Madrileña
RED DE GAS

2021

2021 Annual Report

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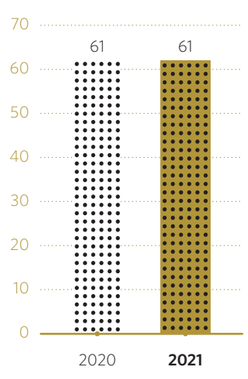
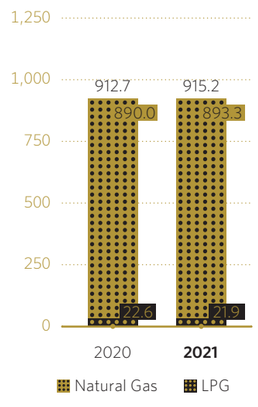
Key figures

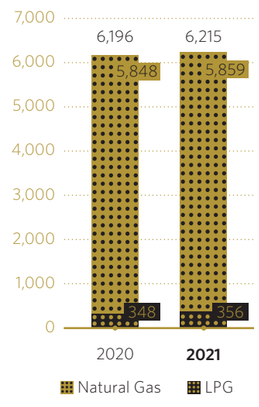
Municipalities
Total No.



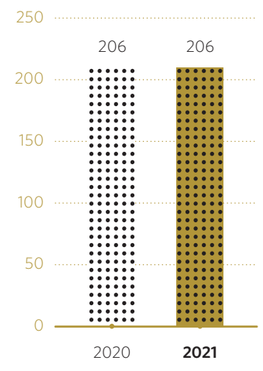
Consumers
Total No. (thousands)



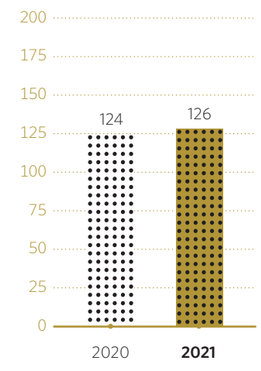
Length of network
Total km



RMS
Total No.

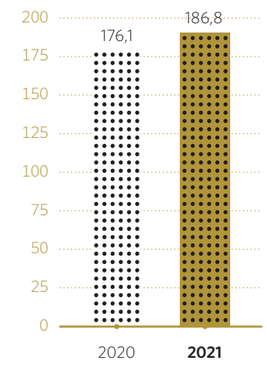


Employees
Total No.*

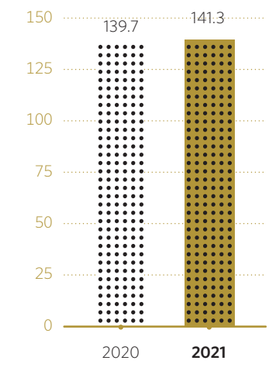


* Employees in the partial retirement scheme have not been included in the figure.

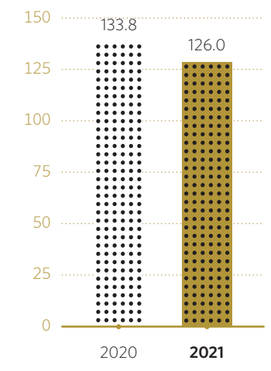
Income
Total (€M)



EBITDA
Total (€M)



Cash flow
Total (€M)



Letter from the chairman

If 2020 will be remembered as the year of COVID-19 and restrictions on economic activity, something that we have all had to learn to cope with, 2021 will go down in history as the year when cheap energy came to an end.

At a time when national economies had barely begun to see the light at the end of the tunnel and a gradual return to normality, around the middle of the year natural gas prices began to register an increase, rising to historically high levels in November and December. The response was to search for alternatives to cover the demand for gas, which recovered more strongly than oil, for example, leading to price increases not only in gas for industrial or domestic use, but also in the costs of electric power produced by combined-cycle power plants and in the marginal prices of national electricity markets across the whole of Europe.

As a result, 2021 required efforts to adapt to COVID restrictions in a similar way to the previous year, although the relaxing of some of these restrictions in the second half of the year, together with the experience gained from 2020, allowed for a progressive return to normality, a process that was completed in the first few months of 2022. Although the pandemic continues to spread, and cannot be thought of as over, the lower impact level of the new waves has helped to bring about a return to normality with the chance of a certain degree of continuity.

Over the past two years, the pandemic has had a major impact on the economy. GDP fell by 10.8% in 2020, with a partial recovery of 5.1% in 2021. The forecasts for 2022 do not suggest that pre-crisis levels will be reached until 2023. It can therefore be concluded that four years of economic growth have been lost, not just in Spain but in large parts of the world.

Electric power demand, which fell by 1.7% in 2019, dropped a further 5.1% in 2020. There was only a 2.4% recovery in 2021. The 9% drop in demand for natural gas in 2020 was followed by a rise of 4.3% in 2021, still below the levels prior to the COVID crisis.

The consumption of oil-based products also fell markedly. Although petrol and diesel ended 2021 with figures only slightly lower than those of 2019, consumption of kerosene air fuel failed to reach 50% of the consumption levels recorded in 2019. Sectors linked to travel, tourism, and hotel and catering are, as expected, recovering with considerable delay when compared with other industrial or tertiary sectors.

In any event, a full economic recovery will not occur until at least 2023. Energy demand, including that of the transport sector, will also take until at least 2023 to recover. Furthermore, with the end of the 2021 financial year, energy has become an involuntary protagonist in the war in Ukraine and the economic disputes between Russia and the West. It is still early to assess the impact that these events may end up having on Western economies, and specifically in Spain. Two impacts of this new crisis deserve to be singled out. The first is the reaction of the energy markets immediately following the outbreak of the conflict, with peaks in oil, natural gas and coal prices, although they did begin to fall again in subsequent weeks. The second, as already indicated, is the major rise in price indexes, due to persistently high prices, particularly for gas. In particular, the consumer price index (CPI) has reached levels not seen since the mid-1980s. Clearly, the decisions made by Western governments in the coming months on embargos or sanctions against Russia will determine the extent of any further impacts.

The economic landscape is, therefore, turbulent and full of uncertainty. Despite all these difficulties, in 2021 we achieved most of the targets set. The efforts made to adapt and ensure job stability at the same time have been successful.

The operating result exceeded that of the previous year, even in the current difficult regulatory context. The results show that financial targets were met, and service quality and safety of operation levels were maintained, as a consequence of the company's focus on permanent internal improvement.

In terms of improving operations, the focus of MRG is on operational excellence, customer service and permanent improvement in management practices. We continue working to attract new customers, helping to replace the

Demand for natural gas fell by 9% in 2020, then rose by 4.3% in 2021, still far below the levels prior to the COVID crisis

MRG's networks have the necessary capacity and conditions to provide the service as it is now with this new fuel, and we are working to ensure that our networks are fully compatible within a very short time

most polluting fuels in small-scale industry and in the residential sector with the replacement and modernisation of heating installations, and in the commercial sector with complete heating and hot water solutions in buildings, while also providing lower costs to consumers, making it more attractive to switch.

We continue with our plans to open new gas refuelling stations for vehicles within the areas where we operate, and this is set to continue over the coming years. We continue to maintain security levels in network operations and are making progress on matters of fraud prevention.

Returning to the strategy for the future, it is important to consider the scenario set out previously of uncertainty and high prices, together with the energy transition policy set out in the Integrated Energy and Climate Plans of the EU's various Member States.

The difficulties of the natural gas market are based on growing demand around the world, chiefly by the growth of the major Asian economies, on the need for gas in Europe to offset the closure of a great many conventional (coal) or nuclear power plants, and on the possible restrictions driven by the policy on sanctions or bans on Russian imports as a consequence of the conflict in Ukraine. Pricing forecasts seem to point to levels that will be above what was normal up to a year ago for at least two or three years before returning to more normal levels. Consequently, there is a need to find alternatives that are acceptable in terms of their feasibility, cost and contribution to environmental targets.

In these circumstances, hydrogen as a clean fuel holds promise in terms of its applications, though its cost has yet lowered to reach that of natural gas, something that seems easier now than in scenarios similar to those of the previous decade, which are unlikely to return. We believe that in a future based on hydrogen, which may be closer than it seemed only a few years ago, transport, distribution and storage infrastructures will be key to hydrogen use becoming widespread. Our networks have the necessary capacity and conditions to provide the service as it is now with this new fuel, and we are working to ensure that our networks are fully compatible within a very short time.

Developing the regulatory aspects of hydrogen is key to that future becoming a reality in a seamless way. Regulatory stability is concerned with ensuring the principle of legal certainty in a specific context, enabling and helping companies to engage in free enterprise and peaceful business activity in the short and long term, make investment decisions, create wealth and employment, and make Spain attractive to investors. Furthermore, real technological changes require serious and permanent attention be paid to regulation in order to be able to respond to problems and new issues, which will undoubtedly arise, to ensure that there are no bottlenecks or regulatory obstacles to new activities that are of benefit to society.

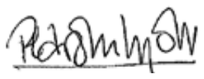
Once all the stakeholders involved understand the importance of committing to hydrogen, the Integrated National Energy and Climate Plan should be reviewed to include this alternative, the long-term economic and environmental value of which there is no doubt.

The importance of conducting analysis on regulatory matters relating to hydrogen is, if anything, even more urgent given Spain's delay in this regard, when compared with major European economies, in terms of both developing pilot or industrial projects and matters relating to regulatory theory.

Gas, whether that be methane today or hydrogen tomorrow, continues to be irreplaceable in many industrial processes and is an acceptable and attractive alternative for other end uses, insofar as there are no other technologies that can offer the same costs and performances. Gas networks make it possible for users to be efficiently provided with renewable gas in the short and medium term, and hydrogen in the long term. This potential sets gas apart from other fuels and makes it an indispensable complement to electricity.

The gas sector is better equipped to collaborate with the Public Administrations in designing energy policies and in adapting regulation to this ever-nearer future. We continue to insist that the regulation of sectors such as the energy sector, in a new scenario, needs ongoing and fine tuning, the success of which depends, above all, on continuous dialogue with stakeholders.

Finally, I would like to express the company's gratitude to the shareholders, in particular for their support during what has been such a complicated time over the past year, and for their support in developing this strategic vision, which will form the basis of the successes we hope to achieve in the coming years. And in the same measure, our gratitude extends to the people at MRG, in recognition of their hard work and their dedication in 2021, and for placing their trust in the company in this second decade of its existence.



Pedro Mielgo

Company

The 2021 financial year brought changes both in legislative terms and in how network access tariffs are structured. MRG has met these challenges to adapt to the new regulations and has focused its efforts on strengthening and improving the company's cyber security and on protecting its customers' data protection rights. In 2021 we were given five-star rating by GRESB (Global Real Estate Sustainability Benchmarks) in recognition of our commitment to implementing best practices on matters of corporate responsibility in terms of environmental, social and governance, an achievement of which we feel justly proud.

1.1 Board of directors

Consilia Asesores, S. L. Chairman and Director (Pedro Mielgo, legal representative)

Dennis van Alphen Director

Andrew Scott Wilkie Director

Martijn Jaap Gijsbertus Verwoest Director

Jaime Francisco Fernández-Cuervo Infiesta Director

Suyu Wu Director

Romain Thierry Victor Bruneau Director

Pierre Alexandre Marie Jean Benoist d'Anthenay Director

Simon George Davy Director

María Martín Secretary (non-Director)

1.2 Executive committee

Alejandro Lafarga General Director

Rafael Fuentes Legal Director

Inés Zarauz Financial Director

David Ortiz Expansion Director

Glen Lancastle Operation Director

María Vázquez Human Resources Director

Félix Blasco Network Operations Director

1.3 Regulatory framework

In its Memorandum 4/2020, the National Commission on Financial Markets and Competition (CNMC) established the natural gas payment methodology that will bring about a new five-year regulatory period: 2021-2026. On 1 October 2021, it also established the methodology to calculate tariff rates for transport, local networks and regasification of natural gas. It was published in Memorandum 6/2020, of 22 July.

This regulatory change classes the tariff period as the gas year, which changes from being the calendar year to the period from 1 October to 30 September of the following year.

The new local network access tariff structure is also altered solely by volume of consumption and not by pressure (there is an adaptation transition for consumers, between 0.3 and 15 GWh/year, which differentiates prices by supply pressure. Access tariffs were published for the 2022 gas year in the CNMC ruling of 27 May 2021.

Additionally, with the new legislation enacted, there is also a new system of liquidations – the LIQUID system – that came into force in November 2021. This system obliges the distributor to adapt to the new requirements in stages.

Before 30 September 2021, Madrileña Red de Gas successfully met the challenge of adapting its computer systems to the structure and billing conditions for transport and local network tariffs, and other regasification costs, as a result of the new regulation. To that end a transition was carried out that did not have any impact or cause any problems for end customers, as a result of the multiple coordination meetings held with some suppliers and the lesson learned from the electricity sector.

New tariff groups
By volume of consumption

Tariff	Consumption (kWh/year)
RL.1	≤ 5.000
RL.2	5.001 – 15.000
RL.3	15.001 – 50.000
RL.4	50.001 – 300.000
RL.5	300.001 – 1.500.000
RL.6	1.500.001 – 5.000.000
RL.7	5.000.001 – 15.000.000
RL.8	15.000.000 – 50.000.000
RL.9	50.000.000 – 150.000.000
RL.10	150.000.000 – 500.000.000
RL.11	> 500.000.000

LN = Local network

On the other hand, and with regard to loss retention rates, the CNMC Memorandum 7/2021, of 28 July, establishing the methodology for calculating, supervising, assessing and liquidating losses in the gas system, which also came into force on 1 October 2021, modifies the coefficients for recognised losses in distribution networks, as follows:

- For networks with a pressure equal to or less than 4 bar: 1.50% of consumption (previously 1%), except those fed by satellite plant, which remains at 2% of consumption.
- For networks with pressure greater than 4 bar: 0.38% of consumption (previously 0.39%).

1.4 Prevention of criminal offences

In accordance with Organic Law 1/2015, of 30 March, Madrileña Red de Gas has a management model in place for preventing criminal offences, which includes an internal map of criminal risks and an internal prevention protocol.

In terms of adopting new measures to ensure the prevention of criminal offences, MRG has a firm commitment to adopt the appropriate risk management tools for this purpose.

In the 2021 financial year, these risk management tools were used to study the current situation of the established monitoring controls in place, analysing both their effectiveness and their degree of compliance. As a result of this analysis, an annual report is produced with the results obtained, the level of compliance and the effectiveness of the prevention system, which is submitted for approval by the governing body, along with the action plan to improve said system.

Additionally, in collaboration with an independent service provider, Madrileña Red de Gas has a complaints channel on the corporate website (https://www.canaldedenuncias.com/es/madrilena) by which any member of the organisation, regardless of their rank, responsibilities or geographic location, as well as staff from any MRG contractor or supplier, and any customer or third party, can lodge a complaint about any irregularity or unlawful behaviour, with every guarantee of confidentiality and without reprisals.

For MRG it is essential that the entire workforce is made aware of this. To that end, to help improve understanding and the extent of the management model with regard to the prevention of criminal offences, training courses are held on both general and specific topics, as per the needs detected through annual monitoring processes.

Madrileña Red de Gas has created a specialist cyber security team, backed by significant investment and with all areas of the company involved

1.5 Cybersecurity

Cyber attacks are one of the largest risks that businesses face. These cyber incidents increase every year and no one is safe from falling victim to them: businesses, government, financial institutions and end users can all find themselves exposed to online threats.

MRG keeps a close watch on how cyber attacks evolve, with the aim of implementing new strategies, plans and best practices in the company to prevent and react to any security risks that arise in our IT and OT networks.

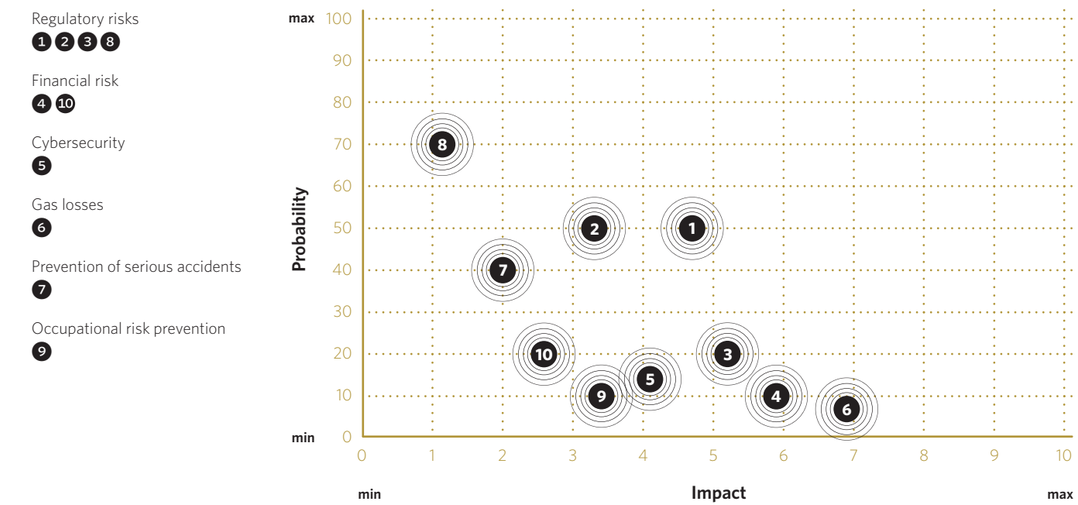
In this regard, as with most of the activities that we carry out online and/or on electronic devices, ensuring the security of our operations and generating trust among our users, suppliers and so on is a primary MRG goal. Throughout 2021 we established the following courses of action in this regard:

- Create a specialist cyber security team, backed by significant investment, to carry out the courses of action put forward in our cyber security management plan.
- Implement a model of governance consisting of cyber security specialists and representatives from all of the company's business areas.
- Prepare a prevention and action framework to deal with threats by activating a Security Operations Centre and an events and security management solution.
- Review and improve the framework of security regulations, and formalise a security incident management framework.
- Train everyone in the company on matters of cyber security through specific courses depending on each staff member's profile and level of risk.

1.6 Corporate risk management

Faced with the growing complexity of risks, businesses need a map of corporate risks that provides a global and shared vision of everything that could constitute a risk or a crisis. This is why implementing a corporate risk management system is one of the main challenges facing businesses, regardless of their size and/or complexity, as it enables them to improve their profitability or minimise losses in the event of any incident. To do this requires a common framework to be established that acts as a guide when faced with risks that threaten the compliance of strategic goals. To this must be added good corporate governance and best business practices, something which in the medium and long term acts as an added value for the company.

MRG risk map



According to the internal rules of procedure at Madrileña Red de Gas, the Risks and Audit Committee, which is comprised of representatives on the Board of Directors from each of the four shareholders, several members of the Executive Committee and the Risk Management department, reports directly to the Board of Directors and operates in accordance with said rules, which define the committee's objectives, functions and composition.

Recurring agenda topics that are discussed at the committee's regular meetings, which are held prior to every Board of Directors meeting, consist of the following: monitoring the map of corporate risks, the most relevant risks and the established or proposed checks and mitigation

The Risks and Audit Committee, which is comprised of representatives on the Board of Directors from each of the four shareholders, several members of the Executive Committee and the Risk Management department

plans, accounts audits, audits of the integrated prevention, environment and quality system, matters relating to sustainability, the policy on the prevention of criminal offences and cyber security risks. They are agreed on internally at the beginning of each financial year.

Being able to assess and monitor these activities in common , rather than in isolation, gives Madrileña Red de Gas a global view of what the main threats are to the company. This enables us to issue recommendations intended for risk management and/or for the Board of Directors, always with the aim of reducing the risks and turning them into actual opportunities to help ensure a sustained form of growth.

Monitoring the evolution of the risks map specific to COVID-19 also remained in place in 2021. In this case, risks of a financial nature were taken into account, as well as the potential impacts on operating margins, liquidity and credit risk, as well as risks relating to difficulties in carrying out interventions in the homes of users affected by the pandemic, the availability of resources for the continuity of operations and/or failures in the supply chain, as well as monitoring the functionality of the business continuity plan and checks to monitor the prevention of risks in the workplace.

The progressive implementation of cross-sectional risk analyses, involving MRG's business and corporate units with the strongest ties to the affected processes, means we can anticipate the risk and ensure the strategic goals and objectives set by the company, which forms part of the agenda at regular Executive Committee meetings, incorporating information on how the risks map is evolving in the reports sent out to our shareholders.

The MRG risks map sets out the ten most common risks, which are assessed by applying risk occurrence probability criteria on a scale of one to ten, the impact of the combination of the disruption caused on the net present value (considering both the direct economic impact for the next 20 years and any possible sanctions) and the reputational impact, both on a scale of one to ten. It also adds new high-level checks to those already in place, helping to mitigate the consequences of said risks.

In comparison with previous financial years, in 2021 the risks relating to the LPG business margin and the volatility of natural gas prices acquired particular relevance, with an emphasis on perfecting their definition and evaluation according to the detailed information available on the potential consequences should they materialise. The company is also developing a strategy aimed at preventing and mitigating any potential impacts associated with these risks.

1.7 Corporate social responsibility

In 2021, Madrileña Red de Gas was awarded a five-star rating in terms of its international assessment of infrastructure sustainability by GRESB (Global Real Estate Sustainability Benchmarks), which gave MRG a score of 93 out of 100. This meant that our company has improved its global ranking position, setting the standard in this area at an international level.

Today, MRG is the second European gas distributor in international benchmarking, and stands above the average 72-point rating awarded to the more than 500 companies assessed. The company is also working to integrate the 2030 Sustainable Development Goals adopted by the United Nations into its strategy.

GRESB also granted two special mentions to MRG, in terms of "Infrastructure Asset Most Improved" and recognition as the company that has achieved most progress within its sector and its region.

This improved score in the GRESB benchmark and the five-star rating are proof of our firm commitment to implementing best practice on matters of corporate responsibility in terms of social and environmental governance, and enable us to establish a vision of both how the company is evolving with regard to previous financial years and its degree of ESG maturity, as well as setting a comparison with other companies in the gas sector.

The GRESB initials are a worldwide sustainability index that assesses and rates the work carried out by more than 500 funds and assets in different sectors in order to promote sustainable development, based on a global standard on environmental, social and governance matters. Since 2009, this organisation has sought to assess and compare the non-financial performance of businesses and financial institutions by publishing an annual benchmark. This ranking, which is used throughout the world to measure the performance of companies with regard to sustainability, provides data that is standardised and has been validated by the financial markets.

GRESB assessments are guided by what investors and the industry feel are important issues regarding the sustainability of real estate investments, and are adapted to the Global Reporting Initiative (GRI) and Principles for Responsible Investment (PRI), among other international reports.

The international assessment of infrastructure sustainability conducted by GRESB (Global Real Estate Sustainability Benchmarks) awarded MRG a five-star rating

There was a rise in the number of businesses taking part in GRESB infrastructure assessment in comparison with the previous year. In 2021, more than 500 organisations were assessed, a response to the growing interest of investors in sustainable business models and the importance of ESG factors in the decision-making process.

Based on the formidable GRESB result obtained, Madrileña Red de Gas proceeded to conduct an in-depth analysis in order to continue to move forward. As a result of the report, it was possible to identify which improvements should be implemented in our sustainability management model based on the ISO 26001 standard that will be developed throughout 2022.

Finally, the sustainability report includes specific chapters on ESG, drawn up in accordance with the GRI standard. This report was also submitted for external verification by BVQi, and the Global Reporting Initiative (GRI) was duly informed.

1.8 Data protection

Information is one of the most important assets of any company, regardless of its size and/or activity. Businesses not only have the right to safeguard information relating to their processes and activities, they are also under the obligation to ensure that the data they hold about their customers, suppliers, investors and so on is appropriately managed. To that end, the different areas of management in the organisation that manage or handle information of this type need to be made involved, implementing preventive and reactive measures aimed at preserving and protecting the confidentiality, availability and integrity of said information.

In order to protect people's privacy and any information relating to them, the law grants citizens the power to be in control of the personal data, a fundamental right that is set out in the Constitution. This right grants people the possibility to learn and obtain information about the personal data that businesses handle, as well as to modify, correct and cancel any such information that they deem appropriate, oppose any inappropriate or excessive processing, and so on. This not only protects privacy and personal information, it also helps ensure transparency in how the information is processed and helps prevent it being accessible by third parties who could use it for other purposes.

The MRG data protection officer is the highest authority on this matter and has an active role on the Executive Committee, the Risks and Audit Committee and the Cyber Security Committee. Managing the rights of those affected, managing incidents and resolving queries, many of which relate to how current legislation is interpreted and to individuals exercising their personal data protection rights, are the most relevant activities that were carried out in 2021 with regard to data protection management.

Furthermore, in 2021 Madrileña Red de Gas decided to implement an information security management system, based on the ISO 27001 standard, an initiative that is fully aligned with the current integrated management system and which will cover the current personal data protection management model. Based on the structure of ISO management systems, this model uses existing synergies alongside the other MRG systems, which helps ensure ultimate alignment with the ISO 27001 standard. In accordance with the information security and data protection policy, the company has a management manual that has been developed according to more than a dozen personal data protection procedures, which are subject to regular revisions to ensure their content is kept up to date. By implementing the risk and impact assessment model for the different ways in which data protection is handled, data protection management has been organised according to the priorities and opportunities identified, such as, for example, the policies relating to identifying the parties concerned.

The management model also includes interacting with stakeholders by various means: by making the personal data protection policy and information on how personal data is processed available on the company's website to ensure stakeholders were kept up to date. Users are also informed of the availability of this information in the various ways that we communicate with them and active management of communications received by the personal data protection officer.

Actions to coordinate business activities relating to data protection with data processors, through meetings, unifying criteria and best practice agreements, are also fully integrated into the MRG management model; monitoring the data protection performance of our chain of suppliers, through the information provided by the Repro-Achilles website on the maturity of their privacy policies, as well as through the audit reports issued by the Repro-Achilles community, interaction with the Spanish Data Protection Agency (AEPD), as a result of various processes protecting the rights of the affected parties and the record of data protection incidents, investigation into which helps to bring about improvements in how information is managed.

Similarly, it is commonplace to review personal data protection clauses in service provision agreements to make any adjustments that may be necessary to ensure a base level of alignment with our policy.

A significant increase of queries about personal data protection was recorded in 2021 compared with previous years. Nine personal data protection incidents were recorded; none of them led to a breach of data protection security, but the investigations carried out made it clear that improvements needed to be incorporated into how personal data was managed and processed. Furthermore, the courts rejected the only sanction proposed by the AEPD relating to data protection that has been recorded since the company began.

Finally, and with the aim of promoting our internal data protection culture, the MRG internal regulation library released information on revisions and updates made over the course of the year, ensuring that the documentation it contains is kept up to date.

A significant increase of queries about personal data protection was recorded in 2021 compared with previous years

Business

The 2021 financial year was a period of market recovery. Natural gas continues to be a safe and indispensable option for the high-consumption market and is the main power source in the industrial sector.

Despite the effects of the pandemic, at MRG the number of contracts was similar to that of previous years, with almost 16,000 new supply points. Natural gas for vehicles continued to strengthen its position. A range of activities were carried out to encourage changing over from polluting energy sources to natural gas. We also updated our supply networks, which now accept renewable gases, such as hydrogen and biomethane.

2.1 Residential market

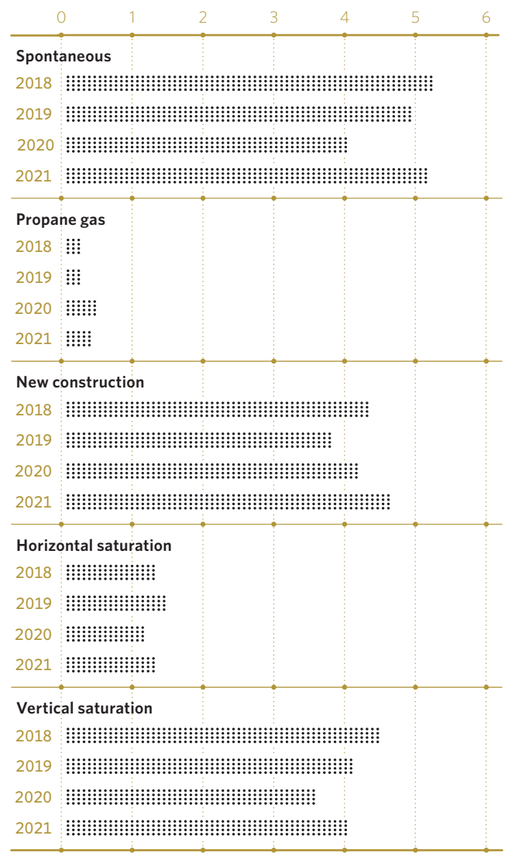
The effects of the pandemic continued to be felt in sales and in trends in the gas market in general, particularly in residential markets. Even so, in 2021 the number of contracts remained similar to that of previous years, therefore the financial year can be described as a period of market recovery.

At Madrileña Red de Gas a total of 15,437 new domestic installations entered into service. Added together with commercial premises, boiler rooms of communal residential buildings, institutional buildings and industries, a total of 15,930 new supply points were connected to our area of distribution. This stands as a success of the company's expansion strategy, particularly if we consider the highly volatile circumstances, due mainly to rising energy prices and the emergence of new technologies.

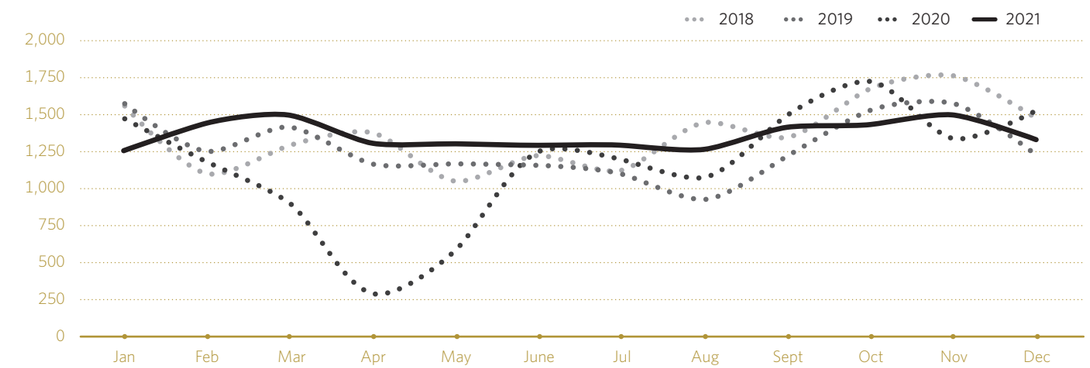
Taking the two years prior to the pandemic as reference, in 2021 there was an even spread of new contracts throughout the year, reflecting the increased productivity in registration channels, which have largely succeeded in reducing the typical peaks and troughs associated with natural gas contracts.

Focusing on the various residential markets, MRG ended 2021 with an increase in contracts in new builds compared with previous years, although the last third of the year experienced a drop-off, as a result of the situation faced by the property market. Regarding spontaneous registrations, there was a significant increase compared with other years, mainly due to the rental market's reactivation. ForLPG, Madrileña Red de Gas maintained its strategy of recent years, making significant investments in networks that will become natural gas networks in a future transformation.

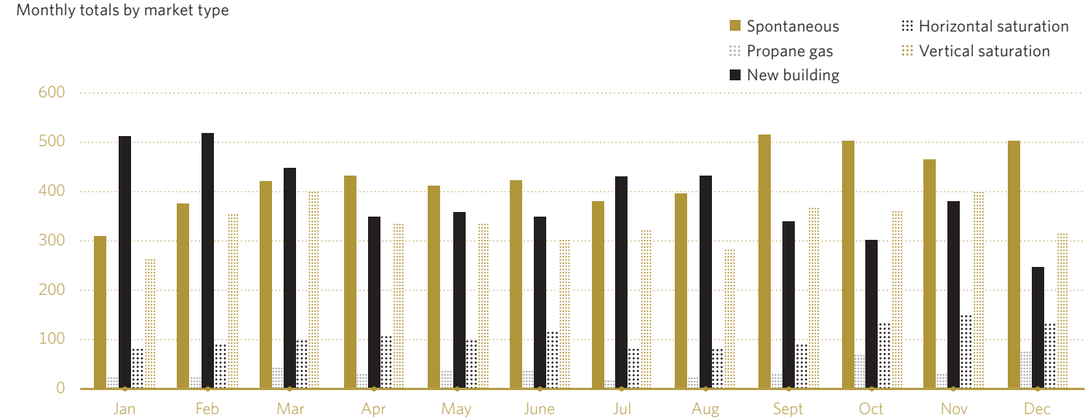
Annual evolution of new contracts
Monthly totals by market type (thousands)



Residential market registrations, 2021
Monthly total



New contracts, 2021
Monthly totals by market type



The year ended with very positive figures in terms of the high-consumption market, which has increased by more than 189 GWh and 495 new supply points

2.2 High consumption

The year ended with very positive figures in terms of the high-consumption market, which has increased by more than 189 GWh and 495 new supply points, showing that natural gas continues to be the safe and indispensable option for this market.

Natural gas forms a key part of the energy transition due to its economic and environmental advantages, as well as for the guarantee of supply. These reasons have led the Hospital Hestia and El Escorial funeral home to replace their diesel oil boilers with a natural gas version, achieving greater savings and improved performance.

To supply the Hospital Hestia, MRG invested €85,000 in the network. The pipeline process was a challenge due to its complexity, because the hospital is located close to the Santillana and El Atazar pipelines, which supply water to a large number of inhabitants in the Madrid region. This made the works more problematic, requiring the use of special protections and a load study to be conducted. In managing the various authorisations that were needed, several official bodies were involved: the Directorate-General for Highways, the Isabel II Pipeline and the rail infrastructure administrator ADIF.

MRG also collaborated with the new Oasiz Madrid shopping mall, the largest in Spain, which opened in early November in Torrejón de Ardoz. The collaboration was focused on designing the interior facility so that both the heating and all the catering premises had a natural gas supply.

Natural gas has also remained highly present in the industrial sector, where it is the main source of energy for production. In 2021, several food industries and a foundry chose to transform their facilities, demonstrating how important it is for them to have a reliable, safe and affordable energy supply.

Natural gas for vehicles (NGV), meanwhile, continued to strengthen its position as the fuel considered to be cleanest both by the public and by the professional transport sector.

Another notable fact from the past financial year is the opening of two public petrol stations in the towns of Fuenlabrada and Leganés, within the MRG distribution area.

Furthermore, as a result of the MOP16 network pipeline built by MRG, the Madrid Taxi Co-operative (SCAT) has a new compressed natural gas (CNG) loading infrastructure at its Secoya facility, which shows the support from the taxi sector for less polluting fuel sources and the policies to improve air quality adopted by Madrid city council.

In the last third of the year, Leganés town council began its renovation project to ensure energy improvements in 13 municipal buildings, including eight primary schools, a nursery, a cultural centre, a civic centre, an indoor swimming pool and a municipal warehouse, which involved transforming 19 boiler rooms and all climate control facilities from diesel to natural gas. The investment was €1,540,000 and was co-financed by FEDER European funds. MRG collaborated with the town council to plan the works and put the facilities into service. The most notable aspect of this project is the fact that the transformation was carried out during the heating season and without any classes being interrupted.

At MRG we are very aware of the importance of combating climate change, and particularly the importance of good air quality in Madrid, for which natural gas plays a decisive role. Accordingly, at MRG we work to provide assistance and solutions that can help bring about the change from polluting energy sources to natural gas. An example of this is the recent collaboration on the study to transform various barracks in the Madrid region to help reduce the emission of polluting gases, while also improving energy efficiency and reducing energy costs through the use of more modern technologies.

As in previous years, MRG helped to improve air quality in the Region of Madrid by taking part in the plan to replace boilers in private residences, with an initial contribution of €110,000 and a second of €200,000, as part of the campaign designed to transform boiler rooms. A total of 38 boiler rooms were transformed, all in communal residential buildings, of which 24, in the city of Madrid, formerly ran on coal, which has prevented emissions amounting to 2,700 metric tons of CO_2 a year*.

Finally, in 2021 we maintained our support for the sectors most affected by the COVID-19 crisis, such as small businesses and SMEs, through special campaigns devised specifically for them.

* Calculation based on emission data published on the website www.miteco.gob.es

2.3 New construction

In the new-build market, in 2021 expectations were exceeded in terms of homes delivered. Although the construction sector did not come to a complete halt during the crisis, in 2021 activity was able to regain its pace, helped in part by the projects launched prior to the current Technical Building Code.

Over the course of 2021 a natural gas supply was provided to 6,913 homes, exceeding the initial forecast by 20%. Of these, 4,647 are fitted with individual boilers and 2,266 feature central boiler rooms.

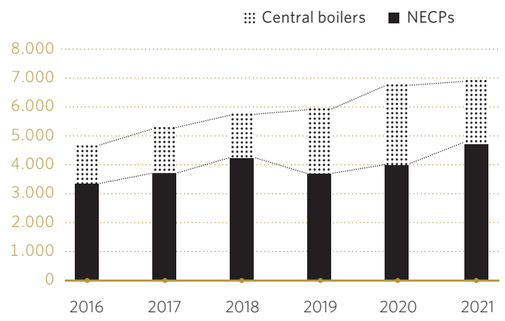
The Madrid region is the autonomous community with the highest rate of growth on the property market. The towns of Boadilla del Monte and Alcalá de Henares, both within MRG's operating area, are where most new-build homes are being delivered. They are followed by Torrejón de Ardoz, Colmenar Viejo and Valdemoro, towns where MRG is also authorised to distribute natural gas. This growth is partly due to recently completed housing developments.

More than 15 thousand homes are expected to be built in the Madrid region over the coming years.

There are also other developments in the project stage in San Sebastián de los Reyes and Alcorcón, two towns where MRG is working to provide thermal solutions through gas natural in district heating and cooling networks. The aim of these projects is to ensure comprehensive development of the necessary services, including the supply of domestic hot water, heating and cooling, and even lighting with natural gas. In all of these introducing renewable gases such as biomethane, along with hydrogen, would be fully viable.

On the other hand, over the past few years other solutions have been introduced to meet the energy needs of new builds, such as aerothermal and geothermal climate control, which are presented as a new, more profitable solution. However, the figures indicate the opposite. This trend seems to have come from a mistaken interpretation of the Technical Building Code with regard to the feasibility of using natural gas. Using natural gas in new builds is feasible from both a

New edification evolution
Total according to boiler type



Over the course of 2021 a natural gas supply was provided to 6,913 homes, exceeding the initial forecast by 20%

Investment in installing an energy system
Costs by type of home and energy system

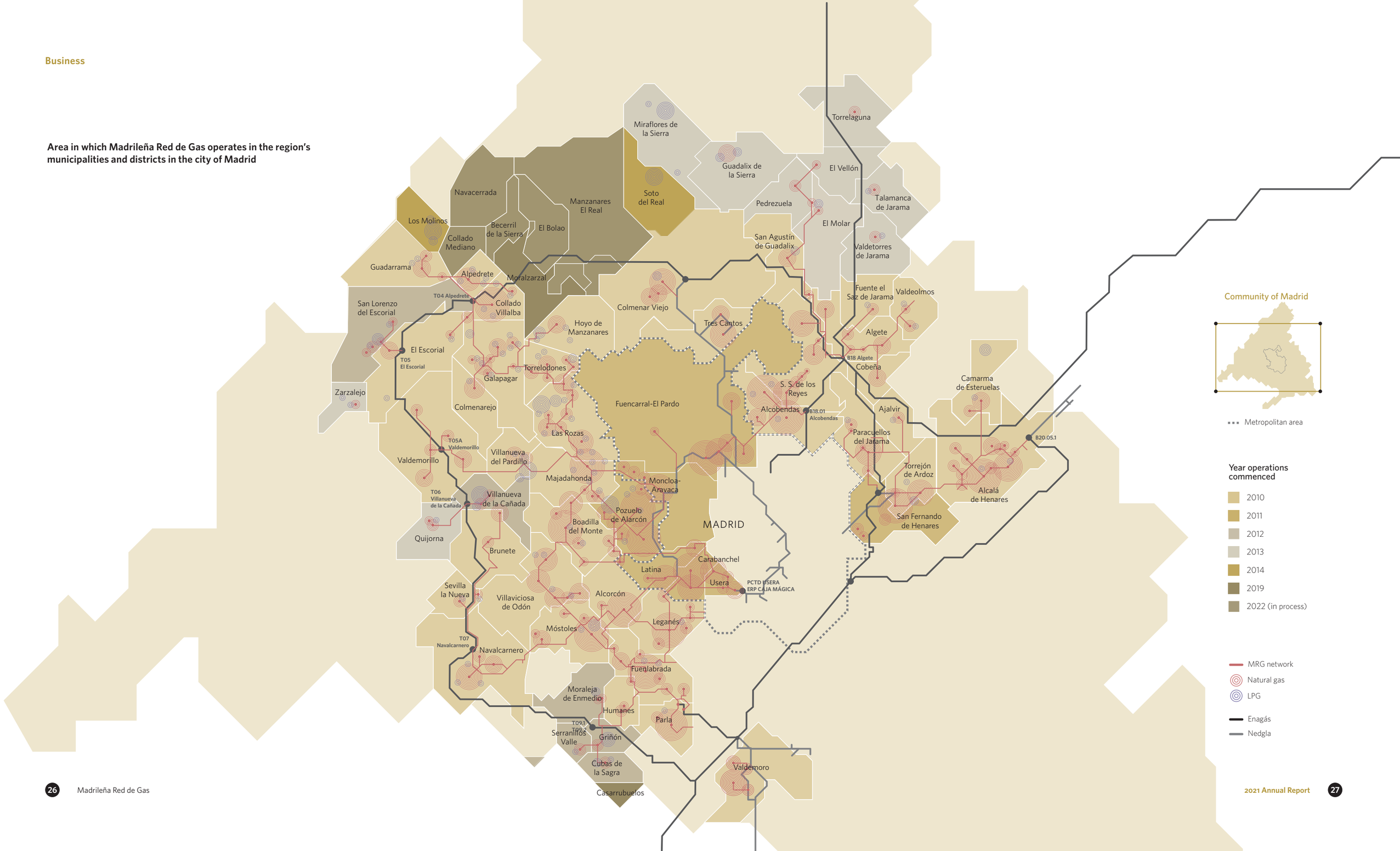
Type and surface area	Individual gas boiler + Pump + Solar T	Collective gas boiler + Pump + Solar T	Individual aerothermal heating	Collective aerothermal heating	Individual Geothermal heating	Collective Geothermal heating	Aerothermal + Individual gas boiler	Aerothermal + Collective gas boiler
Single-family house 150 m²	€ 12,250	-	€ 18,250	-	€ 28,850	-	€ 20,750	-
Single-family house 250 m²	€ 17,000	-	€ 27,350	-	€ 44,750	-	€ 30,550	-
Housing block 90 m²	€ 9,135	€ 9,235	€ 14,500	€ 12,335	€ 25,550	€ 18,685	€ 17,100	€ 15,471
Housing block 180 m²	€ 13,020	€ 14,520	€ 22,600	€ 21,980	€ 36,100	€ 32,000	€ 25,800	€ 27,335

Estimated costs for a 30-year life cycle
Costs by type of home and energy system

Type and surface area	Individual gas boiler + Pump + Solar T	Collective gas boiler + Pump + Solar T	Individual aerothermal heating	Collective aerothermal heating	Individual Geothermal heating	Collective Geothermal heating	Aerothermal + Individual gas boiler	Aerothermal + Collective gas boiler
Single-family house 150 m²	€ 52.779	-	€ 83.244	-	€ 68.602	-	€ 73.539	-
Single-family house 250 m²	€ 88.162	-	€ 131.746	-	€ 101.335	-	€ 117.521	-
Housing block 90 m²	€ 34.848	€ 33.703	€ 59.252	€ 50.552	€ 53.274	€ 39.274	€ 51.959	€ 46.464
Housing block 180 m²	€ 61.917	€ 60.917	€ 101.844	€ 92.644	€ 80.489	€ 69.789	€ 89.233	€ 83.633

- In conventional systems, gas boilers and heat pumps are generally renewed every 15 years (one renewal in 30 years), whereas air source and ground source heat pumps are generally renewed every 10 years (two renewals in 30 years). This is due to the fact that aerothermal and geothermal systems are used 365 days a year.
- In a medium-severe continental climate, predominantly in the northern third of the Madrid region, boilers are generally considered to have a 95% coefficient of performance, heat pumps 350%, aerothermal pumps 300% and geothermal pumps 450%, based on performance curves for equipment used for heating, cooling and DHW.
- The prices shown include 21% VAT.

Area in which Madrileña Red de Gas operates in the region's municipalities and districts in the city of Madrid



NORBA, the tool developed by the Thermal Engineering Group of the Universidad de Sevilla, allows natural gas facilities to be compared with aerothermal electric and/or biomass climate control in new builds

technical and regulatory standpoint, and remains a highly efficient and profitable source of energy.

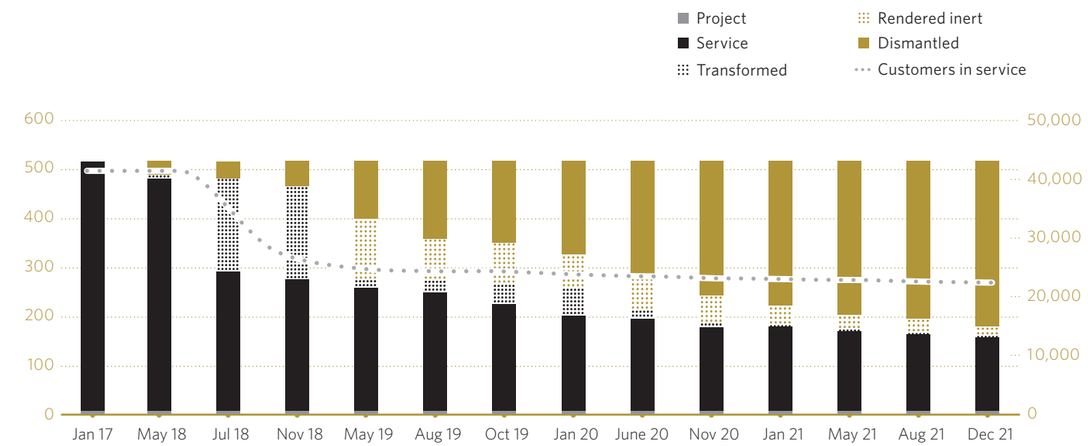
In order to correct this misconception, and with the aim of assuaging incorrect interpretations, SEDIGAS (the Spanish Gas Association) has supported the creation of NORBA, developed by the Thermal Engineering Group from the Engineering School at the Universidad de Sevilla. This tool allows natural gas facilities to be compared with aerothermal electric and/or biomass climate control in new builds. MRG has produced a video explaining how NORBA works in order to help disseminate the tool and facilitate access by property developers, architects' studios, engineering firms, etc.

According to the NORBA comparison, in most cases natural gas is awarded an 'A', the system's highest energy rating. Natural gas also complies with the 2019 Technical Building Code and its building and running costs are more favourable.

In comparison with aerothermal electric energy, natural gas is efficient, affordable and provides immediate domestic hot water and heating. On the other hand, with aerothermal electric solutions, climate plays a key role in the performance of these devices, in areas with a continental climate, such as the Madrid region, they do not reach particularly high levels of efficiency. Additionally, it is increasingly common for new-build homes to have a heating service in winter and climate control in summer, which is why an aerothermal pump is often chosen as a single solution to both scenarios. However, the most ideal way to meet this demand is with hybrid natural gas and aerothermal systems, an economically unbeatable option, as proven by the studies and analyses carried out.

Finally, Madrileña Red de Gas continues to work actively in its discussions with developers, builders and thought leaders, informing them and engaging with them with regards to any new developments at a technical, administrative or legal level.

LPG plants: status and number of customers



MRG has set a goal of transforming more than 15 thousand supply points over the next two years

2.4 LPG market

In recent years MRG has carried out a policy to transform its LPG installations based on the objective maintenance costs of each one. The company has therefore proceeded to transform installations from LPG to natural gas in facilities where there was a strategic requirement for an almost total renovation or where running costs were particularly high.

Given the current LPG market situation, MRG has set a goal of transforming more than 15 thousand supply points over the next two years. To that end, in 2021 there was a lot of planning, surveying, budgeting and dimensioning for all the work involved in that target.

Transforming from LPG to natural gas is a highly delicate activity, in which different courses of action and timescales

MRG's strategic collaboration in 2021 with the property portal Idealista has had a digital impact among more than 1,400 advertisers of properties in the company's distribution area

need to be carefully weighed up. This process is also highly intrusive for users, as it involves modifying and adapting the facilities and apparatus in their homes. This is why it's essential to know very clearly what the objectives are and what tasks need to be carried out.

Madrileña Red de Gas has more than 300 km of propane gas pipelines, of which 74 will be completely renovated. The rest will be reused or decommissioned and rendered inert, as the natural gas network is duplicated in these areas.

MRG has entrusted the design and awarded a new transformation contract to eight leading companies in the sector, with a budget of more than €10 million for the works to reuse networks, adapt installations, transform equipment and dismantle storage centres. Internally, this required strengthening the company's management team and developing a range of IT-based initiatives.

2.5 Collaborators

MRG's strategic collaboration in 2021 with the property portal Idealista has had a digital impact among more than 1,400 advertisers of properties in the company's distribution area. This collaboration helped to boost the vertical saturation market; in fact, new supply contracts were recorded in the summer season, which is historically unusual. Once summer came to an end, there was a steady rise in the number of requests received by our virtual office.

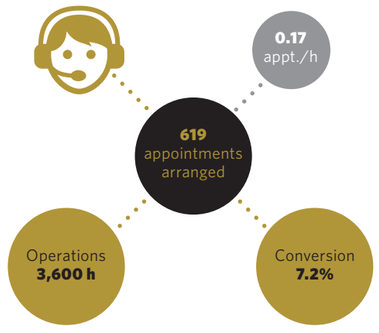
In 2021 conversations also got under way with the National Association of Refurbishment Companies (ANERR), with the aim of establishing a collaboration with MRG in all of the association's projects in the Madrid region. The collaboration agreement has yet to be signed.

In 2020, with a view to reactivating sales of new gas installations, in collaboration with Unísono (now Intelcia Spain) MRG initiated a pilot telemarketing project, which was consolidated in 2021. In this way, we have been able to engage in a more direct way with our potential customers, with highly satisfactory results. This project was in place throughout 2021, and led to new supply points being secured and a greater awareness of our potential customers.

The ongoing improvement in the customer's supply, optimising the sales pitch used in calls, and the fact of having approached different companies that are competitors among themselves led to a significant improvement in results, resulting in a new collaboration agreement being signed for 2022.

With regard to sales in digital environments through the Selectra call centre, MRG conducted a campaign to recover

Telemarketing operations



lost leads, which proved to be a resounding success. All manner of requests were processed, with offers matched to each customer's profile by telephone, which was then managed by the installation company allocated to the different areas where our customers live. By doing so, Madrileña Red de Gas brought greater transparency to sales operations and is developing a relationship of genuine trust with its customers. We also continued to deal with new supply requests.

Additionally, in collaboration with The Marketing Hub, an advertorial was produced, in both digital and printed format, published by the magazine of the School of Property Administrators of Madrid (CAFMadrid). As a result of this initiative, MRG was present in the repertory of services for owners' associations (Solucionaf), the CAFMadrid platform, which is used as a directory for services in the sphere of owners' associations and property administrators, and may also be consulted by general public.

The 2021 financial year also led to the full integration of Enerty into our systems and mobility tools, adapting it so that it draws up other documents, such as anomaly correction slips from regular inspections carried out every year.

This ambitious project is the result of the collaboration between AGREMIA (the Association of Installation Companies of Madrid) and Logalty, a company with expertise in digital transactions and certificates, which allowed for two thousand digital certificates to be processed through the platform. Consolidation with Enerty ensures correct regulatory compliance, complete transparency and legal certainty for the process of certifying installations.

Finally, in collaboration with the engineering firm REINS, the inhabited home potential viewer was developed, which has led to continuity in how the area managed by MRG is viewed, dividing it up by markets and supplies.

The viewer is based on Google Maps technology, and by using land registry and MRG network cartography overlays we can develop a geolocated overview of the network for all properties created in our customer management system (SAP). The company is therefore able to monitor the entire territory at all times and know where the market segments are that can be targeted, in order to generate new supply points and saturate the networks.

The MRG natural gas distribution network, which supplies more than 915,000 customers, was not affected by Storm Filomena

2.6 Distribution network

The 2021 financial year began with Storm Filomena, bringing an unusually heavy snowfall to the Madrid region, with subsequent periods of freezing temperatures, combining with the uncertainty of the pandemic, which still affects us all.

Accordingly, MRG strengthened its emergency response service and its entire field work team, made up of more than 40 people. The technical team was joined by the operations team to work continuously in resolving each and every incident that occurred as a result of the storm.

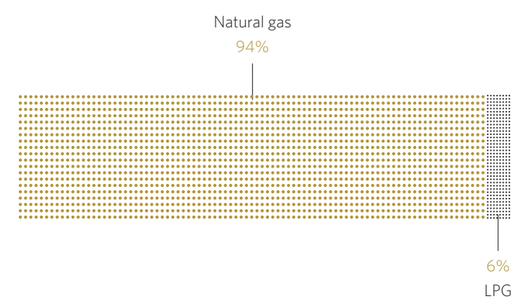
From 8 January, more than 1,500 emergency calls were received by the service, a figure much higher than the average demand (in a normal January around 800 warnings are received).

Despite Filomena, the MRG natural gas distribution network, which supplies more than 915,000 customers in the Region of Madrid, did not record a single incident and functioned as normal.

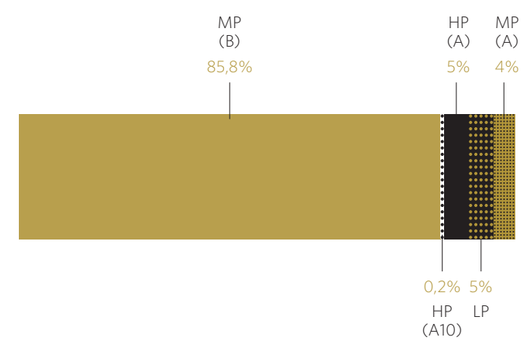
During that time, a full and continuous process of coordination with the relevant authorities working in energy, safety and roadway maintenance was maintained. Special mention must be made of the 112 and fire services.

With regard to the supply of LPG and LNG, our customers were barely affected at all, although, due to roads being impassable because of the snow, which prevented tanker trucks from travelling, there was the occasional delay in the supply to several LPG satellite plants and to one LNG plant. The delays were resolved in as short a time as possible thanks to the coordination of the different courses of action taken with the authorities concerned.

Types of gas in the MRG network, 2021
(%)



Range of pressures in the natural gas network, 2021
By pressure type: high, medium and low (%)



For another year running, MRG met its commitment to maintaining its distribution system in full, including the 169 LPG plants and the five satellite LNG plants.

Additionally, to ensure that all systems in our regulation and metering stations were operating as they should at their various pressures, with regulatory monitoring of the gas network, more than 15 thousand scheduled preventive and corrective maintenance actions were carried out. The biannual leak test was also conducted along 3,295 km of the network. To verify their operational status, 8,777 valves in natural gas and LPG networks were checked and more than 1,178 tasks were completed that involved painting, cleaning and/or clearing out auxiliary installations, LPG plants and LNG plants. More than 3,600 actions were carried out on equipment that ensures the cathodic protection of our steel networks.

As part of the MRG action plans for 2021, the necessary overhauls, mesh work and corrective measures were also carried out to maintain the safety conditions of the network and guarantee supply in the natural gas and LPG networks, replacing materials such as steel, cast iron and copper for polyethylene pipeline. In total, in 2021 around 1,800 metres of network were replaced.

Additionally, and in coordination with the local authorities in the various municipalities involved, Madrileña Red de Gas dismantled 37 LPG plants, which involved emptying out, burning and rendering inert 52 tanks. More than 50 journeys needed to be made to transfer the surpluss gas to

other MRG plants while preventing any emissions into the atmosphere. The waste obtained during the dismantling process was transported to processing plants run by the Madrid region authorities, while complying with the MRG environmental commitment, and all without disturbing the usual activities of our customers and their neighbours, with all precautions taken and with COVID-19 disinfection protocols performed during and after each job, so that the area was always completely disinfected once the work had been completed.

By complying with the action protocols established by the Ministry of Health and our Health and Safety department, no cases of COVID-19 infection between workers were recorded.

In collaboration with several other companies, public bodies and customers, all requests to reposition gas pipelines due to their location affecting planning developments, roads, new buildings, and so on, were dealt with and completed, which involved repositioning 1,100 metres of gas pipeline.

Finally, with regard to fixing leaks, Madrileña Red de Gas was able to reduce the resolution period by 6%, and in doing so make both environmental and safety-related improvements.

Emergencies

Continuing with the objective of upholding the maximum safety parameters for our networks and the customers connected to them, once again in 2021 we succeeded in addressing all alerts of maximum priority in less than 30 minutes.

In order to continue providing an improved service for our customers, a new centre was created as an operational base for activities to deal with emergencies and maintenance of our distribution system, to be used by our staff for services in the field. The various additional processes were improved, with computerised mobility systems that help to reduce the amount of paper used and optimise how information resulting from field work carried out by our teams is managed.

Control centre

One of our key objectives in 2021 was to prepare the MRG networks to admit any gas type from a renewable source, such as hydrogen and biomethane. To that end, our network simulation system is being adapted to incorporate these gases into our daily management processes. We are also conducting analyses of the capacity needed to incorporate the different projects relating to renewable gases.

Finally, throughout 2021 we continued to optimise information from other remote installations, replacing old communication systems for other more modern and more advanced systems, by which our data analysis and decision making can be increased and improved in terms of how our distribution network is managed.

One of our key objectives in 2021 was to prepare the MRG networks to admit any gas type from a renewable source, such as hydrogen and biomethane

Customers

With the aim of establishing a fluid relationship with our customers that is as operational as possible, at Madrileña Red de Gas we made significant changes to improve interactions between customers and the company. These include the digitalisation of how first-level calls received at the call centre are dealt with, the use of AI, centralising everything relating to requests at our call centre, developing new sections of the website or creating the IOGAS platform, which was implemented after the new formats on new tariffs came into force.

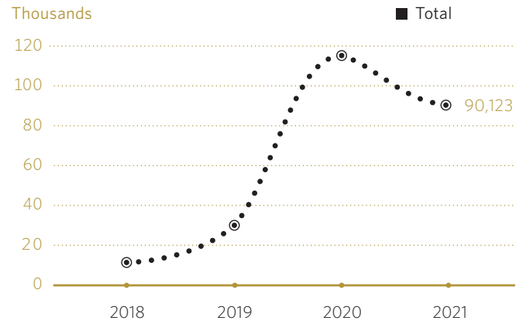
In 2021 MRG digitalised how first-level calls to the call centre are handled

3.1 Customer support

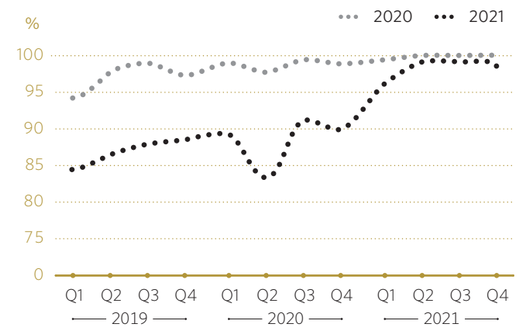
In 2021 MRG digitalised how first-level calls to the call centre are handled. Thanks to the use of artificial intelligence (AI), by using the LEX voice-recognition service from Amazon, we have been able to simplify our telephone service for customers even more. With this new service, our customers do not have to listen to recordings and then enter an option in order to be dealt with. Instead they select the option that best matches the request they wish to make using natural language. The AI helps to manage the call through automated voice recordings, provided it is a query that only requires simple information or IVRs, so that customers can provide the reading from their meter, confirm or reschedule the regular inspection visit or pay LPG invoices via the automatic payment gateway. For calls requiring special attention, the service proceeds to transfer them to the group of MRG call centre agents, from where customers are dealt with in a more personalised way that better suits their needs.

By using this technology, MRG can identify customers who contact the company, as it recognises the telephone number

Call traffic through IVR service
Annual variation

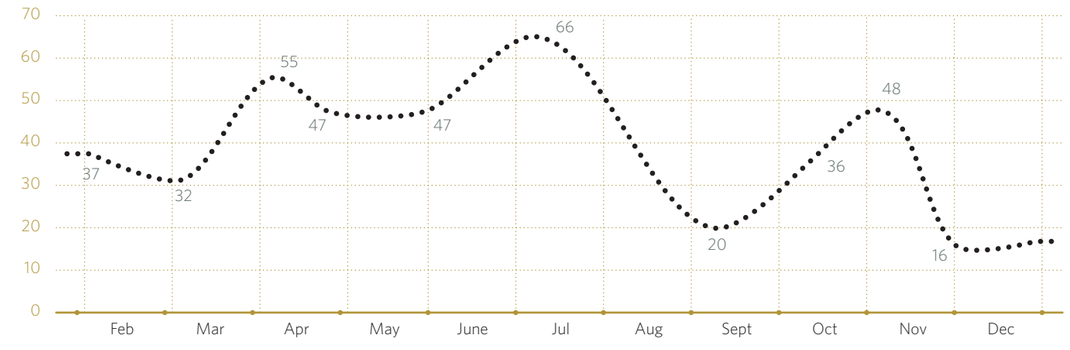


Evolution of requests resolved*
Quarterly variation

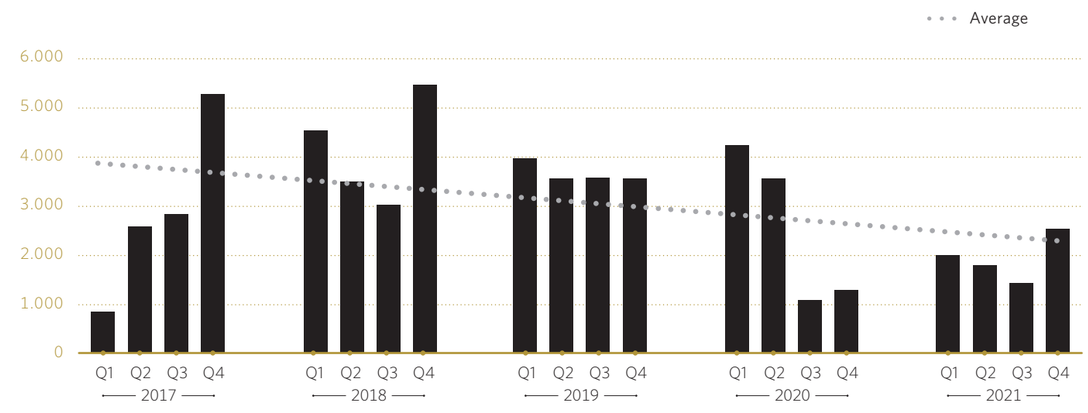


* Includes information requests, requests for action to be taken and complaints.

Evolution of proceedings with official bodies pending processing, 2021
Total no.



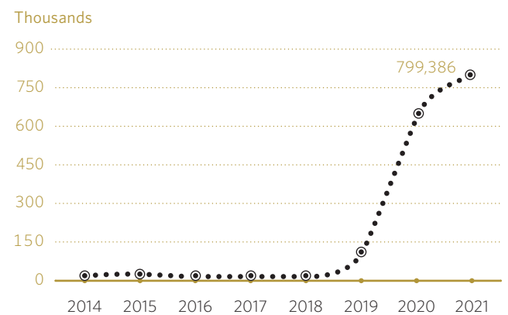
Complaints to the CNMC filed by suppliers
Total per quarter



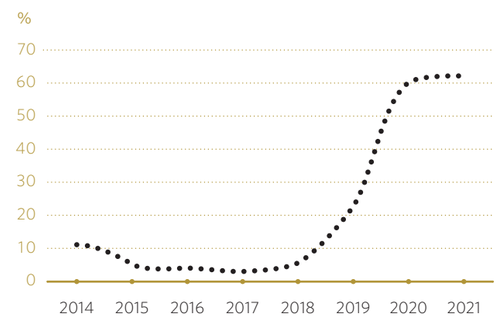
that they have rung from, provided it is included in the customer's contact data. This another of the advantages of digitalisation, helping to ensure a more satisfactory customer journey. The length of time has been reduced as a result, dropping from 111 seconds to 94 seconds.

On the other hand, and once this first phase of the digitalisation process of its call centre had been completed, in 2021 MRG's call centre centralised its management and information services with regard to requests relating to the processes with greatest levels of demand that are received via WhatsApp, the virtual office and suppliers. These processes include readings, the regular inspection, home operations and customer support. In unifying how all requests are processed through the channels described, and as a result of our agents' experience, the unified criteria and the same degree of thoroughness has been applied as in the customer support telephone service. With these changes, at MRG we have been able to optimise not only the productivity of our call centre, but also the customer experience as a whole. In 2021, a total of 26,389 requests were processed.

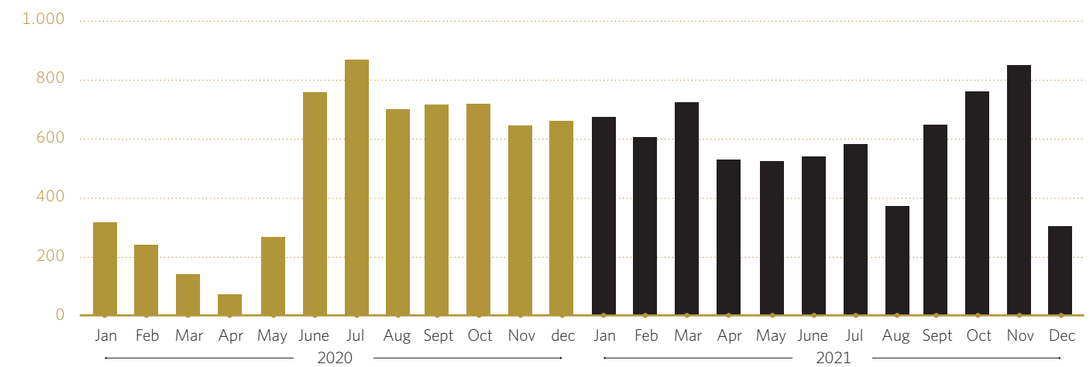
Evolution of virtual office use
Total annual



Self-service
Annual variation



Evolution of applications received through the virtual office
Monthly totals



3.2 Virtual office

The MRG virtual office (VO) came about as a way to modernize our contracting processes. Now that consumers (particularly domestic consumers) operate digitally on a day-to-day basis with most services, our VO has become the main channel for requests relating to connections and documentation from installation companies.

The VO for installation companies and sales associates of Madrileña Red de Gas has incorporated new functions and possibilities, such as registering for and signing up to different campaigns and sales plans to capture and connect new supply points or provide information and documentation to customers of installation companies. The VO is where all this information is contained and where use of this information is facilitated to the company's different units. Using the VO means that in 2022 it will be possible for installation companies to create their files and records on our website in such a way that they can monitor and provide any process relating to the documentation required for gas installations.

3.3 Website

Transparency has always defined Madrileña Red de Gas; it is something that is applied in what we do, in our processes and in how our management operates. In this regard, and with the purpose of being competitive as a gas sector business, we have gone a step further by creating a new section of our website, titled "Commitment".

This provides official bodies and MRG customers with the appropriate ratings and action protocols so they can contextualise the company in its sector and make comparisons with other business in the sector, be they Spanish or international. We publish our KPI scores for CSAT, CES, NPS and GMB, as well as our ratings on complaints received. We have also conducted an analysis of the TOP 5 types of complaints, where it is explained what they consist of, how we manage them and what the solution is that we provide to try and minimise them. We have also published our commitments on scheduled visits, customer services, what the MRG process is for managing customer requests, and how our specialists act when providing personalised services.

On the other hand, and due to the fact that frequently asked questions, articles, blogs and news items may not be the best option when it comes to informing us appropriately about a particular matter, in 2021 MRG produced a range of short, simple video tutorials to help our customers understand how to interact with us.

We identified what their main queries are and analysed the contacts made. By extracting the experience gained from dealing with customers, and securing the involvement of all business areas in the company, we produced 14 information videos, using a simple language that avoids technical jargon, and which we promote on the various MRG channels of communication, including the website.

The initiative has been a resounding success. The video "How to send my meter reading via our virtual office" has been watched 48,000 times; "What your gas meter reading is for" has been viewed 31,000 times; and "How to solve anomalies in a regular inspection" a total of 4,000 times.

In 2021 we produced short, simple video tutorials to help our customers interact with the company

MRG management of requests

Process for dealing with complaints and suggestions received:

1. **Tell us what the problem is**

   If at any time we haven't done as well as we could, we'd like to have the chance to improve. In the virtual office, in the section "Need help" section, you can tell us about your incident. **We resolve 95% of incident within one working day**. If we have your contact details, we will keep you informed until the issue is resolved.

2. **Team of experts**

   We have **specialists in all areas to resolve your problem**. Whatever it is, we guarantee it will be resolved within six weeks

   - Irene — Expert in solving issues relating to your regular inspection.
   - David — Helps customers during operations we need to carry out in their homes.
   - Ruth — Expert in solving issues relating to your gas meter readings.
   - Paula — Helps customers with any problems in accessing the virtual office.

3. **Continual improvement**

   In the most complicated cases, if the solution adopted isn't to your satisfaction, we review our processes to see if it can be improved. **We believe in the continual improvement of our processes** to keep making them easier for you and all other users.

MRG's commitments to users during visits

Sometimes we need users to be at home when work they have requested needs to be carried out or that we need to do to comply with regulations. When users open the door to their home for us, our commitments are:

1. **Two-hour slot**
   When we have planned the visit, so you are able to manage your time.
2. **Day chosen by the user**
   We offer several dates to choose from if the user cannot be at home on the day scheduled.
3. **Visit reminders**
   On the day before, if the user has provided their details.
4. **No surprise changes**
   We do not alter the plan for schedule visits that are less than 48 hours in advance.
5. **Seriousness**
   We conduct the schedule visit in the agreed time slot.
6. **Qualified staff**
   We ensure that our operators have the experience, the training and the tools they need to do their work safely and securely.
7. **Requesting the user's opinion**
   If the user has provided us with their contact details, we will ask how we did. We want to learn from our users.

3.4 Digital communication

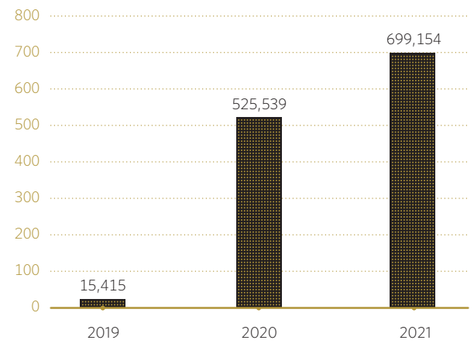
Some years ago we began engaging with our customers through digital channels, mainly email and text messages. The 2021 financial year was when we provided added value for our customers by making it easier for them to deal with the company and by providing them with the information they need for more efficient energy consumption.

We also helped make it easier for customers to send their meter readings, change appointments for field work or report anomalies by digital means. Likewise, after each meter reading period, we have sent the customer a consumption report, which includes a comparison with their neighbours and their municipality as a whole, and information is given on how local temperature has influenced their consumption, how to be more efficient in their energy use and what the carbon footprint is of the gas they use compared with other energy sources.

In figures, this meant 1.9 million actions with a single click, without the need to have a log-in for the VO, nine million emails and texts to our customers, asking for readings, confirming appointments, results from regular inspections, complaints, etc. Another notable figure is the more than three million personalised consumption reports and the increase in digital readings, which went from 65,000 in 2019 and 525,000 in 2020 to 542,617 readings sent digitally in 2021. The success of these channels has motivated us to work towards the following objective: incorporate WhatsApp as a channel of communication in certain processes, as it is one of the most frequently used digital platforms used by people who are less familiar with digital technology.

On the other hand, with regards to communication via social media, the Madrileña Red de Gas profile arose as part of an innovation project that a group of company staff members had developed a few years previously. In 2021 the decision was made to promote these channels, which the company could use to provide users with company-related content. With LinkedIn, for example, we are able to get across the values, philosophy and innovation projects that Madrileña Red de Gas is involved in.

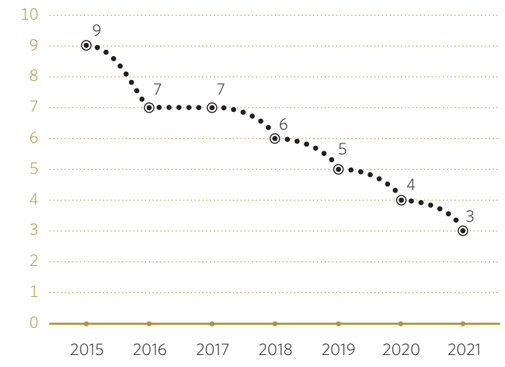
Total number of meter readings sent through the virtual office
(thousands)



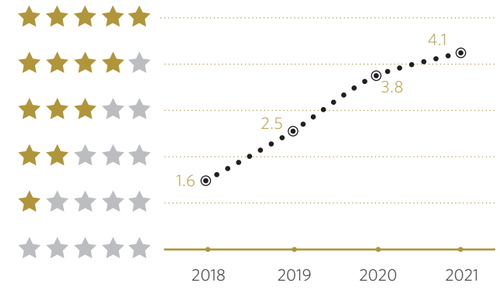
Additionally, three years ago Madrileña Red de Gas set itself the challenge of being the best utility company on the market, and today we are proud to have 6,085 reviews on Google My Business, with an average score of 4.1, compared with 1.6 in 2018.

We have drawn up a digital transformation plan full of initiatives to learn about customers' real opinions, measure the quality of our services, establish new communications channels, provide information and make other tasks easier to manage. And we have not stopped measuring the results in order to work on continual improvement based on the feedback received.

Evolution of no. of customers without real reading
(%)



MRG rating on Google



As a result of the scores given by our customers, we have been able to evolve and improve all our processes by providing more information and greater transparency, flexibility and safety.

From our various ways of contacting customers, at MRG we offer them the chance to rate us, both at GMB and through satisfaction surveys, where we gather scores on CSAT, NPS and CES. All reviews and scores that reach the company are analysed by our customer experience team and the company's business areas, which results in value being generated both for our customers and for MRG.

3.5 Customer operations

With regard to regular inspections, in 2021 we were successful in reaching our targets.

From the beginning of the campaign, the volume of inspections remained above budget, and the year ended with a success rate of 97%, which translates into the 10,090 inspections carried out above the target number, and an unpunctuality rate of less than 0.5% (0.31% of inspections were unable to be conducted and 0.05% of missed inspections were able to be recovered on the same day).

One of the challenges for 2021 was to adapt our booking agendas to provide greater flexibility and availability for customers to change their appointment without it affecting the process of carrying out regular inspections. This led to 26,875 appointments being changed (12.8% of the total);

the highest increase occurred as of May, when the lockdown came to an end.

As well as making it easier to change appointments, the efforts made to adapt to our customers' needs have allowed for continual communication through the various channels made available for this purpose.

These communications have undergone constant changes to adapt to meet customers' needs, which thanks to reviews, surveys and/or complaints we were able to meet. As a result, since from 2021 we were able to resolve all complaints within the established timeframe, and 99% were resolved on the same day.

3.6 Suppliers

Following the liberalisation of the energy sector, with the exception of Gas Extremadura, all other distribution companies exchanged messages with suppliers through the SCTD (Transport-Distribution Communication System).

For MRG the SCTD had a series of limitations, which are described below.

- **Rejecting requests**: When the system rejected a request, only generic information was given, according to the established formats. This meant that in most cases any communication had to be processed with the supplier's ATR (third-party network access) department, or issue a complaint through the 48 process, to obtain more information about why the request had been rejected, and then act accordingly. This obviously led to a delay in activating the request that needed to be processed.

- **Traceability of a request:** In most cases, the only traceability obtained from a request was through the messages established in the formats- The end result was only known when the message indicating the completion of the process arrived. This prevented more detailed information about a request from being accessed when it was still pending and the established timeframes had been exceeded.

- **Extracting information:** Faced with the need to extract reports autonomously about volumes of requests and/or messages, we were faced with the limitation of not being able to extract information for periods longer than a month.

- **Complex interface:** The tool used consisted of various sections, which in turn consisted of various screen, which meant that both how requests were made and how information was searched would take a long time; our own system also suffered from complexity when going through the process of making a request.

Coinciding with a crucial moment to embark on a new venture, such as the new formats coming into force for the new tariffs, we decided to implement a platform of our own. That platform is IOGAS, which incorporates new technologies with the aim of providing an improved user experience, greater control and improved visibility, while always respecting CNMC directives in terms of formats and validations.

With the new IOGAS platform, Madrileña Red de Gas provides:

- **Operative control:** IOGAS is designed to monitor operations in an agile, intuitive way. Using control panels and personalised views, it allows us to determine in real time the requests sent, rejected, in process, etc. It also provides full traceability of the processes and allows for alerts to be programmed depending on the particular user's needs.

- **Validations in real time:** Validations are made online for all requests. The platform allows for real-time verification of validation of supply point formats and information in the distributor's systems, so that errors can be corrected instantly and to avoid any rejections.

- **Integration and access facilities:** IOGAS has an API for online integration with suppliers' own systems, so that any system can connect to the platform quickly, simply and securely. It also provides the option of exchanging files via SFTP, which works as it did up to now, i.e. without having to make any changes in the systems.

As well as the integration options, this new MRG platform features a friendly and intuitive user interface that can be accessed online and from any device.

- **Improved customer service quality:** IOGAS provides more information about the traceability of a processed request. It also provides information on the situation of a supply point, and can be used by sales and customer service channels. The aim is to increase First Cal Resolution for any channel used, minimising the need to transfer calls or process complaints with the gas supplier due to a lack of information to resolve a customer's complaint and, of course, to improve customer satisfaction.

- **Security:** IOGAS was developed in line with the latest advances in access, application and data security. This includes two-factor authentication, email and phone verification during the registration process, the secure password policy, communication security and full traceability of requests and modifications. Specific cyber security trials were carried out to detect and correct any possible breaches.

Along with all these improvements, the project to replace SCTD with IOGAS will mean an annual saving of €80,000 for MRG.

Human capital

Working from home and digitalisation were two of our biggest challenges over the course of the past financial year, a year in which we succeeded in having more women on the workforce than ever before. MRG increased its investment in and devoted more time to training its teams, with more than four thousand hours of training given on issues such as equality, digitalising field operations, big data and cyber security. It devoted a large percentage of the company's health and safety budget to all matters relating to COVID-19.

4.1 Working from home as a way to stay organised

Working from home (WFH) is a flexible way of organising work that consists of staff continuing to work without being physically in the workplace for a large part of their working day. In the beginning of the pandemic, in the first quarter of 2022, WFH started to become more widely accepted in the business world, and it has ended up becoming the norm in a great many Spanish businesses. Even though the figures are much lower than for other European Union countries, WFH in Spain has grown exponentially: from close to 1.6 million people working from home before the pandemic began, in March 2021 the number doubled, rising to almost three million people.

Working from home and digitalisation were two of MRG's major commitments in 2021. Both were applied practically across the board for the entire workforce, while maintaining a 24/7 emergency response service. To implement this new way of working, we opted for the most widespread formula among the various agreements that regulate remote working, by which the company provides the means and an explicitly predetermined remuneration for costs resulting from this way of working.

Prior to implementing its WFH protocol, MRG ran a diagnosis of the situation, with the involvement of various company departments, which identified which roles were best suited for WFH, devised a model to cover any problems that may arise and implemented measures such as reducing the office's physical space.

The benefits afforded by WFH include greater access to talented individuals, retention of qualified staff, lower office costs, improved metrics and lower emission levels, due to fewer journeys between work and home. For our workforce, working from home was a motivating factor and allows for greater flexibility, resulting in an improved work/life balance, increased productivity and considerable savings in both time and costs associated with the daily commute to the company's offices.

As proof of how successful WFH has been is the fact that 99% of remote working agreements across all areas of the business were formalised over the course of 2021.

Diagnosis model for remote working

4.2 Women in the organisation

In 2021 our workforce had the shortest length of service in the company's history, as MRG continues to adapt to new circumstances with a workforce that is both more agile and more flexible.

Average MRG seniority fell by 30%. Specifically, in the past five years, the average length of time a staff member has been at the company has dropped from 19 years to 16 years.

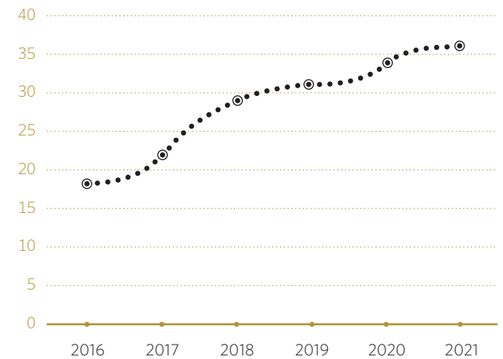
And in the past five years the company's workforce has dropped by 13%, from 145 employees in 2016 to 126 in 2021, with nine staff members retiring in the 2021 financial year. The overall workforce has dropped by 16%, from 162 employees in 2016 to 135 in 2021.

In 2021 there were more women on the workforce than ever before. The number of women employees had been on the rise over the 2010-2021 period, with the percentage doubling over the past five years, up to 80%. Whereas in 2016 the percentage of women on the MRG workforce was 17%, today it is 37%. At the financial year's close, this meant 46 women and 80 men.

Furthermore, over the past five years an average eight people have joined the company each year, of whom 58% are women. In the 2020 financial year, all of the people joining the company were women, and in 2021 half of the new employees were women.

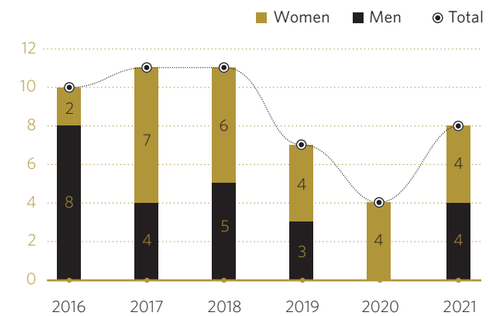
Of the individuals joining the workforce, 75% are university graduates, bringing added value, versatility and expertise to the company.

Proportion of women in the workforce, 2016 - 2021
Proportion of total workforce (%)



Not including partial retirees.

Development in new hires
According to gender



4.3 Training

If we have learned anything over the past two years of the pandemic, it has been to place our focus once again on people and on developing emotionally intelligent organisations. This need to look after ourselves and protect one another from a common enemy, such as COVID-19, has reaffirmed the relationship between company and staff.

Since March 2020, MRG has focused on protecting the health of its workers, and today we are one of the few companies that has kept its staff working from home since then to prevent people from becoming infected. In 2021 we continued working to encourage active listening among our workforce as a way to share and understand situations that they have gone through over the past two years and help them to cope with their day-to-day issues in a friendly, positive way. As part of this work, seven workshops were organised, totalling more than 200 hours.

If 2020 gave us the opportunity to reinvent ourselves at all levels and plant the seeds of projects aimed at managing the change that a global pandemic entails, 2021 was the year in which all these projects have germinated and we have gained ground on the uncertainty that concepts such as lockdown, vaccination or remote working caused among us all. This has happened partly as a result of the ongoing training provided, both in terms of health and safety and in the form of workshops aimed at providing tools for our staff to deal with this new work backdrop, which means acting as leaders for change, initiative, being proactive, cooperation and teamwork.

The 2021 financial year was characterised by ensuring continuity and consolidation of these types of programmes, with more than four thousand hours of training, investment of more than €120,000 and more than 500 people taking part. This training work also helped us to move forward in other aspects that are just as important for the company, such as equality, digitalisation and emotional intelligence.

In 2021, MRG devoted more than four thousand hours and invested more than €120,000 to staff training. The various courses given have helped us move forward in terms of equality, digitalisation and emotional intelligence

For years now at MRG we have operated with the aim of being a leading example on matters of equality. In this regard, and by continuing to work according to these best practices that are aligned with MRG's commitment to achieve equality between women and men, in 2021 we took a step further by incorporating specific training (100 hours) on issues relating to equality within the company's training plan.

Finally, and with the aim of Madrileña Red de Gas bring the very best natural gas distributor for its customers, in 2021 we also invested in training on digitalising field operations, big data and cyber security in order to provide a service that is better, quicker, more comfortable and, above all, safer.

4.4 Prevention

In 2021, at MRG we worked to ensure the continuity of our prevention policies implemented as a result of the COVID-19 pandemic, which in practical terms involved establishing working from home as the preferred option for office-based staff whose roles were suited to this way of organising their work, as well as a raft of other measures aimed at staff whose work is only partly office-based and/or who carry out work in the field.

In this context, a significant percentage of the company's health and safety resources needed to be allocated to issues related to COVID-19. Faced with this situation and in compliance with the business contingency and continuity plan, the most relevant actions taken in 2021 were related to defining criteria that could be applied to processes and activities, standardising and procuring protective equipment and materials, coordinating preventive activities and applying the protocols indicated by the Ministry of Health regarding contagions and close contacts.

Once working from home had been standardised, a series of data-gathering surveys were conducted aimed at devising the appropriate workplace risk assessment by the independent prevention service. As a result of this process it became clear that there was a need to provide staff with further means in order to promote a way of working from home in conditions of appropriate health and safety.

On matters relating to self-protection and emergencies, reviews were completed of the self-protection plan for LPG plants and the emergency plans of five LNG plants were updated. Work also continued on the second management cycle of assets affected by Royal Decree 840/2015 Seveso III, completing the review of eight interior emergency plans for LPG plants with storage capacities of more than 50 tonnes, and five regulatory inspections were carried out, emergency drills were run at LPG and LNG plants and distribution networks, and the appropriate necessary training was given.

Work also continued with new batches for testing explosive atmospheres in LPG storage centres. A new cycle of regular visits was also carried out of ADR advisors for affected installations, and operational control visits were conducted in terms of prevention, environment and quality of a range of our most significant processes.

Finally, in 2021 there were fewer work-related accidents among internal staff compared with previous years.
As a result of a single recorded accident resulting in sick leave, we scored 3.86 points on the accident frequency index. The voluntary legal health and safety audit was also conducted.

Gas and society

NGV is the solution for transitioning to the future of mobility as represented by hydrogen. Madrileña Red de Gas is involved in three projects that will be key for the energy future of the Region of Madrid: Inspira Madrid, the most important project on mobility with green hydrogen; the Henares Corridor – Green H2, a unique opportunity to promote the use of renewable hydrogen and help reduce the dependence on fossil fuels; and the European project Ready4H2, in which MRG is involved along with 90 gas distributors in 17 countries in the European Union.

5.1 Natural gas for vehicles (NGV)

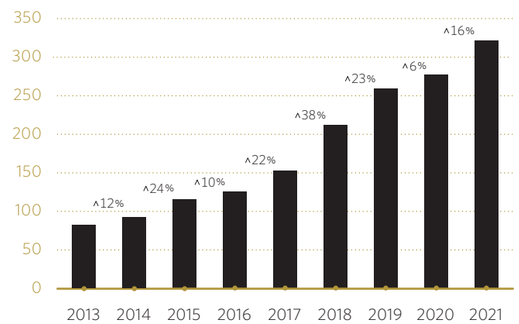
Even though mobility has yet to return to pre-pandemic levels, the use of natural gas as a fuel continued to rise in 2021. There was a 16% rise in stations connected to MRG networks and consumption tripled in comparison with data from 2015.

Over the 2021 financial year, three new NGV supply stations were opened: two of which are public access, in the towns of Fuenlabrada and Leganés, which have close to 200,000 inhabitants with ECO mobility needs for people and goods, and another, in south Madrid, for use by taxi professionals.

In terms of air quality, the main problems relate to NO_2 and particles, which are most prevalent in urban and suburban areas, which is why NGV is the solution to transition to the future of mobility that hydrogen can provide, as the benefits of using NGV are well known: twice as ECO (economic and environmental), saving and reducing emissions (20% of CO_2 and almost 100% of NO_2 and particles). NGV is also the gateway to the use of renewable gases for mobility, as it is 100% compatible with and replaceable by biomethane obtained from various types of waste, the greatest exponent of circular economics. The decarbonisation of transport is therefore possible not solely through electrification, but also through the use of these gases.

On the other hand, in 2021 a total of 3,177 NGV-powered vehicles were registered in Spain, with a notable increase in truck registrations, where sales of LNG trucks rose by 34% and by 60% for CNG trucks, achieving a market share of 4.1%, proving the interest shown by transport professionals in this fuel. Half of these vehicle registrations were made in the Region of Madrid, where MRG operates, and where there are 113 CNG refuelling stations (23 of which are in the city of

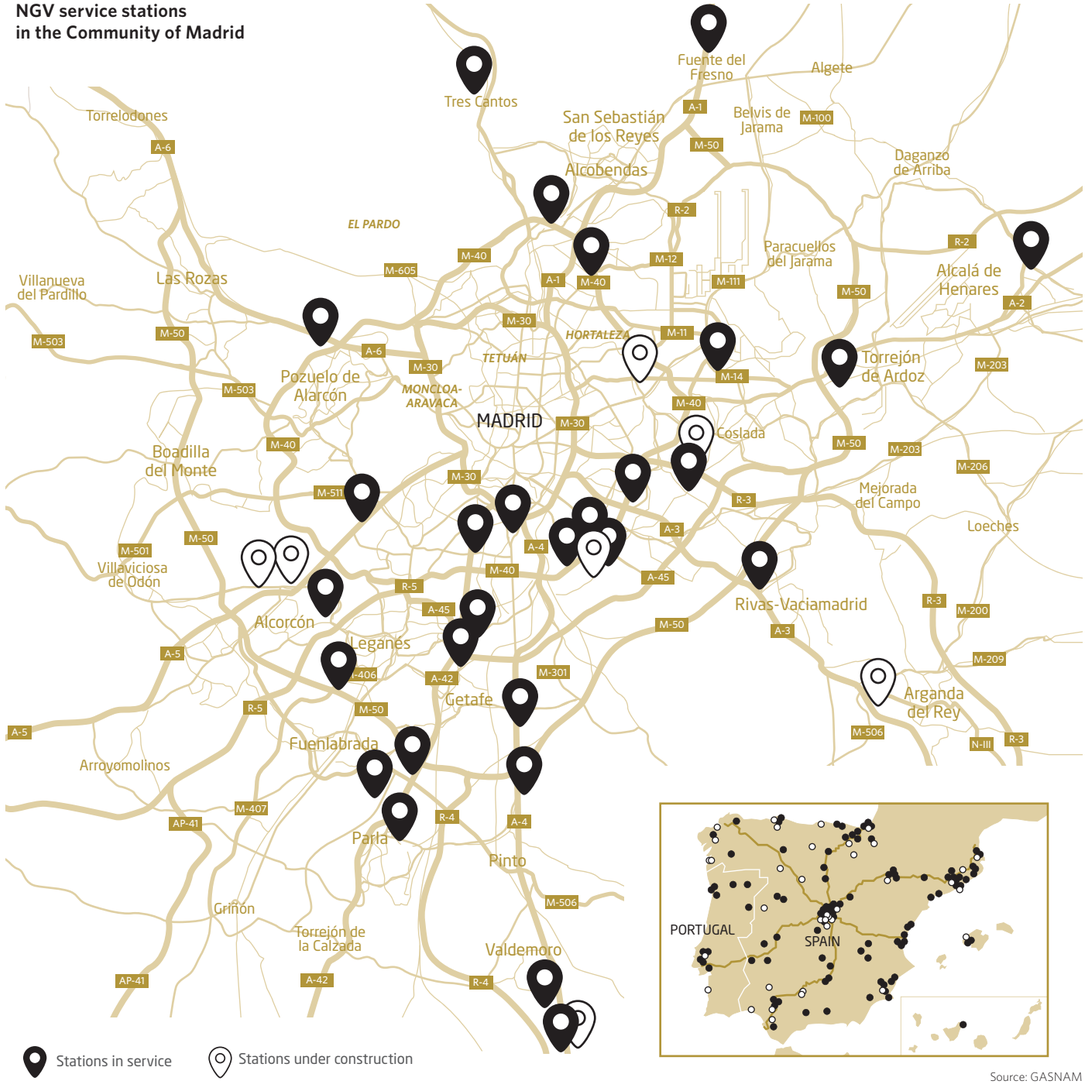
Evolution of NGV consumption
(GWh/year)



Average growth since 2014 stands at 18.8% a year.

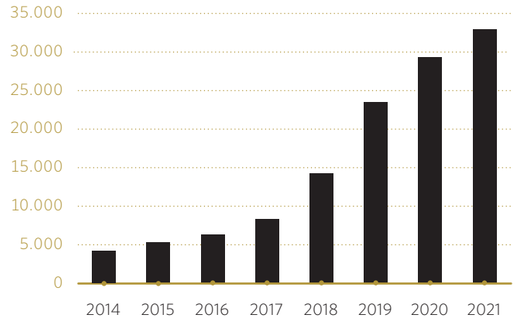
The use of natural gas as a fuel continued to rise in 2021. There was a 16% rise in stations connected to MRG networks and consumption tripled in comparison with data from 2015

NGV service stations in the Community of Madrid



Source: GASNAM

Number of NGV vehicles in Spain
(Total units)



MRG is participating in Inspira Madrid, the most important project on green hydrogen mobility in the Region of Madrid

Madrid) and 78 LNG stations. Many more of these refuelling points are also currently being planned or built throughout the rest of Spain, where in 2021 15 new CNG and 15 LNG refuelling stations were built, consolidating an infrastructure that makes NGV-powered mobility along the main transport routes a reality throughout mainland Spain, particularly in the country's larger cities.

5.2 Environment

With regard to the environment, and in order to estimate fugitive emissions of methane into the distribution network, Madrileña Red de Gas maintains its system of environmental performance indicators. During the past financial year, use of the methodology by events has progressed satisfactorily, the result of which is taken into account for the corresponding carbon footprint report. Thus, the carbon footprint report on scopes 1 and 2 for 2021, which uses the ISO 14064 as its base standard, has been verified by an independent third party: the global testing, inspection and certification company Bureau Veritas. Scope 3 is expected to be included in the next report. The carbon footprint report was also submitted to the Spanish Climate Change Office, which awarded it the "Calcula 2" seal.

Additionally, notification of reports on contaminated land from dismantled LPG plants continued apace and it is expected that the owners of said land will be notified of the conclusions to the administrative rulings issued in relation to this process.

Finally, MRG renewed the certifications for its integrated management system (IMS) on the environment, quality and prevention in accordance with the ISO 14001 and ISO 9001 standard, respectively. The company also obtained ISO 45001 certification, replacing OHSAS 18001. Progress was made with regard to introducing improvements in the digitalisation of personalised IncaWeb processes, and the tool's various other processes were also strengthened.

The ESG report includes specific chapters that go into further detail about these issues.

5.3 Inspira Madrid project

One of the main causes of polluting emissions in the Region of Madrid is land transport, which accounts for 55% of the region's CO_2 emissions.

Together with the Professional Taxi Federation of the Region of Madrid (FPTM) and the companies FRV, Toyota España and the Ruiz Group, MRG is participating in Inspira Madrid, the most important project on green hydrogen mobility in the Region of Madrid. In collaboration with PWC as strategic advisor, Inspira Madrid promotes the decarbonisation of urban public transport fleets through the use of green hydrogen, contributing to the entire value chain, from the infrastructure to generate and supply the gas through to promoting its use by the transport sector.

Inspira Madrid was designed to be modular, flexible and adaptable, so it can be progressively scaled up in subsequent phases of the project's expansion. The initial phase is eligible for subsidy as it is included in section 2.e – "Implementation of hydrogen distribution plants for fuel-cell vehicles" – (complying with the requirement of hydrogen from renewable sources) of Appendix I of the regulatory terms of the MOVES programme Singular Projects II.

In an initial phase, Inspira Madrid will install a 5 MW polymer-electrolyte membrane (PEM), fed through the direct connection with a solar power plant implemented in the Region of Madrid. This facility is complemented by a connection to the network that will supply power through a PPA (power purchase agreement), and which comes with certificates of origin guaranteeing that its source is renewable. All of the hydrogen produced will be allocated to a network of five public-access hydrogen plants, with an individual daily supply capacity of 200-300 kg of green hydrogen. Unlike with conventional fossil fuels, these hydrogen plants will supply light and heavy-duty vehicles at a competitive price. In this phase, the off-taker, or wholesale end user will be the fleet of taxis operating in the Region of Madrid; an estimated 650 vehicles are expected to be transformed. The Ruiz Group is expected to transform five buses to run on fuel cells.

In the next phase, the hydrogen-generating infrastructure will begin to be scaled up. The design of this phase means that the PEM can be scaled up to 10 MW, and the network is expected to be scaled up to between eight and ten hydrogen plants, with an increased supply capacity (from 300 to 600 kg). A thousand vehicles from the taxi sector fleet and 20 buses are expected to be transformed in this phase.

Throughout the project's various phases, Inspira Madrid will actively collaborate with the various green hydrogen off-takers to guarantee demand for the hydrogen produced. These collaborations come with the strategic backing of the FPTM in terms of the sector's progressive decarbonisation. In this context, work is ongoing with Toyota España to

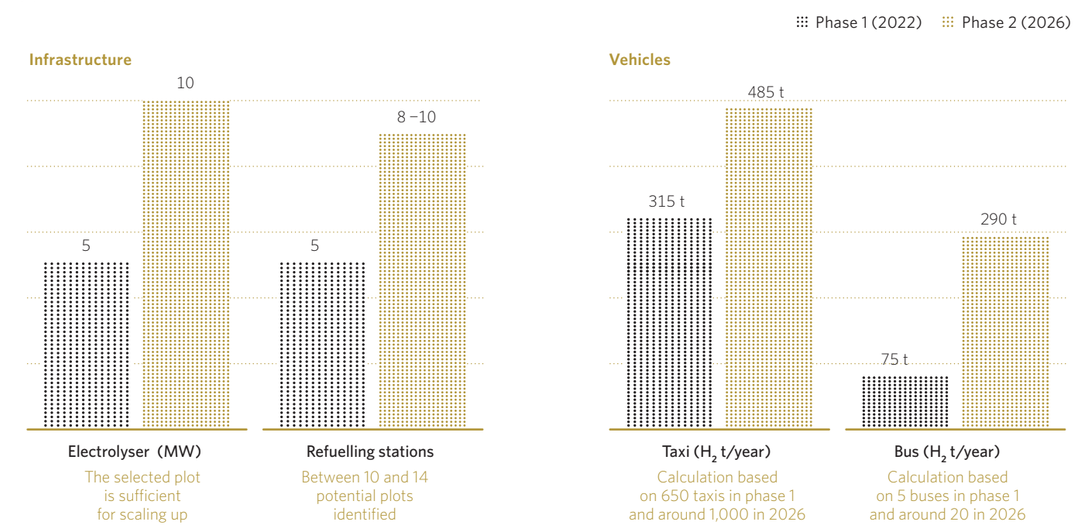
develop an innovative business model to implement a new hydrogen fuel-cell vehicle in the taxi sector.

The project also includes a commitment from the Ruiz Group, which specialises in urban bus transport, support from the Seur Group, a leading Spanish logistics company that has undertaken an ambitious process of decarbonising its fleet, and involvement from the municipal waste collection company Getafe LYMA and the cash-in-transit company LOOMIS.

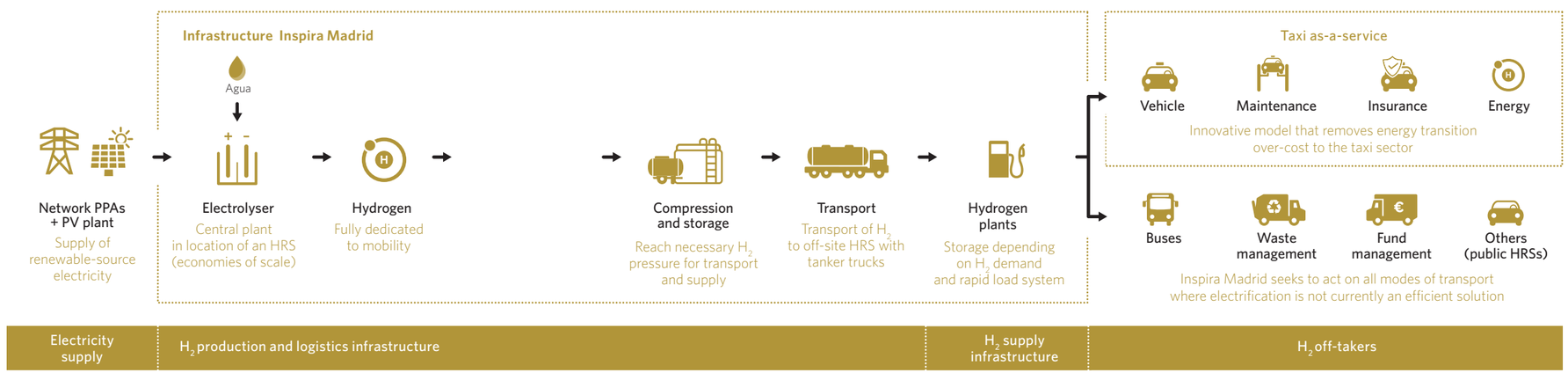
The project has representation of all of the region's main forms of transport, of both people and goods alike. In terms of MRG, the company will use Inspira Madrid to bring about a progressive transformation of its fleet of vehicles powered by renewable hydrogen.

Inspira Madrid will actively collaborate with the various green hydrogen off-takers to guarantee demand for the hydrogen produced. These collaborations come with the strategic backing of the FPTM in terms of the sector's progressive decarbonisation

Inspira Madrid estimated figures
By phase of project



Inspira Madrid



The Henares Corridor – Green H2 project is a unique opportunity to foster the use of renewable hydrogen and help the Region of Madrid to decarbonise through its effects on transport and industry

5.4 Henares Corridor – Green H2 project

In the framework of the Region of Madrid policy to move towards a model of sustainable transport and mobility, it is essential to foster specific courses of action aimed at reducing the effects of greenhouse gases and pollutants, and to reduce overall energy consumption. This is why renewable hydrogen will be a fundamental aspect of the region's sustainability policy.

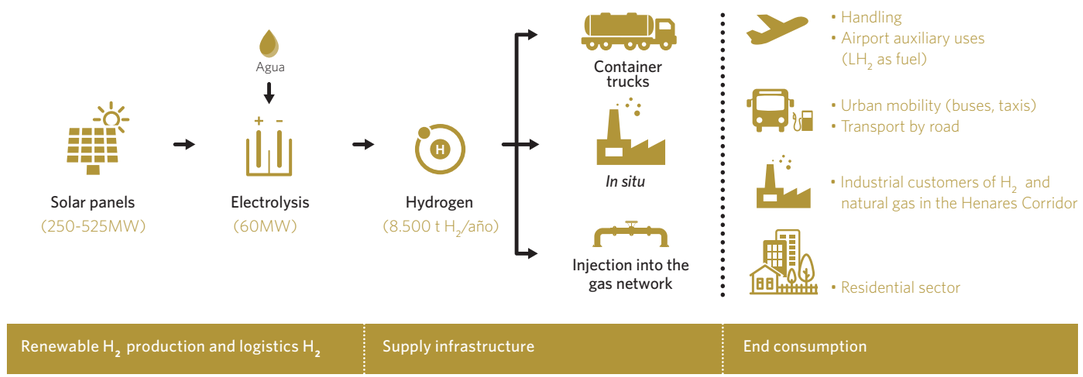
Madrid also has the Air Quality and Climate Change Strategy (Planazul + 2013-2020), aimed at achieving a 10% reduction in recorded CO_2 emissions in 2020 compared with 2005, and 30,000 fewer tonnes of substances released into the atmosphere.

Because the transport and mobility sector is one of the highest consumers of energy, and responsible for a significant percentage of atmospheric emissions, the use of renewable hydrogen is essential for this sector when it comes to reach the decarbonisation targets set. For the industrial sector, the Spanish road map has set the target of replacing 25% of grey hydrogen by 2030.

The Henares Corridor – Green H2 project is therefore a unique opportunity to foster the use of renewable hydrogen, contributing to the decarbonisation process in the Region of Madrid by helping to modify the activities that result in the heaviest emissions, namely transport and industry.

The Henares Corridor is a strategic part of Madrid's economy. Located to the east of the metropolitan area, this is a residential, industrial and business area made up of 16 municipalities with a combined population of more than half a million inhabitants (around 8.4% of the region's population), and is a dynamic part of a first-rate industrial enclave.

Henares Corridor - Green H2 project



The Henares Corridor is where a significant part of the Madrid region's productivity is based. It is where 7.1% of the region's industrial facilities are located and where 6.9% of the region's population is employed, and is therefore an ideal in which to develop economic activities, particularly those with links to transport and logistics. Its location along the Madrid-Zaragoza-Barcelona axis means it is on the route for goods coming in from elsewhere in Europe. This axis is the most important logistical enclave in the Iberian Peninsula, as it includes the Adolfo Suárez Madrid-Barajas airport, one of the most important infrastructures and transport hubs in the region, as the largest Spanish airport in terms of passengers, air cargo and number of operations.

Madrileña Red de Gas forms part of the consortium made up of ENAGAS Renovables, EDF and Q-Energy, with the aim of making a pioneering contribution to deploying green hydrogen production capacity by combining solar and wind power produced where the project itself is based.

The hydrogen produced will be used mainly to decarbonise the Adolfo Suárez Madrid-Barajas airport by replacing natural gas with green hydrogen from the existing cogeneration plant, helping to meet the airport's energy needs. It will also be used for fuel cells to power the machinery used in the airports and loading terminals for goods and passenger handling, replacing their current consumption with power from renewable hydrogen. Part of the energy produced will also be used to support pre-industrialisation processes of aircraft prototypes powered by renewable hydrogen.

To that end, a series of 60 MW proton exchange membranes (PEMs) will be used, divided into respective 25 MW and 35 MW phases. The hydrogen plant will also have a compressor to increase the pressure, so that the hydrogen can be stored and transported by truck to the various consumption points close to the project's location.

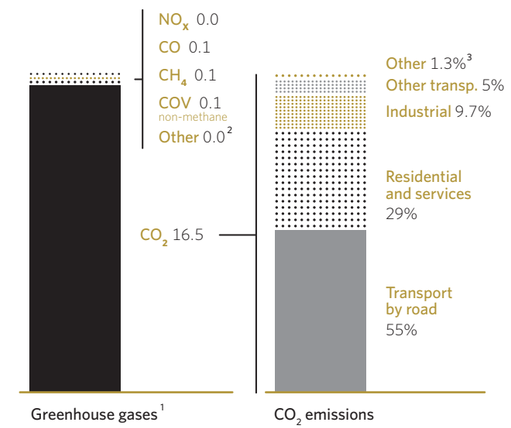
Several hydrogen distribution points will also be installed in the Henares Corridor area, which will be used to supply the energy needs for hydrogen-powered mobility, mainly in relation to urban transport and for medium and long distance heavy goods transport.

Furthermore, the project's benefits will make Madrid an innovation leader in the use of green H2 for mobility (urban transport, rail and air transport), smart networks, and in systems used for guarantees of origin and green certification. It will also enable various place of learning, such as the University of Alcalá de Henares, the Carlos III University and technology centres to share knowledge and train future engineers and operators of Spain's new renewable H2 industry.

The project will also boost job creation: more than a thousand new jobs are expected to be generated in the development and construction stage, and close to a hundred in the operating stage. These estimates are based on the project's full completion and the complete value chain, both the solar power plant and the H2 value chain, which will reduce CO_2 emissions by 132,000 tonnes/year, helping to improve air quality and people's health.

The Henares Corridor – Green H2 project will make Madrid an innovation leader in the use of green H_2 for mobility and smart networks, and in systems used for guarantees of origin and green certification

CO_2 and NO_x emissions associated with transport and mobility
(t thousands)



1. Acidifiers, ozone precursors and greenhouse gases.
2. Includes NH_3, So_X, HDC, SF_6 and PFC.
3. Includes the use of solvents and other products, processing and eliminating waste, producing and transforming energy, agriculture, extraction and distribution of fossil fuels, and other sources.

Source: Comunidad de Madrid

5.5 Ready4H2 project

The importance of the role that hydrogen currently plays in decarbonising the power grid is based on the fact that climate change has forced the industry to place limitations on greenhouse gas emissions. Hydrogen is therefore a key element in Europe's energy transition, and gas distribution companies are an important part of ensuring a rapid rollout. For decades, European gas distributors have shown their capacity to provide a network of safe and profitable gas pipelines, as well as having plenty of experience in how they should be managed, which can help to ensure a speedy and agile transformation of Europe's energy infrastructure.

The Ready4H2 project is aimed at combining the hydrogen expertise and experience of European gas distribution companies, helping to produce a common framework of collaboration to analyse how distribution networks can help to make the huge potential for growth of this gas a reality, as well as providing a regulatory framework for it to be developed that harnesses the potential of Europe's existing gas infrastructure, and therefore help to achieve climate neutrality targets by reducing the impact of Europe's carbon footprint for people's benefit.

To that end, more than 90 gas distributors from 17 EU countries are collaborating on Ready4H2. Madrileña Red de Gas is one of the five Spanish gas companies (along with Nedgia, Redexis, Nortegas and Gas Extremadura) that have joined the initiative to share their experiences of different markets and shape the role of gas distribution networks throughout the hydrogen value chain as the necessary link between producers and consumers. Combined with the other European distributors, this will create an ideal scenario to ensure the project is properly implemented and able to prosper.

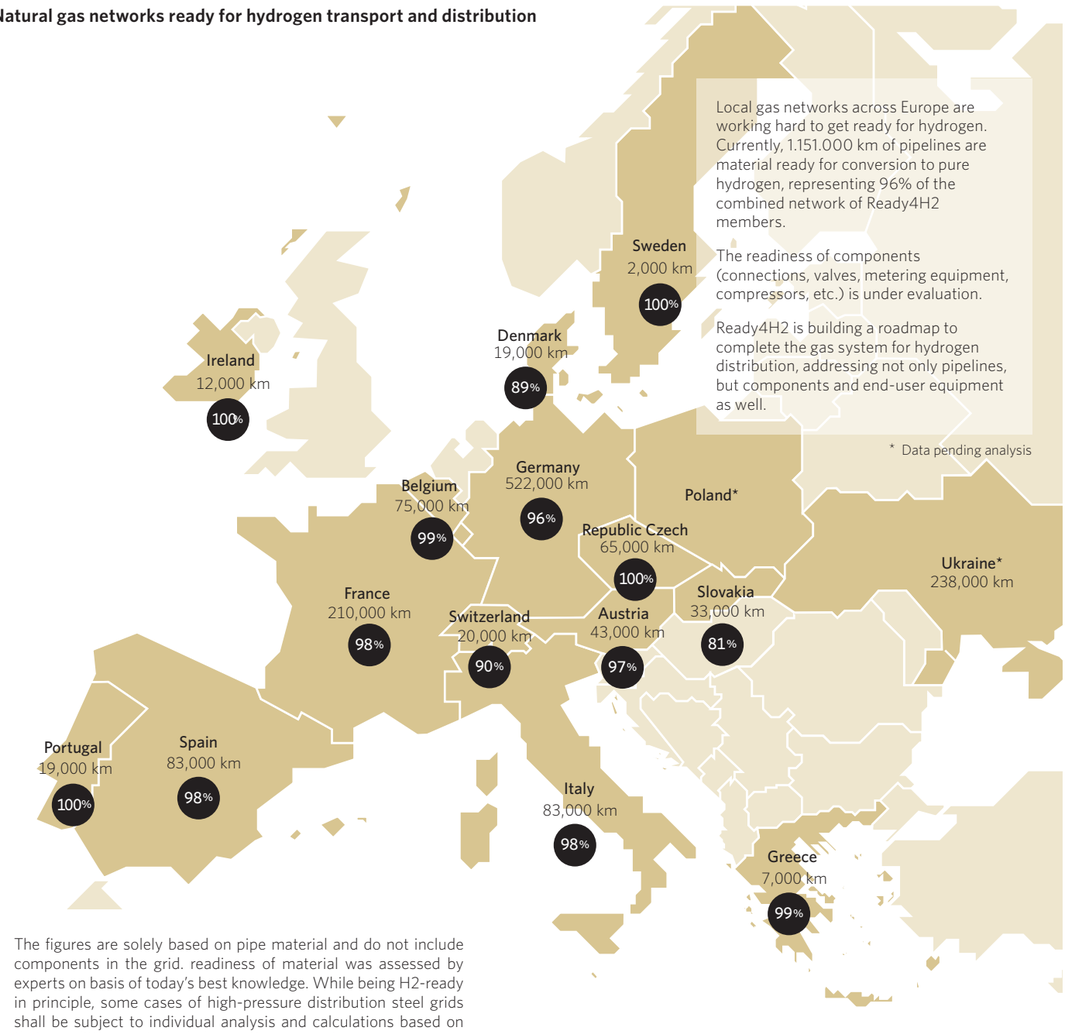
In Europe, more than a million kilometres of gas pipelines, 96% of the total, have been prepared to distribute hydrogen

Work on the Ready4H2 project is focused on three fronts. The first of these is the analysis of the various distributors' involvement in developing hydrogen, the accumulated experience and the strategy adopted in different countries. This also includes examining how the different official bodies are involved in developing hydrogen and up to what point the hydrogen strategy has evolved in each country.

The second front is concerned with how European gas distributors can contribute to the development of hydrogen and the strategic planning for the region, analysing each distributor's experiences and knowledge, as well as the position of gas distribution companies and their contribution to strategic planning for the region.

The third front consists of drawing up a road map with specific initiatives so that gas distributors can form the link, at both the national and the European level, between hydrogen producers and consumers.

Natural gas networks ready for hydrogen transport and distribution



The figures are solely based on pipe material and do not include components in the grid. readiness of material was assessed by experts on basis of today's best knowledge. While being H2-ready in principle, some cases of high-pressure distribution steel grids shall be subject to individual analysis and calculations based on their condition and intended operating parameters.

Source: www.ready4h2.com

Results

In the 2021 financial year, Madrileña Red de Gas has shown great financial resilience, with a solid position of foreseeable generation of revenue, which rose by 6% compared with 2020. We closed the financial year with 915,209, supply points, of which 893,311 are for natural gas and 21,898 are for LPG, and after having made investments amounting to €13.1 million.

It was the year in which a new regulatory period began (2021-2026), which establishes that gas years do not follow the calendar year.

Profit and losses (€M)	2020	2021
Remuneration	142.9	145.8
Other revenues	33.2	41.0
EBITDA [1]	139.7	141.3
EBIT	106.8	106.7
Net profit	64.4	70.3

1 Excluding non-recurring expenses.

2021 was the first year of a new regulatory period (2021-2026). Notably, it establishes gas years that differ from the calendar year

6.1 Summary of results

While still feeling the effects of the pandemic, 2021 began with Storm Filomena and ended with high levels of volatility and uncertainty in the markets. In this context, MRG has continued to show its capacity to maintain stability against adverse economic cycles and unexpected events, obtaining excellent results that confirm great financial resilience, with a solid position of foreseeable revenue creation.

Company revenue was €187 million, a 6% increase compared with 2020. This variation is due mainly to greater turnover, at almost €3 million, and to increased revenue of €8 million in other areas, compared with 2020.

MRG's main source of revenue is turnover from its distribution activity. It is calculated each year using a parametric formula and varies depending on the growth in supply points and demand conveyed through the network. The demand for gas conveyed through the network increased in 2020 compared with 2020, both in terms of connection points for domestic use and among commercial and industrial clients, due to colder temperatures in winter and increased economic activity. This led to an increase in turnover, which exceeded that of 2020, easily offsetting the gradual cutback applied in this first year of the regulatory period (2021-2026).

MRG's main business is the distribution of natural gas, which is a regulated activity. The regulatory periods for this activity are in six-year cycles, and 2021 was the first year of a new regulatory period (2021-2026), the framework for which had been defined and published in 2020. The methodology for calculating payment is along the same lines as previously, but also includes a gradual revenue adjustment over the period set. Notably, it establishes gas years that differ from the calendar year, as this first gas year, 2021, was for a period of nine months (1 January 2021 to 30 September 2021). The subsequent gas years are for 12 months, beginning on 1 October and ending on 30 September. The offset for MRG corresponding to the 2021 gas year was €2.7 million, whereas for the calendar year it was €4.7 million.

The increase in other revenue is due to the consumption of liquid petroleum gas (LPG), distributed through the network, which in 2021 rose by 4.5% with regard to 2020. This was due to the low temperatures, added to the rising price of LPG and the conducting of regular inspections, which must be carried out every five years at every supply point in the company's network, and these inspections are not spread out evenly over the five years. More inspections were carried out in 2021 than in the previous year, which led to an increased revenue from inspections of €4.5 million compared with 2020.

In the 2021 financial year, the EBITDA amounted to €141.3 million, a 1% growth over 2020, due to the increased revenue recorded. The EBITDA figure also includes greater costs than the previous year due to differences in how gas is metered, mainly caused by the change in the gas year and by rising gas prices.

The 2021 financial year was the first time that the gas year ended on 30 September, meaning that unusually this first gas year lasted only nine months. The second gas year also began in 2021, and will end on 30 September 2022. In terms of the costs recorded for this concept throughout the current financial year, they are impacted by two gas years with two different regular gas prices. This, in conjunction with the fact that when entering the metering differences there are major seasonal fluctuations, combined with rising gas prices, has affected the one-off cost estimate by approximately €4 million, which could be offset when the price trend reverses, leading to the opposite effect.

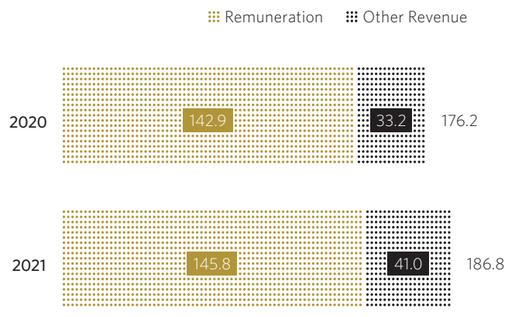
The company's growth strategy continues to focus on profitable and sustainable expansion both in our region and in adjacent areas. The company's customer base continues to grow, and in 2021 the company was able to maintain the same rate of growth as in the years prior to the pandemic. As of the close of 2021, Madrileña Red de Gas distributes gas to 915,209 supply points, of which 893,311 are for natural gas and 21,898 are for LPG.

Other aspects underpinning this growth strategy are the commitment to decarbonisation and replacing more polluting and less efficient energy sources, promoting the use of NGV, robotising, digitalising and automating processes, the focus on customer satisfaction and renewable gases, which include green hydrogen.

6.2 Operational results

In 2021, our EBITDA amounted to €141.3 million, 1% more than in 2020. The higher turnover figure accounts for this increase in the operation result.

Revenue
(€M)



6.3 Revenue

Total revenue in 2021 was €186,8 million, a 6% drop compared with 2020, due mainly to a higher demand for gas due lower higher temperatures and a seasonal effect due to the higher number of inspections made when compared with previous years.

A total of 97% of the company's revenue stems from regulated activities. In practical terms, 80% of this is the revenue from distribution, legally recognised in the resolution of 18 December 2019 issued by the CNMC on the payment of companies conducting regulated activities relating to LNG plants, transport and distribution for the 2021 financial year, and the adjustments that have been made and estimated based on the evolving demand for gas. The remaining 20% is from other services related to natural gas distribution, such as rental of meters, regular inspections, other consumer services and the sale and distribution of LPG.

6.4 Financial position and balance sheet

Financial strength is one of the strategic mainstays of Madrileña Red de Gas. The company has strong levels of solvency and liquidity consistent with an investment grade. The financial structure is efficient and long-term. In 2021, gross debt amounted to €950 million, with an average maturity period, at the close of 2020, of six years, approximately, and an average cost of 2.7%.

MRG also has a contingent credit line of €75 million, which was renewed in February 2022, in line with the company's real needs for the coming years. At the financial year's close, the company's available liquidity amounted to €108.5 million.

Flexibility in the company's dividend policy is another feature that ensures MRG enjoys a better financial position.

The group's debt is issued by MRG Finance, in the regulated Luxembourg market under the EMTN programme. This debt is classed as investment grade (BBB-) by S&P Global Ratings and DBRS Morningstar. During the 2021 financial year, both agencies re-confirmed their credit rating of BBB- and BBB low, respectively.

Total revenue in 2021 was €186,8 million, a 6% drop compared with 2020

Balance sheet (€M)	2020	2021
Gas distribution licences & other intangibles	751.0	751.0
Net tangible fixed assets	339.2	318.1
Total network fixed assets	**1,090.1**	**1,069.1**
Goodwill	57.4	57.4
Deferred tax assets	17.9	14.7
Other non-current assets	212.1	339.2
Current assets	47.7	34.5
Cash	46.6	33.5
Total assets	**1,471.8**	**1,548.4**
Equity	362.5	432.8
Long term debt	945.2	944.6
Deferred income tax liabilities	70.0	79.9
Other non-current liabilities	38.6	36.1
Current liabilities	55.6	54.9
Total liabilities & shareholders equity	**1,471.8**	**1,548.4**

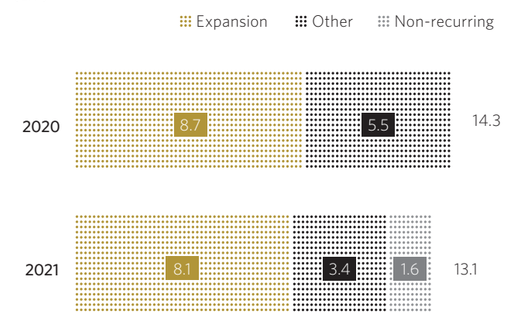
Free cash flow[1] (€M)	2020	2021
EBITDA	139.7	141.3
Income tax paid	(7.1)	(5.6)
Working capital[2]	15.5	3.4
Capex	(14.3)	(13.1)
Free cash flow	133.8	126.0

1 In accordance with the International Financial Reporting Standards (IFRS).
2 Excluding one-off operations (incoming payment of the Castor project in 2020).

6.5 Operating cash flow

Operating cash flow was €126 million, 6% lower than in 2020. This variation is mostly due to the working capital position at the close of 2021. The 2020 financial year was characterised by increased cash flow resulting from adjustments to turnover from previous positive years, whereas in 2021 the adjustments to turnover from previous years were negative. At the same time, the system's deficit position improved in comparison with the previous year, partially offsetting the negative effect of the adjustments to the position's negative turnover with the system.

Investments
(€M)



6.6 Investments

In 2021 investments were made totalling €13.1 million, a similar amount to the investments made in the previous year. These investments can be divided as follows::

Network expansion

MRG invested a total of €8.1 million in expanding its pipeline network, in alignment with its strategy of viable and sustainable expansion.

Other projects

Investments remained at a similar level to those made in previous years, and were used for network maintenance, digitalisation, automating processes and developing information systems, which are chiefly aimed at reaching our targets of cost efficiency and improvements in the quality of our customer service.

MRG invested a total of €8,1 million in expanding its pipeline network, in alignment with its strategy of viable and sustainable expansion

Published by
Madrileña Red de Gas

Edited by
Nuria Martínez Deaño

English translation
Lema Traductores

Design
Francisco Dorado

Production
Global Media Comunicaciones

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