

# \*True Commitment





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# Letter from the General Director

# **#TRUECOMMITMENT**

It gives all of us who form part of Aqualia to present to you this eleventh edition Corporate Social Responsibility Report for 2016. And for me personally it is an excellent way — a special channel — to reach out to all our stakeholders directly.

If one thing makes us stand out at Aqualia it's the role that sustainable development plays as a substantial part of our business model: combining generating social benefits with fair profits for the company puts us in a privileged position in the water-management sector.

And in this report we include a selection of Aqualia's socioeconomic impact over the last year and the company's contribution towards the United Nations Sustainable Development Goals (SDGs), approved by the UN General Assembly in New York on 25 September 2015 and officially in force since 1 January 2016. For the first time, these goals now include the role of the private sector (http://www.un.org/sustainabledevelopment/globalpartnerships/).

This report is intended to serve as a tool to leverage public/private partnerships in the water sector and the direct benefits that they can bring for society.

And we must never forget that our responsibility and commitment towards the local districts where we work is not limited solely to providing the service but goes further than it. We always seek to contribute towards improving people's well-being, particularly for the most vulnerable groups. Thus, in 2016, our initiatives have included renewing our partnership with Cáritas to cover payment for water services for people at risk of exclusion. We have also reached a similar new partnership with Vigo Council, helping us to identify and propose alternative solutions for families going through financial difficulties.

Also this year we've continued working with the firm intention of improving not only the quality of the services we provide for more than 20 million people all over the world, but also their experience as users.

With the launch of the **Smart aqua** app, we have taken another step forward in the digital transformation of our services, to offer the public a new window for real-time communication that's more convenient and simpler, enabling us to respond more effectively and promptly to their needs and expectations.

It's important to stress that are of us — the company and the public — have a responsibility when it comes to the efficiency and sustainability of our water resources and infrastructure. Aqualia has continued to pursue a great many awareness-building actions targeted at all kinds of audiences. For example, in 2016 once again we have organised the **International Children's Drawing Competition**, now in its 14th edition, setting a new record for entries with more than 10,000 children from Spain, Portugal and the Czech Republic taking part. The #DontThrowItAway campaign aims to build awareness among the general public of the proper use of sanitation systems.

The links between water and the environment, and the consequences that climate change could have in the future, leave us no option but to act diligently in everything we do. This year we have continued to make progress with the implementation and adaptation of the Energy Management System under the standard ISO **50001**, in order to comply with R.D. 56/2016 and reduce our carbon footprint yet further. This commitment towards the environment is extended to our users through such initiatives as "Switch to e-billing", which aims to step up the growing number of clients opting for electronic rather than printed bills, absolutely free of charge, and since its launch has proved to be a great success (more than 70% users compared with last year), making us one of the Spanish companies with the most customers who taking advantage of this service.



Innovation is another cornerstone of our business and one that helps us to keep making improvements to efficient, sustainable water management. In 2016 we have been pleased to launch **new RDI projects focused on wastewater treatment**. Our intention is to improve energy performance and efficiency and obtain new products with greater added value from the waste that is generated at treatment plants.

In 2010 we were the first company in the sector to be awarded the Equality Enterprise seal from the Ministry of Health, Social Services and Equality. And now we have presented the fifth action report, which the ministry has backed, positively valuing the awareness-building campaigns devised by Aqualia for International Women's Day (8 March) and the International Day for the Elimination of Violence Against Women (25 November). The training the company has organised, particularly with a view to increasing women's presence in senior positions, such as the High-Potential Women management programme, the mentoring programme to foster female talent, and the workshops "Lead Your Own Future" and "Supporting Talent".

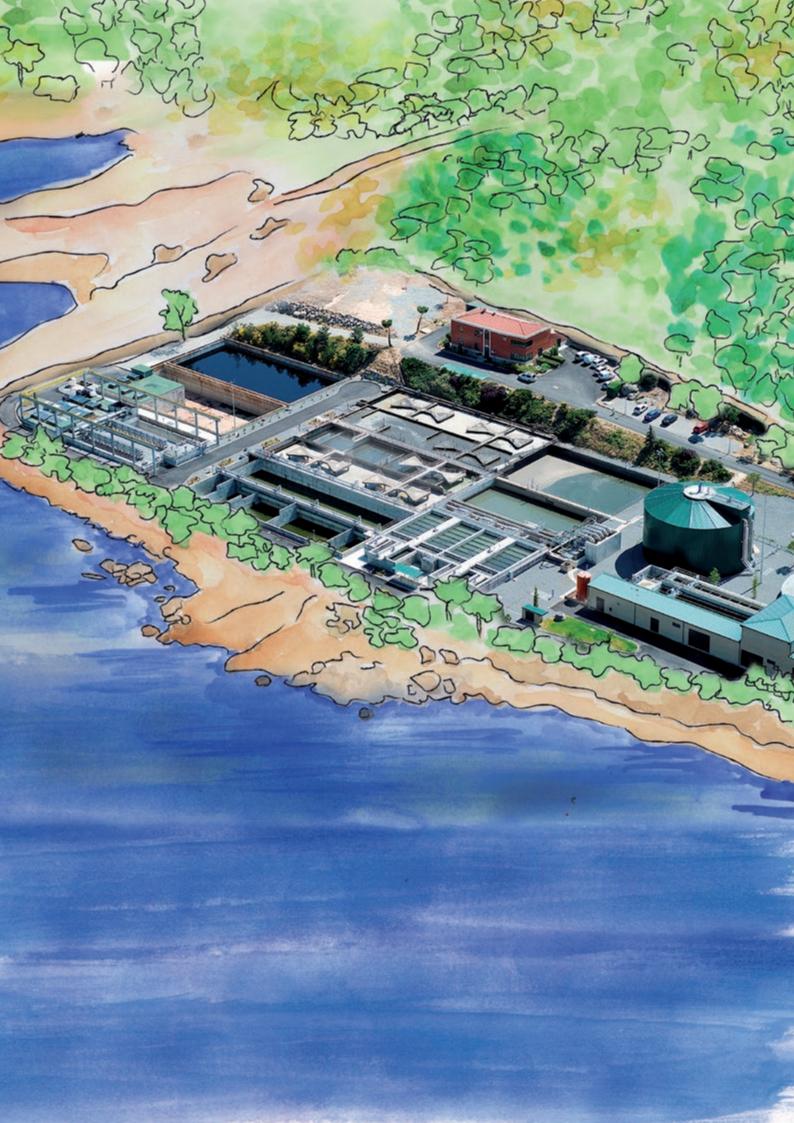
These and many other matters help us to maintain our position and keep on growing with new contracts and awards. And all Aqualia's employees have a stake in making this possible, with their hard work, professionalism and human qualities. Because, this year once again they have demonstrated their degree of involvement and commitment towards society. Good examples of this are the many local initiatives that have been put into practice in the districts where we operate, including their cooperation in the efforts to combat domestic violence through the **#AqualiaWithYou campaign**, in which nearly 2,000 employees have been involved.

I trust that you will find Aqualia's social-responsibility report to be of interest to you, and urge you to join me for the next one, when I'm certain that we will be able speak once again of our company's #TrueCommitment to contribute towards improving people's quality of life.

Regards,

# Félix Parra Mediavilla

General Director



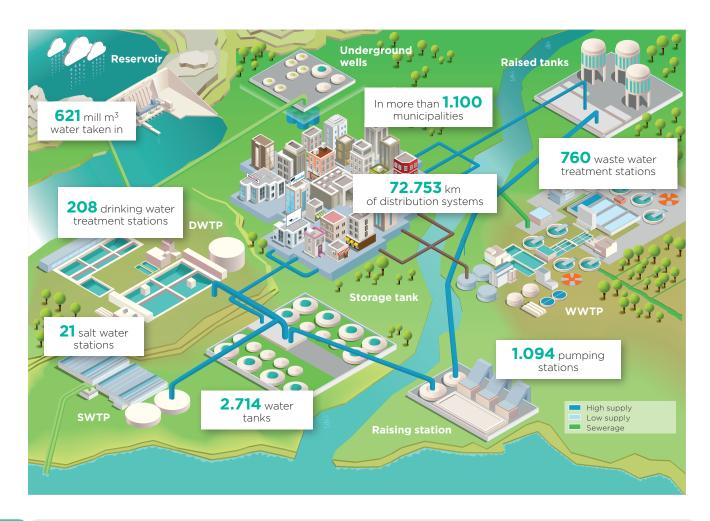


# Leaders in the management of the integral water cycle

# Leaders in the management of the integral water cycle

Aqualia plays a role as specialised collaborator with authorities in supplying a basic service such as the integrated water cycle for the public. Beyond its technically efficient performance, Aqualia maintains a sustainable vision of this service from three dimensions: economic, social and environmental. Thus the Company adapts its strategy to the specific needs of the areas in which it works, being aware that an appropriate management of water resources is fundamental for complying with the United Nations Sustainable Development Goals.

# AN OFFER OF SOLUTIONS THAT ADD VALUE



The commitment to diversification makes Aqualia one of the few companies in the world able to offer any service linked with the various uses of water, contributing experience, technological development and an excellent services quality to offer sustainable and innovative solutions that meet the public's real needs.



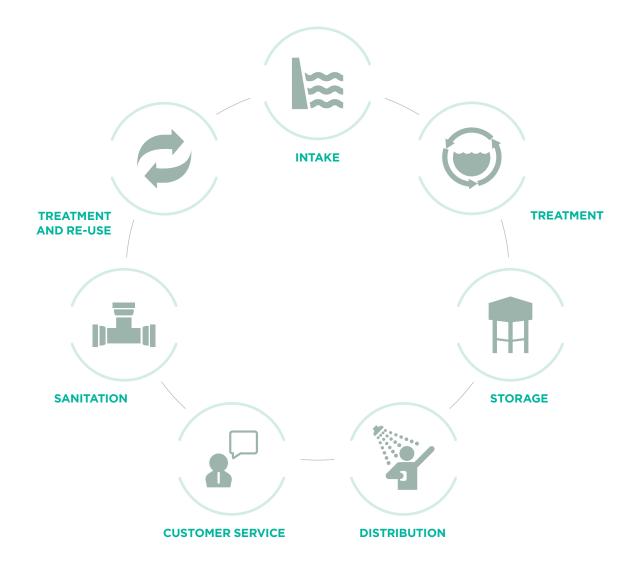
# **INTEGRAL MANAGEMENT OF PUBLIC SERVICES**

The management of the integrated water cycle from when the water is collected and reaches the tap to when it is returned to nature and re-used involves various complex phases that require knowledge, technology and resources:

The management of the integrated water cycle from when the water is collected and reaches the tap to when it is returned to nature and re-used involves various complex phases that require knowledge, technology and resources:



Aqualia's workers.



Because of its high level of innovation and specialisation, thanks to an experienced and committed human team that seeks maximum efficiency in the production processes, the company has quickly become a leading brand in the sector.

Aqualia offers authorities consultancy and technical assistance services through a team of multi-disciplinary professionals.

# WATER INFRASTRUCTURES

Aqualia is positioned as a leading international company thanks to the high degree of specialisation and innovation in the design and building of turnkey projects that match its clients' needs.



Querétaro aqueduct, Mexico.

# Specialisation in the design and building of all types of water infrastructures1:



# **PURIFICATION**

Drinking water treatment plants

# DESALINATION

Sea water and brine desalination plants

# **TREATMENT**

Municipal treatment plants for waste water with domestic contamination

# **RE-USE**

Tertiary treatment plants for the re-use of waste water

# **INDUSTRY**

All types of water solutions for the industry sector

# A GLOBAL COMPANY

Aqualia is present in 22 countries in Europe, Latin America, the Middle East and North Africa. Serving more than 23 million persons, it is the third private water management group in Europe<sup>2</sup> and the seventh company world wide.

# **IN SPAIN**

Aqualia serves more than 12 million inhabitants in more than 850 municipalities throughout the country with a market share of 36%. In Spain, 85% of its income comes from regulated water management activities while unregulated activities amount to 15% of revenue.



- Aqualia's worker.
- 1 Including pumping stations and conduits.
- 2 Global Water Intelligence Ranking.

# National presence and main contracts adjudicated and renewed in 2016



# 1. Nigrán, Pontevedra (€10 M)

Management of municipal water supply and sewerage service.

# 2. Vigo, Pontevedra (€2.8 M)

Maintenance of installations and functioning of indoor swimming pools for Vigo City Council.

# 3. Llanes y Ribadesella (€3.9 M)

Service of operation, maintenance and conversation of the public sewerage systems adjudicated by the consortium for the water supply and sewerage in the Principality of Asturias (CADASA).

# Pola de Lena (€4.2 M)

Integral management of the municipal water supply and sewerage service.

### 5. Zalla, Vizcaya (€4.6 M)

Operation, maintenance and conservation of the Sollano DWTP (Bilbao), including the maintenance and conservation of the Ibarra and Berron plants.

# 6. Costa Brava, Gerona (€26.2 M)

Treatment services.

### 7. Corredor del Ebro, Zaragoza (€2.9 M)

Water supply and operation services in the province of Zaragoza, the Ebro corridor and the lower Ebro in Aragon.

# 8. Ibiza (€11.1 M)

Municipal service concession for water supply and sewerage.

# 9. Sant Antoni de Portmany (€3.9 M)

Management of the municipal water supply and sewerage service.

# 10. Sant Eulalia des Rius (€3.2 M)

Management of the municipal water supply and sewerage service.

### 11. Yecla, Murcia (€4.9 M)

Management of the municipal water supply service.

### 12. Puebla de Don Fabrique, Granada (€4.6 M)

Municipal concession to manage the water supply, sewerage and fresh water treatment services.

# 13. Rota, Cádiz (€9.5 M)

Management of the municipal water supply service.

# 14. San Cristóbal, Segovia (€4.5 M)

Municipal concession for the integral management of the water service.

# **15.** Guijuelo, Salamanca (€13 M)

Construction and operation of infrastructures in the municipality.

### 16. La Adrada, Ávila (€8.3 M)

Municipal concession for the drinking water supply and sewerage services.

### 17. Madrid (€11.5 M)

Operational and maintenance service for La Gavia WWTP.

### 18. Madrid (€11.5 M)

Operation and maintenance service for the Valdebebas WWTP (lot 1).

# 19. Santiago de Teide, Sta. Cuz de Tenerife (€9 M)

Management of the municipal water supply service.

# IN THE WORLD

Aqualia is present in more tan 1,100 municipalities throughout the world. In 2016, 24.5% of revenue was for the activity in the international market. The

international projects portfolio is €6,202.9 million, that is, 41% of the total business portfolio.

# International presence and main adjudications in 2016



# 1. Mexico (€4.7 M)

Modernising, commissioning and operation of the Contracorriente WWTP in the City of Mexico.

# 2. Colombia (€36 M)

Design, construction and operation of a waste water treatment plant in San Silvestre, Barrancabermeja.

# **3.** Colombia (€435 M)

Design, construction and supply and installation of equipment and assisted operation for the enlargement of the waste water treatment plant in El Salitre, Bogota.

### 4. Ecuador (€23 M)

Construction of the waste water treatment plant and sewerage system in Ambato.

# 5. Montenegro (€10.9 M)

Construction of the sewerage and waste water treatment plant in the city of Berane.

# 6. Egypt (€114.6 M)

Design and construction of a reverse osmosis desalination plant in El-Alamein with a capacity of 150,000 m3/day. Management of the municipal water supply service.







# Future vision: Aqualia's strategy

Trends that will transform the business

16

Opportunities for action

Aqualia's strategic lines

18

# Future vision: Aqualia's strategy

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Aqualia's strategy puts the public at the centre of its activity to connect the trends that will condition water management in the future with the current demands of society – combining technology and sustainability – based on sustained growth over time.



# TRENDS THAT WILL TRANSFORM THE BUSINESS



### **DEMOGRAPHIC GROWTH AND URBANISATION**

The population will exceed 8,500 million persons in 2030<sup>1</sup> more than 60% of whom will live in urban centres, mainly in the emerging economies where the consolidation of the middle class will drive the urbanisation process during the next decade.



# SCARCITY OF WATER RESOURCES

Water is a renewable but limited resource. During the last century, water consumption doubled with respect to the population growth. However, today there are still some 750 million persons without access to improved water sources and some 2,500 million persons without access to basic sewerage services.

If the current consumption trends continue, it is estimated that in the next decade, more than 1,800 million persons will suffer from a lack of water and two thirds of the world's population will live in water stress conditions.



### **GLOBAL WARMING**

The climate change increases the risks of threats relating to the availability of water and intensifies extreme weather events<sup>2</sup>. As the effects of climate change appear, it becomes more difficult to meet needs relating to the world-wide demand for water maintaining the sustainability of water resources and natural balance.



### **DIGITAL TRANSFORMATION**

Technological innovation will be the key to facing the challenges of the efficient management and sustainability of water in the future. The digital transformation process will determine the way in which companies relate to the environment and consumers in a context more connected by information technologies.

# **OPPORTUNITIES FOR ACTION**

The global trends show the pressure on the water resource and the growing need for access to water of greater quality for most of the population on our planet. This need requires greater water infrastructures that supply the population, better technology that helps the efficient management of the resource and more innovation so that the public participates in responsible consumption and care for such a precious resource.

# 1 United Nations, Department of Economic and Social Affairs: Population Division. 2015. World Population Prospects: The 2015 Revision.

2 United Nations Organization for Education, Science and Culture (UNESCO). 2016. United Nations World Water Development Report 2060: Water and Jobs.

# **¿SO HOW DOES AQUALIA RESPOND TO THESE TRENDS?**

# **SOME EXAMPLES:**



More than €120 million invested in water infrastructures in the last five years to serve 23 million persons.



Applied innovation focused on the re-use of waste water through projects such as FP7 All-gas for producing bio energy from the treatment of waste water and H2020 Incover which increases the knowledge acquired in the previous project for producing bio fertilisers and bio plastics.



R&D in the water cycle to guarantee sustainability, improve efficiency and optimise the management of urban water through intelligent monitoring systems that continuously analyse the condition of the system.



Development of applications for mobile devices such as Smart aqua which allows the public to undertake management in real time - omni-channel experience - of the services contracted, simply and easily.



Education and awareness campaigns for the young and adults that give value to management and the need for the responsible use of water both regarding its consumption and its return to the natural environment through treatment processes.

# **AQUALIA'S STRATEGIC LINES**

In this context, Aqualia aspires to become the world leader in the management of water resources aimed at the public to respond effectively to the growth in demand and the need to guarantee access to water and sewerage over the long term.

To achieve the company's aspirations, the strategic priorities in the short and medium terms such as economic solvency and financial balance strengthen the basis for the sustained growth of the business both nationally and internationally, serving to lever the company to continue to create value in the societies in which it operates.

# Strengthening the business risk profile

Focus on the activities that supply a stable and recurrent cash flow for the company and that improves its capacities to create future value and develop new opportunities internationally.

# Operational and financial efficiency

Improve profitability and the optimisation of Aqualia's capital structure based on the constant implementation of new tools that promote efficiency.

# National consolidation and international growth

# In Spain:

Reinforce the positioning and leadership in the water concession ambit.

Focus on the renewal and extension of contracts in the long term.

# International:

Concessions for managing the urban water cycle in target markets: Europe, the Middle East and Latin America.

Prioritise organic growth without renouncing new opportunities in emerging countries.

Public/private collaboration in developing countries designed to improve the drinking water and sewerage systems.

Distinctive capacities in the development of new projects and technological solutions of value in the areas of desalination, industry and the re-use of water.





# Aqualia in 2016

# Aqualia in 2016

During the last decade, Aqualia has shown a favourable business evolution that has made it one of the European leaders in the water sector and a leading company world wide.

The consistency of the results obtained shows a solid base on which to grow in the future in a growing market. Its business portfolio today represents 15 times its income and the international presence represents an important part of future results.

# BUSINESS DEVELOPMENT 2012 - 2016



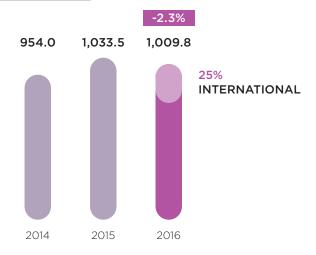
# **PERFORMANCE IN 2016**

2016 saw a slight decrease in revenue as a consequence of the reduction of the technology and systems activity in the national market, compensated for by the contribution to the result

of contracts recently obtained in Latin America - two treatment plants in Colombia, among others - and in North Africa - a desalination plant in Egypt.

# **Financial result**

# REVENUE (€ MILL)



# EBITDA (€ MILL)



# BUSINESS PORTFOLIO (€ MILL)



**4.** AQUALIA IN 2016 23

# National presence and main contracts adjudicated and renewed in 2016

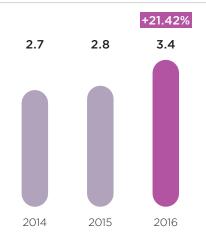
	2014	2015	2016
Length of systems managed (km)	69,522	66,387	72,753 <sup>(1)</sup>
Water taken in/purchased (mill. m³)	653.9	618.8	621
Number of drinking water treatment plants (DWTP)	203	209	208(2)
Number of drinking water pumping stations (DWPS)	892	1,080	1.094(3)
Number of drinking water tanks	2,595	2,709	2,709
Number of sea water desalination plants (SWDP)	6	6	6
New contracts adjudicated (Spain)	151	216	142
New contracts adjudicated (international)	12	6	13

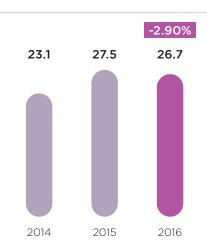
<sup>1</sup> Water supply and sewerage.

# Investments for the period

# INVESTMENT IN R&D (€M)

# INVESTMENT IN INFRASTRUCTURES (€M)



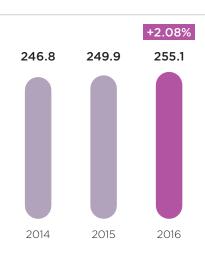


# **Human Resources**

# STAFF (NUMBER OF PERSONS)

# +2.42% 7,639 7,764 7,952 2014 2015 2016

# PERSONNEL COSTS (€M)



<sup>2</sup> Also including SWDP. 3 Scope for Spain, Italy, Portugal and SmVak.

# **Fiscal contribution**

# PAYMENT OF TAXES (€M)

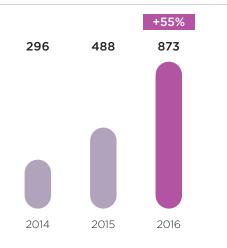


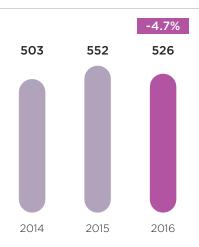
# **Community action**

# SOCIAL INVESTMENT (€M)

**Supply chain** 

# PURCHASES FROM SUPPLIERS (€M)



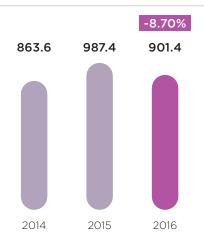


# **Economic value generated and distributed**

# DIRECT ECONOMIC VALUE GENERATED (€M)

# ECONOMIC VALUE DISTRIBUTED (€M)





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# THE YEAR'S MILEPOST 2016

**01** January

**02** February

**03** March

### I'LL TELL YOU IN THE STREET

Aqualia and the Council of Lorca del Río in Seville start a creative marketing campaign featuring the public and workers to increase awareness of the value of the water service.

# AGAINST POVERTY AND INEQUALITY DROP BY DROP

Cáritas and Aqualia sign an agreement for persons in a situation of vulnerability or exclusion in Spain. The commitments acquired by Aqualia include requests regarding difficulty in paying the bill, vouched for by the municipal social services, and donating an annual amount to improve their living conditions.

### **SWEF AWARD FOR WATER**

Aqualia received this award as the best water operator in Saudi Arabia in recognition of the work carried out in the last five years in the sectorising and leaks programme in the city of Riyadh within the framework of the Saudi Water Electricity Forum event.

# THIRD MENTORING PROGRAMME

A new edition of the mentoring programme starts to encourage female talent and contribute to the company's gender equality cultural change.

# H2020 MIDES: PURE WATER AT ZERO COST

The MIDES project is chosen in the European Commission Horizon 2020 programme, coordinated by Aqualia, for the simultaneous desalination to obtain drinking water and the treatment of water for re-use.

# THE WATER CYCLE, AN ADVENTURE FOR THE BRAVE

Aqualia starts the 14th edition of the international children's drawing competition for World Water Day.

**07** July

# 08 August

# "EL CHUPETE" INTERNATIONAL CHILDREN'S COMMUNICATION FESTIVAL

Aqualia becomes the first company in the water sector chosen to participate in the festival, thanks to its "Drawing Competition," and is the finalist among more than 200 participants.

**09** September

# **EQUALITY IN THE COMPANY**

For a further year, the Ministry of Equality recognises the company's daily work for of men and women in the company with the "Equality in the Company" award for the sixth consecutive year.

# LEADERS IN WATER MANAGEMENT

Technicians responsible for water management in Seoul, South Korea, get to know at first hand Aqualia's activity as manager of public water services.

# LIFE METHAMORPHOSIS: INNOVATION IN THE AMBIT OF THE CIRCULAR ECONOMY

Aqualia presents the progress in the Methamorphosis project in Barcelona, its commitment to achieving hydrocarbon-free, sustainable and environment-friendly fuel.

The project is part of the 2014 European LIFE programme.

04 April

**05** May

06 June

# COMMITMENT TO ENERGY EFFICIENCY

Aqualia obtains the AENOR certificate for its energy management system throughout the company, as per the ISO 500001 standard, to comply with Royal Decree 56/2016.

### **SWITCH TO E-BILLING**

Start of the campaign to add a million more electronic bills within a year, thus contributing to saving paper and minimising the impact on the environment.

# FIRST CONTRACT ADJUDICATED IN COLOMBIA

Aqualia wins its largest contract to date in Latin America to design, build and operate the El Salitre plant, serving almost 3,000.000 inhabitants of the capital of Columbia and contributing to reduce pollution levels in the River Bogota.

# SMVAK PREVENTS THE EMISSION OF MORE THAN 5,000 TONNES OF $CO_2$ PER YEAR

SmVaK has defined its carbon footprint as per the ISO 14064.1 standard and has made an exhaustive analysis of the impact of its activity on the environment to take the necessary measures to reduce its emissions.

# 10 October

# 11 November

# 12 December

# **#NOLOTIRES**

Aqualia starts a campaign on the Internet and Twitter to inform and increase the public's awareness of the correct use of urban sewerage systems.

# #AQUALIACONTIGO

Aqualia starts the #AqualiaContigo campaign to demonstrate again the company's support and involvement in increasing awareness of this social problem.

# FIRST FEMALE TALENT MEETING

Aqualia holds the first female talent meeting in its head office in Las Tablas in the framework of its Mentoring Programme, in which successful women managers participate to provide their own professional personal experiences.

# **"GOTA DE ORO" PRIZE**

The ASEPE organisation recognises the company's work in the environmental area for its initiatives aimed at achieving the efficient management of natural resources and the more rational energy consumption.

# FIRST AQUALIA JOURNALISM PRIZE

This prize encourages the media to write about urban water management and to increase the public's awareness of the value of the services provided.

**4.** AQUALIA IN 2016 27



# True commitment

Aqualia's sustainable commitment

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Agenda 2030: the Sustainable Development Goals

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Intelligent services

Exemplary behaviour

# True commitment

Aqualia understands Corporate Social Responsibility as an additional element in its business model such that financial profitability and competitiveness are integrated with social and environmental factors in our surroundings, so important for the future of our business and contributing to sustainable development.

With this, not only do we respond to the public's need but we cover the expectations of all our stakeholders, generating the necessary confidence to continue operating.

# AQUALIA'S SUSTAINABLE COMMITMENT

Corporate Social Responsibility has formed part of Aqualia's daily work for more than 10 years. Sustainable development forms a consubstantial part of the activity, reflected in its value creation model and combined with the profitability of the business itself to the benefit of society.



2006

Launch of Aqualia's first CSR report.



2007

Aqualia is the main promoter of the international forum on drought, a space open to all organisations related to drought, climate change and water management.

"Customer Service Leadership of the Year" prize within the Best Practices programme held by the Frost&Sullivan consultancy every year.



2008

Launch of the Aqualine virtual office, aqualiaOnline.

Presentation of the book Climate change and its consequences in the water sector in Expo Zaragoza 2008.



2009

Aqualia, CCOO and UGT together sign the first equality plan for the water sector.

ECOInnova prize for the project to recover the Medina del Campo lagoons.



2010

Participation with the Polytechnic University of Valencia in the publication of the book Engineering and water management through the ages.



2011

The Ministry of Health, Policy and Equality awards Aqualia the Equality Award.

Participation in the European Benchmarking Cooperation (EBC) project to compare the management models of water management companies internationally.



2012

Implementation and certification as per the UNE-ISO 27001:2007 standard of a management system that guarantees the security of customers' information.

Certification of the energy management system as per the ISO 50001:2011 standard for the contracts in Solana, Denia and Alcoy.



2013

Presentation of the results of the "intelligent meters" pilot plan for providing information on users' consumption.

Aqualia and the Fundación Real Madrid together with the Mazarrón Council sign an agreement for children at risk of social exclusion to participate in a social and sports school.



2014

Aqualia receives the innovation+-sustainability+network award from the *Expansión* newspaper as one of the most innovative companies in Spain.

Start of the mentoring programme aimed at facilitating the professional career of women with potential in the company.



2015

Consolidation of the "Yo Contigo" campaign to increase employees' and society's awareness of the total rejection of gender violence.

Calculation of the carbon footprint with global scope and for all its activities and of the water footprint in Cantabria.



**2016** 

Presentation of the CIEN SMART Green Gas project in the Guadalete WWTP, Jerez de la Frontera, where a petrol station was installed to supply pilot vehicles with the biofuel obtained from waste water as a result of this innovative project.

Cáritas and Aqualia join forces to support persons in a situation of vulnerability or exclusion in Spain. In operational terms, this commitment is transferred to three strategic lines that integrally cover all aspects of the company's activity and of the relationship with its stakeholders. The special attention to economic, social and environmental factors guarantees Aqualia's sustainability in the long term and contributes to its mission to be the best water management company in the world.

# The development of intelligent services

From innovation, proposing leading-edge and sustainable solutions that contribute to the efficient management of water resources and to improving the public's quality of life while protecting the surroundings, minimising the environmental impact.

The publication of this Corporate Social Responsibility Report annually deepens the commitments acquired and the actions started during the current year in the framework of Aqualia's responsible management policy.

# The connection with the public

The continuous link with the public is essential in the activities relating to the provision of urban services in cities and especially water management. Its purpose is to respond to the current and future needs and expectations of the end consumer and the various stakeholders – with an innovative focus – to maximise the company's positive impact on the societies in which it operates, not only from the perspective of the services provided but also through the contribution to economic and social development.

# The organisation's exemplary behaviour

Aligned with the corporate governance values and practices from the FCC Group. The group's code of ethics sets the guidelines for the conduct and orients the action and behaviour of the professionals working in Aqualia.

# AGENDA 2030: THE SUSTAINABLE DEVELOPMENT GOALS

In September 2015 the United Nations General Assembly approved the Sustainable Development Goals (SDGs), a universal action plan to "Transform Our World," putting an end to poverty in all its forms and reduce inequalities, favouring global prosperity through economic growth and the protection of the environment from an inclusive and integrating perspective.

The SDGs will have a major effect on the agendas of states in the next decade but they also require a high degree of involvement by all social actors involved the system, especially the private sector.

Among the 17 goals approved - and the 169 associated goals - water management is postulated as one of the key factors to achieve success in the road to sustainable development. Goal 6: Water and sanitation, direct concerns the importance of guaranteeing the availability of water and its sustainable management as well as access to sanitation services for everyone. But water is not only present through this goal but also has an important influence on the rest of the goals, as seen by the importance of water in the spheres of life and social and economic progress.

In 2016 the IESE Business School and Aqualia¹ worked on the preparation of the case study of the New Cairo treatment plant, the first public/private collaboration project in the water management sector developed in Egypt, led by Aqualia and that, among other aspects, shows the plant's contribution to achieving the sustainable development goals.

# **Sustainable Development Goals**

	Large impact	Moderate Impact		Large impact	Moderate Impact		Large impact	Impacto moderado
1 NO POVERTY			7 AFFORDABLE AND CLEAN ENERGY			13 CLIMATE ACTION		
2 ZERO HUNGER			8 DECENT WORK AND ECONOMIC GROWTH			14 LIFE BELOWWATER		
3 GOOD HEALTH AND WELL-BEING			9 MOUSTRY, INNOVATION AND INFRASTRUCTURE			15 UFE ON LAND		
4 QUALITY EDUCATION			10 REDUCED MEQUALITIES			PEACE JUSTICE AND STRONG INSTITUTIONS		
5 GENDER EQUALITY			11 SUSTAINABLE CITIES AND COMMUNITIES			17 PARTNERSHIPS FOR THE GOALS		
6 CLEAN WATER AND SANITATION			2 RESPONSIBLE CONSUMPTION AND PRODUCTION					

<sup>1</sup> Collaboration within the framework of the "PPP for Cities" centre, a United Nations initiative through its UNECE Regional Commission and the "International Centre" of Excellence programme..

# NEW CAIRO: A PRACTICAL EXAMPLE OF HOW AQUALIA CONTRIBUTES TO ACHIEVING THE SDGS

The activity of the New Cairo treatment plant generates a very positive impact on 12 of the 17 SDGs relating to water management.

The New Cairo plant (WWTP) handles the waste water of the new residential area in the capital of Egypt, serving a million inhabitants.

The plant generates a very positive direct impact on achieving Goal 6: Water and sanitation:

- Access to sanitation services (6.2).
- Improved water quality reduced discharges of untreated waste water to the river (6.3).
- Efficient water use re-use of waste water in green areas (6.4).
- Protection and re-establishment of water-related ecosystems volume of polluted water reduced (6.6).

Its activity also favourably affects the rest of the SDGs thanks to its public health effects (Goal 3) and the benefit of the reduced discharge of polluted water to the River Nile (Goals 13, 14 and 15).

The greater availability and quality of water for agricultural use likewise allows higher food production (Goal 2) that can contribute to increased income for famers (Goal 1).

The creation of regular and stable jobs around the plant also helps to reduce inequalities (Goals 8 and 10).

The treatment plant was built with strict sustainability criteria, taking into account the need to reduce its environmental impact (Goals 9 and 11).

Finally, the infrastructure was designed, built and operated to a public/private collaboration model led by Aqualia (Goal 17).

The case study has been accepted by the United Nations as an international reference example in the ambit of public/private collaboration for the water management sector<sup>2</sup>.



2 This occurred in the first months of 2017.



New Cairo WWTP.





# Connection with people

## Connection with people

Aqualia takes very seriously indeed its commitment to provide the public with an excellent, high-quality service that meets their expectations. It offers an integral multi-channel service to respond to all its customers' needs in a close and personalised manner.

This commitment goes beyond the management of the integrated water cycle through its involvement in the development of the cities in which it is present with initiatives that give value to its activity and guarantee a financially and socially efficient and sustainable management of the integrated water cycle.

#### A QUALITY AND CLOSE SERVICE

Aqualia's commitment to value is fully aimed at the continuous improvement of relationships with end consumers through quality and innovation in its care for customers.

#### WATER QUALITY

The control analyses made daily in Aqualia's facilities easily exceed the health criteria for water for human consumption in Royal Decree 140/2003.

The quality of the water managed by Aqualia is checked periodically by the exhaustive analysis of the water supplied to end customers. This work is carried out in the Aqualia laboratories – accredited as per the UNE-EN-ISO 17025 standard<sup>1</sup>. In 2016, a total of 865,790 parameters were checked, with a compliance level of 99.6%.

86.4% and 98% of the facilities in Spain are certified as per the ISO 9001 quality control and ISO 14001 environmental management standards, respectively.



Laboratory.

#### NUMER OF TESTS MADE IN THE LABORATORIES<sup>2</sup>

#### **Strategic Quality Plan**

Aqualia has maintained a Strategic Quality Plan since 1997 to ensure the quality and efficient supply of water to customers and its proper treatment in all phases of the integral water cycle.

The plan is based on four specific working lines – the quality of the water supplied, service efficiency, the technical performance of the system and the level of customer service.

1,085,781 840,446 865,790 2014 2015 2016

Similarly, Aqualia regularly delivers water-management data to the National Drinking Water Information System (SINAC), which centralises information the characteristics of water supplies and drinking-water quality in Spain.

Information on these controls is available to the public on the SINAC Web site and on the local Web sites in the places in which Aqualia operates.

#### **CUSTOMERS: FROM MULTI-CHANNEL TO OMNI-CHANNEL**

Aqualia bases its customer communication strategy on improving the user's experience, providing access to information and interaction between consumers and the company thanks to the opportunities offered by new technologies for bidirectional, customised and real time communication.

In 2016, the company took a further step to offer a close and customised customer service.

With the launch of the new Smart aqua application, Aqualia entered the omni-channel ambit and proposed a new model of relationship with customers, integrated and interconnected so that the information in the various communication channels available to customers flows in real time.



- 1 Test and calibration laboratories.
- 2 Number of parameters analysed in the laboratories of samples taken in the contract production stage following the current standards in Royal Decree 140/2003. Tests not undertaken in laboratories such as organoleptic tests which are sent to SINAC in the case of Murcia are omitted. This is the reason for the reduction between 2014 and 2015.



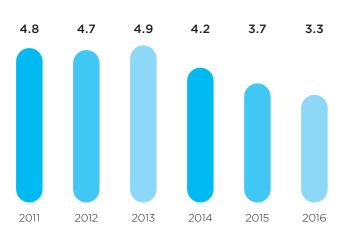
**TRADITIONAL** 

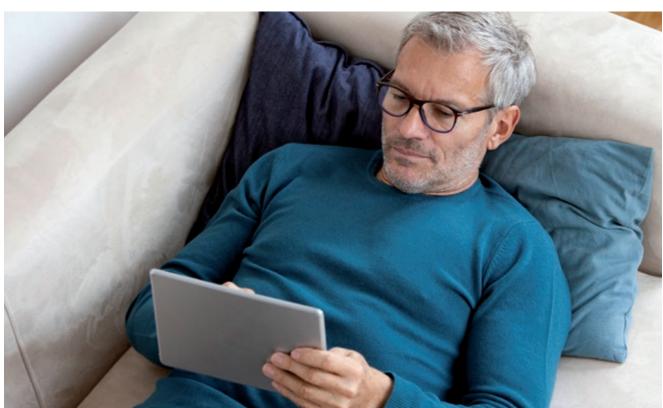
#### **MULTI-CHANNEL**

#### **OMNI-CHANNEL**

The efficiency of these communication channels reduces the service's response times with a positive effect on the number of complaints, which have reduced substantially in recent years, with an average response time to complaints of 16 days.

% PERCENTAGE OF NUMBER OF COMPLAINTS OVER TOTAL CONTRACTS







#### **SMART AQUA**

Digitisation is changing the way in which customers relate with companies. Consumers increasingly require a more fluid communication with immediate replies, adapted to their individual needs.

For this reason, Aqualia developed the Smart aqua<sup>3</sup> application in 2016, offering a new, more transparent and closer window for communication with customers that facilitates access to undertaking procedures – in real-time – when the consumer so requires, easily and simply.

Smart aqua handles all the procedures relating to the services provided by Aqualia - modification of data, consolidation of consumptions, sending of self-readings with photograph, payment of bills, consultations and requests, with full security.

#### What are the advantages of Smart aqua for customers?

- Optimises their time: permanent attention 24/365 without waiting or time limits.
- Facilitates an overview of their contracts, bills, consumption data and more.
- Easy to use and faster procedures.
- Access to services and functions for both customers and for users who are not customers.
- Fast response and flexibility.
- Information security.

Since its launch and up to 31 December 2016, the app recorded a total of 1,268 new users for 1,777 contracts registered.

In addition, a total of 9,808 procedures were carried out.





Smart aqua.

<sup>3</sup> Available for Android and iOS mobile devices.

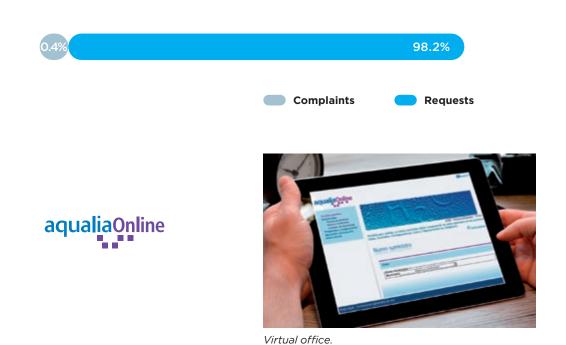


#### **AQUALIA ONLINE**

AqualiaOnline is Aqualia's virtual office in which customers can carry out all their procedures simply, securely, quickly and confidentially, 24 hours a day for 365 days of the year through the local Web sites that Aqualia maintains in the cities in which it is responsible for managing the municipal water service.

With a total of 320,817 contracts registered at AqualiaOnline, a total of 329,935 requests were logged over the course of the year, 1,498 of which were complaints.

#### **REQUESTS THROUGH AQUALIA ONLINE IN 2016**

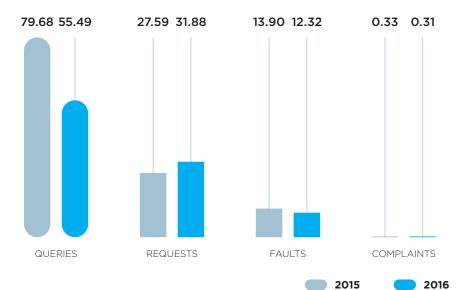




#### **AQUALIA CONTACT**

The telephone attention service allows customers to carry out procedures and resolve any type of incidents without the need to visit the offices. The telephone attention is offered in six languages – Spanish, Galician, Catalan, English, German and French – and is also available 24 hours a day throughout the year.

In 2016, a total of 729,282 calls were received of which only 0.31% were complaints.



To measure satisfaction, at the end of each call, customers are given the opportunity to take part in a survey. This year we have surveyed 235,242 customers using Aqualia Contact, of which 170,308 graded the service as excellent, 36,234 as very good and 18,399 as good, i.e., an overall degree of satisfaction of 95.62%.





Call centre, Aqualia contact.



#### **PERSONAL ATTENTION**

As well as the digital channels and telephone attention, customers who so wish can visit the company's offices in the localities in which it is present.





Customer-service office.

## Privacy and data protection are assured

Aqualia considers that the effective protection of information is possible only by combining the robustness of the management systems with specific training in data protection matters for employees.

For this reason, as well as certifying the attention channels - in accordance with the ISO 27001 standard for information security management systems - it periodically carries out awareness and training campaigns for employees on the importance of the proper management of the information and the data to which they have access.

During this year, the data protection training was focused on new aspects of the general data protection regulations imposed by the European Union which will come into force in 2018. 366 employees received this training.

#### **RESPONSIBLE BILLING**

Aqualia offers its customers personalised water consumption billing that structures the information simply and transparently to facilitate its interpretation by consumers and thus improve the quality of the service provided.

The bills include information on the costs of the complete cycle associated with water management – from supply to treatment – as well as additional information on other taxes and municipal or regional rates included in the bill.

These bills are also an effective channel for publishing social and environmental awareness campaigns on the importance of efficient management by Aqualia and the involvement of the public in the responsible consumption of water for everyone to achieve the sustainability of the water resources in time.

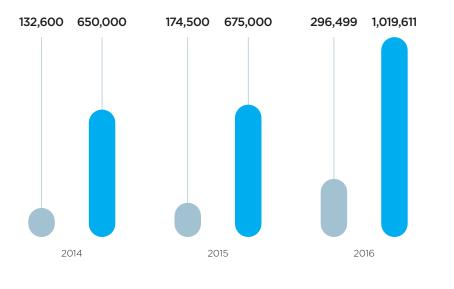
#### **Electronic billing**

The number of customers with electronic bills increased by 70% compared to 2015, thanks to Aqualia's campaigns to invite users who receive paper bills to switch to the digital format.

In 2016, Aqualia became one of the national companies with the largest number of customers joining the e-billing service.



Infoaqualia image.



Customers with electronic billing Electronic bills issued

#### Switch to the e-billing

To appeal to the environmental commitment and to continue increasing the number of customers receiving the free electronic bill instead of the traditional one on paper, Aqualia started a new campaign in 2016 to add a further million new electronic bills within one vear.

As well as the advantages inherent in electronic building regarding ease, the avoiding of the accumulation of paper and the possibility of consulting it at any time, customers who requested the receipt of electronic format bills took part in a draw for 24 tablets, two every month for a year.

Getting the public involved in the campaign has resulted in estimated savings equivalent to more than one and a half million printed invoices every year. Protecting the environment is a commitment that brings all society together and a responsibility for companies like Aqualia, committed to providing an efficient, high-quality service to the public while respecting the environment.

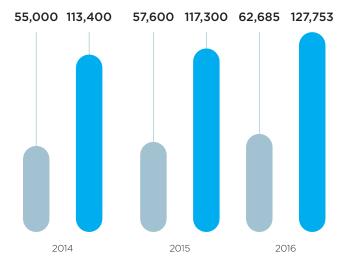


Communication tools used in the "Switch to the e-billing" campaign.

#### **Meters: Reliable and precise**

Users' water consumption is measured with sophisticated meters, approved with strict quality control, that guarantee that only the volume of water consumed is billed.

In 2016, Aqualia continued to progress in the installation of remotely-read meters that offer a higher degree of information reliability and exactly show the consumption and avoiding unnecessary estimates. During the year, a total of 5,085 new remote meters were installed - 9% more than in the previous year - with a total of 127,753 channels available for increasing the reading.



- Remote Access for meter reading
- Number of channels available for increasing reading

This year has also seen an increase in the number of smart meters installed, providing precise, personalised information on consumption patterns, tariffs and network services for individual consumers, enabling them to identify any room for improvement and giving customers advice on how they can optimise the efficiency of their water consumption.

#### INTELLIGENT METERS INSTALLED





Remote meter-reading.

#### **Customer satisfaction**

Aqualia carries out periodic satisfaction surveys of both its institutional and end customers to know at first hand the consumers' perceptions regarding the quality of the service provided. The last satisfaction survey took place in December with very satisfactory results for the company.

Notable this year was the increase in the general satisfaction index for end consumers which increased substantially compared to the last survey made in 2014, with 27 points out of a total of 30, associating Aqualia with a reliable and efficient service, attentive with its customers.

In addition, 79.3% of customers - 10% more than in 2014 - stated that they were satisfied with the quality of service.

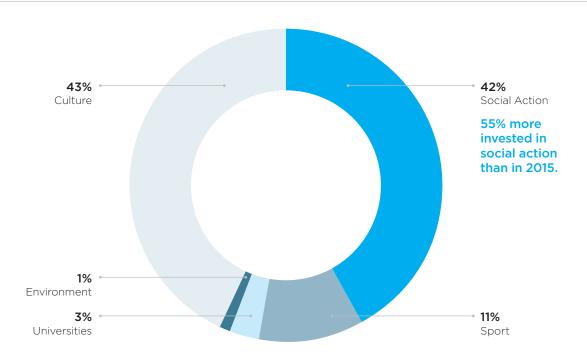
#### **END CUSTOMER SATISFACTION INDEX**



In 2016 the general assessment of institutional customers was 3.91 (on a scale of 1 to 5).

#### **AQUALIA IN THE COMMUNITY**

The company continued to progress in 2016 in undertaking actions that contribute to improving the well-being of persons living in cities that confide in Aqualia as their water company.



In 2016, Aqualia carried out more than one hundred collaborations in the ambits of culture, education, sports and the environment, reflecting the

company's commitment in the communities in which it is present.

#### **INVOLVEMENT WITH THE YOUNGEST**

For more than 35 years, Aqualia has carried out activities aimed at the youngest to increase their awareness in an amusing way of the importance of acquiring responsible water consumption habits and the importance of efficient management.

This is the case of the International Children's Drawing Contest which held its 14th edition in 2016 with the subject "The water cycle, an adventure for the brave." More than 8,000 third and fourth year primary school children took part in it from areas in which the company is present with the purpose of encouraging the young to learn about the management of the integral water cycle.

This competition, held in Spain, Portugal, Italy and

the Czech Republic and carried out entirely over the Web, included a new section in 2016 containing audio-visual and graphical content to contribute to increasing the children's knowledge of the management of the integral water cycle. This year 250 runners-up and 10 winner were chosen.

> At the same time and with the same theme, the seventh edition of the Peque-artistas competition was held for the children, grandchildren, nieces and nephews of employees, in which 178 children aged between 4 and 14 took part.



Image of the story created to promote the 14th edition of the drawing competition.

Finalists in the "El Chupete" International Children's Communication Festival

The International children's Drawing competition was a finalist in 2016 in the seventh edition of the "El Chupete" International Children's Communication Festival in the Digital Campaign category which each year awards the best creative work with social values aimed at children and youth.

#### **SPORTS ACTIVITIES**

Sport also plays an important role in the publishing and awareness of social values such as health, effort, teamwork and respect, fundamental aspects for building a better society.

Every year, Aqualia supports a multitude of sports events and activities in the municipalities in which it provides services. For example:

- In Murcia, the Campus Mista for football and indoor football in Caravaca de la Cruz, organised by the ex-footballer Miguel Ángel Ferrer 'Mista' in collaboration with Aqualia is a clear example of the company's commitment to encouraging base sports, a healthy life and social values. A hundred children aged between five and 15 took part in this edition.
- In Denia, a total of 227 children aged between four and 14 also enjoyed the Multi-Sports School this summer in the Sports Centre, organised jointly by the Sports Department and Aqualia as the company managing the installations, in which the children practised all types of sports. This year, thanks to the collaboration with the Tourism Development Centre, the children also took part in weekly culinary seminars where they learned to cook various local recipes.
- In Sanlúcar de Barrameda, Aqualia collaborates with the children's categories in the Rhythmic Gymnastics Club.



Campus Mista for football in Caravaca de la Cruz.

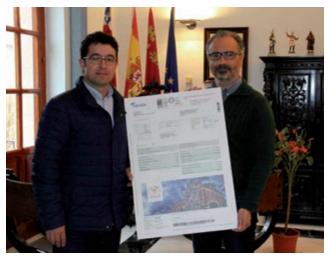


Girls at Sanlúcar de Barrameda Rhythmic Gymnastics Club (Cádiz).

#### PROMOTION OF CULTURE

In the cultural ambit, every year Aqualia demonstrates its commitment to the municipalities in which it is present beyond the effective provision of the public service, contributing to their economic, social and cultural development.

This year, Aqualia took part once more in the International Street Art Festival held annually to great popular acclaim in Puerto de la Cruz, Tenerife. On this occasion, the company was present through the Aqualia Space in the Plaza del Charco, one of the main public plazas in the town, where numerous activities forming part of the festival are held.



The head of the service in Caravaca de la Cruz, Mario González, and the town's Mayor, José Moreno, show the image promoting the Año Jubilar in Caravaca de la Cruz.

In Caravaca de la Cruz, Murcia, Aqualia joined with the council in promoting and publishing the 'Año Santo Jubilar' in 2017 through the water bills, which will contribute to dynamising the municipal and interior tourism in the Region of Murcia.

Also notable was Aqualia's sponsorship in Talavera de la Reina of the new ceramic mural dedicated to the Las Mondas festival in the framework of a wider project involving a ceramic "Murals Route."

## Aqualia with the leaders of the future

This year, Aqualia and the Industrial Organisation School (EOI) signed a collaboration agreement lasting for two years, extendable, to train professionals in the Water Engineering and Management Master programme given by this public state foundation.

The EOI will design, manage and undertake the academic programme as well as developing all the procedures relating to the students and teachers such as their selection, coordination, contracting and assessing. Aqualia will provide professionals as teachers in the programme, will make its technical installations available for the organisation of students' visits and will integrate various students in internships at the end of the programme.

This agreement will allow Aqualia to participate in the process of training those who will be protagonists in the sector in the coming years as well as to provide its vision of the management of the integrated water cycle as a fundamental element for the development of societies and a keystone for the backbone of modern societies.



The "Aqualia Space" in the Plaza del Charco, Puerto de la Cruz, decorated with various corporate banners for the International Street Art Festival.

#### **AWARENESS**

## Every year, Aqualia participates in awareness campaigns to inform society of the company's commitment to efficiency and sustainability.

More than 150 seminars were held in 2016 with various groups – including housewives, pensioners and journalists – and more than 50 visits from schools were organised in which more than 15.000 students took part. During the visit the participants could see at first hand how the integrated water cycle is managed in a company such as Aqualia and heard advice for responsible water consumption in daily life.



Students visiting the Oviedo DWTP.

In Lora del Río in Seville, Aqualia collaborated with the local council to start a creative marketing campaign featuring the public and workers to raise awareness of the value of the water service and inform them of the high quality of the tap water as well as the work, technology and infrastructures needed to provide an uninterrupted service every day of the year.

Notable among these actions was the competition to paint sewerage manholes, water tastings and drawings on the pavements simulating the pipes running under the streets. Open door sessions and visits to schools were also organised.

#nolotires

Aqualia carried out the #nolotires campaign in 2016 to raise the public's awareness of the use of the sewerage system and change some everyday habits that damage the working of these systems.

The campaign was undertaken on the Web site and Twitter and focused on five messages with various information on best practices for using the sewerage as well as data and statistics showing the size of the problem. It is estimated that just the throwing away of wipes in the WC costs Europeans between €500 and €1,000 million every year<sup>4</sup>.

#nolotires won the prize for the best social awareness initiative in the iAgua awards, the leading publication in the sector in Spain and Latin America.

Through AEAS, Aqualia has also signed a sector positioning statement on suitable and unsuitable products for discarding in the WC, to which nearly 200 organisations and companies have joined.



4 According to the European water service operators' association EurEau.

Image of the poster created for the #DontThrowItAway campaign



Juan Pablo Merino, Director of Communication, Marketing and CSR, receiving the iAgua award.

#### Real facts about water

In 2017 Aqualia has launched an information campaign (available at the website www.informacionrealdelagua.com) to counter all the false myths about management of the full water cycle and operators' role in it, by putting forward solid arguments to give the Company's different stakeholders — public entities, the public, the media, etc. — the actual facts about water management, regardless of whoever is providing the service.



General image of the #RealFactsAboutWater campaign.

#### SUPPORT FOR VULNERABLE GROUPS

Among the responsibilities assumed by Aqualia is the obligation to respond to the social needs of the most vulnerable groups by actively participating in various initiatives and projects.

During 2016, in collaboration with the municipal authorities of the localities in which it is present, it renewed the agreement signed with Cáritas Spain in which Aqualia undertakes to support those initiatives of Cáritas that attend to persons in a situation of vulnerability or exclusion in matters relating to the water cycle and to donate each year the equivalent of the amount of the water bills for Cáritas centres in the cities in which Aqualia provides its service.

In 2016 donations haven been made that are equivalent to the total water bills of 86 Cáritas centres.

At the local level, Aqualia has signed a collaboration agreement with Vigo Council in which, in collaboration with the council's Social Services, cases of effective inability to pay are identified and more effective solutions sought for them to avoid cutting off water to families without economic resources.



Félix Parra, General Director of Aqualia, and Sebastián Mora, General Secretary of Cáritas Spain.



Aqualia collaboration with the Associazione Italiana Persone Down (AIPD).

#### Caltaqua with Caltanisetta



Caltaqua develops social projects as part of its activity aimed at the integral development of the community in a commitment in which the company maintains all the premises in the Sicilian province of Caltanisseta in which it provides service.

In 2016, the company started collaboration with the Associazione Italiana Persone Down (AIPD) for the autonomous training of children with Down syndrome between three and 10 years old to enhance the elements that facilitate the acquisition of basic knowledge and other simple tasks that are useful in daily life for children with this syndrome.

It also joined the "Guaranteed Mobility Programme" to facilitate transport for persons with mobility problems by donating a van adapted for the disabled that will act as a social taxi within the urban area, helping to relieve the problems in the region regarding the lack of equipment adapted as a means of transport.

Finally, Caltaqua has become a strategic partner in the prevention project of the Italian Association Against Cancer (LILT, in its Italian initials) to give greater visibility to the initiatives undertaken by the association among the youngest. The company also takes part in the "Nastro Rosa" campaign against breast cancer for carrying out periodic prevention controls for all its female workers.

Aquajerez, the Aqualia subsidiary in Jerez de la Frontera, took part in the municipal reception for the 24 sub-Saharan children who spent their holidays with foster families in the city within the "Peaceful Holidays" programme. It also gave school supplies to each child.



Mamen Sánchez, the mayor of Jerez (Cádiz); Enrique Reina, the manager of Aquajerez, and José Antonio Díaz, the councillor for urban services, pictured with the Saharawi children and their host families.

For another year, the manager of the sports centres in El Vendrell (Tarragona) travelled 1,582 km, the distance between Barcelona and Rome, undertaking seven ironman in seven consecutive days to help children with cancer.

The solidary challenge of this initiative was to collect funds for AFANOC, an association for children with cancer, and the Xuclis house, a shelter for the families of these children.



Joan Lara's challenge for children with cancer.

## RELATIONS WITH STAKEHOLDERS

For Aqualia, maintaining fluid and constant contact with its stakeholders to know their expectations and requirements is a key for defining its corporate responsibility strategy.

#### A GLOBAL COMPANY WITH LOCAL MANAGEMENT

During 2016, Aqualia has especially strengthened its contact with the leading local communications media in the geographical areas in which the company carries out its work. It has held numerous meetings in which it explained the company's vision on current questions in the sector and information on the most notable aspects of each service or branch.



Winners of the First Aqualia Journalism Award with Felix Parra, General Director, and Santiago Lafuente, Aqualia National Director.

Reinforcing Aqualia's positioning in local and regional communications media opens the door to new channels for communication that bring the company closer to the end consumer. Thus, Aqualia ended 2016 with an increase in its information, publishing and public awareness activity.

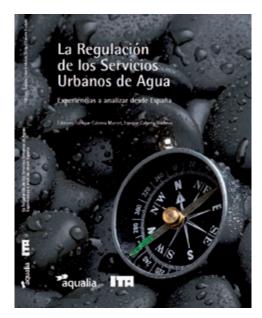
#### First Aqualia Journalism Award

The company launched the First Aqualia Journalism Award in 2016 to inform reporters and society of the importance of the proper and specialised management of the water cycle for the development and well-being of society.

In this first edition, the winner was the journalist Tomás Díaz for his article "Sewerage rates will rise by 50% and make the bill dearer," published in the Water and Environment supplement in *El Economista*.

The contest received a great welcome among the media with wide participation and high quality work presented as well as the publication of the contest locally and nationally.

The company also collaborates with other institutions in its work of responsibly communicating and participates in the communication discipline working groups created by the Spanish Water Supply and Sanitation Association (AEAS) and the Andalusian Water Supply and Sanitation Association (ASA) to define clear, regular and close guidelines for explaining the value of the management of the integrated water cycle to society overall.



Front cover of the book "La Regulación de los Servicios Urbanos de Agua: Experiencias a analizar desde España".

This communication effort by Aqualia during the year was also reflected in the ranking published annually by iAgua that positions the company as the second most influential organisation in the sector in Spain and Latin America.

#### ENHANCING EMPLOYEE RELATIONSHIPS

In the ambit of internal applications, Aqualia has continued to enhance the relationship with its employees through the Aqualia ONE intranet, information bulletins received by workers daily by e-mail, and Tu Flash, the monthly printed bulletin for personnel who do not have their own access to online information.

It has also carried out other initiatives to encourage the transverse knowledge of all areas of the company and to promote interaction between the departments. For example, in Santa Catalina, Jaen, some 30 workers from administrative posts, meter readers, technical office and customer service in Jaen visited the waste water treatment plant in the municipality, operated by Aqualia since 1997. During the visit, the attendees took part in an information talk on the supply to the city and the integral management of the water cycle as well as the functioning of the WWTP.

The purpose of these communications is to effectively provide employees, as ambassadors of the company, with structured information on the company and the sector that allows them to answer questions connected with the activity with full guarantee of proven reliability.

## The Regulation of Urban Water Services. Experiences to be Analysed from Spain

Aqualia has also collaborated in the publication of the book The regulation of urban water services. Experiences to be analysed from Spain which discusses the regulation and the relationship between public authorities, service operators and users in countries such as Germany, Australia, the United Kingdom, Portugal and Denmark.

The book was published in collaboration with the Polytechnic University of Valencia (UPV), its organisation specialising in urban water management (ITA) and the International Water Association (IWA).

The family is also an important element to take into account in relations with employees. For this reason, and for seven years, Aqualia has held the Pequeartistas Digital Drawing Competition for the grandchildren and children of employees. In 2016, it should be noted, participation in the competition was also widened to the workers' nieces and nephews.



Winners and finalists in the 2016 Pequeartistas competition.



Jaen employees visiting the Santa Catalina Plant.

## A LEADER IN TECHNICAL MATTERS, INNOVATION, SUSTAINABILITY AND COMMUNICATION

In 2016, Aqualia notably increased its presence in strategic events and forums, both nationally and internationally, that consolidate the company's positioning as a leader in the sector in the developing of innovative solutions that respond to current and future challenges in water management.

#### **PARTICIPATION IN NATIONAL EVENTS**

#### FIRST "SOCIAL ACTION MEASURES IN THE WATER SECTOR" SEMINAR JANUARY I SEVILLE, SPAIN

Aqualia took part in a round table, organised by the Andalusian Water Supply and Sanitation Association (ASA), in which it presented various initiatives undertaken by the company in favour of groups at risk of exclusion, based on tariff containment, the incorporation of social tariffs and payment flexibility during temporary economic insolvency and collaboration with social agents, among others.

#### FIRST "WATER IN THE PITIUSAS: WE ARE ALL RESPONSIBLE" SEMINAR MAY I IBIZA, SPAIN

This seminar organised by the company included representatives from the Balearic Islands authorities and water management experts to discuss the current water management situation in the Ibiza and Formentera. During the debate, the water scarcity suffered by the islands was discussed while solutions for the future with a sustainable focus from the water management technical and professional points of view were proposed.

#### 12TH ESAMUR SEMINARS

**NOVEMBER I MURCIA. SPAIN** 

Within the framework of the 12th technical seminars on sanitation and treatment, held in Murcia and dedicated to emerging pollutants in water, the Aqualia JPI Motrem, FP7 All-gas and ELAN process research projects for controlling and eliminating these pollutants were presented.

#### "WATER AS AN ENGINE FOR EMPLOYMENT AND SOCIAL SUSTAINABILITY" SEMINARS

**TOLEDO - SEVILLE, SPAIN** 

These meetings, held in Seville and Toledo during 2016, discussed matters connected to management models, the legal and employment frameworks and the regulation of the sector, emphasising the role of water and its management on the road to the sustainable development of modern societies. The holding of these initiatives was promoted by of UGT trade union workers' representatives and members of the AGA employers' association.

#### FIRST PUBLIC MANAGEMENT SEMINAR: PUBLIC/PRIVATE COLLABORATIONS FOR DEBATE

**OCTOBER I BARCELONA, SPAIN** 

Organised by the Barcelona branch and the PPP for Cities Centre, this seminar brought together representatives of authorities, companies and universities to identify, improve and generate new opportunities in the management of services through public/private collaboration.

Aqualia formed part of this meeting as a leader in water management with wide experience in the development of PPPs framed within the company's collaboration in the United Nations PPP For Cities project through its UNECE Regional Commission and the "International Centre of Excellence on PPPs" programme.



Seminar: "Water in the Pitiusas: we are all responsible". A round table bringing together the mayors of Ibiza's five municipal districts and the representative from the island of Formentera.



The first Public Management Seminar held in the head office of IESE to discuss public-private collaborations.

#### PARTICIPATION IN INTERNATIONAL EVENTS

#### **SAUDI WATER ELECTRICITY FORUM**

7-9 FEBRUARY I RIYADH, SAUDI ARABIA

Saudi Water Electricity is one of the most important conventions in Saudi Arabia – strategic for the water and energy sectors – in which national and international companies, leaders, investors and contractors meet each year to exchange ideas for developing and identifying new opportunities and innovations relating to the water/energy binomial.

During the convention, Aqualia received the "SWEF Award for Water" prize recognising the work carried out in the last five years in sectorising and leaks projects in the city of Riyadh.

#### **GLOBAL WATER SUMMIT 2016**

19-20 APRIL I ABU DHABI, UAR

Organised by Global Water Intelligence magazine with the theme "Water sustainability as a source of business and economic growth," this meeting is one of the largest business congresses in the water sector, attended by sector leaders and their stakeholders to discuss the future of the resource and its management.

#### **EXPOMIN 2016**

25-29 APRIL I SANTIAGO DE CHILE, CHILE

Participation in the most important mining fair in America - and second in the world - with a stand in the Spanish pavilion and as sponsor of the "Sea water for mining" seminar.

#### OMAN ENERGY & WATER 2016 (2<sup>ND</sup> ED)

23-25 MAY I MASCATE, OMÁN

Aqualia took part for the first time in this event in which companies and authorities discuss the challenges of water and energy in Oman as well as new forms of public/private collaboration to develop sustainable initiatives.

#### 13<sup>TH</sup> INTERNATIONAL IWA LEADING EDGE ON WATER AND WASTEWATER TECHNOLOGIES CONGRESS (LET)"

13 -16 JUNE I JEREZ, SPAIN

In 2016 this biennial congress was held in Jerez de la Frontera and was organised jointly by Aqualia and the University of Santiago de Compostela with a highly successful attendance of more than 450 from 47 countries including companies in the sector, universities and research centres.

The speeches this year were focused on the efficient management of energy, micronano pollutants, the recovery of resources and the development of technologies based on solar water and algae.

#### **WATEC ITALY 2016**

21-23 SEPTEMBER I VENICE, ITALY

In collaboration with its Italian partner, Itavelco Group, Aqualia shared experiences and intelligent solutions in one of Italy's main water sector events. Three R&D projects in which the company is currently involved in the field of desalination were presented during the congress - H2020 MIDES, LIFE Remembrane and ECO Innovation Cleanwater.

#### LATIN AMERICAN WATER DESALINATION AND RE-USE CONGRESS (DESAL)

5-7 OCTOBER I SANTIAGO, CHILE

Also in 2016, Aqualia took part in DESAL, the main desalination event held in Latin America that annually brings together the main actors in the sector to know about, share experiences and identify new practices for the most recent developments and innovations in water desalination and re-use techniques, not only from the perspective of innovation but also regarding the development of new business and financing models for projects in the sector.



Presentation in the Barcelona iWater conference of the book "The regulation of urban water services. Experience to be analysed from Spain", by Aqualia General Director Félix Parra and Enrique Cabrera, Professor of the Polytechnic University of Valencia (UPV) and editor of the document.



The Aqualia stand at the Global Water Summit. From left to right, Ignacio Díez de la Quintana (Aqualia Country Manager in India), José Miguel Santos (Aqualia Country Manager in UAR and Qatar), Mohammed Al-Saud (Vice-minister for Water in Saudi Arabia), Luis de Lope (Aqualia International Director), José Enrique Bofill (Regional Director for MENA and Asia) and Javier Díaz (Aqualia Country Manager in Saudi Arabia).

#### **ANEAS 2016**

#### 7-11 DE NOVIEMBER I TIJUANA, MEXICO

Aqualia was present in 2016 at the 30<sup>th</sup> National Convention and Exhibition held by ANEAS (Asociación Nacional de Empresas de Abastecimiento y Saneamiento) in the city of Tijuana, Mexico.

The annual ANEAS Convention and Exhibition is recognised as one of the most important events in Latin America and is a space where national and international experts, businessmen, academics, legislators and other actors related to the water sector and especially to the drinking water and sanitation sub-sector, gather.

As well as a stand in the exhibition area, Aqualia took part in the events agenda with the participation of Emilio Soler, its LATAM Regional Director, who took part in the round table "Conditions for the efficient regulation of public services in Mexico."

#### **IWATER**

15-17 NOVEMBER I BARCELONA, SPAIN

As well as sponsor, Aqualia took part in the first edition of iWater in Barcelona with talks by five experts on urban resilience, the Sustainable Development Goals, the Smart aqua app, the case of public/private collaboration in Ibiza and the FP7 All-gas R&D project.

#### WATER INVESTMENT FORUM (1<sup>ST</sup> ED)

27-28 NOVEMBER I RIYADH, SAUDI ARABIA

First edition of the Water Investment Forum organised by the Saudi Arabian Ministry of the Environment and Water, the Saline Water Conversion Corporation and the National Water Company, attended by national and international key water investors and actors to promote opportunities for investment in the country that solve the lack of available water resources.

During the Forum, Aqualia presented the case of the successful public/private collaboration model developed in Egypt to build and operate one of the largest treatment plants on the African continent, the New Cairo WWTP.

#### **AMERICAN WATER SUMMIT**

7-8 DECEMBER I MIAMI, USA

Aqualia was present at the American Water Summit held in Miami in December where, as well as an information stand, it led one of the round tables to share energy-saving practices in desalination plants (Energy Saving Tricks for a Desalination Plant).



## Intelligent services

Innovation in the water cycle

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The management of the environment impact

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Implications of global warming

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Focus on the circular economy

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## Intelligent services



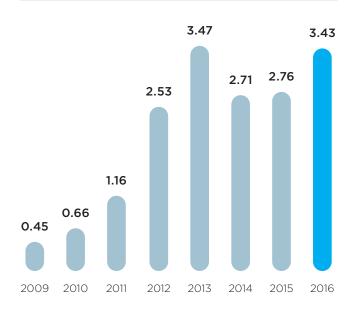
Aqualia continuously adapts its offer of services to respond effectively to the challenges arising from the scarcity of resources and the need to protect the natural medium, using innovation and efficiency as levers in all areas of its activity.



#### INNOVATION IN THE WATER CYCLE

In Aqualia, R&D is a transverse element that permeates the organisation's entire activity. Innovation is essential to progress in the sustainable management of water, improve the quality of life of persons and guarantee the availability of the resource from efficiency.

#### INVESTMENT IN R&D PROJECTS (MILLION OF EUROS)



In 2016, Aqualia provided more than €3.43 million for developing R&D projects and accumulated a total investment of €15 million in the last five years.

#### SUSTAINABILITY, EFFICIENCY, COMPETITIVENESS AND ALLIANCES

Aqualia focuses its R&D activities on developing innovative solutions that contribute to complying with the company's mission of continuously improving the quality of the supply, minimising its environmental impact and optimising the operating conditions as well as the continuous search for new business opportunities that may arise in the water sector.



Innovation is a transverse element in Aqualia. Throughout the report, this icon shows those R&D projects with a high innovation component.

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**R&D OBJECTIVES** 

IMPROVE THE QUALITY OF THE SUPPLY

MINIMISE THE ENVIRONMENTAL IMPACT

OPTIMISE THE OPERATING CONDITIONS

The innovation is possible thanks to a team of highly qualified professionals – currently consisting of more than 30 persons – and the continuous support of national and international universities and research centres.

Together with other institutions and companies, Aqualia also takes part in the development of innovative high-performance projects in the framework of innovation programmes promoted by European public institutions.

To develop these projects, the company has its own financing and grants from various organisations involved in promoting R&D.



Aqualia's R&D team with an All-gas car.

#### **R&D MANAGEMENT IN AQUALIA**

The innovation management system is certified according to the UNE 166002:2006 standard.





**PERMANENT DIALOGUE** 



**STAKEHOLDERS** 



#### **SELECTION OF R&D**

Sustamasmey
CDTI Sustainable solids (2012*)
FP7 SWAT (2013*)
CENIT VIDA (2014*)
IDEA Regenera (2015*)
INNPACTO Downstream (2015*)
FP7 All-gas (2018)
LIFE Biosol water recycling (2018)
H2020 Incover (2019)
H2020 Sabana (2020)

Sustainability

OCO Innovation Cleanwater (2017)
RETOS Renovagas (2017)
CIEN SmartGreenGas (2018)
LIFE Answer (2019)
H Mides (2020)

**Eco-efficiency** 

LIFE Remembrane (2015\*)

MIMAM MBBR (2010*)
INCITE MBR Trainasa (2012*)
INCITE ELAN Trainasa (2012*)
CDTI ELAN Vigo aqualia (2013*)
INNPACTO Filene (2014*)
INNTERCONECTA Alegria (2014*)
INNPRONTA ITACA (2014*)
INNOVA Impactar (2015*)
CDTI BESTF2 Biowamet (2017)
INNOVA E3N (2017)
LIFE Memory (2018)
CONECTA PEME Medrar (2018)
WATERWORKS Pioneer (2018)
LIFE Methamorphosis (2019)

Quality

#### MEC Predictive maintenance (2012\*) INNPRONTA ISIS (2014\*) INNTERCONECTA Smartic

Intelligent management

FP7 Urban Water (2015\*)
CDTI WATER JPI Motrem (2017)
LIFE Icirbus4industries (2019)

D.I.VIRTUAL CSIC UAB (2020)

(2014\*)

(\*) Terminated projects

#### STRATEGIC LINES FOR R&D



#### **SUSTAINABILITY**

Reduction of energy consumption and emissions, use of waste water and wastes as resources and alternative technologies.



#### **ECO-EFFICIENCY**

Use of electricity from renewable sources, innovation to create new ecological fuels.



#### **QUALITY**

Standard indicators for drinking water, water re-use, desalination and analysis.



#### INTELLIGENT MANAGEMENT

Management systems, optimising of water resources and information and communication technologies.

During 2016 and in line with the strategic planning of R&D activities relating to water management, Aqualia developed a new working area around eco-efficiency, added to the existing ones on sustainability, quality and intelligent management.



LIFE ANSWER team.

The new line consists of the ECO Innovation Cleanwater and RETOS Renovagas projects under development (which will conclude in 2017 after an extension of six months to consolidate their results), the CIEN SmartGreenGas project (2018) and two new projects started during the year in the framework of the European competitions for developing new bio electro-chemical processes, the H2020 Mides and LIFE Answer projects.



RETOS Renovagas team.



#### H2020 Mides

Location: Phase 1: Denia (Alicante); Planned phase 2: Tunisia, Chile. Duration: 01/04/16 - 31/03/2020 Total budget: €7,949,754.29 Aqualia: €1,691,206.79

Participants: Aqualia (Coordinator), Fujifilm, Imdea, SGL Carbon, Leitat, Mikrolin Hungary, Oncontrol Technologies, Simtech Simulation Technology, Rood Wit Blauw Water Services, Unesco-Ihe, University of Gabès, University of Chile.

Led by Aqualia, the H2020 Mides project seeks to revolutionise desalination technology and reduce its energy cost by five times compared to the traditional reverse osmosis technology.

This is undertaken with microbial desalination cells (MDC)2 using residual organic matter (from effluents) to activate the bacteria that displace salts through the membranes without the need for an external energy supply.

The Mides project involves an international consortium consisting of 12 companies and organisations from eight countries – Austria, Chile, Germany, Hungary, the Netherlands, Portugal, Spain and Tunisia – with a wide combined experience in water management and technological innovation.



#### **LIFE Answer**

**Location:** Guadalajara (Spain) **Duration:** 01/09/16 - 31/05/2019

Total budget: €973,408 Aqualia: €265,172 Participants: Mahou San Miguel (Coordinator), Aqualia, Recuperaciones Tolón, University of

Alcalá.

Life Answer consists of a system for treating waste water to recover nutrients with advanced electro-chemical systems (electro-coagulation processes and bio electro-chemical reactors) to save energy.

This project allows the assessment of the fluidised bed bio electrogenic system developed by Aqualia during the ITACA project, in collaboration with the University of Alcalá and later patented with the name "Method for treating" waste water in a fluidised bed bioreactor."

ANSWER is being undertaken in the Mahou San Miguel brewery in Guadalajara, the project leader.

Two new projects have been started in the area of sustainability in the European Horizonte 2020 programme<sup>3</sup>, Incover and Sabana, added to two other projects already active in this same strategic line: FP7 All-Gas and LIFE Biosolware.



#### **H2020 Incover**

Location: El Toyo WWTP (Almería) and El Torno WWTP (Cádiz)

Duration: 01/06/16 - 31/05/2019

Total budget: €8,431,385

Aqualia: €878,625

Participants: Asociación de Investigación Metalúrgica del Noroeste (AIMEN) (Coordinator), Aqualia, Aarhus Universitet, Universitat Politécnica de Catalunya, Helmholtz-Zentrum fuer Umweltforschung gmbh - UFZ, Future intelligence erevna tilepikinoniakon ke pliroforiakon systimaton epe, Gregersen Peder Simbiente, Engenharia e Gestao Ambiental Ida, Universidad de Valladolid, Solarspring gmbh, Teknologisk Institut, Autarcon gmbh, Instituto de Biología Experimental e Tecnológica, Renergie Systeme gmbh & Co kg, Biotrend - Inovacao e Engenharia em Biotecnologia S.A., Office International de l'Eau, Isle Utilities Limited, Iclei European Secretariat gmbh (iclei

europasekretariat gmbh).

The objective of the programme is the development of innovative ecological technologies to recover resources from waste water.

Incover creates synergies with existing installations and the knowledge acquired previously with the FP7 All-Gas project to increase the use of the biomass of algae for products of greater value such as bio fertilisers and bio plastics, improving the production of water for re-use.

It is led by the Aimen technology centre and brings together 18 companies and organisations from seven countries – Spain, France, Switzerland, Germany, the United Kingdom, Denmark and Greece.

- 2 Previously developed by Aqualia in the IISIS Project, together with Imdea Agua.
- 3 European Union research and innovation programme (2014-2020.



#### **H2020 Sabana**

**Location:** Demo 1 - Almería and Demo 2 to be defined in southern

Spain

**Duration:** 01/12/2016 - 30/11/2020 Total budget: €10.646.705

Aqualia: €2,552,812

Participants: University of Almería (Coordinator), Aqualia, GEA Westfalia Separator Group, A.I.A., Consorzio Italiano Biogas e Gassificazione, Biorizon Biotech, Università Degli Studi di Milano, University of Las Palmas de Gran Canaria, Széchenyi István University, Karlsruher Institut fuer Technologie, Mikrobiologicky Ustav – Centre Algatech.

Led by the University of Almería, the main industrial partner is Aqualia together with Westphalia (Germany).

The general objective of the H2020 Sabana project is to demonstrate the technical, environmental and social feasibility of generating valuable products for agriculture and aquiculture using sea water and waste water as sources of nutrients.

The work is being carried out in a 15 ha cultivation facility and a bio refinery to achieve new bio fertilisers and bio pesticides as alternatives to conventional chemical products using micro algae for an agriculture that is more respectful with the consumer and the natural environment.

Two new projects - WATER WORKS Pioneer and CONECTA PEME Medrar - were started in 2016 in the area of quality, focused on the development of

more sustainable treatment plants in addition to those already being undertaken in this line.



#### **WATERWORKS Pioneer**

**Location:** Pontevedra (Spain) **Duration:** 01/05/16 - 31/08/2018

Total budget: €1,805,245 Aqualia: €183,106 Participants:

University of Santiago de Compostela (leader, USC, Spain), Danmarks Tekniske Universitet (Denmark), Università degli Studi di Verona (Italy), Royal Institute of Technology (Sweden), Aqualia. The project is framed within the WATER JPI initiative in the European ERA-NET Cofund Water Works programme.

WATERWORKS Pioneer tackles the challenges relating to the valuing of waste water from a holistic perspective to improve the sustainability of waste water treatment plants and the elimination of micro-pollutants, minimising the environmental impact of treatment using ELAN technology and the precipitation of struvite.

It is led by the University of Santiago de Compostela (USC) together with other prestigious universities as well as Aqualia, the only company in the consortium.



#### **CONECTA PEME Medrar**

**Location:** Vigo (Spain)

**Duration:** 11/02/16 - 30/11/2018

Total budget: €557,352 Trainasa (Aqualia): €136,931

**Participants:** 

Canalizaciones y Construcciones Salnes, S.L. (leader), ASM SOFT, S.L., Tratamiento Industrial del agua, S.A. Co-financed by the Conecta PEME programme, the Medra project is developing a modular system for treating waste water, applicable to small centres of population or small urban/industrial agglomerations as a more sustainable alternative to the systems currently used in areas with few inhabitants.

The project is developing compact and fully automated modules for integration in the rural environment with minimal impact and cost to the community.

Although no new products projects were started in 2016 in the ambit of intelligent management, the area has continued to progress in developing the European JPI Motrem project that evaluates new technologies for controlling and retreating emerging

pollutants and the LIFE Icirbus project the objective of which is to demonstrate the possibility of reusing wastes from treatment plants in construction materials and to generate bio fertilisers.



#### R&D projects active in 2016.

PROJECT	OBJECTIVES
SUSTAINABILITY	
<b>FP7 ALL-GAS</b> [2018]	Industrial-scale demonstration of sustainable production of biofuel based on the cultivation of low cost micro algae with a cultivation area of 10 ha.
<b>LIFE BIOSOLWARE</b> [2018]	Development of a new, efficient and competitive system of treating waste water based on an ecological process called "Bio-Solar Purification" (BSP), especially designed for small centres of population and isolated homes.
<b>H2020 INCOVER</b> [2019]	Transformation of waste water into a source of added value products - bio methane, bio plastics, bio fertilisers and water for re-use. It uses DSS technology to select the most efficient treatment solution from the technical, social and economic points of view.
<b>H2020 SABANA</b> [2020]	Development of a large-scale bio refinery based on micro algae for producing bio pesticides and bio fertilisers. The objective is to achieve a process with zero wastes that is sustainable from the environmental and economic points of view.
ECO-EFFICIENCY	
CIEN SMARTGREENGAS [2018]	Improvement of technologies for converting biogas produced from wastes into bio methane for injection into the mains or as a bio fuel for vehicles.
RETOS RENOVAGÁS [2017]	Design of plants to produce synthetic natural gas from excess renewable energies.
ECO INNOVATION CLEANWATER [2017]	Industrial-scale demonstration of the application of an innovative chlorination system for disinfecting water in three commercial applications, water for human consumption, re-use of water and desalination plants.
<b>H2020 MIDES</b> [2020]	Low-cost desalination in decentralised plants of low/medium capacity allowing the simultaneous treatment of waste water with a positive energy balance.
<b>LIFE ANSWER</b> [2019]	Development of a system for treating waste water and recovering resources based on electrocoagulation processes and bio electric-chemical reactors.
QUALITY	
LIFE MEMORY [2018]	Demonstration of the technical and economic viability of the submerged membrane anaerobic reactor technology (SAnMBR) for treating urban waste water. Thanks to the generation of power and the recovery of resources, the carbon footprint and the emissions of greenhouse gases are minimised.
BESTF2 BIOWAMET [2017]	New focus on the treatment of waste water. Using the anaerobic membrane bioreactors technology (AnMBR) the waste water is considered a source of power and nutrients capable of generating a reusable water resource.
INNPULSA INNOVA E3N [2017]	Investigation of the process for the energetically efficient elimination of organic matter and nitrogen in urban and industrial waste water.
<b>LIFE METHAMORPHOSIS</b> [2019]	Energy valuation of organic solid wastes of urban and agricultural-industrial origins to obtain alternative and sustainable fuels.
CONECTA PEME MEDRAR [2018]	Innovative and sustainable system for treating waste water for small centres of population using a modular system. The system adapts to the properties of the flow to be treated and to the criteria for discharging or re-using the treated water.
<b>WATERWORKS PIONEER</b> [2018]	Application of new technologies to improve the sustainability of waste water treatment, recovering resources and optimising the energy balance of the treatment plants.
INTELLIGENT MANAGEMENT	
<b>JPI MOTREM</b> [2017]	Integration of processes to monitor and treat emerging pollutants, improving the efficiency of removing these pollutants in urban waste water treatment plants to achieve a high percentage of re-use.
LIFE ICIRBUS [2019]	Example of the circular economy to reduce the environmental impact of industry. It seeks to use the waste materials from two industries (biomass and waste water treatment plants) in cascade to convert them into new ecologically valid products such as fertilisers and construction materials.

#### **NEW PATENTS**

The Aqualia research team obtained a new patent on the production and refining of biogas in 2016:

■ EP 14382399.5 on the feeding of an anaerobic reactor UASB.

Five patents have also been applied for on various of the technologies currently in demonstration such as ELAN, AnMBR, MDC, MFC and the crystallising of struvite.



PIG technology applied for cleaning water intake pipes in the Mostaganem, Algeria, desalination plant.

#### **INNOVATION APPLIED TO THE BUSINESS**

One of the most important questions for Aqualia in the ambit of innovation is to be able to transfer all the knowledge acquired from research and the development of new technologies and processes to the daily operation of the business, thus improving its competitiveness and resulting in a substantial improvement of the services it offers to the public.

Among the multiple actions carried out in this sense during 2016, special mention must be made of the installation in Almería of a predictive system to help in the management and prevention of leaks in the distribution system by applying intelligent information technology systems that have allowed more than €70,000 to be saved during the year thanks to improved water efficiency.

Also in 2016, Aqualia successfully applied PIG (Pipeline Inspection Gauge) technology to clean water intake conduits in the Mostaganem desalination plant in Algeria. This technique, used traditionally in petrochemical sector, is one of the first experiments world wide in the water sector and its application to a large desalination plant. The PIG system has helped to reduce the cost of cleaning the conduits in the SWDP with an approximate saving of 70% in the maintenance of the plant's intakes and a production increase of 16.7%, equivalent of the supply of water for a further 125,000 persons.

#### **ENVIRONMENTAL IMPACT MANAGEMENT**

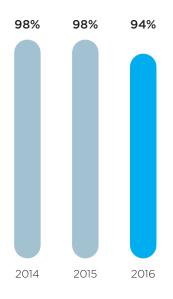
Aqualia recognises the economic, social and -above all- environmental values of water, the main activity of the organisation. Because of this, one of its main ends is that the management of this resource is carried out efficiently based on respect for and protection of the natural environment.

## CONTINUOUS IMPROVEMENT OF THE MANAGEMENT OF AQUALIA'S ENVIRONMENTAL IMPACT

Aqualia's integrated environmental management system is based on the ISO 14001 standard which defines and sets the necessary control and monitoring mechanisms to minimise the company's impact on the environment.



#### AQUALIA'S ACTIVITY IN SPAIN, CERTIFIED AS PER THE ISO 14001 STANDARD



94% of Aqualia's activity in Spain is certified in accordance with the ISO 14001 standard for environmental management systems. Taking into account the total national and international activity, the scope of the activities covered by the environmental management system is some 86.4% – 12% more than all the activity certified in 2015.

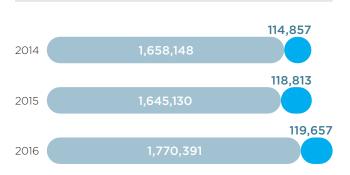
In 2016, Aqualia became one of the first Spanish companies to adapt to the innovations implemented in the ISO 14001:2015 standard. The new standard strengthens the concept of the leadership of environmental management and includes new criteria in its scope that refers to aspects such as the environment in which the company operates and attention to the expectations of stakeholders, among other questions.

Taking advantage of the updating of the processes and procedures, Aqualia also carried out a functional and territorial restructuring of its organisation to drive the continuous improvement of the integrated environmental management system.

## AESPE recognises Aqualia's commitment to the environment

Aqualia was awarded in 2016 by the Spanish Portable Ecological Sanitary Association (AESPE) with the "Gota de Oro" award for its commitment to the environment and the development of initiatives aimed at the more efficient management of natural resources, more rational energy consumption and the identification of the risks associated with the company's activity in Merida, Extremadura.

#### INDIRECT ENERGY CONSUMPTION (GJ)4



Aqualia GIA data for Spain, Italy and Portugal.

#### IMPLANTATION AND CERTIFICATION OF THE ENERGY MANAGEMENT SYSTEM

The efficient and rational use of energy is an essential aspect in Aqualia's responsible environmental management.



Juan Pablo Merino, Director of the Communication Marketing and RSE Department, receiving the award from AESPE Chair Luis Miguel Ballesteros.

#### DIRECT RENEWABLE ENERGY CONSUMPTION (GJ)

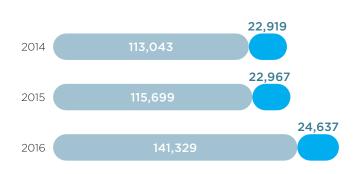
#### 2014 91,017 14,926 2015 42,299 23,288 2016 47,276

Aqualia GIA data for Spain, Italy and Portugal.

## The differences with respect to previous years are due to changes in the consolidation perimeter of Aqualia's national and international activities.

The conversion factor used to convert litres of diesel to GJ is from the IDAE (0.039688 GJ/I).

#### **DIRECT FUELS CONSUMPTION (GJ)**



Aqualia GIA data for Spain, Italy and Portugal.

Aqualia GIA SmVaK

For this reason, and to comply with Royal Decree 56/2016, approved in February, Aqualia decided to implement an energy management system in 2016, certified according to the ISO 50001 standard involving the setting up of quantifiable objectives to optimise the use of energy resources in its activity.



Image of the certificate accrediting that Aqualia, in all its contracts, has adapted its working procedures to the ISO 50001 standard.

Actions defined for implementing the ISO 50001 in all Aqualia contracts

Improvement of the measurement systems by acquiring process, energy and maintenance equipment.

Calculation and monitoring of the energy performance of pumps.

Optimising and improving of processes in installations and production equipment.

Investment in equipment with greater energy efficiency.

Improvements in the maintenance of infrastructures and the system's water performance.

Following the example of Aqualia in Spain, SmVaK became the second water management company in the Czech Republic to implement and certify its activity as per the ISO 50001 standard. Additionally, a change of strategy took place during the year regarding management of energy purchasing and the activity was centralised to generate new opportunities before the renewal of the management contracts close to expiry. The immersion in the market prices indexed to the market has favoured a saving of 20% in the contracting of the electricity supply for next year (2017).



#### **INNOVA Impactar**

**Location:** Santander ("Las Llamas" waste water pumping station) **Duration:** 25/06/12 - 25/06/2015

Total budget: €285,100 **Aqualia:** €179,572.60

**Participants:** 

Aqualia (leader), Environmental Engineering Group (GIA) of the University of Cantabria (UC).

Financed by the government of Cantabria, the INNOVA project seeks the energy efficient removal of nitrogen in treatment plants with a potential energy saving of up to 75% thanks to the aeration technology using silicone membranes (MABR) which eliminates the bubbles in the process.

This project is a sustainable and competitive solution for the market which will facilitate energy self-sufficiency in large treatment plants while providing a compact and sustainable solution in small ones.

The project also creates synergies between the service offered by Aqualia in Santander and the University of Cantabria and demonstrates new, decentralised solutions for intelligent cities.

## IMPLICATIONS OF GLOBAL WARMING

One of the main lines of action in the environmental management system is the knowledge of the impact on climate change by Aqualia's activity and its mitigation.

The implementation and certification of the environmental (ISO 14001) and energy (ISO 50001) management systems not only involved the improvement of the efficiency in the use of energy sources but also directly contributed to the fight against global warming by reducing the emission of greenhouse gases to the air.

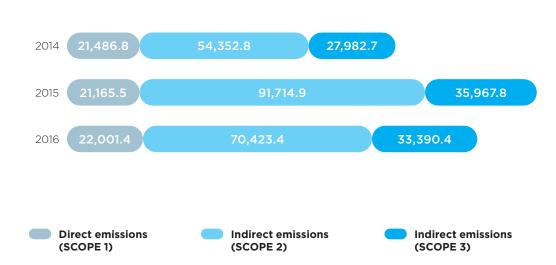
For this reason and within the framework of the FCC Group's 2020 climate change strategy, Aqualia has worked since 2012 on the continuous improvement of its integrated management system with the fundamental objective that includes both the management of the quality of processes, products and services and environmental management.

#### MEASUREMENT OF THE CARBON FOOTPRINT IN THE ENTIRE ACTIVITY

For the third consecutive year, Aqualia has calculated the carbon footprint for the entire activity of managing the integrated water cycle in the company. The calculation was verified by AENOR and entered in the carbon footprint register of the Ministry of Agriculture and Fishing, Food and the Environment.

The energy efficiency measures implemented contributed to a reduction of 15.5% of total  $CO_2$  emissions to the air in 2016.

#### DEVELOPMENT OF THE CARBON FOOTPRINT OF AQUALIA GIA (TEQ CO2)



With this initiative, the company aims to know and assess the impact of its greenhouse gas emissions to identify opportunities for reducing and/or compensating the carbon footprint.

Based on the results, an action plan has been defined that involves specific actions that contribute to reducing the company's carbon footprint.



Image of the promotional banner for Aqualia's activity in calculating the carbon footprint.

- Internal and external communication and awareness campaigns.
- 2015 2016 carbon footprint reduction plan (under review). Main actions:
  - → Reduction of Scope 2 emissions: reduction of energy consumption by implementing and certifying an energy SG (ISO 50001).
  - → Reduction of Scope 3 emissions: reduction of total nitrogen release concentration in treatment.
  - → Increase of fixed emissions: increased destination of sludge for agriculture.
  - → Increase in emissions avoided: increase in output of biogas for boilers and increase in the power output produced.
  - → Renewal of vehicle fleet by acquiring electric vehicles.
  - → Participation in a MAPAMA CLIMA project.

- Extension of the project internationally: Czech Republic and Portugal:
  - → During the year, the carbon footprint of SmVaK in the Czech Republic was defined and measures were taken to avoid the emission of more than 5,000 tonnes of CO<sub>2</sub> a year.
  - → During 2017 the carbon footprint for Aqualia's activity in Portugal will also be checked.

#### FOCUS ON THE CIRCULAR ECONOMY

Aqualia contributes to the transition to a circular production model thanks to progress in efficiency and treatment and the re-use of waste water by technology in its activities and innovation applied to its operations.

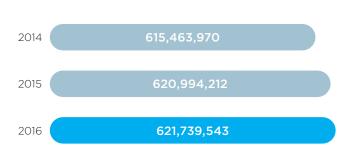
The availability of water resources is currently threatened by factors such as climate change, causing increasingly frequent droughts and floods, and demographic growth and the pressures it places on the demand for natural resources.

As the effects of climate change become more noticeable, it will become more complicated to met the needs relating to the world demand for water, maintaining the sustainability of water resources and natural balance<sup>5</sup>.

## EFFICIENCY IN THE INTEGRATED WATER CYCLE

As a company specialising in all phases of the integrated water cycle, Aqualia assumes its responsibility in the efficient management and protection of the water resources that guarantee the supply through innovation and awareness of responsible consumption among the public with multiple campaigns that also give value to the progress in the re-use of water.

## VOLUME OF WATER TAKEN IN FOR MANAGEMENT (M³)

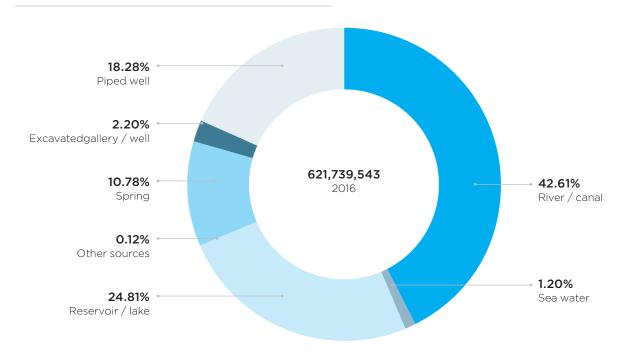


5 United Nations Educational, Scientific and Cultural Organisation (UNESCO). 2016. United Nations report on the development of water resources in the world, 2016: Water and jobs..



In 2016 the total volume of water taken in by Aqualia for management was 621,000 million m<sup>3</sup> and remained almost unchanged from the water taken in in 2015.

### VOLUME OF WATER TAKEN IN FOR MANAGEMENT AND INTAKE SOURCE (M³)



By intake sources, 78% was obtained from surface water sources – rivers, canals and reservoirs, among others<sup>6</sup>.

## The re-use of water as a challenge in Ibiza and Formentera

Aqualia and the Alliance for the Sustainable Management of Water in Ibiza and Formentera brought together politicians, sector professionals and representatives of society in November 2016 to discuss the re-use of water resources as an alternative supply and to optimise costs.

During the seminar, as well as discussing current regulations on re-use in Spain, special emphasis was placed on the need to continue to inform and increase the awareness of the public on the possibilities offered by waste water as a re-usable resource, for example in the energy ambit.



Image of the programme for the seminar.

6 The various types of intake are associated with the facility managed, that is, its choice does not depend on Aqualia.

## TREATMENT AND RE-USE OF WASTE WATER

Aqualia is currently positioned as one of the leading companies in the development of innovative solutions -with a large number of active projects- for the re-use of waste water and its conversion into new products through new anaerobic technologies

in valuing discharges and the treatment of organic waste water to obtain water for re-use and bio methane for the transport sector, among other projects.



#### **FP7 All-gas**

**Location:** El Torno WWTP, Cádiz **Duration:** 01/05/11 - 09/07/2018 **Total budget:** €11,820,564.14 **Aqualia:** €8,098,099.82

**Participants:** Aqualia (leader), BDI Bio Energy International, Hygear B.V., University of Southampton, Fraunhofer - Gesellschaft.

The All-gas project for the production bio energy from the treatment of waste water contributes to the transformation of treatment plants into future energy factories with zero discharges.

The project's objective is to convert micro algae into clean energy by re-using the nutrients in waste water. The biomass generated in the process will be converted in anaerobic processes to produce biogas which will be subjected to a purification process with an innovative patent called ABAD® (absorption/adsorption).

In this patent, developed within the All-gas framework, the ABAD® process provides a quality bio methane for use in combustion engines and for injection into the mains. The great advantages of ABAD® compared to traditional systems are the reduced investment cost (almost 80% less) and the lower operating costs since it dispenses with chemical reagents and pressure.

In 2016, the European Commission approved its extension for 24 months which was key to the success of undertaking the project, immersed in the demonstration phase.

It should also be noted that since last summer, a car has already been functioning with the bio methane produced from a prototype with a smaller capacity  $(1,000 \text{ m}^3)$ .



Volkswagen-up that will test the biogas from the All-gas project.



#### **LIFE Methamorphosis**

**Location:** Ecoparc2 in Barcelona **Duration:** 16/07/15 - 30/06/2019

**Total budget: €**3.642.167 **Aqualia: €**837,049

**Participants:** Aqualia (leader), FCC, S.A., AMB, Gas Natural, ICAEN,

SEAT

Methamorphosis is a project led by Aqualia and co-financed in the Life Programme to maximise the recovery of energy from wastes generated from the production of bio methane that can then be used as a fuel in cars or injected into the natural gas mains, with a potential impact on urban mobility and the cities of the future.

The bio methane obtained from processing wastes will be tested soon in vehicles made by SEAT which will be driven for more than 120,000 km.

#### Biogas from the CIEN Smart Green Gas project, a commitment to the resilient city

Aqualia has started pilot tests in the SMART Green Gas project, undertaken together with SEAT to obtain renewable bio fuel of 100% Spanish origin from the treatment of waste water. The leading automobile sector company in Spain has provided two SEAT León TGI cars that are being tested in the waste water treatment plant in Jerez de la Frontera to confirm and check the entire production chain to the obtaining and use of the fuel.

This joint project is a further step in the development of a circular economy and in the construction of resilient cities. Its main advantage is that the 100% use of the bio methane vehicle allows a reduction of 80% in the emissions of "Well to Wheel" CO<sub>2</sub> compared to one using petrol.



Raúl Cano, Aqualia researcher, and Andrew Sheperd, SEAT's GNC product manager, with the two SEAT León TGI cars that will be used to test the biofuel.





# **Exemplary**behaviour

The organisational structure and the values that accompany it

80

Aqualia's professionals

82

Responsible management of suppliers and contractors

96

## **Exemplary** behavior

Aqualia defines its supervision and control system on the basis of integrity and business ethics. It continually strengthens the model and extends it to its entire value chain – partners, suppliers and contractors – with whom it shares not only responsibility for ethical conduct but also social and environmental questions.

• • •

The company also considers it essential to create a safe and diverse working space in which all the professionals that form part of Aqualia can develop their professional careers.

## THE ORGANISATIONAL STRUCTURE AND THE VALUES THAT ACCOMPANY IT

The governance practices in Aqualia are framed in the good governance model defined by the FCC Group that emphasises integral and responsible management for each of the businesses in the company in tune with the values in its code of ethics.

#### **GENERAL MANAGEMENT**

Aqualia's organisational structure follows the strategic objective of being the leading company in the management of water resources globally.

During 2016, the company progressed with the restructuring of its organisational architecture in Spain to strengthen and consolidate its positioning within the country. This national management thus consists of three regions – defined according to territorial criteria – in which all the activities in the water cycle such as concessions, operations and urban and industrial maintenance, systems and technology are grouped.

The strategic growth and expansion in international markets is empowered through the International Directorate.

**Aqualia General Management** 

Félix Parra

#### **Corporate Departments**

#### **Economic and Financial Dir.**

Isidoro Marbán

#### Legal Dir.

Elena Barroso

#### **Communication and CSR Dir.**

Juan Pablo Merino

### Water Engineering and Technology Dir.

Javier Santiago

#### **Human Resources Dir.**

Carmen Rodríguez

#### **Development Dir.**

Antonio Vassallo

#### **Studies and Operations Dir.**

Pedro Rodríguez

#### **Customer Service and IT Dir.**

Manuel Castañedo

#### **Procurement Dir.**

Alberto Andérez

#### Spain Management

Santiago Lafuente

#### Zone I

Juan Carlos Rey

- Galicia
- Asturias
- Cantabria
- Basque Country
- Madrid
- Castile and Leon
- · Castile la Mancha

#### Zone II

Juan Luis Castillo

- Balearic Islands
- Catalonia
- Aragón
- Navarre
- La Rioja
- Murcia
- Region of Valencia

#### Zone III

Lucas Díaz

- Andalusia
- Extremadura
- Canary Islands

### International Directorate

#### **Europe**

Guillermo Moya

#### **MENA**

José Enrique Bofill

#### LATAM

Emilio Soler

#### **USA, Caribbean and Brazil**

José Miguel Janices



Management committee 2016

#### **AQUALIA'S DUE DILIGENCE**

The ethical values and principles that guide the morality and behaviour of those forming part of Aqualia in ethical, social and environmental matters come from the FCC Group code of ethics which also includes questions relating to the protection of human rights, the prevention of corruption and bribery and the health and safety of persons, among others.

#### For further information see:

FCC's Group Code of Ethics.

Framework of integrity and ethics [pages 185-186], FCC Annual Report.

### **AQUALIA'S PROFESSIONALS**

With 7,952 employees world wide, Aqualia continues to grow and consolidate itself as one of the leading companies in the ambit of the management of the integrated water cycle thanks to a staff of professionals who are committed to their work.

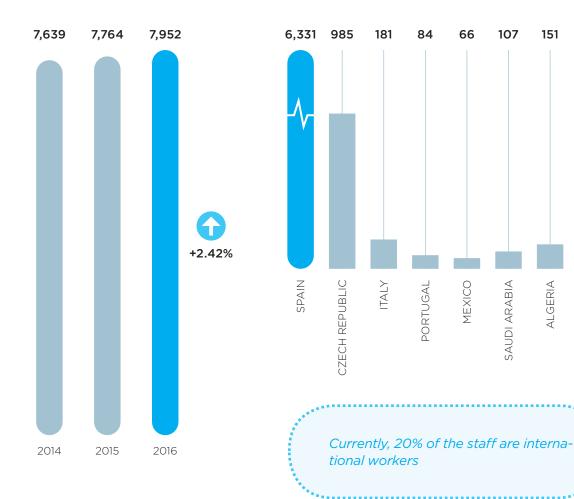


Aqualia workers in El Rocío.

151

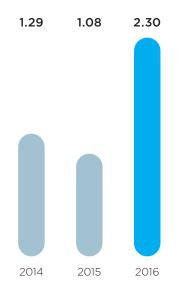
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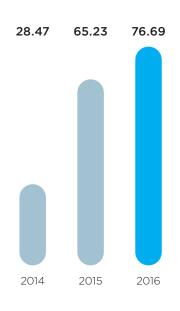
OTHER COUNTRIES



#### **ROTATION OF EMPLOYESS 1**

#### PROPORTION OF CONTRACTS FOR AN INDEFINITE DURATION 1





Indefinite-contract percentages and rotation of employees calculated for employees in Spain.

## COMMITMENT TO EQUALITY AND DIVERSITY

Equality between men and women in access to employment and to opportunities relating to the development of their professional careers is a fundamental principle in Aqualia, which continuously works to give visibility to the talent of the women working in the company.

## Equal opportunities work in Aqualia

Aqualia's recruitment processes continue to be made under the model of selection by skills which consists of preparing a questionnaire containing the same questions to be answered by all candidates seeking employment, after analysing the skills needed for undertaking their functions.

This method allows the uniform comparison of the answers, guaranteeing equality and preventing discrimination during the process.

Since 2011<sup>2</sup> Aqualia has held the "Equality in the Company" award as a recognition by the Ministry of Health, Social Services and Equality of the company's commitment to eliminating barriers between men and women within the employment ambit.



Cristina González, Head of Service in Santiago del Teide.

Aqualia's work in this matter hinges around the second Equality Plan for 2015 - 2018, approved jointly with representatives of the major trade unions nationally and that includes specific measures to fight against inequality for reasons of gender. For the third consecutive year, these measures have been distributed to the entire staff through the training in equal opportunities included in the employees' training sessions.

## "Company socially committed to equality"

In 2016, the municipal council for equality between men and women of Avila City Council recognised Aqualia as a "Company socially committed to equality" in a ceremony held within the framework of International Women's Day for values given to the information measures and actions undertaken in the company.

Aqualia is also a leader in equality for other organisations and actively participates in forums and initiatives to debate and share its experiences of the challenges and opportunities that arise in the company when implementing and developing equality policies.

Notable in 2016 was the company's participation in the "Towards gender balance in the management of companies: opportunities and challenges" seminars held and organised by the Secretary of State for Social Services of the Ministry of Health, Social Services and Equality, EEA Grants<sup>3</sup> and the initiative "More women, better companies" for the adoption of measures that increase the presence of women in pre-management, management and management committee posts.

Aqualia has also undertaken awareness campaigns that go beyond the employment ambit for International Women's Day, the fight against breast cancer and gender violence.



Round table, including Elena Barroso, the head of the legal department, during the conference on gender equality in employment.

#### **Empowering female talent**

Women represent only 19.7% of the workforce in the water sector<sup>4</sup>. In Aqualia, this figure rose to 28% of the staff in 2016, six percentage points more than the previous year (22% in 2015).



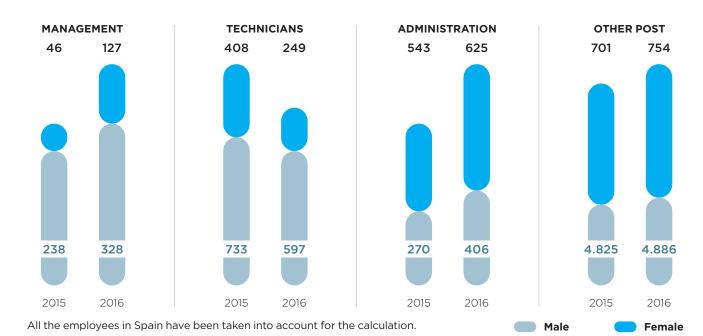
Carmen Rodríguez, Aqualia's Human Resources Director, receiving the "Company socially committed to equality" award granted by Avila City Council.

Traditionally, women - because they joined the employment market later - have represented a lower proportion of workers in companies, especially in some sectors such as water management.



Carmen Rodríguez, Aqualia's HR director, with a group of Aqualia's professionals in the Balearic Islands.

- 2 In 2017, Aqualia will start the procedures for renewing the "Distinction for equality in the company" for three years.
- 3 Financial Mechanism of the European Economic Space with the participation of Norway, Iceland and Liechtenstein.
- 4 Inter-American Development Bank, 2016. Infographics: Does water have gender? Home surveys most recent available data for 17 countries..



Aqualia's strategy seeks to balance the number of women in the organisation and reduce gender inequalities, especially in access to posts of responsibility within the company, through a programme to develop women by reinforcing their presence, visibility and participation in the company's organisation.

#### Second Mentoring Programme

After the success of the first edition in 2016, the Second Mentoring Programme was held to promote female talent. This initiative, in which six women and their mentors took part, is designed to promote the cultural change towards gender equality as well as to orient and facilitate the professional career of the women identified as having high performance potential in Aqualia and to transmit the company's values and know-how.

Aqualia also takes part in other external initiatives designed to promote the number of women in management posts such as the development programme for management of women with high potential in the EOI (Industrial Organisation School) in which two women from the company took part this year.



Participants in the Second Mentoring Programme.

#### First Female Talent meeting

Framed within the Mentoring
Programme, the first feminine female
talent meeting was held during the
year attended by successful women in
management as well as the participants
in the programme, who supplied their
personal and professional experience.



First Female Talent meeting group.

#### #AqualiaContigo

Nearly 2,000 employees have shown their support on the Web site through photographs and messages against gender violence in the form of a large heart, the symbol of the campaign, and its publicising in the social networks with the use of the tags #AqualiaContigo and #HaySalida.

The localities in which Aqualia is present have also shown their solidarity, support and total rejection of gender violence through initiatives such as the signing of adhesion to the social pact by a Talavera de la Reina free of gender violence, among others.

#### Zero tolerance for gender violence

Aqualia undertakes an important work every year to end gender violence through the publication, start-up and participation in various awareness campaigns to mobilise employees and the public.



Image of the heart formed with the photos of employees, showing their support for gender violence victims.

#### **Diversity and social inclusion**

In the ambit of diversity, Aqualia works for the social and employment inclusion of the disabled and other vulnerable groups, contributing to normalise their situation, improve the group's employability and enrich the working environment.

#### **ACTIVITIES UNDERTAKEN IN 2016 TO PROMOTE DIVERSITY IN AQUALIA**

Familia Fundación Adecco plan aimed at the children of employees with a certified disability greater than or equal to 33%. Agreement with the Fundación Prevent to facilitate the undertaking of non-employment practices for persons at risk of social exclusion and with the Fundación ONCE (through the FCC Group).

Awareness seminar in aqualiaContact to work with persons at risk of exclusion.

Integration of persons with intellectual disability in work teams through the Fundación Síndrome de Down.

#### Work and conciliation

To increase awareness and motivate the senior managers of each area and business unit in Aqualia of the importance of the personal/professional balance and other measures attempt to improve conciliation effectively, three awareness seminars were scheduled in 2016 on "Conciliation, a new paradigm in the management of persons," held in Madrid, Barcelona and Seville.



Image of one of the conferences on balance, a new paradigm for personnel management.

#### **AQUALIA WITH THE BEST TALENT**

Aqualia's objectives regarding the training discipline of its employees are fully aligned with the company's strategic objectives, focused on improving the workers' productivity and occupational health and safety.

In addition, the current map of posts and functions was enlarged and consolidated in 2016, standardising and extending it to identify and frame all current personnel in the company with greater functional effectiveness, involving an improvement in existing information and a better analysis of the current personnel in the area.

The professional development of employees is a priority aspect for Aqualia, reinforced in 2016 with a substantial increase in the number of training classes and of the hours of training received per worker compared to 2015.

#### MAIN TRAINING FIGURES IN 20165



**464** [+21% vs.2015]

Courses given



**6.172** [+15% vs.2015]

Participants in the training courses



**68.062** [+26% vs.2015]

Training hours given



**553** [+6% vs.2015]

Investment in training (thousands of euros)



6

Online training (% of total)

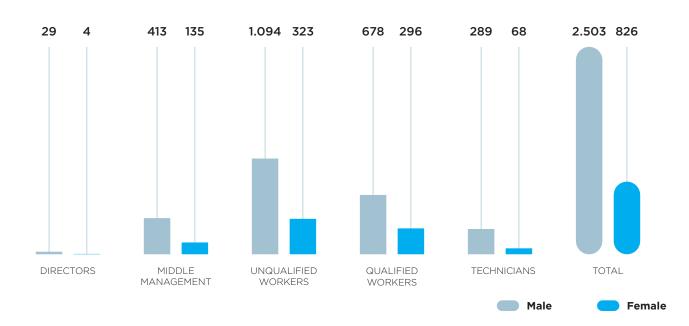
<sup>5</sup> Spain scope. Including training data for expatriate personnel and persons in the Las Tablas International office.

In 2016, 59% of the employees of Aqualia were given training. By gender, among the employees who receive training, 57% were men compared to 66% for women.

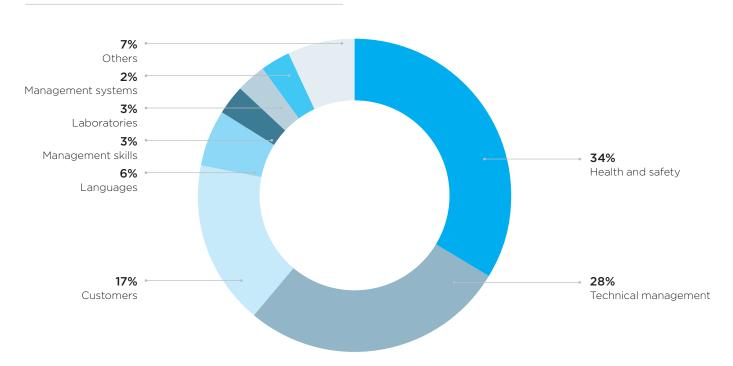


Image of one of the training courses for employees.

## DISTRIBUTION OF EMPLOYEES TRAINED BY PROFESSIONAL CATEGORY AND GENDER



## DISTRIBUTION OF TRAINING HOURS RECEIVED BY COURSES GIVEN (%)



Aqualia also works to develop training maps for specific and critical groups in the organisation such as the heads of service, laboratory personnel and customer service.

Third Otto Walter cycle

2016 saw the third Otto Walter Cycle, Aqualia's transformational leadership programme for middle management that has led the company towards a persons management style that is more participative and catalyses talent to help reinforce the team's cohesion.

The assessment of the effectiveness of the training courses on the control groups in 2016 reached a general average of around seven points out of a total qualification of 10, which will serve to identify new training needs in the training catalogue for 2017.

YOUNG TALENT
Collaboration with academic institutions to train Young professionals

Every year, Aqualia collaborates with universities, business schools and other institutions to support employment insertion and for students and recently graduated young persons to undertake internships in the company.

The company maintained 27 active collaboration agreements with public and private universities and two agreements with business schools in 2016.

The company's specific training programme is focused on the continuous strengthening of occupational health and safety and the specialisation of technical training in the water sector.



Group photo from the third edition of the Otto Walter season.



Recognition by the University of Oviedo.

The University of Oviedo, with which Aqualia collaborates in the international master course on "Operation and Maintenance of Water Treatment Plants" in the university, recognised the support of Aqualia in the practical training of students and graduates in 2016.

Aqualia and the Industrial Organisation School (EOI) signed an agreement in 2016 for collaboration to train professionals in the Water Engineering and Management master course given by the public state foundation. This agreement will allow the company to participate in the process of training those who will be leaders in the sector in future years as well as spreading its vision of the management of the integrated water cycle as a fundamental element for the development of societies and key for the backbone of modern societies.

Another of the activities to promote the integration of young people in the employment market was the participation in 2016 in Company Day in the EOI<sup>6</sup>, advising students who have terminated their postgraduate master on questions relating to the professional environment in a first contact with the water management sector.

Within the framework of the Dual Alliance for Professional Training<sup>7</sup>, Aqualia signed new agreements in 2016 – adding to that signed in 2015 with the Instituto Pere Martell in Tarragona – to promote, drive and develop professional education in Spain. In total, there are already nine collaboration agreements with professional training institutes and one with professional associations.



Félix Parra, Aqualia's General Director, and Fernando Bayón, EOI General Director, signing the partnership agreement to participate in the development of the water engineering and management master's programme.



María Almeida and Carlos Escribano from the Aqualia Human Resources Department attending students in the EOI in the company's space on Company Day.

- 6 Industrial Organisation School.
- 7 State network of institutions and companies committed to the development of quality duel professional training in Spain.

## New collaboration agreements for quality dual professional training

## San Juan de la Cruz secondary school in Madrid:

Agreement to develop dual mode alternation environmental health higher grade training cycle.

## Andreu Nin Institute in El Vendrell, Tarragona:

Agreement to develop in alternance mode with dual training for the higher grade training cycle in physical activities and sports activities animation.

#### **Torre Vicens Institute in Lerida:**

Agreement to develop in alternance mode with dual training for the higher grade training cycle in building projects.

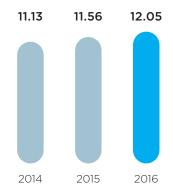
## PREVENTION CULTURE IN OCCUPATIONAL HEALTH AND SAFETY

Sensitising and raising awareness from the prevention perspective is an essential question to guarantee a safe and healthy working environment for the workers.



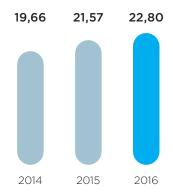
Aqualia employees being trained in OHS.

#### **ACCIDENT RATE AND ABSENTEES**



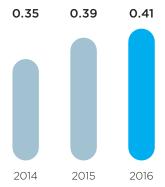
#### **Accident frequency index**

Number of occupational accidents occurred per million working hours in the year.



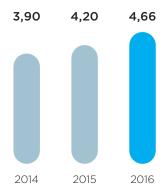
#### Index of occupational accident incidence

Number of accidents occurred for every thousand persons exposed.



#### **Accidents seriousness index**

Number of working days lost due to occupational accidents per thousand working hours in the year.

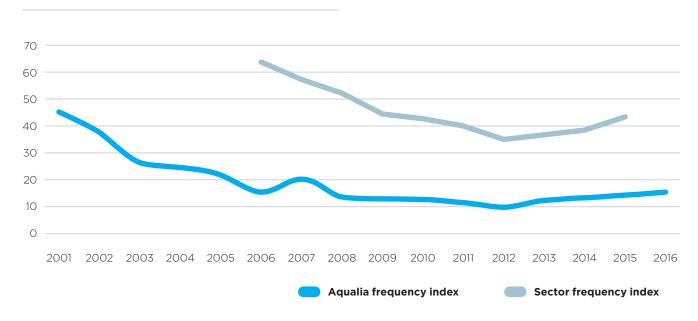


#### **Employment absenteeism**

Total hours lost in relation to working hours in the year.

Although the recent development of the indicators is not positive, two questions must be taken into account. Firstly, that the company's accident rates are significantly lower than the average results for the second sector and, secondly, that the development of the ratios maintains an evolution that is similar to the national trend.

### COMPARISON OF THE FREQUENCY INDICES WITH THE SECTOR



For a further year, the company has renewed its certification for its occupational health and safety management system according to the OHSAS 18001 standard – globally, nationally and internationally – and has started the necessary work for the transition during the next year to the new standard which will replace the current certification and will give the system a more integral vision of the management with a focus on prevention.



Meeting with Aqualia workers on health and safety matters.

#### Focus on prevention management

Aqualia has continued to progress during the year in the effective application of the focus on prevention management in health and safety within the starting of a Web portal<sup>8</sup> that improves the obtaining of information at the contracts level and is an effective management tool for controlling and monitoring.

Compared to previous years, Aqualia has maintained its programme of visits to contractors with a high accident rate and the visits undertaken in 2016 gave rise to the preparation of specific programmes for improvement in 21 selected contractors throughout the country.

In addition, new measures were implemented in 2016, included in the Prevention Culture Improvement Action Plan, that strengthen the work of raising the individual and group awareness of employees regarding the guidelines for safe work in any circumstance.

#### PREVENTION CULTURE IMPROVEMENT ACTION PLAN

Make the organisation's prevention commitment visible

Promote greater operational involvement in prevention Reduce the prevalence of unsafe behaviours Monitor and assess the prevention effort Continuous policy of learning from errors and equity in the assessment

These points are for the strategic objectives.

8 Associated with the occupational risks prevention management computer system designed in 2015.

#### Safety steps

These visits by senior management to the work centres are designed to improve the prevention climate in the organisation and to help identify opportunities for improvement in management to preserve and drive the culture of safety and prevention leadership.

This initiative is usually applied by first level companies in prevention management, the objective of which is to make the prevention commitment by senior management visible.

More than 100 visits were made by general management, zone and branch directors in 2016.



Group at the first safety walk organised in San Lorenzo del Escorial: Diego Lobo Cámara, DWTP officer; Santiago Lafuente, Aqualia's director for Spain; José Luis San Segundo, Aqualia's El Escorial service head; Carmen Rodríguez, Aqualia's HR director; Alfonso García Quijada, plumbing and DWTP officer; Félix Parra, Aqualia's General Director, and Javier Cano Torres, designated OHS worker.



OHS technicians during one of the workshops held as part of the OHS Culture Improvement Plan.

#### Safety talks

These talks are designed to encourage the workers' participation and the standardisation of the frequent treatment of health and safety matters in all work centres.

A guide has also been prepared and a practical workshop held on the management system to be implemented progressively by the heads of service.

## Safety refresher training and comments

Training sessions by OHS technicians on the risk of the work post using new audio-visual material and a new teaching method, seeking to learn, give participation and obtain the workers' commitment.

With this same objective, the method followed in safety inspections has been modified to reinforce the workers' involvement and participation.

Work also continued during 2016 on the development in the Aqualia occupational health system in which representatives of the major trade unions and company management collaborate to improve safety conditions through dialogue and the design of best practices at the global level.

#### **Road safety**

Prevention in the ambit of road safety and the promotion of safe driving is also an essential question to improve the quality of occupational safety in the company. Progress in the framework of the Aqualia road safety campaign in 2006 included:

- A new health and safety policy was signed that reaffirms the company's commitment to road safety.
- Work was also undertaken on compiling information on traffic accidents to assess the incidence indices.
- A sworn declaration was requested on the workers' driving capacity, especially regarding the points maintained on the driving licence.

#### **Healthy Company**

The Healthy Company programme encourages employment well-being by promoting physical activity and sport, healthy food and habits and collaboration with the community.

The management unit in Lerida was the first work centre to start the initiative, joined in by all the workers, offering incentives and activities proposed by the employees themselves to live a healthier life, such as special prices in the gymnasium, nutritional advice and the distribution of fruit in the work place, organisation of group activities and sports competitions, among others.

## Aqualia started the assessment of the workers' psycho-social risks in 2016.

The objective is to progress and to continue deepening on questions surrounding the concept of occupational health and to detect prematurely the most frequent health problems among the workers and then to define specific measures that contribute to improving the results.

The actions carried out in 2016 before the start of the risk analysis included:

- Definition of the assessment method to be used.
- Undertaking of a study to determine the "analysis units," allowing the diagnosis surveys to be managed with greater effectiveness.
- Awareness workshop for 20 persons in which prevention technicians, human resource managers and workers' representatives took part.



Workers in the Lerida service during the presentation of the Healthy Company programme.

## Aqualia: an example of occupational health and safety

Every year, Aqualia takes part in forums and meetings, together with other leading institutions, to discuss best practices carried out in the company within the ambit of the prevention of occupational risks.

Notable in 2016 was the participation in the Foro Altanto 2016 and in the Third Prevention Culture Meeting, organised by the Andalusian Institute for Prevention Culture (IAPRL) and the obtaining of recognition for its work in the workers' health and safety.



Aqualia discusses the mileposts and challenges to the company in the area of employment well-being during its participation in the 2016 Altanto forum.

## Recognitions in workers' health and safety matters

Finalist in the eighth ATLANTE prizes in the category of integration elements for the prevention of occupational risks.

Finalist in the 2016 ASEPEYO prizes for the project to improve the prevention culture in Aqualia

Winner of the 2016 FCC prize in the prevention management category.



Company representatives recognised in the ASEPEYO prizes. From left to right, Manuel Aragonés, Prevention Director of FCC Industrial, Constantino Perea, Asepeyo Major Accounts Director, Carmen Rodríguez and Guillermo Martínez, FCC Industrial Engineering and Development Director.

## RESPONSIBLE MANAGEMENT OF SUPPLIERS AND CONTRACTORS

During 2016, Aqualia worked with more than 11,500 suppliers 99% of which were local<sup>9</sup>. In total, the company spent €340 million on payments to its suppliers.

The sustainability of the business and the confidence that the stakeholders deposit in Aqualia are to a great extent conditioned by the involvement of the suppliers and contractors in responsible management with the responsibilities shared in the provision of a quality service in all phases of the integrated water cycle.

Sharing the mission, vision and values of Aqualia with the entire value chain and making it participate in the common objective in favour of sustainability and quality contributes to defining a long term strategy with them, based on mutual confidence.

The criteria for assessing and monitoring suppliers defined by Aqualia seeks at all times the compliance with the spirit and requirements of the company's values and policies.

<sup>9</sup> Only the data on companies managed through SAP are taken into consideration. "Local" suppliers are those in which the supplier's country of origin matches that of the company. The rest are considered global suppliers.

### SUPPLIERS ASSESSMENT AND MONITORING CRITERIA



## TECHNICAL QUALITY

Quality management system as per ISO 90001.

Initial assessment before assessing the tender.



## RESPECT FOR THE NATURAL MEDIUM

Contractual requirement of the least possible impact on the environment.



#### COMPLIANCE IN RISKS PREVENTION

Control and monitoring of suppliers' compliance with occupational health and safety prevention legislation.



## COMPLIANCE WITH EMPLOYMENT REGULATIONS

Contracting processes as per regulations and possession of occupational insurance.



## CODE OF ETHICS

Obligatory compliance with Aqualia's code of ethics and the 10 principles of the United Nations Global Compact.





## **About this** Report

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Once again Aqualia presents its Corporate Social Responsibility Report for 2016, prepared according to the option to follow in full the guidelines for preparing sustainability reports in line with version G4 of the Global Reporting Initiative and verified by an independent external entity (AENOR).

The analysis of the material content, index of GRI G4 content and verification report are available at:

www.aqualia.com/es/responsabilidad-social/memorias-rsc, memoria 2016.

This new edition gives the most notable facts in matters of corporate responsibility that have occurred in Aqualia during 2016 and is a new milestone in transparency of communication with its stakeholders.

The structure and contents of this report are determined by the strategic lines of the FCC Group corporate responsibility policy – connection with the public, intelligent services and exemplary behaviour – and the materiality study also made in the framework of the Group's integrated report before its preparation.

The quantitative information reported is for the period mentioned although references also made to the data for previous years to show the development of the most important magnitudes.

## **AQUALIA DATA**

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