

**2018**

ANNUAL REPORT

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**KEY FIGURES**

28%

The percentage of women within the MRG team. This means an increase of 11 points compared to 2014, when the percentage of women in the workforce was 17%

43%

The estimated savings of CO<sub>2</sub> emissions when a coal boiler is replaced by a natural gas boiler

6,145

The total length of network kilometres, adding the 5,772 km of natural gas network and the 373 km of LPG. This financial year our network grew more than 150 km

16%

The increase in natural gas transported by our distribution network in 2018

4,259

New homes to which MRG has provided service in the last financial year

206

Regulation and measurement stations. Most of them are managed remotely and autonomously from the control centre

16,500

LPG points from those acquired from Repsol in 2016 have been converted to natural gas

16

The average seniority of our workers is 16 years

20%

Road traffic is the factor that most affects the pollution of the city. It is followed by heating, which causes 20% of the pollution

1,100

Miraflores de la Sierra customers will enjoy the benefits of natural gas after the conversion from LPG

+300

The number of existing coal boilers in the city of Madrid

25%

The increase of companies working with MRG compared to the previous financial year

500

Million euros in bonds have been redeemed during 2018 as of the due date

59

Municipalities operated by Madrileña Red de Gas in the Community of Madrid

903,346

The total number of users who rely on Madrileña Red de Gas for their supply. Our aim is to offer a quality service and meet all their expectations

×4

Investment in training has quadrupled in recent years

129

People are the MRG workforce. Thanks to them, our users know that they will receive efficient and excellent service

Note: Employees under partial retirement regime are not included.

7.1

The average life of the debt in 2018

100%

The entire MRG fleet has used alternative energies since 2015

29%

The percentage of women present in the current Madrileña Red de Gas Board of Directors

2018

Madrileña Red de Gas has been awarded the “Excellent Madrid” mark of quality by the Autonomous Community of Madrid

2,898

Tons of CO<sub>2</sub> is the amount that has stopped being emitted into the atmosphere after the conversion of 8,052 supply points from LPG to natural gas

45%

The new commissioning of the Miraflores LNG plant may entail up to 45% annual savings for many homes in the municipality

3,500

Smart meters installed in 2018

100%

All Madrileña employees have received training in data protection

1,098

Hours of training in safety and occupational risk prevention

146%

The percentage by which the registration of NGV vehicles has increased in 2018; more than half in the Community of Madrid

188

Total revenues for this 2018 financial year were € 188 million, 3% more than the previous year

7%

In 2018, EBITDA increased 7% due to the operational efficiency that enabled revenues to be increased and costs to be reduced

100%

All our contracts are permanent term

12

Months without non-in itinere work accidents causing sick leave

110.6

During this financial year, our earnings before interest and taxes (EBIT) reached € 110,6 million, which represents 5,2% growth compared to the previous year

0

2018 has been another year without any serious accidents in Madrileña Red de Gas or its contractors

116

The cash flow generated by ordinary operations during the 2018 financial year was € 116 million, 13% more than the previous financial year

2.7%

The average cost of debt has improved in 2018 decreasing from 3.1% to 2.7%

31%

The increase in consumption associated with the 3 new NGV stations in the MRG area

750,000

Customer installations inspected by Madrileña Red de Gas in 2018

1,442

Boiler rooms converted to natural gas by MRG

LETTER FROM THE CHAIRMAN

Madrileña Red de Gas has begun its tenth year of activity and, in a few months’ time, will therefore celebrate its tenth anniversary. It is a good time to take stock of the company’s achievements and assess its vision for the future.

Over the last ten years, the energy sector in Spain has undergone a more than remarkable change. Regulation has also changed in direction as a result of new climate and energy policies being implemented. All this means that we will experience changes even greater than before and that, in another ten years, energy companies will be very different to what they are today.

In the time since it received the authorization required to start its activity, Madrileña Red de Gas has established itself as a solid company. It is outstanding in its operational and financial efficiency and its safety, the quality of its operations and customer service. The size of the company has increased through internal growth and successive acquisitions of distribution assets. Today we have surpassed 900,000 active connection points. We continue to initiate activity in new municipalities: from the initial 39 to the current 59. This includes the Municipality of Madrid, the capital where distribution activity is maintained in five districts. This is proof of our commitment to continue investing in making gas available to everyone in Madrid, in order to improve their quality of life and their economy, because of the savings this represents in comparison to other forms of final energy.

In this last year, we have carried out work to improve the network in relation to its segmentation, and a programme to extend telemetry. We have also launched an ambitious fraud detection, correction and prevention programme as a result of the increase that these practices have experienced in the

distribution networks, not only for gas but also for electricity. It is a pioneering programme that is providing very positive results.

Finally, good results are being achieved in the extension of gas use in those industrial sectors in which there was clear undeveloped potential. In addition to serving those customers and contributing to the reduction of polluting emissions, this translates into a more efficient use of the network and contributes to the improvement of the Company's results.

With regard to operational safety, our indicators show a clear improvement, both in absolute terms and in relation to the indexes of comparable sectors.

We have maintained the level of our economic results, despite the impact of the 2014 regulatory reform and the cuts that subsequently took place, with the reduction of the remuneration of some activities (such as the rent of meters) and the opening up of others to competition (such as periodic inspections). These results emerge out of the concern for permanent internal improvement, which translates into reducing costs and monitoring these, without detriment to quality in any area, as has been stated.

Looking now towards the future, our concerns are focused on three main issues: customer service, energy transition and regulation.

In relation to customer service, we have launched a programme to review processes that involve interaction with current or potential customers: contracting, connection work, consultations, billing, breakdowns and emergencies, collections and claims.

Our objective is to simplify processes by choosing the simplest access channels and procedures, so that customers have

quick and easy access to the information they need, to billing information, and a quick response to all types of requests: emergency calls for incidents, with a satisfactory resolution within the agreed term, the resolution of claims of all kinds in short terms, the programming of connection or repair works, adapting the response to the specific needs of each customer. This programme is in the development and implementation phase, and we hope to show results at the end of this financial year.

In the next legislature, the Energy Transition Law will be approved. It will establish the objectives and the framework to which the regulation must comply in order to achieve them. In fact, the transition has already begun twenty years ago, with the Electricity Sector (1997) and Hydrocarbons (1998) laws, which have led to the mix of primary and final energy and, above all, the electricity mix, both in terms of power and energy, being already very different from what we had then. However, these changes have had a negligible effect on the oil and gas sectors, on the supply side, and, on the demand side, the industrial, commercial and domestic sectors. The new stage of the transition will be more demanding in its objectives and wider in its scope, so it will affect all sectors of the economy, and also that of natural gas.

Therefore, the manner in which this energy transition is designed and developed is crucial. The future of gas as a clean energy, as a real solution available from today to radically improve air quality in cities (one of the major problems of developed societies) and the role that natural gas can play in mobility, as a very attractive option, owing to the absence of polluting emissions, the autonomy of gas vehicles and the economic savings offered by this fuel, will depend on this. This, in the short term. In the medium term, the development of renewable gas, still in its infancy, can expand the role of gas as an energy solution.

In this sense, Madrileña Red de Gas has been a pioneer in the promotion of applications for motor vehicles and specifically for cars and fleets of buses. Amongst other things, we are the first Spanish company to have a fleet of vehicles that only use compressed natural gas as fuel.

The recognition of our activity in relation to our concern for an intelligent use of energy took place in 2017, with the award presented to us by Madrid City Council for being the most active company in the field of energy efficiency.

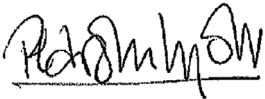
Regarding the regulatory framework in which our activity is carried out, we are close to the end of the current regulatory period (2015-2020). The Royal Decree-Law 1/2019 of January<sup>11</sup> gives the National Commission on Financial Markets and Competition (CNMC) competences in the development of the remuneration methodologies of the regulated activities. Consequently, the National Commission on Financial Markets and Competition (CNMC) has announced the drafting, within the first half of the year, of the proposals of those methodologies, which will be crucial for the next regulatory period. It is expected that regulatory stability, essential for investors to continue to see Spain as an attractive country, will be ongoing and without difficulties, and that the activity of the regulatory body will be developed with the necessary permanent consultation with regulated sectors.

It is worth emphasizing that regulation in sectors such as energy requires continuous fine-tuning, which must be carried out on the basis of a continuous dialogue with the actors, who know in detail the complex reality that we must manage on a daily basis, improving and updating the regulations that govern the sector's operation. Much more so at a time when energy transition can lead to unwanted turbulence, if all aspects are not handled well.

Finally, I would like to mention corporate governance, a field in which we have taken decisive steps in order that Madrileña be at the level of those that are now accepted as best practices.

We have put into operation two committees on the Board of Directors: the Audit and Risk Committee which, in addition to the usual internal audit functions, is responsible for keeping the catalogue up-to-date and evaluating the risks that may affect the company; and the Crime Prevention Committee, tasked with preventing and warning of any problem or vulnerability of the company and work processes in this regard. An evaluation of the Board of Directors has also been carried out, which has resulted in the identification of areas for improvement and the implementation of actions in each of these.

Finally, I would like to express, once again, the company's gratitude to the shareholders for their support in all action plans, both in the short term and with a long-term vision. And to the management team and all those who dedicate their working lives to Madrileña Red de Gas, in recognition of what has been achieved and in support for all the challenges that lie ahead in the coming years.




Pedro Mielgo  
Chairman



# 1

## THE COMPANY

This financial year has been distinguished by the application of the required adaptations to the new community law on data protection, an effective management of corporate risks and the analysis of and rigorous compliance with environmental measures.



1.1

## BOARD OF DIRECTORS

**Consilia Asesores, S. L.**    Presidency  
(Pedro Mielgo, legal representative)

**Dennis van Alphen**    Director

**Martijn Verwoest**    Director

**Michael Andrew Bryan**    Director

**Ruwantha Vidanaarachchi**    Director

**Rong Yang**    Director

**Simon Davy**    Director

**Fanny Grillo**    Director

**Pierre Benois d’Anthenay**    Director

**María Martín**    Secretary (non-Director)

1.2

## EXECUTIVE COMMITTEE

**Alejandro Lafarga**    Chief Executive Officer

**Rafael Fuentes**    Legal Director

**Inés Zarauz**    Financial Director

**David Ortiz**    Business Development Director

**Glen Lancaster**    Systems and Operations Director

**María Vázquez**    Human Resources Director

**Félix Blasco**    Network Operations Director

1.3

## CORPORATE SOCIAL RESPONSIBILITY

The pursuit of excellence, through the application of social responsibility and good corporate governance criteria, which assess the impact of the company’s actions on the community, workers and the environment, is the pattern of action followed by Madrileña Red de Gas. For this reason, we have opted for the Excellent Madrid mark of quality. In the first half of 2018, we received the “Excellent Madrid” business excellence certificate, a guarantee mark with which the Community of Madrid certifies the quality and excellence in management of companies and fosters competitiveness within the business sector.

In this area, for another year MRG has participated in the “GRESB Infrastructure” initiative. This enables us to remain faithful to our purpose of having a broader perspective on the company’s evolution and its level of development compared to other companies in the sector.

1.4

## CORPORATE RISK MANAGEMENT

In terms of risk management, and in accordance with the Madrileña Red de Gas culture, the Audit, Risk and Compliance Committee has held regular sessions in which a wide variety of topics have been analysed. These sessions are aimed at monitoring the development of the risks regarded as

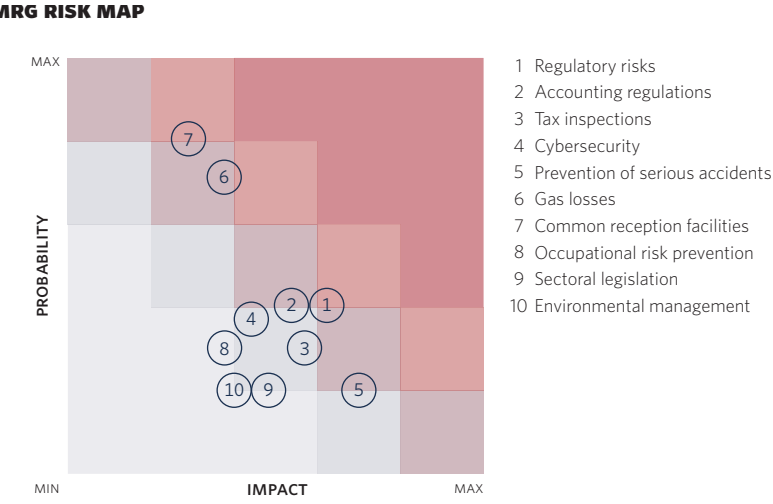
most relevant, the approval and monitoring of risk mitigation plans and monitoring the effectiveness of the monitoring implemented. Similarly, the scorecard of corporate risk indicators has been maintained and perfected.

This committee reports directly to the Board of Directors and is composed of the risk manager, representatives of the Board of Directors, the Management Committee and an independent risk expert appointed by the investors. The latter carries out regular visits to enhance his/her knowledge of the risk management that is carried out in the company’s most representative operational processes.

Finally, as a result of the application of the risk management policy, the corporate risk map has been updated. It includes the ten most significant risks, which have been evaluated using a criterion based on:

- 1. The probability of occurrence of a risk on a scale of 1 to 10.
- 2. Impact as the combination of the effect on the net present value and reputational impact, both on a scale of 1 to 10.

This map covers emerging risks, establishing new high-level monitoring processes that add to existing ones. The implemented action plans contribute to mitigating the consequences of these risks.



1.5

## ENVIRONMENTAL RESPONSIBILITY

After analysing the specifications of our facilities and the activities carried out, in application of the Law 26/2007 on environmental responsibility, during the current financial year we have carried out the analysis of environmental risks and calculation of the amount of financial guarantee in each one of the LPG plants affected by SEVESO regulations (Royal Decree 840/2015). For this purpose, the following has been taken as a point of reference:

- The “UNE 150.008 Analysis and evaluation of environmental risk” standard.
- The “Methodological guide for the preparation of environmental risk analysis for the gas sector”. It has been prepared by SEDIGAS and has been the subject of favourable opinion from the Technical Commission for the prevention



and repair of environmental damage. The objective of this Commission is to facilitate the process of preparing environmental risk analyses in these facilities, enabling the identification of similar environmental risk management and control processes and strategies in this sector that presents a high degree of heterogeneity owing to the different activities that it encompasses.

- The additional requirements of Royal Decree 183/2015 amending the Environmental Liability Law.

In this way, Madrileña Red de Gas complies with the obligation to communicate to the competent authority the existence of environmental damage or the imminent threat that it exists, through the presentation of the responsible statements as well as the adoption of preventive measures, avoidance and repair within the established legal term.

The analysis carried out consisted of the following:

- General description of the LPG plant.
- Description of the installation's environment, taking into account aspects of the description of the environment (geography, climatology, geology, geotechnics, soil science, surface water masses, groundwater masses, wild species and habitats, protected areas and assessment of the environmental quality of the natural receptors).

- Identification of causes and hazards proposed for these activities. The aspects regarded as necessary have been added, eliminated or nuanced, depending on the installation's specifications and environment.

- Identification of the initiating events for the activity and the calculation of the probability of occurrence of the initiating events selected.

- Postulation of accidental scenarios. In this case, the installation's initiating events have been taken into account to determine the fault trees according to the installation's specifications. Similarly, the probability of occurrence of each accidental scenario, the substances involved and the resources that are affected have been determined.

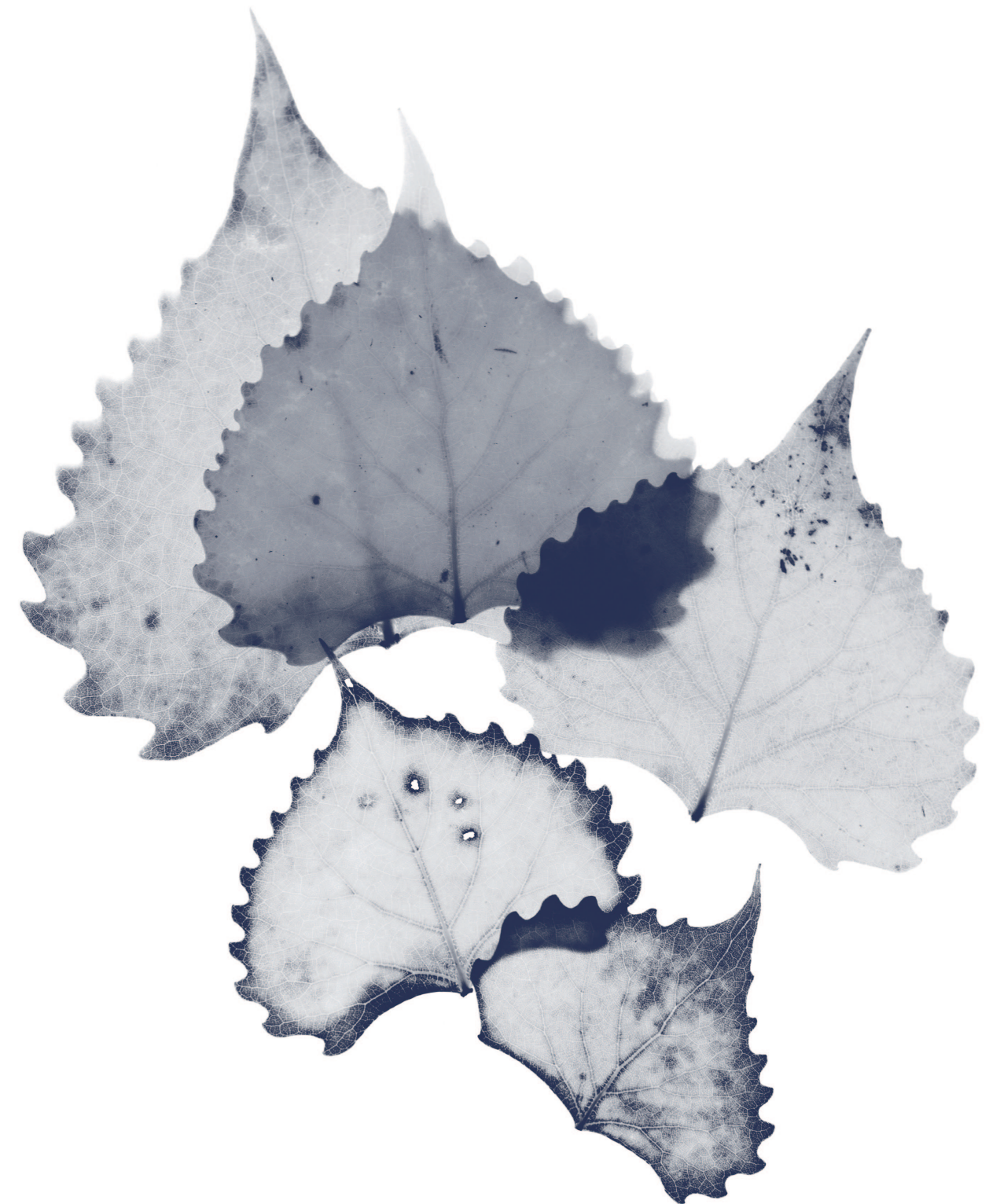
- Definition for each group or agent-resource group scenario that apply for the calculation of the Environmental Damage Index (EDI). Calculation of the index. Calculation of the risk associated with all the installation's accident scenarios.

- Quantification of environmental damage, estimating its extent, intensity and temporality.

- Monetization of the project for primary repair of the damages arising from the selected scenario. This will determine the amount of the financial guarantee, including the costs of prevention and avoidance of damages. (The MORA tool has been used).

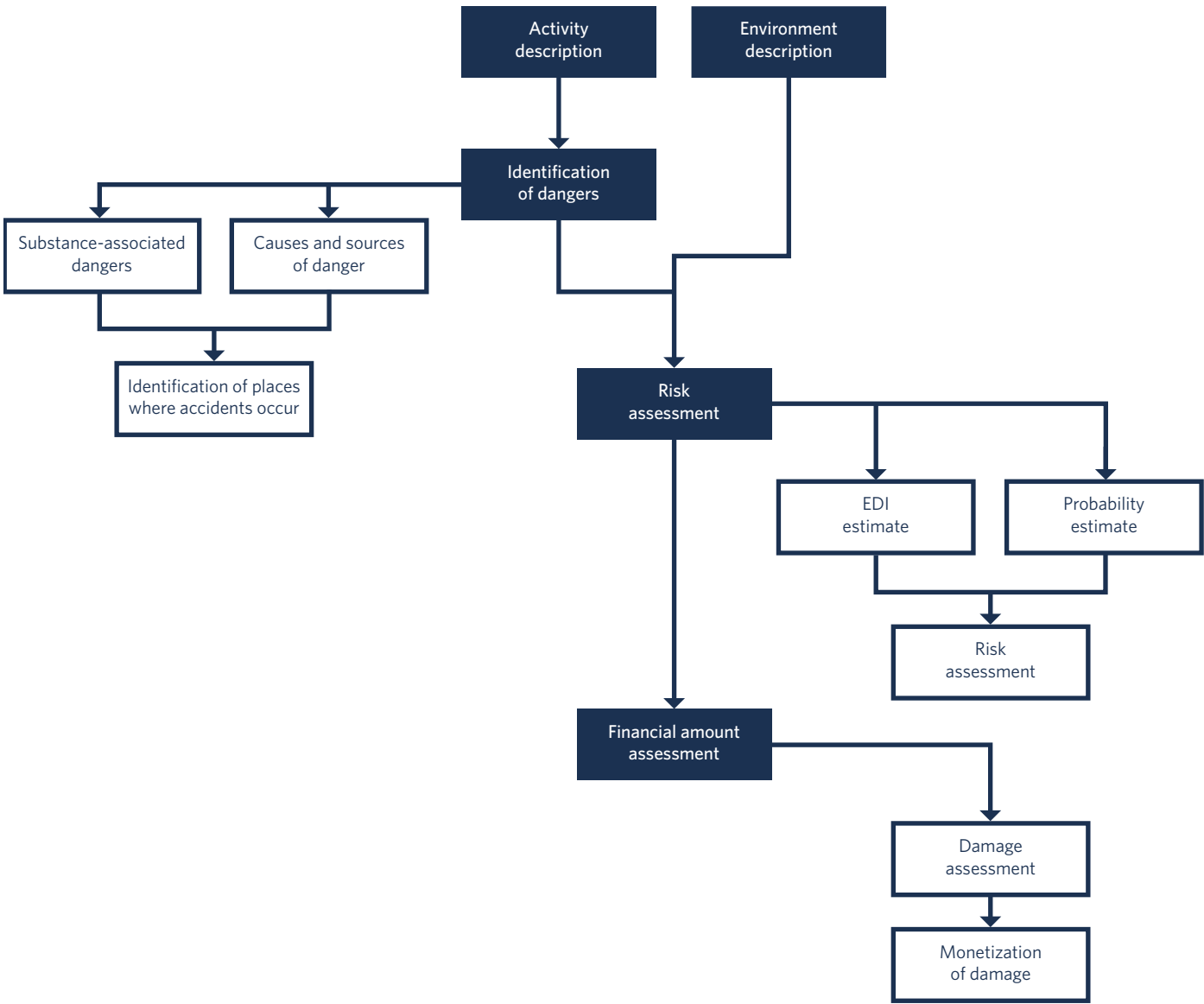
## 2018

**Madrileña Red de Gas has been awarded the "Excellent Madrid" mark of quality by the Autonomous Community of Madrid**





**DIAGRAM OF THE METHODOLOGY  
APPLIED TO DETERMINE THE AMOUNT  
OF FINANCIAL GUARANTEE**



1.6  
**DATA  
PROTECTION**

May 2018 marked two years since the entry into force of the new General Regulation on Data Protection (GDPR), compliance with which is mandatory. The GDPR unifies the regimes of all the EU Member States on the subject and addresses the technological changes of the last decades. Nowadays, data protection must deal with concepts such as big data, industry 4.0, robotics or artificial intelligence.

Despite the controversy generated by the approval of the GDPR, this new regulation provides security to consumers and businesses and establishes the same conditions for all market agents.

In this line, Madrileña Red de Gas has carried out the necessary adjustments with the publication of a new data protection policy, a manual for the personal data protection management system and several of the procedures related to the identification of personal data processing, incident management and security breaches, information management and the consent of the interested party, as well as relations with those in charge of processing. Finally, as established by the GDPR, the appointment of the data protection officer by the Spanish Agency for Data Protection has been notified.

The most relevant actions regarding the protection of personal data have focused

fundamentally on the definition of criteria and in the resolution of consultations. Many of these are related to the exercise of rights of access, rectification, cancellation and opposition, and also to the contents of the informative notes on data protection and contractual clauses.

Similarly, in order to promote the internal culture in terms of data protection, we have carried out online training actions and disseminated informative and briefing notes on specific aspects to all employees.

1.7  
**PREVENTION  
OF CRIMINAL  
OFFENCES**

In accordance with Law 1/2015, of March 30, Madrileña Red de Gas constantly updates its crime prevention management model, including its map of criminal risks, as well as its protocol for the prevention of criminal offences.

In this sense, the level of commitment of Madrileña Red de Gas is constant. During this financial year, the current situation of established monitoring was analysed through the respective risk management tools, analysing their degree of compliance as well as their effectiveness.

As a result, an action plan aimed at the permanent improvement of that monitoring has been approved.

**100%**

**All Madrileña employees  
have received training in  
data protection**

1.8  
**REGULATORY  
FRAMEWORK**

The Spanish gas sector is regulated by Law 34/1998, of October 7, of the Hydrocarbons Sector, reformed by Law 12/2007, of July 2, Royal Decree-Law 13/2012 and Law 8/2015, of May 21, as well as by Law 18/2014, of October 15, and by its implementing provisions, amongst which Royal Decree 1434/2002, of December 27, Royal Decree 949/2001, of August 3, and Royal Decree 984/2015, of October 30 stand out for their importance.

The Ministry for the Ecological Transition (previously called the Ministry of Energy, Tourism and Digital Agenda) is the competent body for the regulation of the gas and electricity sector, while the National Commission on Financial Markets and Competition (CNMC) is the regulatory authority that has been entrusted with the tasks of maintaining and ensuring effective competition and the transparent functioning of the Spanish energy sectors. Until the publication of Law 3/2013, of June 4, these functions were performed by the National Energy Commission (CNE), which has been incorporated into the CNMC. The respective Ministries of the Autonomous Communities have competences both in the development of regulations and in the execution of regulations.

In January 2019, Royal Decree-Law 1/2019, of 11 January, was approved on urgent measures to adapt the competences of the National Commission on Financial Markets and

Competition to the requirements arising from community law in relation to the 2009/72/EC and 2009/73/EC Directives of the European Parliament and of the Council of 13 July 2009 on common rules for the internal market in electricity and natural gas. The following have been amended: Law 3/2013 of 4 June, for the creation of the National Commission on Financial Markets and Competition; Law 34/1998, of October 7, of the Hydrocarbons Sector; Law 24/2013, of December 26, of the Electricity Sector; and Law 18/2014, of October 15, approving urgent measures for growth, competitiveness and efficiency. In this sense, the main modifications have been the following:

- The independence of the regulatory body in the approval of its regulatory circulars is guaranteed.
- In relation to the remuneration of gas and electricity transportation and distribution activities and of liquefied natural gas plants (except for underground natural gas storage), the CNMC will approve the methodology, the remuneration parameters, the regulatory basis of assets and the activity's annual remuneration. In any event, the financial remuneration rate may not exceed the maximum limit established by law for the regulatory period. Regarding the access tariffs for the electricity and natural gas networks, it is established that the regulatory authority will approve, in addition to the tariffs methodology, their structure and concrete

values, the approval of the structure of the positions, their methodology and their values falling within the remit of the Ministry of Environment.

- In relation to the conditions of access and connection to electricity and natural gas transportation and distribution networks, the CNMC will be responsible for approving access and connection methodology and conditions.
- The regulation of the operational rules for organized markets will be the responsibility of the CNMC.
- The remuneration of the electricity system operator and gas system technical manager will be established by the CNMC.

The Ministerial Order ETU/1283/2017, of December 22, established the remuneration of gas sector regulated activities for 2018. Specifically, the initial remuneration recognized for Madrileña Red de Gas for the financial year 2018 amounts to 142,817 thousand euros for the period between January 1 and December 31, 2018. The ministerial order includes an adjustment of the remuneration for 2016 and 2017 for an amount of 2,432 thousand euros of higher income, without this implying a significant impact on the profit and loss account.

This Ministerial Order ETU/1283/2017 modified the meter rental rate and telemetry

equipment for 2018 with a negative economic impact for the gas sector of, approximately, 55 million euros of lower income, and for Madrileña Red de Gas of 5.2 million euros of lower income. The distributors Nedgia and Redexis have appealed the order before the courts, and the appeal is currently pending. If the resolution of the appeal were favourable for these distributors, it would have the same positive effect for the rest of the distributors and, therefore, for Madrileña Red de Gas.

The Ministerial Order TEC/1367/2018, of December 20, has established the remuneration of the regulated activities of the gas sector for 2019. Specifically, the initial remuneration recognized for Madrileña Red de Gas for the financial year 2019 amounts to 142 million euros for the period between January 1 and December 31, 2019. The Ministerial Order includes an adjustment of the remuneration for 2017 and 2018 for an amount of 1.7 million euros of higher income, without this implying a significant impact on the profit and loss account.




# 2

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## **BUSINESS**

We keep growing. In 2018, MRG has put into service 15% more new homes and has opted for the development of NGV pre-installations. We are working to supply natural gas to new municipalities and we have converted more than 60 LPG plants into natural gas, the best energy alternative for urban environments.



2.1  
**NEW BUILDING**

As a result of the economic recovery that has taken place in the Community of Madrid during this year, MRG has put into service 4,259 new homes, 15% more than in 2017.

The use of natural gas in new homes is preferred for heating and D.H.W. (domestic hot water); in some developments, we have recovered the use of natural gas for decorative fireplaces and kitchens.

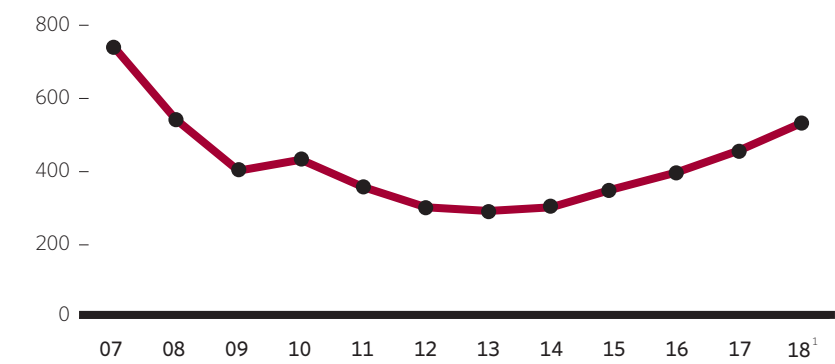
Another noteworthy aspect in the residential market of new buildings is our commitment to the development of NGV pre-installations. Different developers already offer the pre-installation of NGV in the quality reports of their single-family homes without this implying a significant additional investment. This decision will contribute to double the consumption of natural gas in many of the new homes of the Community of Madrid.

On the other hand, and in order to learn first-hand about the needs and expectations of the developers of new housing for the coming years, we have intensified the commercial visits and we have been able to develop an in-depth knowledge of what the new regulation of the sector will bring in terms of to the use of new energy sources. The projects of the new housing developments are already being executed in accordance with the new building criteria with almost zero energy consumption

(EECN) and with energy needs less than 50% of the current ones. This will force developers to use renewable energy sources such as aerothermics, geothermal energy and biomass. All this suggests that if we want to avoid the displacement of natural gas by other renewable energies, we must work for the development of biogas or synthetic natural gas.

Similarly, the intensification of these commercial visits has allowed us to identify two key points that can slow down our growth in new buildings. The first is the lack of professionals in the construction sector. Of the 150,000 homes that are required annually in Spain (25,000 in Madrid) probably a large majority cannot be built because of the lack of professionals, which is already leading to the rise in prices in new housing (well above the CPI) and, therefore, hindering its acquisition.

**HOUSING SALES PERFORMANCE**  
(total/year)



1. Estimated data for 2018.

**4,259**

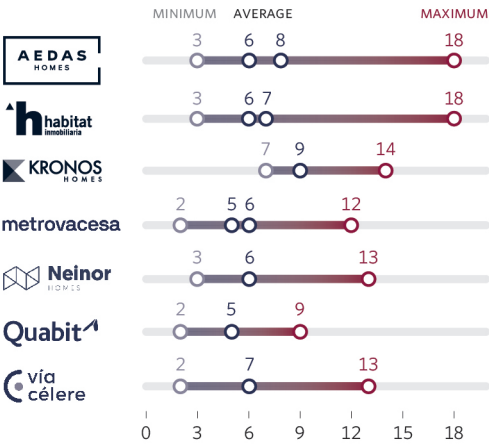
**New homes to which MRG has provided service in the last financial year**

**2018**

**MRG has the best new housing developers that offer NGV pre-installation in the reports on the quality of single-family homes**

The second key point is the lengthening of municipal management deadlines for new housing. The average term for the obtaining of construction and first occupation licenses is very high. According to the study of the Co-ordinated Institute of Governance and Applied Economics, the municipalities of Majadahonda, Pozuelo de Alarcón and San Sebastian de los Reyes accumulate delays of 14 months or more in the granting of new construction licenses for residential projects; the average in Madrid is eight months, although the average period for obtaining a first occupation license to register a new gas supply point is three months. Due to these administrative procedures, the average delay in contracting gas for new homes is extended to 17 months, which represents a considerable reduction in revenues for gas companies.

**TIME TAKEN BY LARGE COMPANIES TO OBTAIN BUILDING PERMISSION** (months)



Source: Cinco Días

2.2  
**NEW MUNICIPALITIES**

One of the priorities of Madrileña Red de Gas is to expand the company's activity in new municipalities. For this reason, Madrileña is active in the economic and social development of those areas that do not yet have natural gas in order to reach as many users as possible. We are always aware that we must execute our work in a sustainable way that is respectful of the environment and always seeking a balance between economic, environmental and social aspects.

In 2018, this commitment has been translated into a project that will be carried out in the near future in the municipality of Miraflores de la Sierra. It is about supplying natural gas, through an LNG plant, to the 1,100 residents of the municipality, currently LPG users. They will benefit from the conversion of their facilities to natural gas. The project is now being processed with the city council, pending confirmation of the location of the plant and the respective administrative authorization.

In addition to an improvement in the quality of life of Miraflores homes due to the comfort, safety and cleanliness of natural gas, this project represents a saving in bills of between 20 and 45%, depending on annual consumption and the fuel replaced.

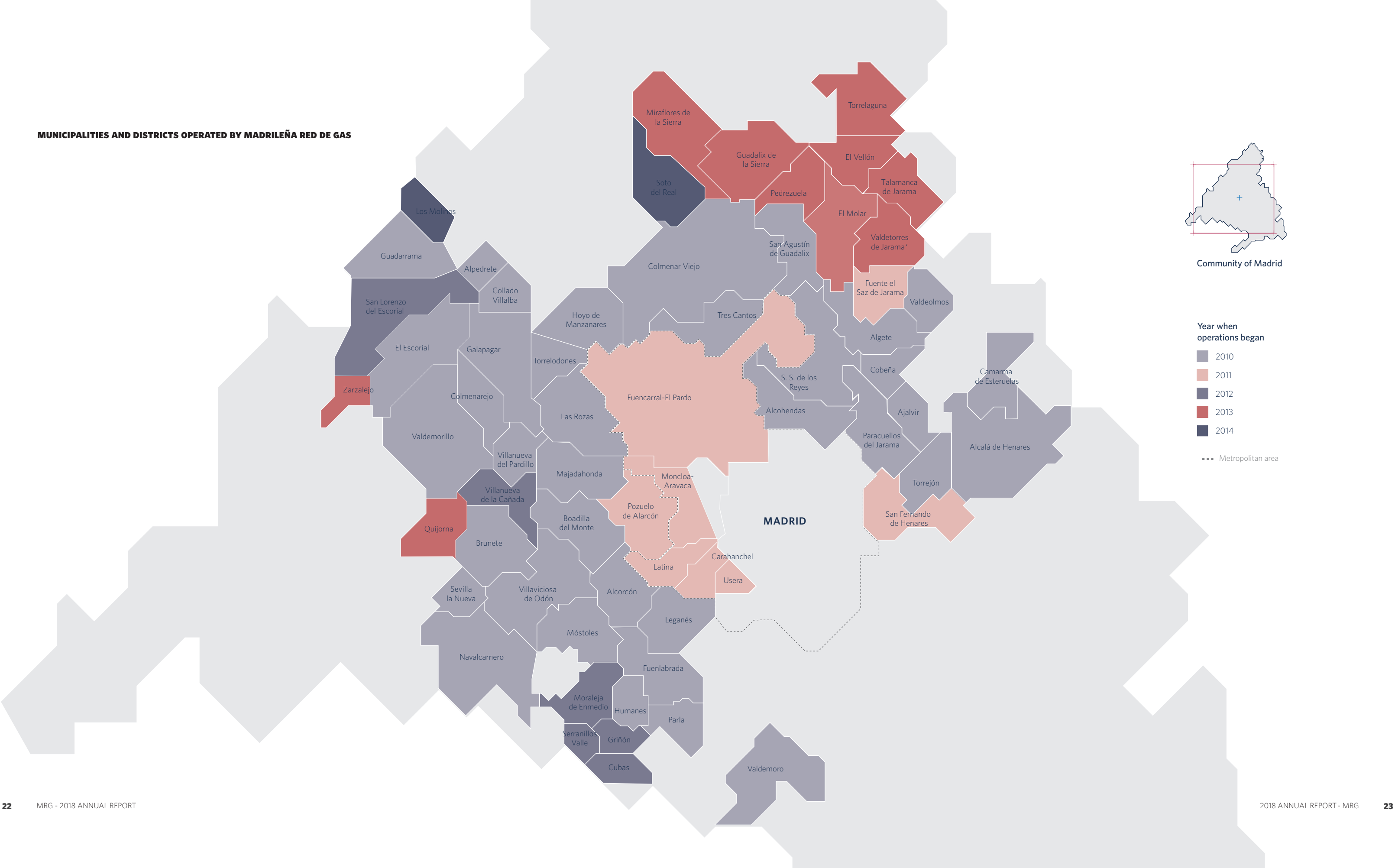
**1,100**

**Miraflores de la Sierra customers will enjoy the benefits of natural gas after the conversion from LPG**

**45%**

**The new commissioning of the Miraflores LNG plant may entail up to 45% annual savings for many homes in the municipality**

MUNICIPALITIES AND DISTRICTS OPERATED BY MADRILEÑA RED DE GAS



2.3  
**LPG CONVERSION**

In 2018, Madrileña Red de Gas has closed 66 LPG plants, which translates into a total of 125 deposits that have been decomissioned and 8,052 domestic supply points that have been converted to natural gas.

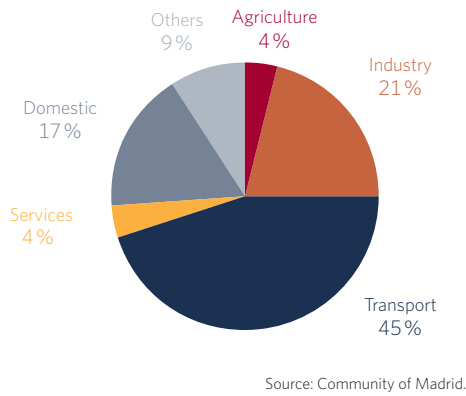
The greatest number of conversions has been carried out in the municipalities of Torrejón de Ardoz, with 1,902 points, Móstoles, with 1,604, and San Lorenzo del Escorial, with 1,100 converted points. The closure of these plants and deposits (and the removal of the need to access their supply tanks) has contributed to the urban transport of dangerous goods decreasing by 95,040 km. In this way, we have contributed to reducing operational risk in urban environments and to avoiding the emission of approximately 71,280 kg of CO<sub>2</sub>.

Next year, Madrileña Red de Gas will continue gradually with its plan to convert the remaining LPG plants acquired in 2016 to natural gas. We therefore contribute to the fact that increasingly more citizens can enjoy one of the most efficient and respectful energies with the environment.

2.4  
**MADRID AND THE BOILER ROOMS**

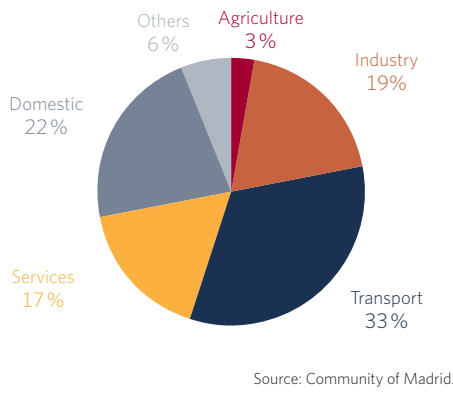
Due to the health problems caused by pollution, the improvement of air quality is a commitment shared by all States and different Administrations.

**SECTORIAL DISTRIBUTION OF DIRECT GHG EMISSIONS IN THE COMMUNITY OF MADRID IN 2016 (%)**



Source: Community of Madrid.

**SECTORIAL DISTRIBUTION OF TOTAL DIRECT AND INDIRECT EMISSIONS IN THE COMMUNITY OF MADRID IN 2016 (%)**



Source: Community of Madrid.

Optimizing the use of energy to achieve greater energy efficiency is another one of the issues in focus, together with the adoption of mobility-related measures. Road traffic is the factor that most affects the pollution of urban environments and, at the same time, the one that is generating the greatest impact in society today. Perhaps that is why we forget

**2,898**

tons of CO<sub>2</sub> is the amount that has stopped being emitted into the atmosphere after the conversion of 8,052 supply points from LPG to natural gas

**20%**

Road traffic is the factor that most affects the pollution of the city. It is followed by heating, which causes 20% of the pollution

an important sector that, to this day, still uses the same polluting fuels: air conditioning systems. Heating is responsible for 20% of air pollution.

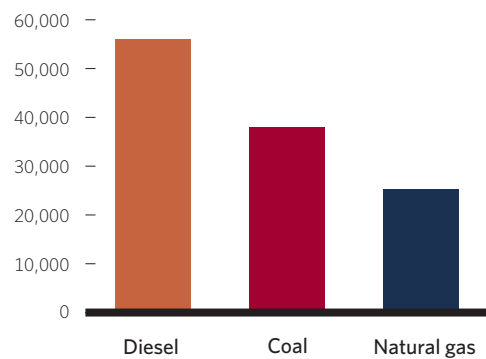
According to the Ministry of Environment, natural gas is the best alternative for centralized boilers in urban environments. However, in Madrid there is a high percentage of communities that consume fuel that is ineffective and highly polluting, such as coal or diesel fuel, energies that emit pollutants that are harmful to health and to the environment.

Even so, during the last decade, and after the boost that occurred at the end of the nineties, the rhythm of conversion to natural gas of the boiler rooms in Madrid has remained stable although clearly insufficient, according to the levels of contamination reached every winter in the capital. It has been proved that these boiler rooms are what triggers these levels, since vehicle movement in Madrid remains constant throughout the year.

While traffic restrictions measures have begun to be adopted, the same has not occurred in heating ignition. For this reason, Madrileña Red de Gas is committed to more effective measures such as replacing heating devices with those using less polluting energies such as natural gas.

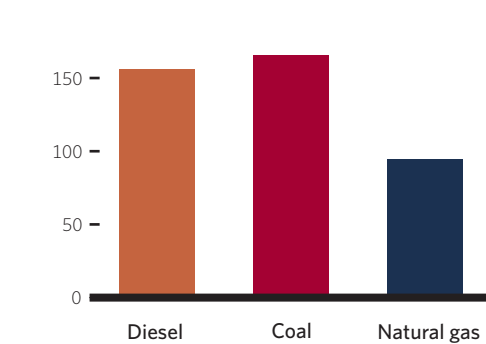
With the aim of being able to comply with Madrid City Council's Air Quality Plan, in which the disappearance of coal boilers is anticipated

**COST OF ENERGY IN 2018 (€)**



Calculation performed with market data, based on a consumption estimate of 500,000 kWh/year.

**CO<sub>2</sub> EMISSION ACCORDING TO FUEL TYPE (t/year)**



Calculations made estimating a consumption of 500,000 kWh/year.

for 2020, Madrid has begun to implement the measures required in order to achieve it. In the city of Madrid there are more than 300 coal boilers. In addition to them being anachronistic, their retention is devoid of any sense; even more so if we take into account that coal mining has all but ceased in Spain.

**+300**

The number of existing coal boilers in the city of Madrid

**43%**

The estimated savings of CO<sub>2</sub> emissions when a coal boiler is replaced by a natural gas boiler

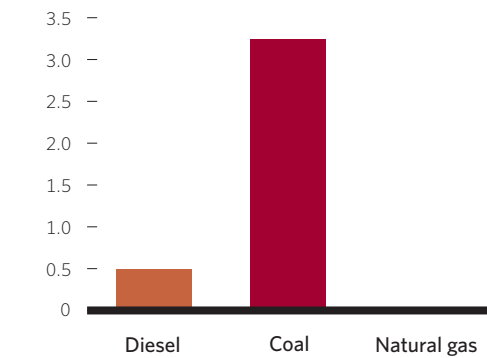


Programmes like the Renove Plan in the Community of Madrid are beneficial. In recent months, the regional government has promoted an incentive that may attain 50% of the investment. However, more awareness and information campaigns are needed to reinforce the economic and environmental benefits of converting these facilities to natural gas. Economic incentives play a crucial role within the homeowners’ associations when considering the replacement of boiler rooms.

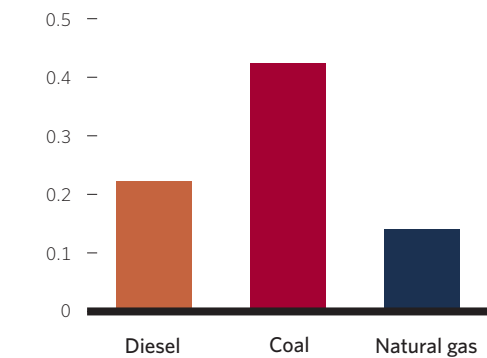
It is necessary to emphasize new natural gas technologies, such as maximum efficiency condensing boilers, with a performance exceeding 100% and which can reach 109%, and a saving of more than 30% with respect to the use of conventional boilers. Also, the use of natural gas almost completely reduces suspended particles and sulphur dioxide, the main cause of respiratory problems in cities, with a significant reduction in emissions of nitrogen oxides into the atmosphere.

In relation to CO<sub>2</sub> emissions, the main cause of greenhouse gases, it is important to note that if we take as a reference the average consumption of boiler rooms already converted to natural gas, the conversion of existing coal boiler rooms would entail a reduction of emissions by 43%. In the case of diesel fuel, it would be 39%. It should be noted that Madrid City Council is working on the renovation of its own air conditioning systems; to date it has already replaced 18 diesel fuel boilers in buildings and municipal facilities, which means

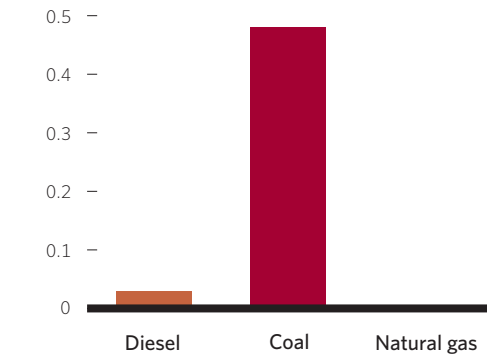
**SO<sub>2</sub> EMISSIONS**  
(end usable gr/kWh)



**NO<sub>x</sub> EMISSIONS**  
(end usable gr/kWh)



**PARTICLE EMISSIONS**  
(end usable gr/kWh)



> 30%

The economic saving from the use of maximum efficiency condensing boilers. Their performance is also 109% higher than conventional boilers

1,442

Boiler rooms converted to natural gas by MRG

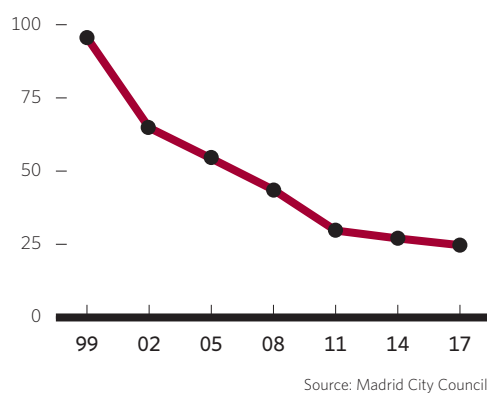
eliminating 67% of the current consumption of diesel fuel. In terms of local pollutants SO<sub>2</sub>, NO<sub>x</sub> and particles, emission reductions are even greater.

On the other hand, it is essential to highlight that the conversion of these boiler rooms to natural gas can be addressed without additional costs for users, regardless of whether they can benefit from the Renove Plan contributions. If we compare energy costs, natural gas is about 50% cheaper than diesel fuel and about 30% cheaper than coal. The conversion payment can be made with the savings obtained by the conversion to natural gas within a period of five years. Currently there are proposals for the costs of conversion, energy and maintenance to be borne by residents’ associations, while maintaining the quota.

In our scope of action, we have attained a penetration in this market of more than 50%, which translates into the conversion to natural gas of 1,442 boiler rooms, with a total consumption of 750 GWh/year and an average consumption per room of 500,000 kWh/year.

However, in the Community of Madrid there is still a long way to go to improve air quality. In our region there are around 4,000 boiler rooms in communities that use highly polluting energies; 1,120 are located in the distribution area of Madrileña Red de Gas.

**COAL CONSUMPTION IN THE CITY OF MADRID**  
(t/year)

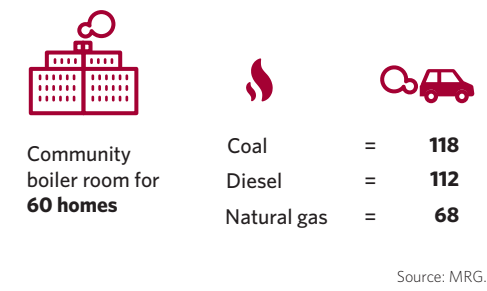


**BOILERS IN THE COMMUNITY OF MADRID**  
(Totals according to fuel type)

	Community of Madrid	MRG Territory
Diesel	3,528	978
Coal	310	74
Biomass	218	68
Totals	4,056	1,120

Source: MRG.

**EQUIVALENT EMISSIONS FROM A BOILER ROOM AND CAR**  
(Depending on fuel used in boiler room)



50%

Natural gas is around 50% cheaper than diesel fuel and about 30% cheaper than coal

2.5  
CUSTOMER

This year, Madrileña Red de Gas has defined its digital transformation plan aimed at the customer. As part of its preparation, we have consulted the opinion of users, who have sent us their comments and suggestions for improvements through working groups, on-line surveys and analysis of the contacts and operations carried out in 2018. This has helped us design a new form of more agile communication that simplifies the message and anticipates possible doubts from customers. The plan will be implemented in 2019.

Focused on the process of periodic inspection and taking as reference e-commerce companies, in Madrileña Red de Gas we have redesigned all the possible scenarios of communication with the customer in order to generate greater commitment, complementing the traditional channels of communication with mobile and e-mail channels for reminders, and providing access to additional information and self-service links.

Our “virtual office” has been completely modified towards what are known as customer experiences. This has meant that the number of clicks has been reduced and it has also facilitated contextualized information based on what the user requires at all times.

Similarly, pilot self-service tests have been carried out in order to co-ordinate visits through web tools that have been well received by our customers.

STOPPAGES AND CUTS IN SUPPLY

	2017	2018	Var. (%)
Stoppages and Cuts	19,392	20,851	8%
Re-openings	4,378	5,229	19%
Others	352,171	147,966	-58%

Source: MRG.

In relation to customer transactions, in 2018 we have handled more stoppages, cuts and reconnection than during the previous year, which has significantly reduced the volume of other jobs. This reduction has been motivated mainly by the complexity and sophistication required to inspect installations pending the fraud eradication project. At the end of this year, we have inspected 750,566 installations, the equivalent of 85% of our customers. After the completion of this project, we have incorporated the inspection of a significant annual volume of visits into our ordinary activities.

In order to maximize the gas disconnections when the meter is not accessible, this year we have designed a new protocol to disconnect the individual installation from the communal installation . This allows the service to be terminated without having to dismantle the gas installation meter.

Also in 2018, the consolidation of an important update of sector messaging formats has been carried out. This required all distributors and marketers to adapt to this circumstance. At the same time, we have implemented the

750,000

Customer installations inspected by Madrileña Red de Gas in 2018

new administrative disconnection process with a different management of unexecuted stoppages. Note the continuous improvement of results taken by readings. In 2018, we reduced the number of customers without a real reading by 12.8% compared to the previous year.

2.6  
MARKET AND COLLABORATORS

The consolidation of MRG commercial plans and the extension of the agreement with the Madrid Energy Sector Installers Association (AGREMIA) to strengthen the commercial operations from the public offering have encouraged the involvement of AGREMIA-affiliated installers in the marketing of new natural gas supply points.

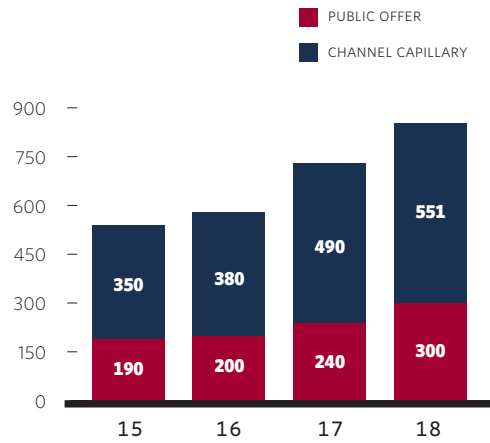
In 2018, the number of installers acting within the MRG geographical scope has increased by 17%, and 25% of those installers work directly with our company.

Also, the implementation during this financial year of the commercial call centre and the increase amongst our collaborators in the use of the mobile device application, with improvements added to facilitate the display of the potential within the market for vertical and horizontal saturation in our scope of action, have entailed a gross growth of customers of 14% with respect to the previous year.

The involvement in the MRG projects of our extended enterprise has been and continues to be one of the objectives that we must consolidate, since it will allow us to build a firm and genuine relationship with our customers. This will allow us to offer value proposition based on an individualized knowledge of their requirements and problems, so that they can be resolved more quickly and effectively.

Therefore, this year has seen start of the programme of association with gas installer customer service offices, with a forecast growth of 50% by 2019. This new initiative will make it easier for us to create a community of strategic professionals that enhance and value the company’s practices in its closest local environment.

DEVELOPMENT NO. INSTALLATION COMPANIES  
(Total according to channel)



25%

The increase of companies working with MRG compared to the previous financial year

2.7  
QUALITY

Currently, quality management systems are a benchmark for business excellence. They allow us to reduce improvisation within processes, so that we always know how to act in normal operational situations or in deviations from the established requirements. With this, we contribute to establish mechanisms for monitoring and improving the management of our organization that enable us to offer a quality service that meets the expectations of our customers.

Madrileña Red de Gas continues to develop its transition project for the quality management system in order to adapt this to the requirements of the new revision of the ISO 9001:2015 standard. Once the first phases of design and planning were completed, the work carried out focused on the revision of the system’s regulatory documents and their subsequent publication. The phase of implementation for some of them has already begun.

We have a new internal standard for supplier certification of relevant service providers. It is focused on those suppliers whose activities require accreditations stipulated by law and which must be subject to prior checking and monitoring over time.

This standard is complemented by a specific catalogue of files for each activity that describes in greater detail the requirements

applicable to the activities usually contracted by MRG. In this way, the precise description of the application criteria is useful and practical, given the magnitude and complexity of legal regulations.

We have also developed a process map from the perspective of quality. It has been structured in two levels: on the first level, the complete photo of the processes is shown and described in detail; in the second, each of the numbered processes. This map provides a complete overview of our main activities and allows us to interrelate processes.

On the other hand, during this exercise we have carried out a first context analysis using the SWOT methodology, an analysis of risks and opportunities from the perspective of quality and a first study of the interested parties, in which, in addition to their identification, needs and expectations have been pointed out, indicating the response mechanisms of the management system.

Similarly, we have begun to update the criteria for the approval of supplier personnel, with special attention to workers who perform their work in electrical installations and in those related to steel welding.

During this year, we have also developed a new environment of collaboration and document exchange in which it is possible to monitor the status of those documents that are in different stages of review, continuing with the adaptation

and revision of the internal regulations associated with various operations processes for customers, expansion, network operations and corporate areas.

Finally, between June and July 2018, we conducted a new round of satisfaction surveys on eight segments of services provided by MRG.

The trends of the results obtained after the analysis of these surveys has resulted in:

- A global satisfaction index of 77.9%, which is the global measure of MRG’s success to satisfy its customers.
- 45.6% of MRG users surveyed would recommend us to family and friends. Thus, the global average of recommendation is 7.45 out of 10.
- The level of loyalty or loyalty among the users surveyed reaches 19.6%. It is also called NPS (Net Promoter Score).

Regarding the surveys conducted in previous years, MRG has experienced an improvement in the satisfaction index results in the processes of periodic inspection, home operations, vertical saturation, new building and readings.

Similarly, there have been improvements in the recommendation levels of the new building processes, periodic inspection, vertical saturation, home operations and readings.

RESULTS OF THE SATISFACTION SURVEY.  
SATISFACTION RATE (Assessment %)



2.8

DIGITALIZATION

With the incorporation of companies in the digital world, it is necessary to implement solutions that facilitate the automation of IT processes which, in the very near future, will be extended to business processes. This allows greater control and greater visibility of the status of works during their execution. This minimizes errors and boosts productivity, which places the company in a position of advantage over competitors both in terms of operability and reliability.

In this environment, Madrileña Red de Gas has taken the initiative in the area of automation of processes through robots (RPA), which we intend to extend over 2019. In 2018, an ambitious project of robotization of business processes has been launched in order to maximize benefits by reducing tasks without added value, saving costs and improving the quality and the degree of satisfaction of our customers.

This year, the first eight processes (all of them put into production) of a total of 37 already analysed and capable of being automated, have been robotized within the functional areas of periodic inspection and channel, readings, home operations and fraud, billing/revenue and expansion.

Once the production has been completed and the different robots stabilized, a reduction of 1.25 (full-time employees) has been

achieved, which is currently dedicated to tasks of greater added value in the different business areas.

An important part of this digital transformation has been the migration of 100% of our infrastructure to cloud services from Amazon and Microsoft. This was done in three months, coinciding with a change of provider. This new infrastructure will allow us to be more proactive in management during periods of variability in needs, and to reduce operating costs, as well as to enjoy up-to-date and leading services.

In the second semester of 2018, we have migrated all our technological infrastructure to Amazon Web Services (AWS) in order to reduce operating costs, increase productivity and achieve greater agility in the digital transformation in which we are involved.

On the other hand, we have installed more than 3,500 smart meters in the field. We have therefore eliminated the manual reading of those meters and have ensured accurate daily data that gives greater visibility to the gas system manager and customers.

Similarly, mobility has already been launched for the integral management of common reception facilities, the conversion of LPG to natural gas and the verification process for industrial meters.

3,500

Smart meters installed in 2018

2.9

CYBERSECURITY

According to the National Cybersecurity Institute (INCIBE), in 2017 there were 123,000 security incidents related to computer attacks, 17% more than in 2016. After becoming aware of this data, throughout 2018 companies have doubled their investment in cybersecurity.

No company or sector is safe from cyber-attacks, and traditional methods to detect them have become obsolete. Modern companies must establish high security standards, regardless of how the business is structured or built, so that the digital workplace is as dynamic and flexible as the cyber threats we face.

Computer science is today an area of vital importance. So much so that in May 2018, the General Data Protection Regulation became mandatory. This new European regulation seeks to ensure that companies protect all data related to the private, professional or public life of consumers. Failure to comply with this regulation will entail large fines.

In order to survive the current technological challenges, Madrileña Red de Gas regards it as it essential to ensure the complete life cycle of data in the digital workplace. For this purpose, we have established privacy protocols and implemented security measures that protect the integrity and availability of this data, whether in transit or stored, allowing secure access without hindering business.

84%

84% of Madrileña Red de Gas staff have received specific training in cybersecurity during 2018

Following our plan on cybersecurity, in 2018 new tool installations have been executed on more modern and resilient platforms. This has enabled us to implement a new telemetry platform that replaces and unifies three previous heterogeneous platforms into a single, more secure platform.

To understand the vulnerabilities of the systems deployed in Amazon Web Services and establish protection plans, we have carried out a cybersecurity assessment from the point of view of cloud/laaS environments (Infrastructure as a Service). This cybersecurity audit of the new environment applies the C2M2 methodology, which identifies areas for improvement in the future.

On the other hand, during this financial year, specific training in cybersecurity has been designed and executed for 84% of employees.

2.10  
DISTRIBUTION  
NETWORK

Automated systems that enable faults to be detected quickly and manoeuvres to be made in the network, as well as the participation of highly committed personnel, form the backbone of Madrileña Red de Gas when operating, maintaining and monitoring the state of the gas distribution network in the municipalities in which it is present. Its response is a key measure of excellence.

Through our gas dispatching system, gas emissions are checked daily by comparing the data of these measurements with that provided by SLATR, in order to register timely claims with the system in case differences are detected. Similarly, physical balances are carried out on a monthly basis that allow “unaccounted gas” amounts to be detected by comparing the emissions of the system with the actual gas consumption of customers.

In order to ensure that the “unaccounted gas” that accumulates at the end of the year is zero, and enabling more accurate decision-making to reduce losses in our networks and points of consumption, by 2018 we have enabled two new areas to make emission measurements at sub-area level.

The increase in consumption as a result of the decrease in temperature during 2018 with respect to 2017 has increased natural gas emissions by 15.94% over the previous year.

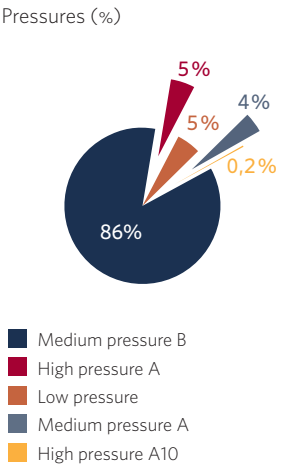
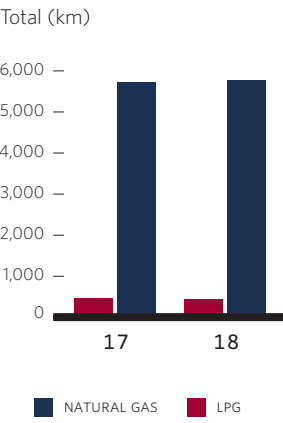
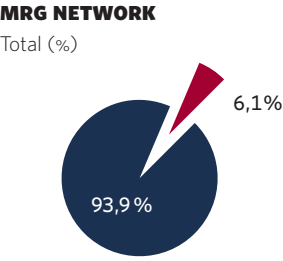
On the other hand, Madrileña Red de Gas continues to operate without any incidence the transport, unloading and supply of LNG, with an increase of 28.9% in distributed KWh. This is: 16,289,669.91 kWh distributed in 2018 (56 tanks) compared to 12,632,676.40 kWh distributed in the year 2017 (43 tanks).

With respect to the actions in the network of Madrileña Red de Gas, 234 LPG plants have been converted, which means an additional 33.25 km of natural gas network. Similarly, the increase in the natural gas network in 2018 was 0.81% over the previous year.

In relation to emergency activity, Madrileña Red de Gas continues the approach of previous years by maintaining the average time of attention to maximum priority notifications at below half an hour. Specifically, during this financial year of 2018, the average time for maximum priority notifications was 26 minutes and 41 minutes for the remaining notifications.

Also, attention has focused this year on the industrial periodic inspection. A census of each installation’s equipment and the management of periodic industrial inspection and large consumption has been carried out. This initiative confers a greater value upon information for its later use in commercial performances and improvements in the monitoring of reductions.

Another noteworthy point of 2018 is the installation of 4,000 telemetry systems



for mass market customers, which have allowed us to improve reading control and the mandatory function of daily regulatory deliveries. This last operation has been as undertaken with normality by the control centre, during a night shift and without an increase in human resources.

During this financial year, in Madrileña Red de Gas we have run fraud detection campaigns with our own staff, paying special attention to repeat offenders and carrying out tests to measure anomalies in idle meters, etc., which is helping to achieve the objective in the waste reduction project.

We have also carried out 20,856 programmed actions in the entire network, auxiliary facilities and satellite plants for LNG and LPG, which has meant 100% compliance with the maintenance plan established by current regulations and the internal regulation of Madrileña Red de Gas. These have allowed us to check and ensure the correct functioning of our entire network.

Regarding the leak rate/km, in 2018 it has remained at an acceptable 0.21; tracking was performed on 2,483 km of natural gas network with 536 localized leaks.

All activities related to network operation have been executed without incidents affecting the safety of people and goods; we therefore continue without serious accidents.

Regarding the management of LNG and LPG plants, during 2018 we saw intense activity. We have carried out the emptying of 326 tanks, which has involved more than 700 actions and trips to other MRG facilities in order to transfer the gas.

Similarly, 294 tanks have been inertised, 96 have been dismantled and 59 have been periodically and legally restamped.

We have managed 2,713 supplies in LPG facilities, 131 network leak tests and 1,404 regulatory and preventive maintenance actions in active plants; as well as improvements in plants such as those in Soto del Real municipality, where a vaporization system has been installed that has been completed with network meshing between the different LPG plants in the municipality. The supply of gas in that location is therefore guaranteed at all times.

All these activities have been carried out with one hundred percent success, the necessary actions co-ordinated in terms of safety and environmental issues with the different social agents. We have complied with the regulatory environmental requirements, with zero security incidents as well as the supply to our customers.

16%

The increase in natural gas transported by our distribution network in 2018

CALLS RECEIVED IN 2018 (Totals according to type)	
External leak	91
Household leak	2,633
Leak in CRI	1,324
Reopening of CRI	2,164
Breakages by third parties	85




# 3

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## LABOUR FORCE

MRG supports talent for another year. Our team continues to grow owing to new hires and also to new training plans and the development of a detailed risk prevention policy, amongst other actions.





3.1  
CULTURE

At Madrileña Red de Gas, we believe in people, in those who aspire to offer the best of themselves, professionals who strive to make the values of the company a reality in daily decision making: a reflection of our culture and, therefore, of our success.

It is these figures that have allowed us to continue onwards in 2018 to give the best of each one of us.

We are a flexible and dynamic company, with a clear vision about the importance of attracting and retaining professionals who contribute to making MRG a competitive company, prepared to overcome and manage the challenges that arise year after year.

In a world of work in which we are experiencing an unprecedented technological revolution, we are committed to adopting a human perspective in terms of each of the members of our team. Together, we are creating a business culture based on collaboration, closeness, improvement and continuous growth. A reflection of this is our headquarters: an open and bright space, without barriers or offices.

Another of our hallmarks is shown in the work-life balance. In this matter, MRG advocates a policy of trust, based on objectives and without fixed schedules. We want our professionals to have greater freedom when it comes to

managing their personal and work time. We trust in their independence and planning capacity to achieve their objectives. This trust leads to an increase in productivity and efficiency.

The organization of working hours, characterized by flexibility, allows our professionals to meet the agreed annual hours in a more efficient way.

Similarly, MRG is characterized by stable employability, with one hundred percent permanent contracts. At the same time, it is committed to the gradual renewal and rejuvenation of its workforce. Therefore, in the last four years, average seniority has gone from 20 to 16 years in the 2018 financial year, and the average age of the worker has fallen by 6% in the same period.

In reference to renewal, MRG is committed to energizing its staff. New hires have averaged 7% of the annual workforce in the last four years. The average age of new hires in this period is 32 years.

In 2018 alone there were 11 new hires, which represented 9% of the total workforce. The average age of these hires was 36 years, and 55% were women.

In 2018, the stability and management of an adequate employment relations framework for the standardization of processes, and other issues of key importance for the company

100%

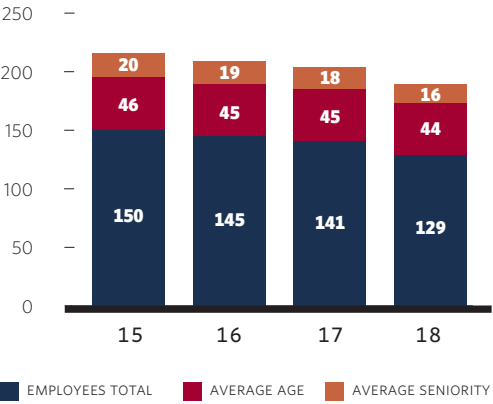
All our contracts are indefinite term

MRG CULTURE



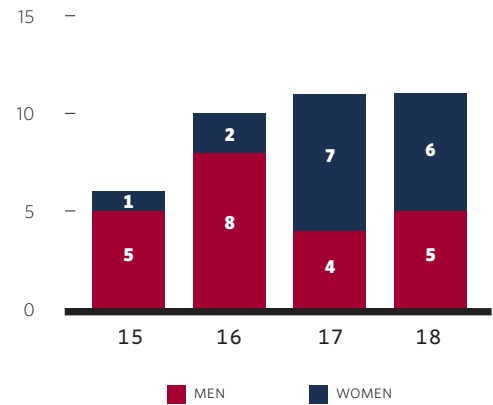
DEVELOPMENT OF NO. OF EMPLOYEES, AGE AND SENIORITY

(2015–2018 period)



DEVELOPMENT IN NEW HIRES

(2015–2018 period)



as a whole, have facilitated the signing of our second collective agreement. This agreement maintains the conditions of its predecessor and applies a new salary review system, based on non-linear equity and job performance, as it has been historically. The latter has been a great achievement for MRG, as it will boost motivation and productivity, align work with the company’s success and help attract and retain the talent of our professionals.

Health and sports are also important in our corporate culture. Therefore, we try to provide our team with greater balance and well-being by making a physiotherapist available to them, as well as the new introduction of Pilates classes.

On the other hand, within the scope of corporate social responsibility, and in our commitment to the environment, we have implemented a zero paper policy, focused on achieving a digital office. Also, another of the commitments adopted this year is the gradual reduction of the use of plastics in our offices.

Additionally, and in relation to sustainability policies, at MRG we offer all our professionals subsidies for the acquisition of natural gas vehicles.

100% of the Madrileña Red de Gas fleet has used alternative energies since 2015. Now our challenge is our suppliers (extended enterprise) and our families.

16

The average seniority of our workers is 16 years

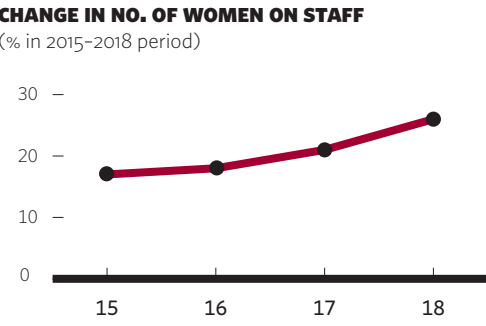
3.2  
PEOPLE

At Madrileña Red de Gas, we believe in sustainability and it is therefore necessary to maintain a strategy that allows us to be competitive and grow as a business. For this reason, we are committed to generational, experiential and also gender diversity.

In a sector traditionally occupied by men like the gas industry, the presence of women is increasing. This is the case of MRG, where we are proud to prioritize talent and skills above all when selecting our professionals. In addition, we promote gender equality, especially in executive positions, as can be seen in the development of our workforce during these years.

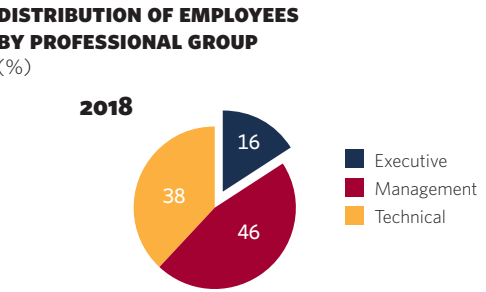
The gender diversity of the Board of Directors has grown to reach the current 29% of women versus 71% of men, with an age range between 40 and 59 years. Similarly, the total percentage of women in the MRG workforce has increased by 11 points over the last four years.

At MRG, management positions form the bulk of the workforce (46% of the total), followed by the technical team (38%) and the executive team, which has 16% representation. In addition, during this year we have fulfilled our commitments to progressively rejuvenate the workforce and attract new talent to the team. The quality of the professionals that have joined MRG is remarkable: their different profiles and their experience in other sectors and businesses add extra value to the company.



**MEMBERSHIP OF THE BOARD OF DIRECTORS**  
(According to gender)

	Men	Women
2015	100 %	0%
2016	89%	11%
2017	89%	11%
2018	71%	29%



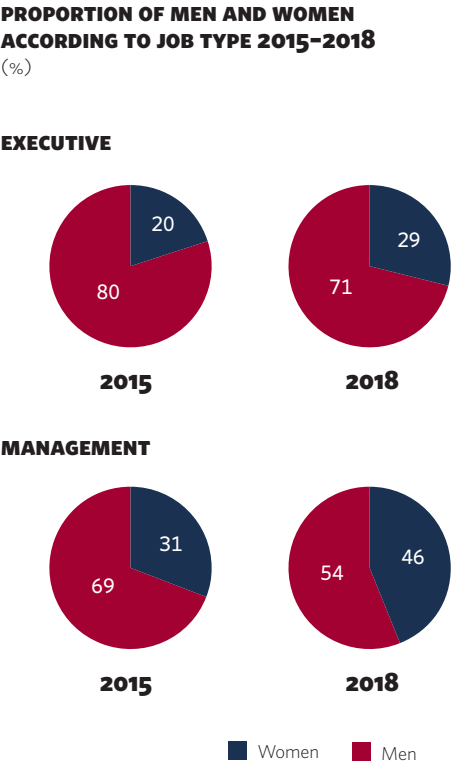
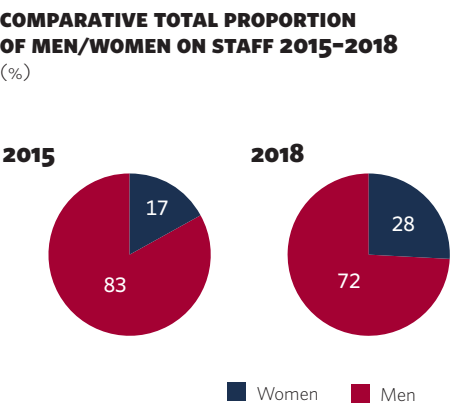
This has been another year when we have strengthened company dynamism through the promotion of scholarships, offering professional opportunities to young people and responding to their concerns and needs.

**29%**

The percentage of women present in the current Madrileña Red de Gas Board of Directors

**28%**

The percentage of women within the MRG team. This means an increase of 11 points compared to 2014, when the percentage of women in the workforce was 17 %



3.3  
PROMOTE  
TALENT

Like many other companies, Madrileña Red de Gas has been changing and adapting to the demands of the sector and market during these years, because we know that success or failure depends on us. Also, to achieve the success of the company, it is essential to know each other and identify our strengths and weaknesses. This way we will be able to develop our project as competitive professionals, prepared to assume responsibilities, changes and challenges and keep growing as a company.

The people management model has been one of the issues that has distinguished us during 2018. It is a model based on the progress of the company through the development of the people who comprise it.

We are carrying out a series of evaluation processes for our employees that allow them to subsequently work on their individual development plans (IDP). They have been carried out gradually, in several stages and with different groups.

These processes, whose main objective is the alignment of personal growth and the achievement of MRG results in the short term, will continue to be implemented until the end of 2019. Once completed, the data obtained will allow us to measure and analyse the effectiveness of the process and implement the necessary improvements in order that it

**×4**

Investment in training has quadrupled in recent years

be of benefit to all of us. So far, a total of 953 hours has been invested, including evaluation, comments and improvements and training on the PDI process.

The involvement of professionals in the process is key and fundamental to the success of the procedure, since, for the development of their PDI, each worker has the support, guidance and help of their managers and colleagues, as well as the human resources management.

Similarly, the “Career conversations” initiative, established in 2018, has been well received by managers and collaborators. Our professionals have been able to transfer their expectations and professional motivations, something of vital importance for the company, since, once contrasted with what their direct managers believe may be more beneficial for their development, it allows us to establish the most appropriate channels through which they may be applied.

3.4  
**FORCE FOR CHANGE**

The training of our professionals plays a very important role in the evolution of Madrileña Red de Gas as an engine of change that leads us to face our daily challenges.

Knowing this, economic investment has been increasing annually until doubling what was invested in the early years. In 2018, we have

invested more than 120,000 euros and 5,200 hours in training, received by 84% of employees with an average of 32 hours per employee.

The company evolves and with it training, as this must not only respond to current needs but also help prepare the professionals that MRG will need in forthcoming years. The experience has allowed us to have more information and resources to cover these needs more satisfactorily. That is how we have designed the 2018 Training Plan, emphasizing four fundamental aspects of that future: talent, business know-how, security and languages.

To achieve this, Madrileña Red de Gas has strongly committed to skills training, which has grown exponentially to quadruple the investment in 2018, if we compare it with other years.

In collaboration with the prestigious consultancy firm, Ackermann, we have designed Individual Development Plans (IDP) so that our professionals can work on the competencies that have been identified as necessary, providing 200 hours of training in “Learning Management”, with specific training in different areas beginning in January 2019.

In addition, in line with the needs of the company, we have strengthened training in customer service, implementing a new concept of training through “Gamification”, which has become something ludic that allows our professionals to enjoy and consolidate learning

**120,000**

**In 2018 , we have  
invested more than  
120,000 euros and 5,200  
hours in training**

through video games, arousing greater interest on the part of employees in everything related to training.

In 2018, one in every three hours of training has been devoted to technical aspects. Providing our customers with quality service is a prime objective for Madrileña Red de Gas, therefore ad hoc courses have been delivered to respond to specific needs. Cross-training has also been emphasised amongst employees, through our most experienced professionals, in order that we can guarantee the company’s Know How.

The low accident rate for which we have been recognized is a cornerstone of Madrileña Red de Gas, and should remain so. For this reason, more than 25% of the total training budget for safety courses has been allocated this year.

Finally, we have dedicated 10% of the budget to language training, offering our professionals face-to-face training inside and outside the office, training through online platforms and also training via telephone. We have surpassed 1,200 classroom hours of face-to-face training, delivered two days a week throughout the year.

3.5  
**INTEGRATED  
MANAGEMENT SYSTEM**

During this 2018 financial year, our comprehensive risk management policy has been highlighted by the total integration of the LPG business. We have positively implemented the internal regulations on prevention, the management of quality legal and environmental requirements related to the dismantling of plants, and the consolidation of the plan to improve safety conditions at LPG plants, as well as the monitoring of the aspects of quality, environment and prevention in the development of the conversion projects and the maintenance of the supervision project of the contractor companies related to the LPG business.

On the other hand, we have continued with the project of adapting the management system for prevention, environment and quality to ISO 45001:2018, ISO 14001:2015 and ISO 9001:2015 standards. The implementation of the new documentation repository specifically for the integrated management system and, in a very special way, for the databases of the different projects managed from here, should also be highlighted.

Another of the main activities carried out during the current financial year has been the improvement of the criteria for reviewing contracts, in which new service level agreements have been incorporated for the management of prevention and the

**84%**

**84% of the employees  
of the MRG staff have  
received at least 32 hours  
of training in 2018**

environment. The personal data protection clauses have been revised in depth in order that they adapt to the new regulations on the protection of personal data. We have also perfected the identification of legal requirements, differentiating by areas of activity, environment, industrial safety and occupational risk prevention.

3.6  
SAFETY AND  
RISK PREVENTION

Good performance in occupational risk prevention involves avoiding or minimizing the causes of accidents or occupational diseases in the workplace, which reverts to a safe job well done.

This commitment to preventive culture is reflected in the “Prevention Plan”. We have implemented a policy for serious accident prevention involving dangerous substances (R. D. 840/2015 - Seveso III). The management criteria to be applied in these cases are detailed in the “Safety management manual for serious accidents prevention” and in the other procedures.

In this sense, the most significant actions carried out in 2018 have materialized in the publication and dissemination of the internal emergency plans, after documentary verification of the approved inspection body and the subsequent implementation thereof, through the provision of training

and undertaking of simulations. The internal regulatory audit for the serious accident prevention and the regulatory inspections of article 21 of R. D. 840/2015, performed by an approved inspection body, have also been carried out for all assets affected, in addition to the mandatory document review of the management system. Emergency drills have also been carried out to in order verify the suitability of the means and resources available.

Similarly, the LPG business has required various actions. Amongst the most relevant is the implementation of self-protection plans in 35 LPG plants affected by R. D. 393/2007, with storage capacities between 30 and 50 tons. Emergency drills have also been carried out with the active participation of the maintenance companies’ personnel and the first explosion protection documents of the LPG plants have been published and distributed. Amongst others, the installations affected by R. D. 840/2015 – Seveso III, with storage capacities of more than 50 tons, as well as the plants where the low voltage electro-technical regulation approved inspection body has carried out the respective inspections, may be highlighted.

The plan for the improvement of safety conditions in LPG plants has also been completed. This will include the installation of SCADA-type remote management systems and video surveillance cameras, fencing improvements, etc.

1,098

Hours of training in  
safety and occupational  
risk prevention

Madriñeña Red de Gas has remained committed to the “Bonus” system established by R. D. 404/2010 for a further year, obtaining a reduction in contributions for professional contingencies through the reduction and prevention of work accidents.

The progressive reduction of the number of accidents at work is a priority objective and, for the second time, there has been a period of twelve consecutive months without non-in itinere accidents causing sick leave.

In relation to the Carriage of Dangerous Goods by Road (ADR), the safety adviser has made the respective annual visits to the LNG and LPG plants. The preventive and/or corrective measures that we must adopt have been extracted from their reports. In addition, the designations of the ADR managers for the casting processes have been regularized recurrently; the mandatory annual report is sent to the Ministry of Transport.

In addition, MRG has prepared and published a new internal standard “PRL-833 Management of safety in the carriage of dangerous goods by road”, and revised the “PRL-829 Work permits” internal regulation in order to facilitate the identification of the activities in LNG and LPG plants in which a work permit is required.

Our policy of occupational risk prevention includes the training of workers in safety and risk prevention. In this sense, a total of 1,098 teaching hours have been delivered to a group

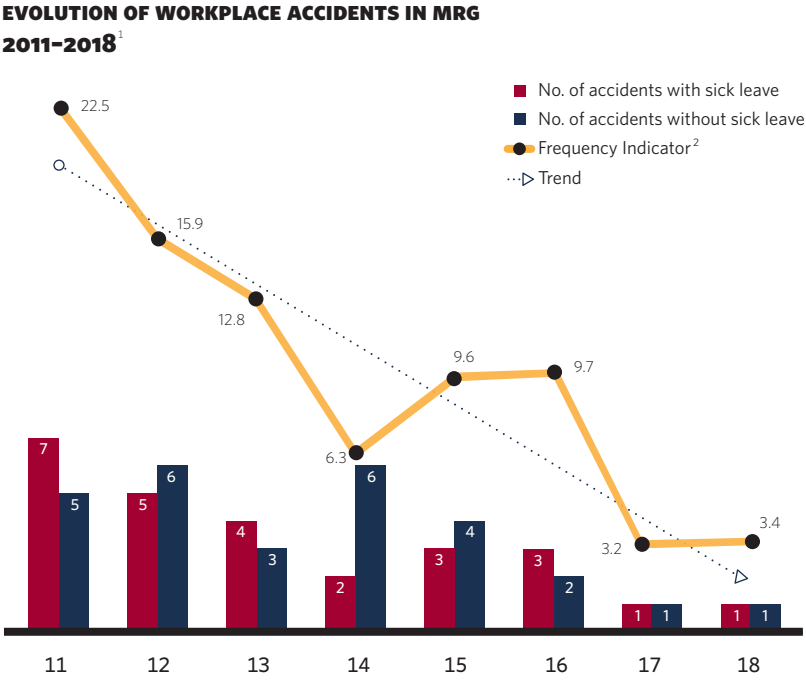
of 69 workers, with a ratio of eight hours of prevention training per employee per year.

Similarly, 12 emergency drills have been carried out in LPG plants. Based on the information obtained in these drills, opportunities for improvement have been identified, as well as preventive and corrective measures.

On the other hand, the monitoring of documentation management has increased to 151 contractors and subcontractors and to 1,110 workers; the volume subject to supervision is greater than 10,200 documents.

12

Months without non-in  
itinere work accidents  
causing sick leave



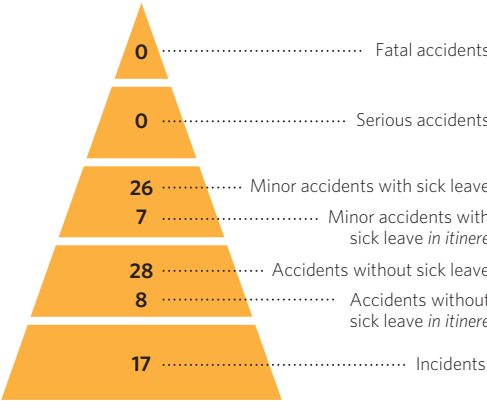
<sup>1</sup> The data displayed is from calendar years unlike that shown in past reports, which refers to financial years.  
<sup>2</sup> The Frequency Indicator is defined as the number of accidents with leave during the working day for every million hours worked.

In 2018, MRG has continued to implement documentary exchange actions with new contracts, and the identification of the parameters and documentary requirements that are subject to supervision has been reviewed, such as those related to jobs with electrical hazards. In this sense, and in view of the significant increase in subcontracting, a large number of validation processes have been carried out on the documentation of occupational risk prevention for subcontractors.

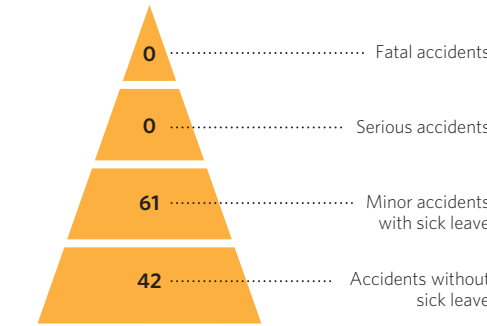
These documentary controls are completed through direct supervision in the field, which was already started in previous years, through which the effective application of a large number of preventive measures and the documentation provided are checked in order for them to be correct. The result of these visits to supervise activity is communicated to the contractors for their knowledge and implementation of improvements. In a complementary manner, periodic follow-up meetings are held with the supervisors in the field in order to promote the usual dialogue with the prevention technicians of the main contractors and establish effective communication channels.

In this financial year, we undertook about 235 operational monitoring visits, most of them aimed at processes related to the LPG business, emergency care and other processes in the areas of network operations, customer operations and expansion.

DESCRIPTION OF THE SEVERITY OF ACCIDENTS FOR MRG PERSONNEL FROM 2011 TO 2018



ACCIDENT RATE IN CONTRACTOR COMPANIES BETWEEN 2012 AND 2017



**0**  
2018 has been another year without any serious accidents in Madrileña Red de Gas or its contractors

**151**  
Contractors and subcontractors whose documentation management has been monitored

Additionally, in adherence to our policy of providing information on occupational risk prevention to interested parties, we have continued to improve the content available in our prevention information channel, enabling access to both our employees and the main contractors. This is how access to updated editions of occupational risk prevention information is guaranteed.

For activities that involve the execution of construction works, periodic monitoring of the health and safety managers’ activity is carried out. In order to improve the monitoring and supervision of the documentary requirements, we have launched technological initiatives in various collaborative environments where the parties involved can monitor project development. This initiative has revealed the high complexity involved in implementing documentation monitoring.

In the area of decommissioning the works of the LPG plants, the drawing up of plans for the hoisting of tanks and for specific tasks related to asbestos risk has been required.

Regarding risk prevention in activities with the potential presence of explosive atmospheres (ATEX), MRG has advised on the application of these policies to RMS (Regulation and metering stations) and LPG plants, and also regarding electrical inspections in ATEX-classified areas.

Also, through the approved inspection body, we have undertaken the mandatory five-year

inspection visits to the LPG plants, in accordance with the low voltage electro-technical regulation.

Finally, periodic medical examination campaigns focused on different groups to cover a large number of workers have continued. To these must be added the prevention campaigns against specific illnesses (prevention of colon cancer, prostate, etc.).

**235**  
Operational monitoring visits, most of them aimed at processes related to the LPG business



# 4

## **GAS AND SOCIETY**

Natural gas for vehicles is experiencing a moment of boom and development. Renewable gases such as biomethane will allow the EU to meet the 2050 targets in its fight for climate change. This is also one of MRG's commitments – to face this challenge. In 2018 we have produced the company's first carbon footprint report, one more step in our commitment to the planet.



4.1

## ADVANCE OF NATURAL GAS FOR VEHICLES (NGV)

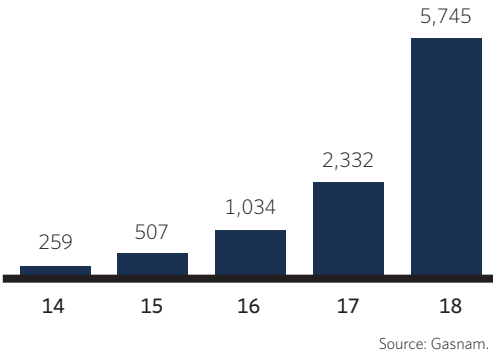
As we have been anticipating in previous years, NGV is in full development. A good example of this are the 5,745 NGV vehicle registrations carried out during 2018; more than half in the Community of Madrid. This figure translates into an increase of 146% with respect to 2017, as well as a total increase of the national vehicle fleet of 68%, with 14,216 registered NGV vehicles.

It should be remembered that NGV vehicles are catalogued with the ECO label of the Spanish Department of Transport, so they have access to Central Madrid and can circulate and park on days when the protocol is activated owing to high NO<sub>x</sub> contamination in the municipality of Madrid, something that is particularly relevant for people living in surrounding municipalities.

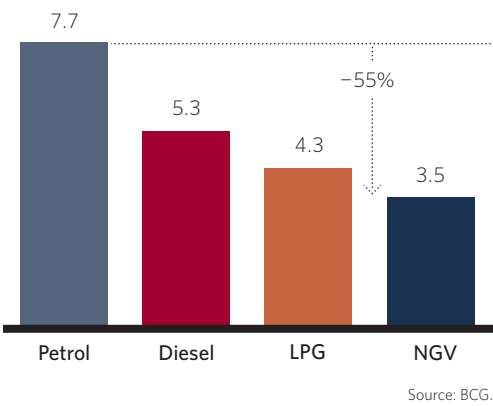
It should also be noted that three new public NGV refuelling stations have been opened in the current financial year within the scope of action of Madrileña Red de Gas, where consumption has increased by 31%. As of today, the MRG area has a total of 14 NGV refuelling stations, of which seven are public access.

In 2018, initiatives such as the SUM (Sustainable Urban Mobility) Plan were promoted in the Community of Madrid, aimed at the purchase, by individuals, of passenger cars that operate with efficient energies, including NGV.

REGISTRATION OF NATURAL GAS VEHICLES  
(total/year)



COST ACCORDING TO FUEL TYPE  
(€/100 km)



146%

The percentage by which the registration of NGV vehicles has increased in 2018; more than half in the Community of Madrid

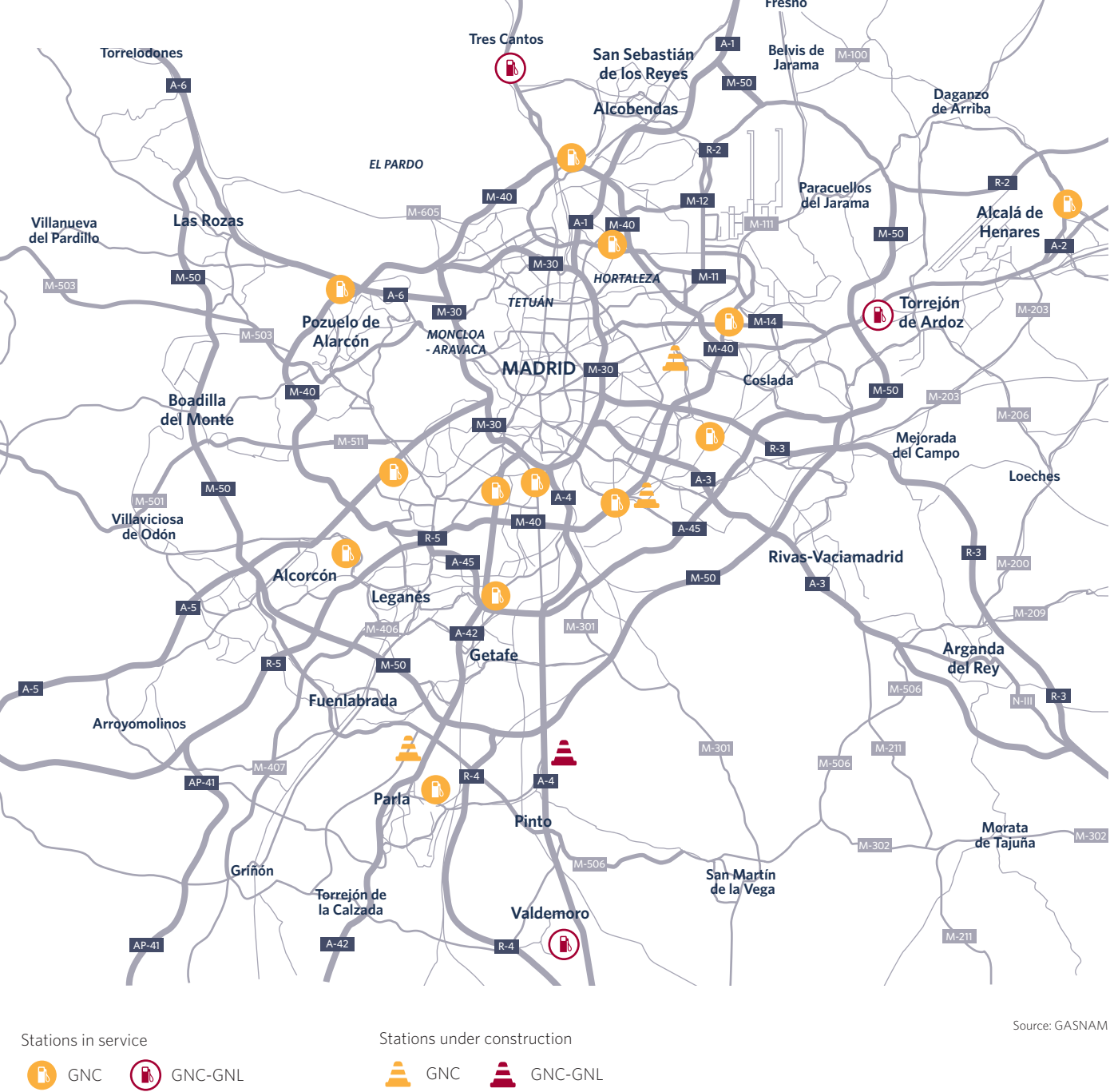
31%

The increase in consumption associated with the 3 new NGV stations in the MRG area

100%

The entire MRG fleet has used alternative energies since 2015

NGV SERVICE STATIONS IN THE COMMUNITY OF MADRID, 2018





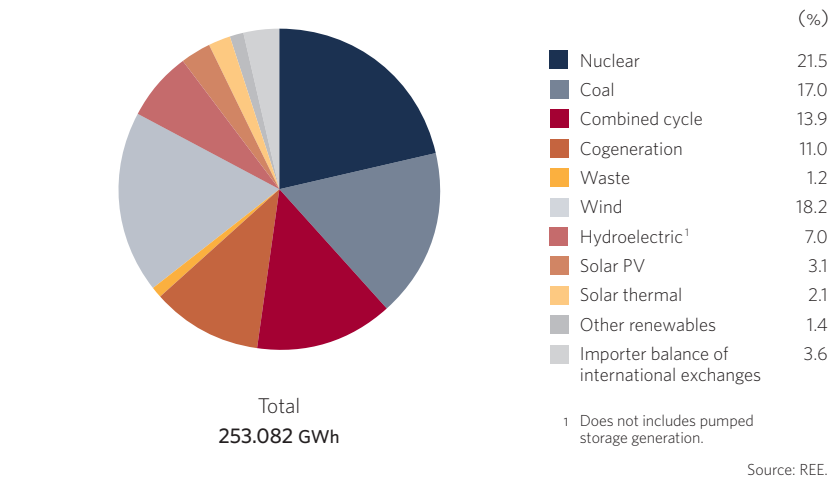
Initiatives such as this one, which is scheduled again for 2019, support the use of NGV as an alternative to petroleum-based fuels for clean and efficient mobility.

We might recall that emissions of local pollutants by the NGV car are almost nil. Regarding CO<sub>2</sub> emissions that cause the greenhouse effect, they are very similar to emissions data for electricity production in Spain, where only 30% of the electricity produced is non-polluting in origin.

In economic matters, the evidence cannot be more encouraging. The data provided by various sources and different professional sectors point to NGV as the most economical option, with savings of over 50% compared to gasoline and 30% compared to diesel. This data has been endorsed by the 2018 OCU [Spanish Consumers and Users Organisation] report. According to this, if acquisition, consumption and maintenance costs are taken into account, the most affordable option is that of NGV vehicles. In fact, at MRG, 100% of the fleet works with natural gas.

For all these reasons, at Madrileña Red de Gas we believe that informative campaigns must be undertaken in order to promote the innumerable advantages of the use of natural gas for mobility and to facilitate the acquisition of this type of vehicle by individual users.

PENINSULAR ELECTRICITY DEMAND COVERAGE, 2017



COST OF A VEHICLE OVER ITS LIFETIME BASED ON FUEL (€)

Segment C vehicles	Finance and taxes	Fuel	Maintenance and insurance	Total
Fuel cell	57,571	8,085	8,937	74,593
Non-plug in petrol hybrid	33,176	14,278	10,661	58,115
Petrol	29,811	15,851	10,661	56,323
Diesel	31,583	11,139	9,999	52,721
Electric	39,958	1,928	8,937	50,823
LPG (liquefied petroleum gas)	30,459	10,306	10,661	51,426
NGV (natural gas vehicle)	30,716	6,288	10,661	47,665

Source: OCU.

4.2  
**BIOMETHANE**

The objectives set for 2050 by the European Union to fight against climate change are very ambitious. They focus on the elimination of greenhouse gases (CO<sub>2</sub>), a greater penetration of renewable energies and improvements in energy efficiency.

This implies a profound conversion in all sectors of the economy, which will require significant investments for the improvement of energy efficiency and the penetration of renewable energies. This new scenario will encourage a circular economy associated with new employment opportunities, a greener infrastructure, clean mobility, etc. But not only economic benefits will be obtained: decarbonisation will reduce premature deaths through air pollution related to fossil fuels, industrial processes, etc.

Renewable gases (biogas, biomethane, synthetic gas and renewable hydrogen) are presented as a global solution for the fulfilment of these objectives.

In Spain, the development of biomethane is one of the most important lines of action to help natural gas maintain its role in the framework of energy transition, helping to achieve decarbonisation objectives and guaranteeing the sustainability of the gas system.

But what is biomethane? Biomethane is methane gas (CH<sub>4</sub>) that is biological in origin

and obtained by biogas produced from a variety of biological substrates, such as agricultural waste (manure, straw, etc.), sewage sludge, domestic and industrial organic waste and others. It is estimated that cattle alone produce 80 million tons per year that are released into the atmosphere.

The biogas production process is the result of anaerobic digestion; that is, a process in which certain bacteria decompose biodegradable material in the absence of oxygen. An initial, untreated biogas emerges from this process, comprising between 50 and 75% methane (CH<sub>4</sub>), between 25 and 50% carbon dioxide (CO<sub>2</sub>) and small amounts of water vapor (H<sub>2</sub>O), nitrogen (N<sub>2</sub>), oxygen (O<sub>2</sub>) and hydrogen sulphide (SH<sub>2</sub>).

However, for its injection into the natural gas network and its subsequent use for heating, hot water or as fuel for vehicles, it must undergo a purification process known as upgrading. Once completed, it can meet the standards to be used as natural gas under the name of biomethane.

Despite being the least known of biofuels, biomethane is the cleanest and has the least ecological impact. It has great potential as a solution for the management of urban and agricultural waste, water purification and the improvement of air quality. It is also very viable from a commercial point of view, since it can be used in existing infrastructures for natural gas.

**15**

**European countries produce and inject biomethane into their natural gas network at present, with a total of more than 500 plants in Europe**

Currently it is produced in 15 European countries and injected into the natural gas network of most of them. In total there are more than 500 plants in the EU. They are mainly used to generate electricity and heat, although their use as transport fuel is becoming increasingly popular. Spain only has one biomethane injection plant in a transport network, Valdemingómez, with a total of 92 GWh per year.

In order to make biogas more competitive with other renewable energies, R&D&I support and a regulatory framework that protects it are needed. The main difficulty encountered is the absence of a certificate that guarantees its renewable origin and enables its traceability, reducing its market value for reduced CO<sub>2</sub>. In this way, a market for the purchase of emission reduction certificates similar to those that already exist for electricity would be created.

Madrileña Red de Gas participates, together with SEDIGAS, GASNAM and other associations, in the preparation and promotion of information whose purpose is to break down these barriers.

The co-operation agreement signed recently with ENAGAS, in order to exchange information and knowledge in this area, is a clear example of the importance for our company of continuing to work together for the common goal of obtaining that regulatory framework that protects biomethane and gives

it visibility as a clean, carbon-free energy, crucial for energy transition and a clear benefit to circular economy policies.

**92**

**GWh of biomethane are injected annually into the Valdemingómez transport network by the only plant in Spain**

**WASTE TREATMENT OPTIMIZATION FOR BIOMETHANE PRODUCTION**

Traditional linear system for waste treatment



Circular and eco-sustainable proposal



CARBON FOOTPRINT

Today, almost all our activities and goods we own or use involve energy consumption and an increase in greenhouse gas (GHG) emissions to the atmosphere.

Hence the concept of carbon footprint, as the set of GHG produced, directly or indirectly, by people, products, events or companies.

The corporate carbon footprint can be approached from different angles and specific scopes and several methodologies or standards employed for its calculation, such as the corporate accounting and reporting standard (GHG Protocol) of the World Resources Institute (WRI), the World Business Council For Sustainable Development (WBCSD) or ISO 14064. These standards establish three scopes to help delineate sources of direct and indirect GHG emissions, improve transparency and are useful for different types of organizations and business objectives.

Although the carbon footprint certificate is not yet mandatory, Madrileña Red de Gas follows its corporate approach, which evaluates the company's carbon footprint over a set period of time (usually one year) and groups the emissions of greenhouse gases in three types with different scopes:

1. Direct emissions of GHGs that come from sources that are owned or controlled by the company (scope 1).

2. Indirect emissions from energy consumption and distribution (scope 2), those associated with electricity consumption, etc., generated by third parties.

3. Other indirect emissions that are not owned or controlled by the company (scope 3).

During 2018, MRG has produced the carbon footprint report based on scopes 1 and 2. Similarly, it has considered the methodological requirements established by public documentation, as is the case of emission factors for the calculation of emissions, prepared for carbon footprint registration, compensation and carbon dioxide absorption projects, created by R. D.163/2014, of March 14. The scope and limits applied to the calculation of the carbon footprint has been as follows:

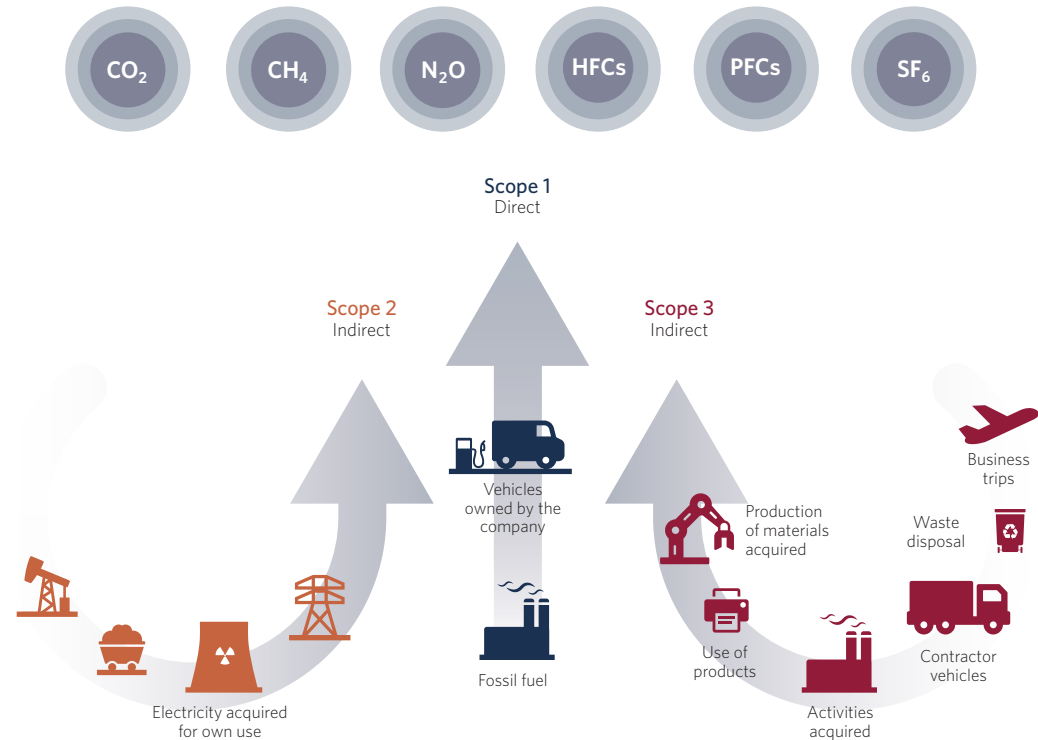
- Central offices of Madrileña Red de Gas.
- Distribution network of natural gas and LPG.
- LNG and LPG plants belonging to MRG distribution network.
- Fleet vehicles.

The GHG included in the carbon footprint are the following: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs and other fluorinated greenhouse gases. All results are reported in CO<sub>2</sub>, applying the warming potentials indicated in the IPCC Fourth Assessment Report and in Regulation (EU) 517/2014, of April 16, 2014, on fluorinated greenhouse gases, which repeals Regulation (EC) 842/2006.

2018

First Madrileña Red de Gas carbon footprint report for scopes 1 and 2

EMISSIONS BY TYPE OF SCOPE



The sources of emission considered, the calculation methodology and the emission factors applied are detailed below.

Scope 1

Direct GHG emissions. From sources that are owned or controlled by the company.

- Combustion in stationary sources (DHW boiler for offices and steam boilers for LNG and LPG plants).

- Fugitive emissions owing to gas losses (gas losses in pipelines, connections and network RMS and gas leaks owing to damages to third parties).

- Fugitive emissions of F-gases (fluorinated greenhouse gases) in air conditioning.

- Combustion in mobile sources (owned or operated vehicles).

3

Typologies of greenhouse gas emissions with different scopes measure the carbon footprint

The emissions of combustion in fixed sources include the fossil fuels used.

Fugitive emissions from network losses refer to CH<sub>4</sub> leaks that occur in the network depending on the materials of the gas pipelines used to transport the gas, leaks in connections, valves and other elements associated with the connections and RMS, and leaks caused by damages produced by third parties in the network.

Fugitive emissions from F-gases refer to the recharged quantities of coolants or other agents containing HFCs, PFCs and preparations formed by GHG mixtures, including the heating potential of the mixtures.

Regarding the combustion emissions in mobile sources, a detailed methodological approach is considered that allows the calculation of CO<sub>2</sub> emissions from fuel consumption. If only having data for kilometres travelled is available, the calculation is made on the basis of specific consumption factors (gcomb/km) by type of vehicle (car, truck, van) and applicable EURO standard by type of driving (urban or motorway) provided by COPERT. The CO<sub>2</sub> emissions derived from the “bio” part of the fuels are discounted. Unlike CO<sub>2</sub>, the rest of the GHG (CH<sub>4</sub> and N<sub>2</sub>O) are calculated primarily from the COPERT emission factors per kilometre travelled (GHG/km) (also including the type of vehicle, applicable EURO standard and the type of driving) or, failing that, from fuel consumption, following the recommendations indicated in the 2006 IPCC

Guidelines for national GHG inventories. In the case of GHGs other than CO<sub>2</sub>, no discount for biofuel is applied.

Emissions estimates are made using the EMEP/CORINEAIR methodology, which enables the amount of emissions from each source to be calculated from quantifiable activity data and emission factors. This methodology is consistent with the options listed in ISO 14064-1.

The emission factors applied come from reference sources, such as the 2006 IPCC Guidelines for national inventories of greenhouse gases, the National Inventory (Spain) of emissions to the atmosphere and the emission factors document from the carbon footprint, compensation and absorption projects registry.

Other factors applied, such as the case of fuel data related to LCV, HCV, density, discount percentage in biofuels) have been obtained from references such as:

- LCV [Lower Calorific Value]/HCV [Higher Calorific Value]: Spain’s national emissions inventory, 2006 IPCC guidelines for national greenhouse gas inventories and emission factors document from the carbon footprint, compensation and absorption projects registry.
- Densities: R. D. 1088/2010, of September 3, which modifies R. D. 61/2006, of January 31, regarding the technical specifications of

petrol, gas oil, use of biofuels and sulphur content of fuels for maritime use and emission factors document from the carbon footprint, compensation and absorption projects registry.

- Biofuels percentage: R. D. 1085/2015, of December 4, for the promotion of biofuels and the emission factors document from the carbon footprint, compensation and absorption projects registry.

Scope 2

Indirect GHG emissions owing to the generation of energy that is acquired by the company for its own consumption and is not self-generated. They include electricity that has been purchased and consumed. The calculation of the emissions is carried out by applying to the consumption (kWh) the emission factor (KgCO<sub>2</sub>e/kWh) referring to the marketer used, provided by the National Commission on Financial Markets and Competition (CNMC) or the emission factor applicable to the mix of marketers without guarantee of origin, for each year of calculation.

No emission associated with the sources included in the carbon footprint has been excluded.

Regarding the approach to the consolidation of GHG emissions data, Madrileña Red de Gas has included one hundred percent of the GHG emissions of the operations over which it has operational or financial control.

The uncertainty associated with the carbon footprint is determined by the following components:

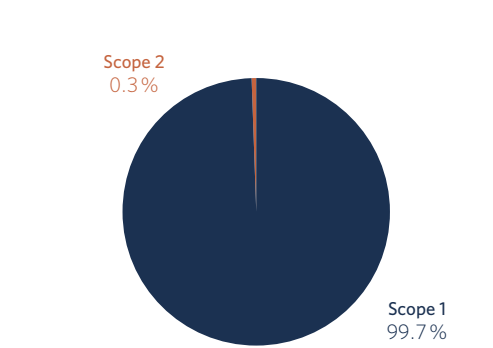
- Scientific uncertainty regarding emission processes. Regarding factors used (emission factors, warming potentials and other conversion factors such as density or LCV). This component is monitored in the carbon footprint mean, in which it uses factors detailed in the IPCC reference documents (emission factors from the guidelines for the preparation of emissions inventories and warming potentials from the IPCC assessment reports) and, whenever available, factors published in the National Inventory of atmospheric emissions. In the case of indirect emissions, specific emission factors from each electricity supplier and reference life cycle analysis in the sectors are used.
- Uncertainty related to the estimation of emissions. Secured through the use of activity data from supplier invoices. For example, electricity billing and/or measuring instruments subject to metrological inspection, such as flowmeters, in order to ensure a range of monitored uncertainty.

This qualitative assessment of uncertainty should not be understood for quantification purposes, but rather as a means to monitor it.



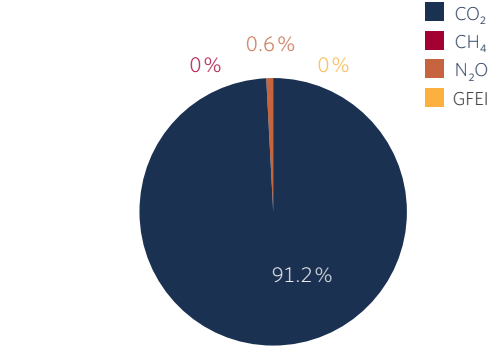
CARBON FOOTPRINT

Distribution of emissions by scope, MRG (%)



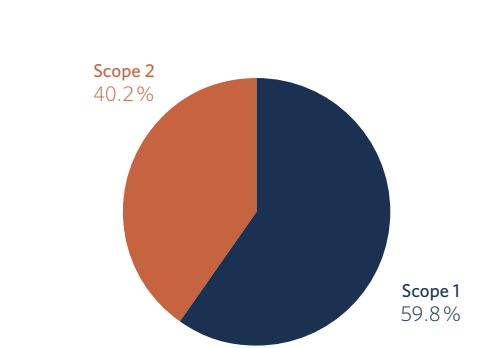
CARBON FOOTPRINT

Distribution of emissions by GHG type, MRG (%)



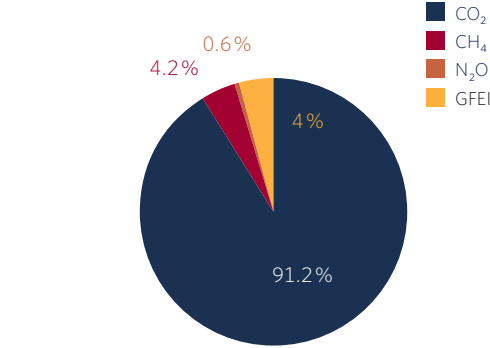
CARBON FOOTPRINT (NO GAS WASTAGE)

Distribution of emissions by scope, MRG (%)



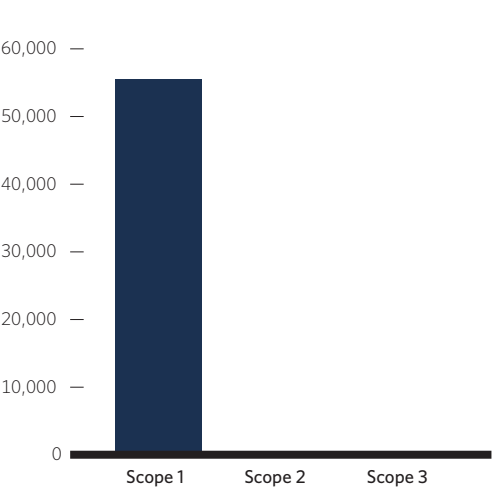
CARBON FOOTPRINT (NO GAS WASTAGE)

Distribution of emissions by GHG type, MRG (%)



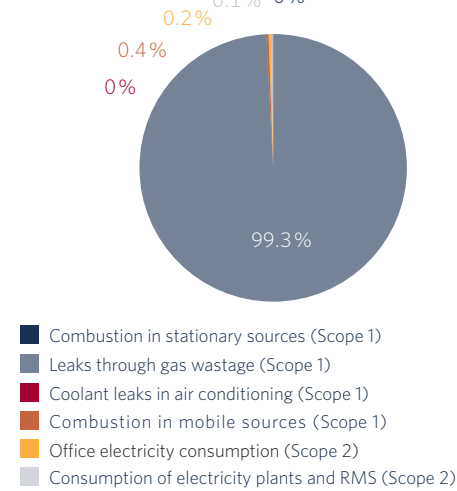
CARBON FOOTPRINT

Emissions by scope, MRG (tCO<sub>2</sub>e)



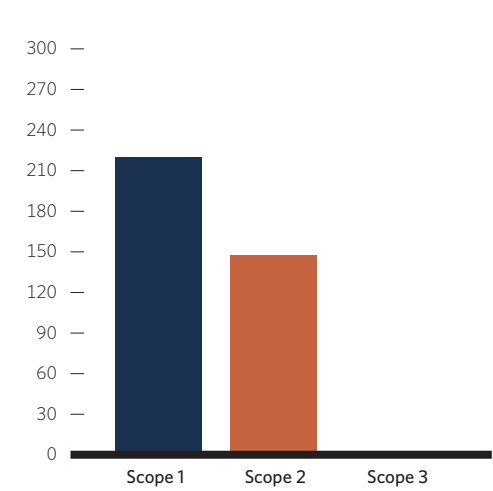
CARBON FOOTPRINT

Distribution of emissions by source type, MRG (%)



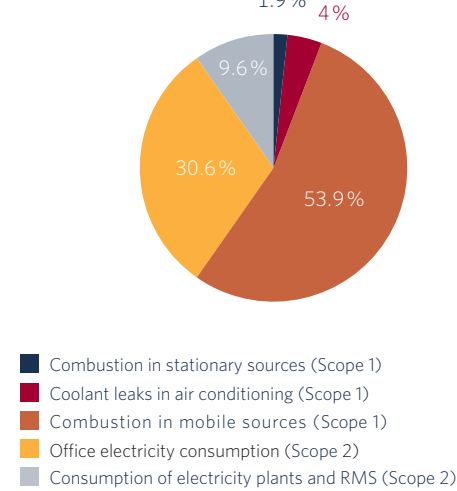
CARBON FOOTPRINT (NO GAS WASTAGE)

Emissions by scope, MRG (tCO<sub>2</sub>e)



CARBON FOOTPRINT (NO GAS WASTAGE)

Distribution of emissions by source type, MRG (%)





4.4

## IDENTIFICATION AND EVALUATION OF ENVIRONMENTAL ASPECTS

Madrileña Red de Gas establishes, through internal regulations, a methodology for the identification and evaluation of the environmental aspects associated with its processes, activities, services, workplaces and vehicle population in order to determine which have or may have a significant impact on the environment. An operational monitoring is established for them in this way.

In order to establish environmental objectives, MRG takes into account the most significant environmental aspects that have been identified in 2018, which has allowed the improvement of

the processes during this year and a new matrix to be set up based on the following aspects.

- Identification of impacts and direct, indirect and potential environmental aspects that includes the description of the activities and processes associated with each area, operating conditions (normality, abnormality or emergency) and the time factor.
- Evaluation of the importance of the environmental aspect considering the applicable regulations, consequences, probability and residual environmental impact in order to determine the degree of significance of the environmental aspect.
- Environmental management that includes the existing operational monitoring.

### ENERGY CONSUMPTION: FACILITIES AND VEHICLES <sup>1</sup>

	2015	2016	2017	2018
Electricity in offices (kWh)	363,000	301,897	319,396	312,069
Electricity in network and LNG plants (kWh)	95,987	53,024 <sup>2</sup>	114,016	153,413
Natural gas in offices (kWh)	18,397	17,320	19,144	18,812
NGV (kg)	18,730	37,843	32,838	29,762
Petrol (l)	9,253	2,855	2,267	1,468
Diesel (l)	11,855	1,417	0	0

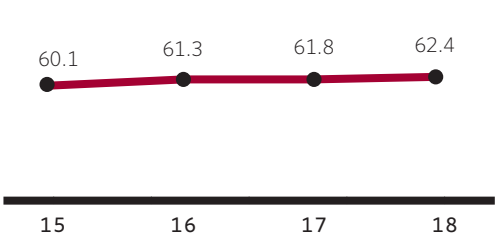
1 The statistics do not include the consumption of the vehicles of the sales personnel nor those of the private vehicles of employees placed in a timely manner at the disposal of the company.

2 The electricity consumption data of the LNG and RMS plants of 2016 is incomplete, due to the fact that invoices for some plants and stations are not available.

815

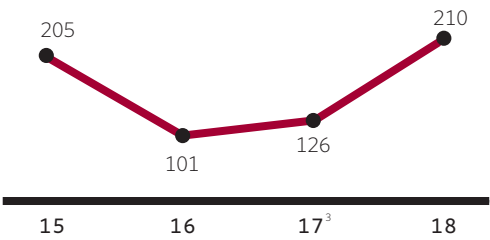
The total m³ of water in which MRG LNG plants have reduced consumption since 2015 until now

### FUGITIVE EMISSIONS OF METHANE IN THE DISTRIBUTION NETWORK <sup>1</sup> (thousands/t CO<sub>2</sub>)



1 The estimated fugitive emissions depends on the materials of the network, its length and conversion factors.

### ATMOSPHERIC EMISSIONS OF FACILITIES <sup>1</sup> AND VEHICLES <sup>2</sup> (thousands/kg CO<sub>2</sub>)

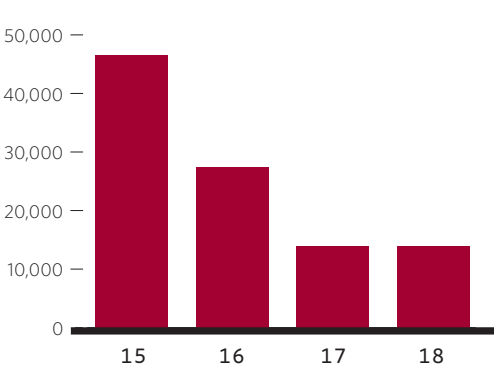


1 Include direct and indirect emissions of the building.

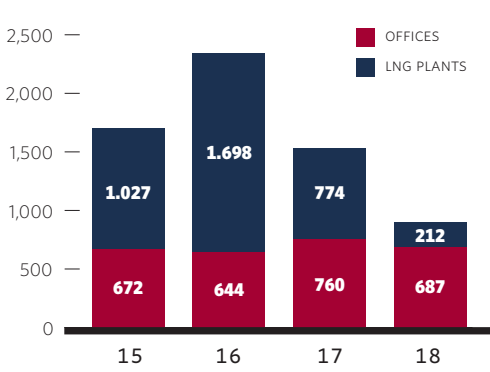
2 The statistics do not include the consumption of the vehicles of the sales personnel nor those of the private.

3 The data referring to 2017 is incomplete, due to the fact that invoices are not available.

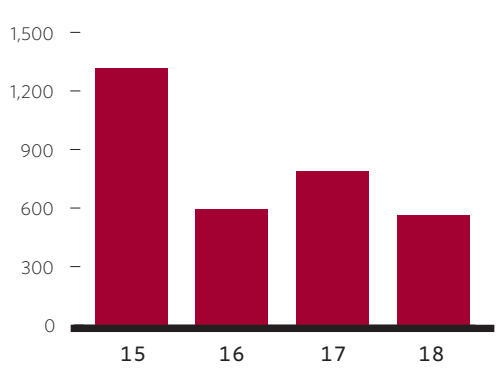
### MANAGEMENT OF CONSTRUCTION AND DEMOLITION WASTE (t)



### WATER CONSUMPTION (m³)

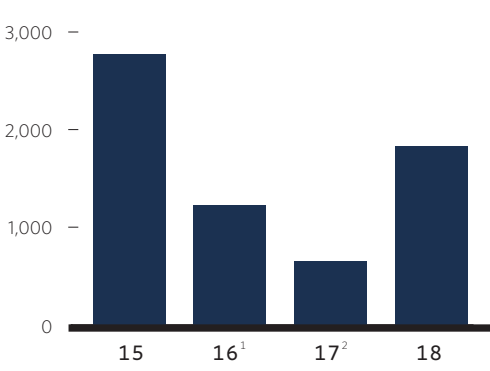


### HAZARDOUS WASTE MANAGEMENT (kg)



Categories of hazardous waste managed: contaminated plastic and metal containers, contaminated rags, aerosols, filters, batteries, computer and electronic equipment, button and alkaline batteries.

### PAPER CONSUMPTION (kg)



1 Data of the first half year.

2 Data of June, October, November and December.



# 5

## RESULTS

In 2018, we obtained excellent results due to a consolidated strategy based on profitable and sustainable expansion within our territory and in adjacent ones. The revenue figure has grown 3%. We will continue to grow thanks to the investment policy in the future expansion of the company.

5.1

RESULTS SUMMARY

2018 is the first financial year for the company that coincides with the calendar year. It began on January 1 and ended on December 31.

The previous year was a short transition period of six months, between July 1 and December 31, 2017. To facilitate the comparison with the 2018 financial year, pro forma figures have been taken for the 12 months pertaining to the 2017 calendar year.

2018, with 11 TWh of natural gas transported by our network, has been a record year in the history of MRG. Low temperatures during the winter months in the Madrid region were the main cause of the increase in the demand of our domestic customers. Similarly, the efforts made by investment and sales to offer this alternative as a source of efficient and sustainable energy in the tertiary and industrial sector has borne fruit, as demand has increased in both sectors within our area of influence.

The company’s growth strategy continues to be profitable and sustainable expansion in our territory and in adjacent territories. More than 903,000 total supply points have already been created, of which more than 879,000 are natural gas.

Around 16,500 of the LPG points that we acquired from Repsol Butano in 2016 have

PROFIT AND LOSSES (€ million)	2017 <sup>1</sup>	2018
Remuneration	132.2	147.0
Other revenues	49.7	41.0
EBITDA <sup>2</sup>	131.8	141.4
EBIT	97.3	110.6
Net profit	38.6	51.0

<sup>1</sup> The data referring to 2017 is not audited; it has been calculated based on the calendar year (January-December) in order to make them comparable with 2018.

<sup>2</sup> Excluding non-recurrent expenses.

already been converted to natural gas. MRG successfully distributes and markets LPG in the points pending conversion.

MRG maintains its operational efficiency. In this sense, it is worth mentioning the effort that the company is making in combating fraud, which will minimize gas losses in the network. At the same time, special attention is being paid to the improvement of services for our customers through the advantages offered by digitization and artificial intelligence tools.

Another major cornerstone of the company is financial strength, since it allows us to take advantage of market growth opportunities, make the necessary investments to achieve greater operational efficiencies and improve service levels, and maintain a strong social commitment to create value in all our interest groups.

16,500

LPG points from those acquired from Repsol in 2016 have been converted to natural gas

7%

In 2018, EBITDA increased 7% due to the operational efficiency that enabled revenues to be increased and costs to be reduced

The consortium of company shareholders has not changed during the year. For them, MRG represents a long-term value creation project where they share the same strategic vision and a commitment to long-term financial strength. The confidence of our company shareholders is crucial since it provides us with the necessary resources to develop our project.

The main activity of MRG is the distribution of natural gas, which is a regulated activity. Therefore, stability in the long-term regulatory framework is important, enabling the interest of necessary investments to guarantee and expand the distribution of natural gas. In this sense, the company operates in a stable, transparent and sustainable framework. The data published on the closure of the 2017 gas system tariff deficit, as well as the forecasts for 2018, show the sustainability and expertise achieved by the system in recent years.

5.2

OPERATIONAL RESULTS

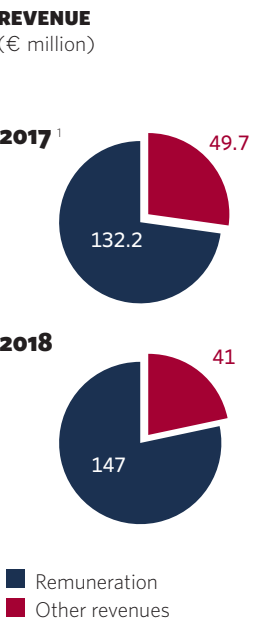
2018 has seen excellent results. Our revenue figure has grown by 3%. Remuneration for the distribution activity has increased owing to growth in demand and connection points. However, this growth has been partially offset by the loss in the rental of meters for domestic use, which has entailed the lowering of rates that came into effect at the beginning of the year.

The increase in revenues and lower costs arising from operating efficiencies explain the EBITDA increase by 7%.

5.3

INCOME

The net amount of turnover in the 2018 financial year was € 188 million, 3% more than the previous year. Of the total income, excluding income from LPG sales of 18.3 million euros, 87% comes from the remuneration recognized for the distribution activity, established pursuant to the Order of the Ministry of Energy, Tourism and Digital Agenda 1283/2017, published in Official State Gazette No. 314, of December 27, 2017, which establishes the remuneration for regulated activities in 2018 and the Ministry of Environment Order 1367/2018, published in the Official State Gazette No. 308, of December 20, 2017 that includes adjustments for 2018 and previous years. The remaining 13% refers to provision from other services related to natural gas distribution activity. These include income from the rental of meters, periodic inspections and provision of other services to users.



<sup>1</sup> The data referring to 2017 is not audited; it has been calculated based on the calendar year (January-December) in order to make them comparable with 2018.

188

Total revenues for this 2018 financial year were € 188 million, 3% more than the previous year

5.4

**FINANCIAL POSITION  
AND BALANCE**

During 2018, € 500 million of bonds were redeemed on their maturity date. The redemption was paid with the funds obtained in 2017 for the issue of bonds for an amount of € 600 million by Madrileña Red de Gas Finance BV, a company domiciled in the Netherlands and one hundred percent owned by the sole shareholder of Madrileña Red de Gas.

After this operation, the resulting debt is lower and its average cost has improved, which has gone from 3.1% to 2.7%. It has also increased its average life to currently 7.1 years, and has a dispersion in maturities that reduces the risk of refinancing.

MRG also has a contingent credit line for a total of € 200 million. Maturing in 2022, it allows us to increase our liquidity position with absolute flexibility.

At the end of 2017, MRG, like other operators in the sector, securitised the tariff deficit, which was 45 m€ from 2014. Similarly, during 2018, the tariff deficits for 2015 and 2016 have been securitised.

Financial strength is an essential pillar in MRG. The company has and pursues strong levels of solvency and liquidity consistent with an investment grade rating. The financial structure is efficient and long-term. Dividend flexibility is another feature that gives the company a better financial position.

Both the company and all the debt issues have been rated by the rating agencies Standard & Poor’s and Fitch with the investment grade. Both agencies have recently reaffirmed their rating.

**500**

**Million euros in bonds  
have been redeemed  
during 2018 as of the  
due date**

**2.7%**

**The average cost of debt  
has improved in 2018  
decreasing from 3.1% to  
2.7%**

**7.1**

**The average life of the  
debt in 2018**

<b>BALANCE</b> <sup>1</sup> (€ million)	<b>2017</b> <sup>2</sup>	<b>2018</b>
Gas distribution licences	740.3	748.4
Net tangible fixed assets	379.3	358.5
<b>Total Network Fixed Assets</b>	<b>1,119.6</b>	<b>1,106.9</b>
Goodwill	57.4	57.4
Deferred tax asset	27.2	24.9
Other non-current assets	6.0	1.9
Current assets	62.1	55.8
Cash	616.0	63.0
<b>Total Assets</b>	<b>1,888.4</b>	<b>1,309.9</b>
Equity	304.8	233.3
Long term debt	1,459.1	942.6
Deferred tax liability	40.4	50.2
Other non-current liabilities	25.7	24.1
Current liabilities	58.5	59.7
<b>Total Liabilities &amp; Shareholders equity</b>	<b>1,888.4</b>	<b>1,309.9</b>

<sup>1</sup> In accordance with the International Financial Reporting Standards (IFRS).  
<sup>2</sup> The data referring to 2017 is not audited; it has been calculated based on the calendar year (January-December) in order to make them comparable with 2018.

5.5

**OPERATIONS  
CASH FLOW**

Cash flow from ordinary operations was € 116 million, 13% higher than the one generated in the previous year, mainly owing to EBITDA growth.

The figure excludes non-recurring items related to the acquisition of LPG points to Repsol, the securitisation of the 2014 deficit in 2017, and the securitisation of deficits for 2015 and 2016 in 2018.

<b>FREE CASH FLOW</b> <sup>1</sup> (€ million)	<b>2017</b> <sup>2</sup>	<b>2018</b>
EBITDA	131.8	141.4
Income tax paid	(7.5)	(5.9)
Working capital <sup>3</sup>	(2.4)	(3.9)
Capex	(19.2)	(15.1)
Free cash flow <sup>3</sup>	102.7	116.5

1 In accordance with the International Financial Reporting Standards (IFRS).

2 The data referring to 2017 is not audited; it has been calculated based on the calendar year (January-December) in order to make them comparable with 2018.

3 Excluding one-off operations (deficit monetization in 2017 and 2018 plus VAT collection of LPG supply points acquired in 2017).

**13%**

**The percentage by which cash flow from the company's ordinary operations has increased**

5.6

**INVESTMENTS**

Madrileña Red de Gas has continued to implement its investment plan, with the objective of expanding the distribution of natural gas to the greatest number of consumers in its territory. The investment in fixed assets during the year reached a figure of € 15.1 million. In view of its key specifications, the investments or investment commitments in 2018 can be grouped into three broad areas:

**EXPANSION**

MRG has invested a total of € 9.3 million in the expansion of its distribution networks. The company's strategy continues to focus on profitable and sustainable growth in our distribution network, both by connecting new customers within our territory and by extending them to new adjacent municipal districts.

The fact that an important part of the organic growth of 2018 comes from the conversion to natural gas of LPG points, which requires a lower investment per supply point, is the cause of the lower capex in expansion compared to other years.

**OTHER PROJECTS**

During 2017 and 2018, the company invested in artificial intelligence tools, digitalization, process automation and development of information systems, as well as the fight against fraud.

Through these investments, we will continue to improve operational efficiency, service levels and fight against fraud.

**NON-RECURRING**

In 2017, there were non-recurrent investments channelled into the sectorization of the company's networks. In 2018, no significant investments were made in this section.

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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