aqualia

Climate change strategy

Contents

CLIMATE CHANGE STRATEGY

The context of climate action

INTERNATIONAL COMMITMENT

As impacts on natural, social and economic systems become increasingly visible and widespread, the international community has stepped up efforts to address the climate crisis through multilateral frameworks, national commitments, cross-sector cooperation and private sector commitments.

With the signing of the **Paris Agreement**[1] in 2015, the international community committed to reducing greenhouse gas (GHG) emissions to keep the rise in global temperatures from pre-industrial levels below 2°C and preferably below 1.5°C.

Today, 150 countries—representing 88 %[2] of global GHG emissions—have adopted, announced or are setting targets aimed at achieving net-zero emissions.

While the **Paris Agreement** remains the key reference framework, and despite progress on Nationally Determined Contributions (NDC[3]), climate finance and clean-technology development, global GHG emissions remain at levels that are incompatible with climate goals.

A 2020 UN report on the emissions gap estimates that planetary warming is heading for an increase of between 2.6°C and 3.1°C this century,[4] with severe impacts already visible (extreme events, biodiversity loss, food insecurity).

Climate change is one of the greatest challenges facing humanity today and requires urgent action.

The 28th Conference of the Parties to the UN Framework Convention on Climate Change (COP28),[5] held in Dubai in 2023, marked another turning point by acknowledging the need to move towards the phased-out use of fossil fuels. Progress was also made on operationalising the Loss and Damage Fund and on the first Global Stocktake of the Paris Agreement, which showed that current action is insufficient and that profound transformation is needed across all sectors.

The most recent **Conference of the Parties (COP29)**[6] to the **United Nations Framework Convention on Climate Change**, held in Baku in 2024, focused on climate finance and on supporting the most vulnerable countries.

Within this context, nations, the private sector, civil society and financial institutions play an increasingly important role. Climate action is a shared responsibility and a strategic opportunity to reshape the global development model towards greater sustainability and equity.

The United Nations has stated that priority measures to combat climate change must include direct support for zero emission technologies and infrastructures, as well as the promotion of nature based solutions.

[1] https://unfccc.int/sites/default/files/spanish_paris_agreement.pdf
[2] Net Zero Tracker, Net Zero Stocktake 2024 (2024), Net Zero Tracker.
[3] NDC – Nationally Determined Contributions.
[4] UN Environment Programme, Emissions Gap Report 2024 (2024), UNEP.
[5] https://www.un.org/es/climatechange/cop28
[6] https://www.un.org/es/climatechange/cop29

The European Union has positioned itself as a benchmark for climate action. It aims to cut GHG emissions by at least 55 % by 2030 compared with 1990 levels. It has also set a target for renewable energy to account for 45 % of consumption, while improving energy efficiency by 13 %. All this forms part of the **European Green Deal** package, whose main goal is to achieve climate neutrality by 2050.

From an adaptation perspective, the EU adopted its **Climate Change Adaptation Strategy** in February 2021 in response to global warming, thereby seeking to build a more climate-resilient society.

The **Sustainable Finance Disclosure Regulation (SFDR)** provides a reference framework for organisations that manage investment funds or pension funds and for insurance companies, thereby defining when their products integrate sustainability risks, possess sustainability characteristics or pursue a sustainable investment objective, in line with the EU taxonomy.

In the private sector, driven by tighter regulation, climate-related financial risks and growing pressure from investors, consumers and other stakeholders, companies are increasingly committed to sustainability and decarbonisation targets.

In sustainable finance, the **EU Taxonomy** is a unified classification system that allows identifying sustainable economic activities on the basis of **six environmental objectives:**

1. Climate change mitigation
2. Climate change adaptation
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy
5. Pollution prevention and control
6. Protection and restoration of biodiversity and ecosystems

In the field of reporting, numerous initiatives and frameworks guide climate-related disclosures.
The CSRD—European Directive 2022/2464 on corporate sustainability reporting—seeks to harmonise the environmental, social and governance (ESG) information produced by companies with more than 1,000 employees. The directive requires that sustainability information must follow common standards: the European Sustainability Reporting Standards (ESRS), which were developed by the European Financial Reporting Advisory Group (EFRAG). Among them, ESRS E1 deals with climate change and covers both mitigation and adaptation, including the management of risks, opportunities, impacts and related metrics.

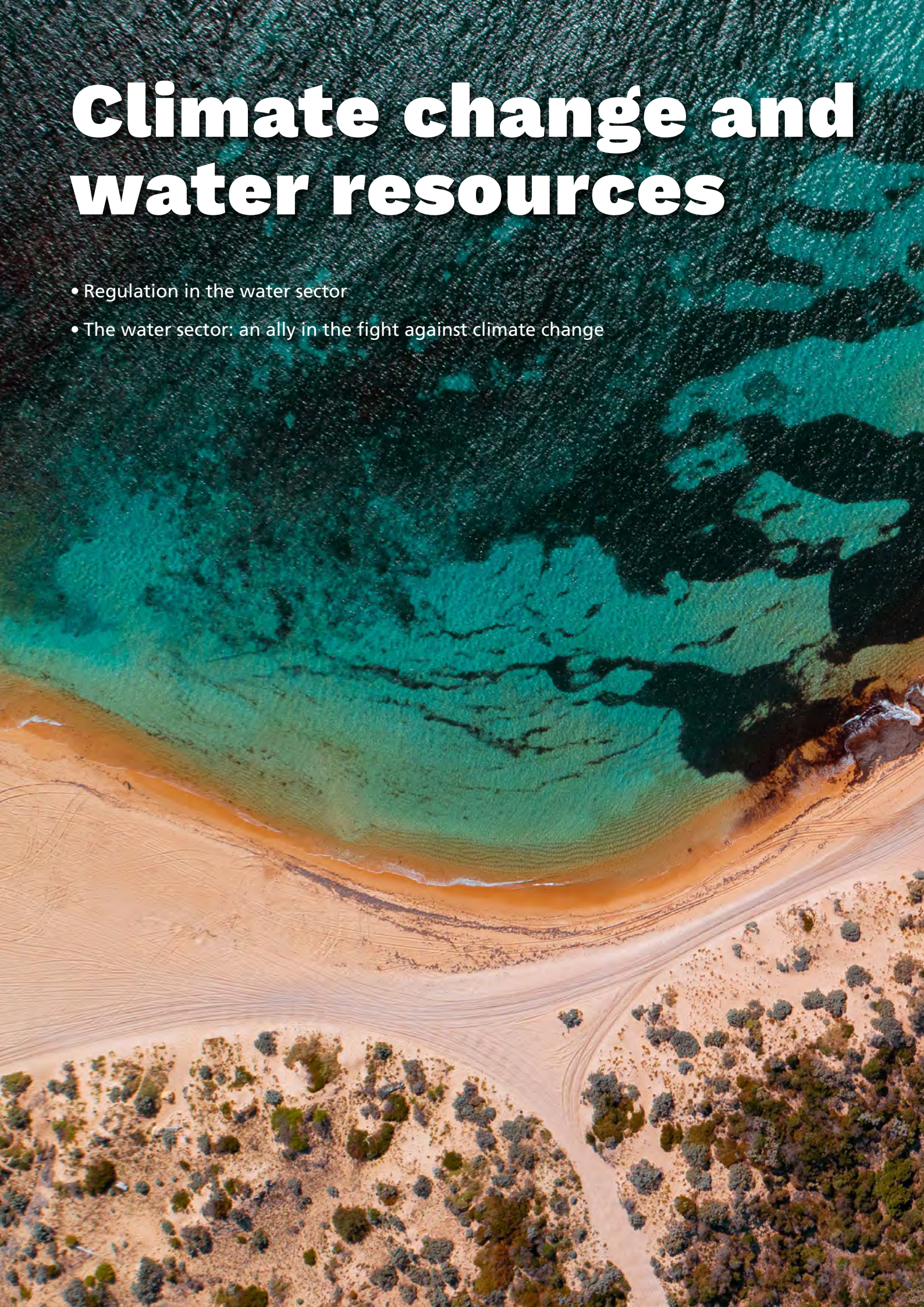
In the United States, the **Securities and Exchange Commission (SEC)** adopted new climate-risk reporting rules for listed companies in March 2024. These rules require the disclosure of material risks related to climate change, including their impact on the company's strategy, operations and financial position, together with specific metrics on greenhouse gas emissions.

Many countries have also begun adopting the new **International Sustainability Standards Board (ISSB) framework**, made up of IFRS S1 and IFRS S2, which set global requirements for sustainability- and climate-related financial disclosures.

Regarding due diligence, the **Corporate Sustainability Due Diligence Directive (CS3D) 2024/1760** requires that large companies identify and prevent negative environmental and human-rights impacts at any stage of the value chain, both upstream and downstream, as well as design measures against those impacts.

Climate change and water resources

- Regulation in the water sector
- The water sector: an ally in the fight against climate change



Water is directly affected by the climate crisis and, by extension, so is water resources management. At Aqualia, a company operating in several countries and at different levels of implementation, we are aware of this challenge and tackle it through the expertise of our teams and the application of innovative solutions wherever we work.

Climate change is triggering extreme weather phenomena such as floods, heatwaves and droughts. The resulting temperature rise is altering the entire water cycle. This causes the melting of glaciers, sea level rise and high evaporation, thereby generating long-term effects that alter the climate and negatively affect the sustainability of our planet.

According to the United Nations report, *Progress on implementation of integrated water resources management,*[7] many areas of the world are vulnerable to water-related natural disasters, especially in the global South.

Climate change affects the **global hydrological cycle**, making extreme phenomena such as drought and flooding increasingly frequent and severe, thereby leading to more polarised weather conditions such as uncontrolled precipitation or, conversely, meteorological drought.

Water quality can also be affected by reduced snow and ice or by an increase in pollutants, algae and other harmful microorganisms. In the long-term, climate change can have serious implications for human health, food security, energy production and aquatic and terrestrial ecosystems.

Diseases such as COVID-19, Ebola and malaria, which are transmitted through water, are consequences of ongoing ecosystem degradation. **Ecological restoration** therefore becomes a priority for supporting the goals of adapting to and mitigating the effects of climate change. At the same time, it is the best response for improving water quality and availability.[8]

Adapting to and mitigating climate change requires sustainable management of water resources. Evidence of this is that virtually all countries with **National Adaptation Plans (NAPs)** have included water as a priority sector, and 40 % have reported developing risk management programmes for water-related disasters.

The UN also warns that, unless the current pace accelerates, sustainable water management will not be achieved before 2050, which will negatively affect more than 3.3 billion people. Today, **more than 2.2 billion people lack safe drinking water, and half the world's population faces water restrictions throughout the year**—factors that will only worsen if climate change is not halted.[9]

In general, with regard to water resources, climate change has caused:

Changes in the *cryosphere* due to the following factors:

- Changes in mountain glaciers, ice caps and ice shelves: increased meltwater and fresh water entering the sea, along with lake formation.
- Reduced extent of cover by snow and permafrost, and earlier river flow peaks.

Hydrology and water resources subject to various impacts:

- Alteration of surface water and groundwater systems, variability in river flows and reduced underground flow in aquifers.
- The warming of lakes and rivers impacts freshwater ecosystems, which can impair water quality by altering the chemical properties, and it also causes greater erosion.

- Riverine, flash, coastal or overtopping floods, together with urban and sewer flooding, attributable to climate change and human intervention.

- Meteorological, hydrological, agricultural and environmental droughts, likewise stemming from factors related to climate change and humans.

With regard to water infrastructure, climate change increasingly calls for adaptation measures.[10]

As far as storage is concerned, the safety and sustainability of reservoirs and aquifers must be assessed, although groundwater enjoys greater protection against the aforementioned changes. As a non-conventional alternative, water reuse requires special treatment and safety measures. Other options include desalination, which is not efficient in terms of carbon footprint, and harvesting atmospheric moisture in fog zones, an option with benefits due to its low cost.

Regulation in the water sector

Compliance with current legislation is the unavoidable basis of our commitment to society and the planet at every level and in all the territories where we operate.

In Europe, the water management sector faces tighter legal requirements following the adoption of **Directive (EU) 2024/3019** of the European Parliament and of the Council concerning urban wastewater treatment (UWWTD – Urban Wastewater Treatment Directive). Its objective is to improve water quality, safeguard the environment and achieve climate neutrality. It applies to urban centres with more than 1,000 inhabitants and to rural areas that require it because of the condition of their sanitation systems.

Also noteworthy is **Regulation (EU) 2020/741** on water reclamation and reuse[11] and its transposition into Spanish law by **Royal Decree 1085/2024**.

This regulation sets minimum water quality and monitoring requirements and sets forth risk management provisions to ensure integrated water management.

Finally, **Directive (EU) 2020/2184,** on the quality of water intended for human consumption, and its transposition into Spanish law by **Royal Decree 3/2023** establish the technical-health criteria for the quality, monitoring and supply of drinking water. The regulation adopts a risk-based approach, updates the parameters to reflect technical and scientific advances and regulates emerging hazards such as *microplastics* and endocrine disruptors.

[7] *UN Water, Progress on implementation of integrated water resources management (2024)*, United Nations, UN Water, UN Environment program.

[8] United Nations, Climate action, *Water: at the heart of the climate crisis (2024)*: https://www.un.org/es/climatechange/science/climate-issues/water

[9] European Commission, Consequences of climate change (2024): https://climate.ec.europa.eu/climate-change/consequences-climate-change_es

[10] *UNESCO, United Nations World Water Development Report 2020: Water and Climate Change (2020)*, UNESDOC.

[11] https://www.boe.es/doue/2020/177/L00032-00055.pdf

The water sector: an ally in the fight against climate change

At Aqualia we are aware that water is a source of life and health for our planet and for humanity, and we are also aware of how fragile it is, increasingly threatened by climate change and water stress. We address this challenge with responsibility and commitment, translated into real actions based on our extensive experience in managing the urban water cycle.

As mentioned above, prolonged droughts, extreme weather events and declining rainfall and its increasingly irregular distribution are major threats that jeopardise access to water, which have to be faced in the coming years.

At the most recent **Conference of the Parties (COP29),**[12] the "Water for Climate" dialogue highlighted the important links between water management and climate change, biodiversity loss, pollution and the human impact of desertification. The final joint declaration set out a series of commitments for the nearly 50 countries that endorsed it:

- Promote cooperation and partnerships at international, regional, river and basin levels.
- Conduct more in-depth scientific research into the causes and impacts of climate change on water resources, basins and related ecosystems.
- Strengthen policy action on water and climate change.

In this context, it is urgent that we anticipate the foreseeable climate and water crises, and management of the integrated water cycle is taking a leading role. The success of strategies and policies against climate change requires incorporating water as a strategic vector and a priority line of action.

The activities of the integrated water cycle are embedded in the natural environment, and therefore, environmental care is intrinsic to the day-to-day management of these services. Companies in the sector must make efficient operation their main goal, while managing water sustainably and with respect for the environment.

Driving a **just transition** that reduces water and energy consumption, formulating a strategy with fewer emissions and engaging in ecosystem restoration and protection are unavoidable obligations if we are to continue ensuring the planet's sustainability and help achieve Goal 13 of the 2030 Agenda, which sets out climate action measures to strengthen resilience and improve adaptation to climate risks.

Faced with these major challenges that will shape the development of forthcoming generations, Aqualia is fully aware of the current water crisis caused by

[12] https://www.un.org/es/climatechange/cop29

climate change—described by the United Nations as "the gravest threat to humanity"—and of the urgent need to adopt adaptation and mitigation measures to safeguard water security for the world's population. As managers of this essential resource, we mobilise to mitigate the water crisis wherever we operate, therefore deploying state-of-the-art technology, reducing water losses and optimising consumption.

Our activities are conducted within a robust **framework of public-private collaboration**, supported by technical capabilities and a highly specialised team that strives to ensure the future delivery of water services at the same level of excellence, founded on the three pillars of sustainability: social, environmental and financial.

Innovation and technology in the fight against climate change

Viable and effective solutions

We invest in developing viable solutions for energy efficiency and reducing the carbon footprint, as well as inclusive, climate-smart products and services that advance the transition to a low-carbon economy.

Innovating for change

We develop projects to transform Waste Water Treatment Plants (WWTPs) into genuine bio-factories that actively help tackle the climate emergency.

Carbon footprint

We were the first company in the Spanish water sector to register a corporate-wide carbon footprint under ISO 14064-1.

Energy efficiency

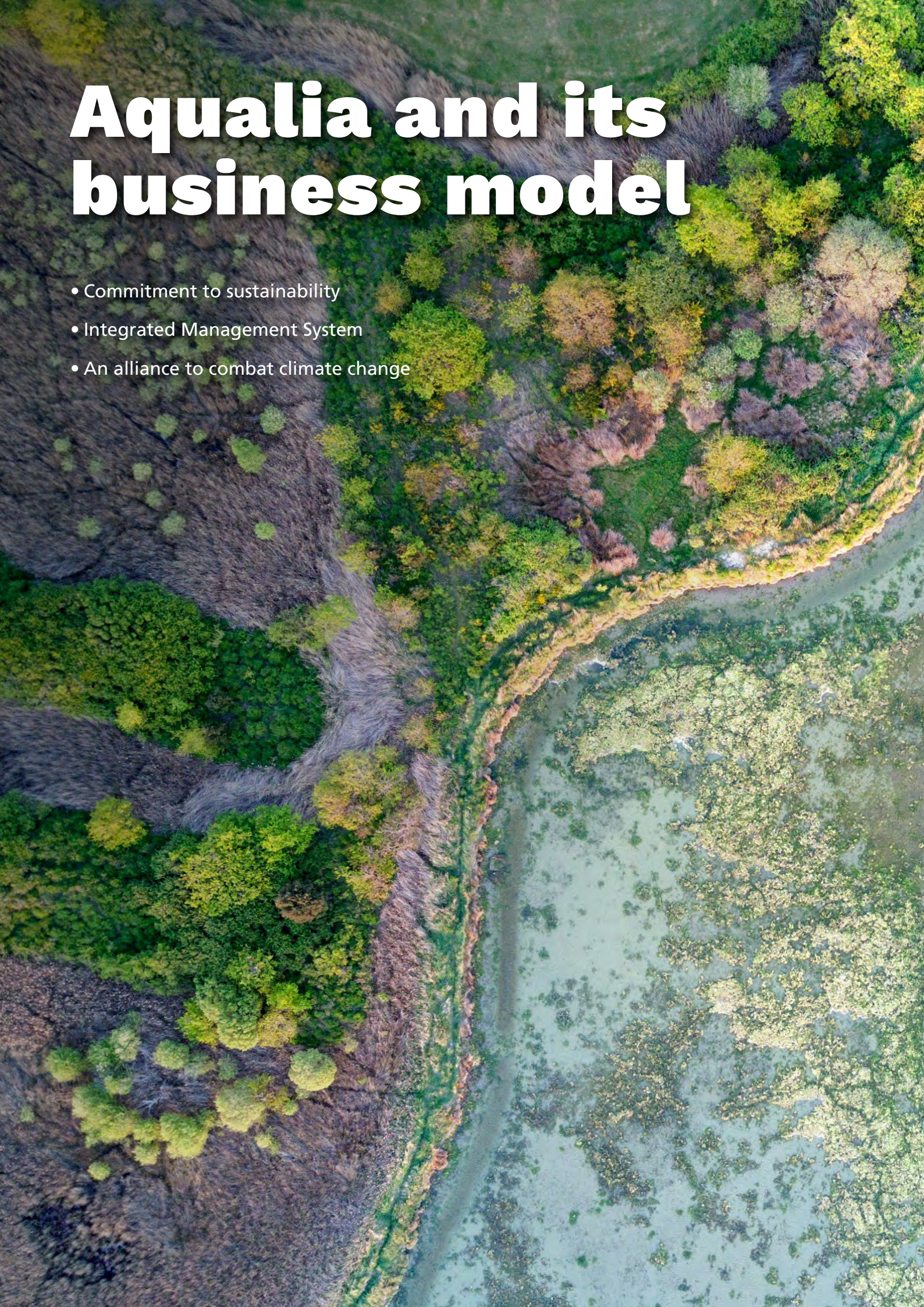
We have implemented an ISO 50001 certified Energy Management System, which entails setting measurable targets to optimise the use of energy resources across our activities.

Sustainable facilities

We develop technologies to lessen the environmental impact from operating and managing our facilities.

Aqualia and its business model

- Commitment to sustainability
- Integrated Management System
- An alliance to combat climate change



Sustainability is central to our business of integrated management of the urban water cycle, which we develop in line with Europe's pathway towards a clean, fair and competitive climate transition.

Aqualia is the urban water cycle management company owned by the citizen services group FCC (51 %) and by the Australian ethical fund IFM Investors (49 %). We are the fourth-largest water company in Europe by population served and the ninth-largest worldwide, according to the latest Global Water Intelligence ranking[13] (December 2024).

We provide technical solutions and quality services across all phases of the integrated water cycle, aiming to enhance the well-being of the people and communities we serve. Central to our work is the preservation of water resources and the environment, achieved through innovative, efficiency-driven management, guided by the United Nations Sustainable Development Goals (SDGs) and in line with the legal and regulatory frameworks of each geographic region.

Our activity

spans every stage of the urban water cycle—from **abstraction** and **treatment, purification** and **reuse,** to **distribution, customer management, sewerage** and **infrastructure construction**—adapting to the specific business model of each region, where our solid experience, adaptability and strategic leadership are reinforced in the various regions where we operate.

Focused on concessions and services, our activities encompass integrated water cycle concessions and proprietary infrastructure; infrastructure concessions under build-operate-transfer (BOT)[14] models; operation, maintenance and irrigation services; as well as technology and network activities, including engineering, procurement and construction (EPC)[15] contracts and industrial water treatment operations.

Accordingly, **we centre our management on a business model of public-private partnership, consequently forging alliances with the water authorities of the countries where we operate, with a view to achieving long-term sustainable growth.** Therefore, together with each country's regulators, we apply criteria to ensure reasonable profitability throughout the water cycle value chain, from facility design to the management of major investment projects in water systems.

As managers of the integrated urban water cycle, we operate in a sector that is key to both climate change mitigation and adaptation. Water is one of the resources most vulnerable to climate impacts, and its efficient management can be a critical lever for global climate action.

[13] https://www.globalwaterintel.com/
[14] *Building, operate & transfer.*
[15] Engineering, procurement and construction.

Commitment to sustainability

The 2030 Agenda sets the course for many of the strategic lines on which we work. The various crises of recent years have tested the commitment of countries and organisations to the Sustainable Development Goals. Nevertheless, Aqualia continues to carry out actions linked to the SDG targets **and has even become the first company in the sector to obtain AENOR's Sustainable Strategy certification**, which involves defining how we contribute to the SDGs through our activities in the countries where we operate.

Specifically, SDG 6 Clean Water and Sanitation, is aligned with our core activity and is our top priority. Regarding the environment and climate change, we added SDG 7, Affordable and Clean Energy; SDG 9, Industry, Innovation and Infrastructure; SDG 12, Responsible Consumption and Production; SDG 13, Climate Action; and SDG 15 Life on Land.

Priority commitments by activity

SDGs on which Aqualia has the most significant and direct impact according to our stakeholders

Linked SDGs

Corporate commitments

SDGs on which we have an impact according to our stakeholders (corporate commitments)

Sustainability Policy

Our **Sustainability Policy**, based on prevention, continuous improvement and compliance, expresses our commitment to the environment, to efficient water management and to community well-being. It sets forth how we act and summarises the ESG-related actions contained in other documents such as the **Aqualia 2024–2026 Sustainability Strategic Plan.**

WHY THE SUSTAINABILITY POLICY IS IMPORTANT

It details and explains the principles that must guide Aqualia's activity

- People-centred approach
- Service efficiency
- Financial consistency
- Innovation
- Environmental engagement
- Social awareness and engagement
- Ethics and transparency
- Business integrity
- Compliance

It harmonises our way of operating in the different territories where we are present

It reflects the current governance model through the Integrated Management System

- Data monitoring and analysis
- Communication management and information access
- Risk identification
- Prevention, mitigation and assessment of potential impacts
- Participation and dialogue with internal and external stakeholders

Its commitments shape our relationship with internal and external stakeholders

IT ESTABLISHES OPERATIONAL GUIDELINES FOR SUSTAINABLE DEVELOPMENT IN SEVEN AREAS, IN LINE WITH THE SUSTAINABILITY STRATEGIC PLAN

1. Climate emergency and care for the planet

We believe in an integrated and circular water cycle that can turn cities into respectful spaces.

2. Technology for integrated management

We tailor our technologies to sector needs and take our know-how to every country where we operate.

3. People management

We work for people's well-being and challenge ourselves to deliver the best possible service.

4. Financial and business strategy

We apply reasonable profit criteria and integrate our capabilities across every area of the value chain.

5. Ethics and compliance

We operate according to the highest standards of corporate integrity, ethics and transparency.

6. Strategic communication

Listening and dialogue with our stakeholders are strategic for conveying messages about integrated water cycle management.

7. Partnerships for generating a positive impact

We form a part of the communities we serve and help build a fairer, more diverse and inclusive society.

THE SUSTAINABILITY POLICY SETS OUT THE COMMITMENTS OF THE MANAGEMENT SYSTEMS:

PREVENTION CONTINUOUS IMPROVEMENT COMPLIANCE WITH REQUIREMENTS

The scope of the management system is:

- Quality and asset management
- Competence of testing laboratories
- Innovation
- Environmental and energy management
- Occupational health and well-being
- BIM methodology
- Information security management.

For the following activities: Integrated water cycle management, water quality control laboratories, design and construction of treatment plants for all types of water and effluents, and concessions of hydraulic works.

See Sustainability Policy

At Aqualia we are aware of these issues and show it in our daily actions, without postponing important decisions that contribute to sustainability, because we believe in an integrated and circular water cycle that is capable of turning cities into respectful spaces.
We are therefore committed to:

Launching initiatives that achieve the decarbonisation goals of the economy

Set by international institutions, and contributing to climate change mitigation through energy efficiency measures, switching from fuel-based energy sources to renewables or deploying new emissions reduction technologies, so that we achieve our decarbonisation goal and reach Net Zero emissions by 2050. We will also adapt the company to the consequences of climate change, thereby reducing the impact on the natural environment.

Protecting natural resources, biodiversity and ecosystems

By fostering initiatives to restore environments and prioritising nature-based solutions.

Using processes, practices or materials that avoid, reduce or control pollution and its risk

Through a prevention-led approach, thereby improving environmental performance, resource consumption, biodiversity management and energy- and climate-related performance. We identify the actual and potential environmental and energy impacts of suppliers, contractors and business partners to prevent possible negative effects.

Managing water efficiently

By implementing management practices that ensure optimised use and the minimisation of losses, to guarantee that not a single drop is wasted.

Sustainability Strategic Plan (PESA)

The PESA is a dynamic plan, subject to the changing needs of the business, of utmost importance in today's highly volatile context. Our focus must always be on the company's strategic objectives to consolidate an efficient organisation and ensure sustainable growth.

Our first Sustainability Strategic Plan, implemented in 2021–2023, focused on innovation, design, regeneration and the development of solutions to supply water in areas with limited water resource availability. The plan included projects to decrease consumption, optimise energy use, reduce emissions and protect and restore ecosystems. In addition, after listening to various stakeholders for the purpose of identifying the impacts of our activity, other initiatives were added to drive the circular economy and the reuse and circularity of water.

With the **Aqualia 2024–2026 Sustainability Strategic Plan**, approved in December 2023, we updated our commitments, objectives and actions. It is a solid, cross-cutting roadmap with a positive impact on the business. It continues with the previous PESA, which marked a turning point for the company in integrating and managing ESG aspects, with a firm purpose: **ensure the well-being and progress of people and communities by delivering a public service such as sustainable water management.**

It embodies a set of internally agreed, firm and realistic commitments that facilitate essential day-to-day management, with a clear commitment to sustainability. It establishes **43 objectives**, structured around **seven strategic lines**, targeted at our activity, supply chain, employees and society.

It is also a dynamic document, subject to annual review and updating. Given the changing nature of stakeholder expectations and concerns, and the ever-faster pace of events, the plan is subject to continuous updating.

Aqualia's strategic lines

- Aqualia's activity
- Cross-company lines
- Driving lines

SL1 CLIMATE EMERGENCY AND CARE FOR THE PLANET
Its purpose is to activate initiatives to adapt Aqualia to climate change and reduce the impact on biodiversity.

PROJECTS
P1 Reduction of water consumption.
P2 Energy optimisation and reduction of emissions.
P3 Promote the circular economy.
P4 Ecosystem protection and restoration. Biodiversity.
P5 Transfer of technology from the solutions obtained in R&D projects to production.

SL2 TECHNOLOGY FOR INTEGRATED MANAGEMENT
Its focus is on implementing digitalisation across the entire water cycle for efficient management.

PROJECTS
P1 Omnichannel customer service.
P2 Asset management and maintenance.
P3 Water analytics (aWA).
P4 *Be Aqualia* App.
P5 Cybersecurity.

SL3 PEOPLE MANAGEMENT
This line guides working towards the physical and emotional well-being of our people and towards creating a sustainable organisational identity.

PROJECTS
P1 Raising awareness about equality and diversity.
P2 Be talent/training.
P3 Improvement of the employee experience.
P4 Zero harm to workers.
P5 Holistic health project.

SL4 FINANCIAL AND BUSINESS STRATEGY
Its aim is to achieve sustainable growth based on reasonable profitability and on integrating the capabilities of the business along the value chain.

The development and targets of this strategic line are set out in Aqualia's Business Strategic Plan.

SL5 ETHICS AND COMPLIANCE
This strategic line seeks to pass Aqualia's culture and values to the whole company and its supply chain.

PROJECTS
P1 Development of the Compliance Model.
P2 Training and awareness in the culture of ethics.
P3 Awareness of the culture of ethics in our dealings with third parties.
P4 Culture of ethics in the supply chain, supplier approval.

SL6 STRATEGIC COMMUNICATION
Its development highlights Aqualia's performance and connects the company's diverse realities and contexts.

PROJECTS
P1 Draw up an annual communication plan to provide stakeholders with a strategic narrative that matches Aqualia's purpose and the priority SDGs.
P2 Raise awareness—inside and outside the company—of the communication plan's objectives through the educational role of the brand.

SL7 PARTNERSHIPS FOR GENERATING A POSITIVE IMPACT
This establishes mechanisms for creating partnerships that deliver a positive impact through collaborative leadership. Aligned with global challenges and with the contribution to the SDGs.

PROJECTS
P1 Rate mechanisms for guaranteeing access to water and sanitation.

See Aqualia's Strategic Sustainability Plan 2024-2026

Integrated Management System

Aqualia's Integrated Management System has been implemented in the countries where we operate, with the overall objective of continuous improvement.

1997

Quality Management System (ISO 9001)

1999

Environmental Management System (ISO 14001)

2006

A-LAB (Accreditation of physical-chemical and microbiological laboratory)

2010

R&D&I Management System (UNE 166002)

Energy Management System (ISO 50001)

2011

Information Security Management System (ISO 27001)

2013

Greenhouse Gases (14064)

For over 25 years we have worked with an Integrated Management System that ensures compliance, continuous improvement and risk management. The system covers the quality management of processes, products and services (ISO 9001), environmental management (ISO 14001), energy management (ISO 50001) and innovation management (ISO 56001).

2017

Management of work-life balance (EFR 1000-1)

2020

AENOR SEGURIDAD Y SALUD EN EL TRABAJO ISO 45001

Occupational Health and Safety Management System (ISO 45001)*

AENOR GESTIÓN DE ACTIVOS ISO 55001

Asset Management System (ISO 55001)

2021

AENOR ESTRATEGIA SOSTENIBLE (ODS)

Certificate of Business Contribution to the SDGs

2024

AENOR BIM2 ISO 19650-1 / 2

Information management using BIM (ISO 19650-1/2:2019)

Value-added purchasing management (UNE 15896)

Sustainable procurement (ISO 20400)

2025

AENOR GESTIÓN DE LA INNOVACIÓN ISO 56001

Innovation management (ISO 56001)

* From 2008 to 2019, OHSAS 18001 (replaced by ISO 45001)

Partnerships to combat climate change

At Aqualia we recognise the importance of partnerships to speed up climate action. By collaborating with leading social and economic actors, we can help combat climate change.

Our **Aqualia 2024-2026 Sustainability Strategic Plan** includes a specific strategic line for promoting partnerships that generate a positive impact through collaborative leadership.

Climate change disrupts the supply cycle of water, a basic resource for humanity, whether through excess or shortage. Floods, inundations and droughts are proliferating in the form of extreme weather events that are ever-more frequent and unforeseen.

Aqualia works to guarantee access to water and sanitation through its own activity and through partnerships in the territories where we operate.

Our commitment drives us to develop the best technical, social and environmental solutions and to seek public-private collaboration to make the right to water effective in a stable and safe way. Together we go further.

OUTSTANDING INITIATIVES

United Nations Pact for the Future
It seeks to speed up both compliance with the SDGs and the private sector's contribution as a key player in the transition to a low-carbon economy, as well as promote sustainable investment and ensure ethical governance.

National Water Council in Spain
In charge of ensuring that water management is in line with the country's climate objectives. It therefore promotes sustainable practices and the transition to a decarbonised economy.

European Federation of National Associations of Water Services (EUREAU)
It represents drinking water operators who, in their work, return treated waste water to the environment, while protecting the resource throughout the hydrological cycle.

International Water Association (IWA)
It connects professionals and companies, operating as an international network of experts that promotes sustainable water management.

StepbyWater Alliance
Internationally, it drives initiatives in support of the 2030 Agenda, the Water Action Decade and the outcomes of climate summits.

PERTE for Digitalising the Urban Water Cycle in Spain
For improving water management, increasing efficiency and meeting environmental objectives.

Scientific and Technical Association for Water and the Environment of France
It acts as a platform for the exchange of information and consensus on various aspects of water management, including waste and the environment. It facilitates cooperation in favour of sustainable development.

Strategy for climate adaptation

- Climate governance
- Sustainable finance
- Strategy, our pathway to decarbonisation
- Impact, risk and opportunity management
- Metrics and targets

Back in 2015 we became the first operator to integrate our carbon footprint calculation in all our activities in Spain. By doing so, we not only contribute to sustainable development, we also provide added value to the municipalities we serve by carrying out our activities with minimal environmental impact and maximum energy efficiency, thereby creating safer, more controlled environments.

Our commitment to the planet is embodied in the **2024–2026 Sustainability Strategic Plan (PESA)**, whose action lines and specific targets are aligned with the 2030 Agenda and the Sustainable Development Goals (SDGs). This framework lends coherence to our integrated management and defines our priorities, while responding to the need to contribute to the fight against the climate emergency through **Strategic Line 1, Climate emergency and care for the planet.**

The development of this action line—focused on the climate emergency and care for the planet—comprises five specific projects broken down into 13 objectives, to each of which owners and resources have been assigned. Progress on these projects and actions is tracked via a set of indicators defined and approved by the company and measured against the established annual targets.

SL1 CLIMATE EMERGENCY AND CARE FOR THE PLANET

The main purpose of this strategic line is tied to initiatives that meet the decarbonisation goals for the economy set by international bodies (SBTi), and it adapts Aqualia to climate change and to reducing the impact on biodiversity.

A1 Reduction of water consumption

Reduce non-revenue water volumes

Improve the efficiency of water distribution networks

A2 Energy optimisation and reduction of emissions

Achieve the neutrality of CO_2 emissions

Increase the use of renewable energy

Improve the energy efficiency of facilities

Transform the vehicle fleet

A3 Promote the circular economy

Recover value from sludge

Increase the use of reclaimed water

A4 Ecosystem protection and restoration. Biodiversity

Identify protected areas

Encourage local initiatives to promote biodiversity

A5 Transfer of technology from the solutions obtained in R&D projects to production

Build a portfolio of innovative solutions to fight climate change

Promote mechanisms for technology transfer from R&D to production

With the aim of becoming a carbon-neutral company by 2050, with integrated water management that is resilient and sustainable in extreme climate scenarios, we have drawn up a climate change strategy that is focused on mitigation, adaptation and climate resilience and aligned with the main global frameworks:

- Paris Agreement
- SDG 6 (Clean Water and Sanitation), SDG 13 (Climate Action) and SDG 9 (Industry, Innovation and Infrastructure)
- TCFD recommendations (Task Force on Climate-related Financial Disclosures)
- United Nations Global Compact

Climate governance

Promote a strong culture of climate governance and accountability.

At Aqualia, environmental governance is embedded in a structured, multi-level organisational framework that ensures oversight at the company's highest level. The **Board of Directors** delegates operational responsibilities to the **Chief Executive Officer (CEO)** who, together with the **Management Committee** and a network of specialist committees—including the **Innovation Committee**, the **Management Systems Committee**, the **Sustainable Finance Committee** and the **Coordination Committee**—oversees strategy, regulatory compliance and the management of environmental dependencies, impacts, risks and opportunities.

The Management Committee plays a key role by addressing environmental, social and governance (ESG) issues across the organisation, thereby ensuring that environmental considerations are integrated into its strategic and operational decisions. This committee meets quarterly and receives information from the Strategic Development and Sustainability Department, which leads company-wide sustainability efforts. This department, reporting directly to the CEO, is responsible for analysing future trends, defining corporate environmental policies, supervising regulatory compliance and monitoring progress towards the company's environmental goals.

Sustainable finance

Assess access to green and sustainable bonds for sustainable-infrastructure projects.

The transition to a decarbonised economy requires financing that is aligned with environmental, social and governance criteria at the heart of sustainability.

Green financing goes beyond climate change adaptation and mitigation. By supporting projects and investments with environmental and/or social objectives, it delivers positive impacts for the planet and beneficiary communities.

Main actions carried out

Design and implementation of green finance frameworks

Robust, externally audited and aligned with international standards.

Access to long-term financing

With favourable terms (investment grade, low premiums).

Diversification of sustainable finance instruments

Syndicated loans, green bonds and bilateral facilities.

Market recognition and validation

From investors and for sector awards.

Allocation of funds to projects with a clear environmental impact

Ranging from energy efficiency and water treatment to emissions reduction and the circular economy.

2022	**€1.1 billion syndicated green loan** Renewable energy, water treatment, sustainable transport
2024	**€275 million green bond by Georgia Global Utilities (subsidiary in Georgia)** Improved water access, infrastructure and climate adaptation
2025	**€500 million green bond** Refinancing, climate projects, green infrastructure **€750 million in bilateral green loans** Complement to the bond, distributed financing

Strategy, our pathway to decarbonisation

Over the years we have made good on our environmental commitment through the development of various projects and actions that have established us as a pioneer in this area within the sector.

Our climate change strategy centres on management based on three lines of action, all of them underpinned by innovation as the driver for developing solutions and products that add value to our own integrated water management and to the planet's sustainable development.

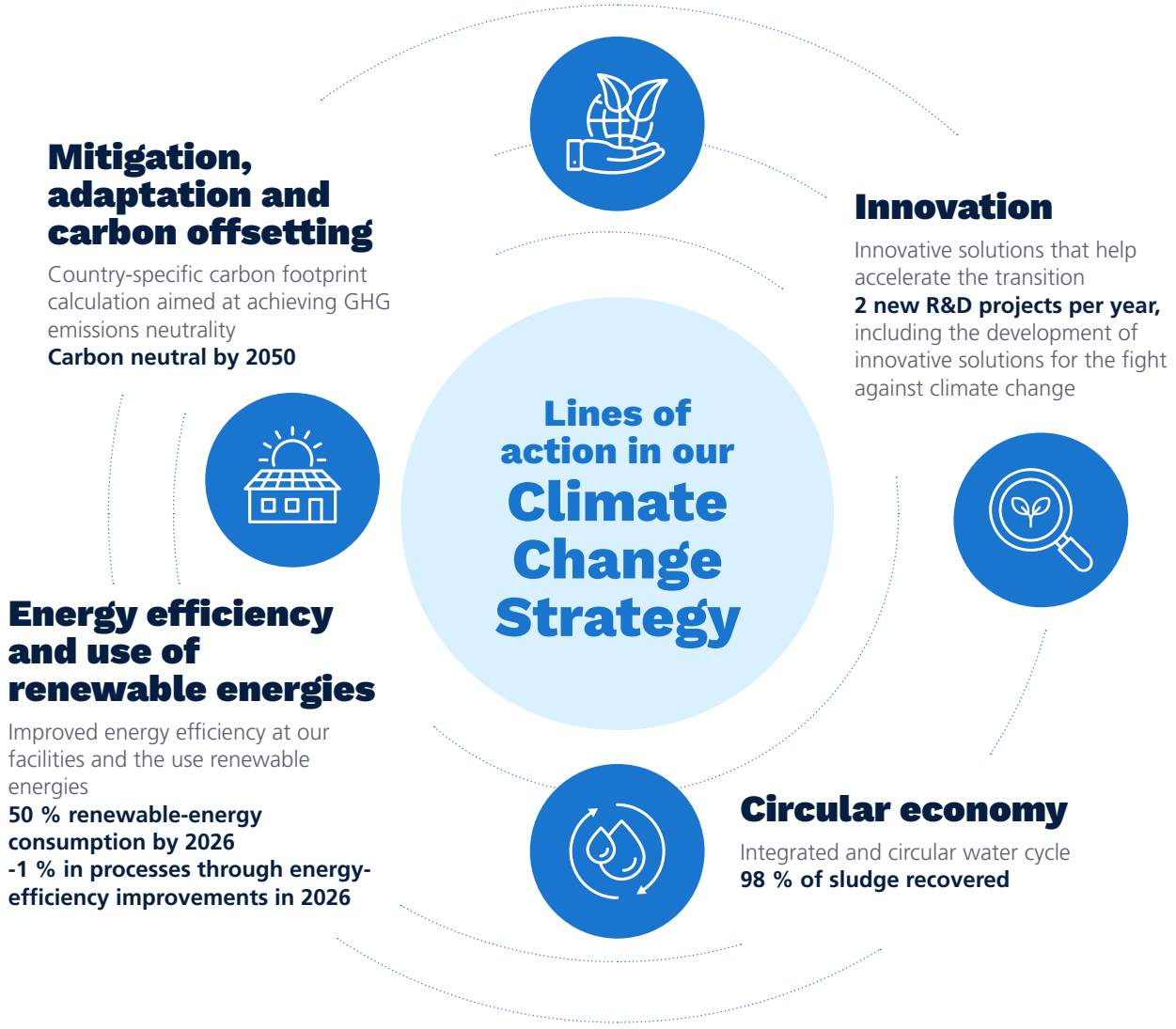
CIRCULAR ECONOMY	MITIGATION, ADAPTATION AND CARBON OFFSETTING	ENERGY EFFICIENCY AND USE OF RENEWABLE ENERGIES

Innovation
Innovative solutions that help accelerate the transition

Lines of action

Because our business as managers of water—an essential natural asset—is intrinsically linked to caring for the planet, our activity is inseparable from care for the planet.

We seek to leave a positive footprint through actions that have an impact on climate change, such as reducing emissions, protecting biodiversity and driving the circular economy.



Mitigation, adaptation and carbon offsetting

Prepare for extreme weather events that affect water availability and quality, and cut greenhouse gas emissions in our operations.

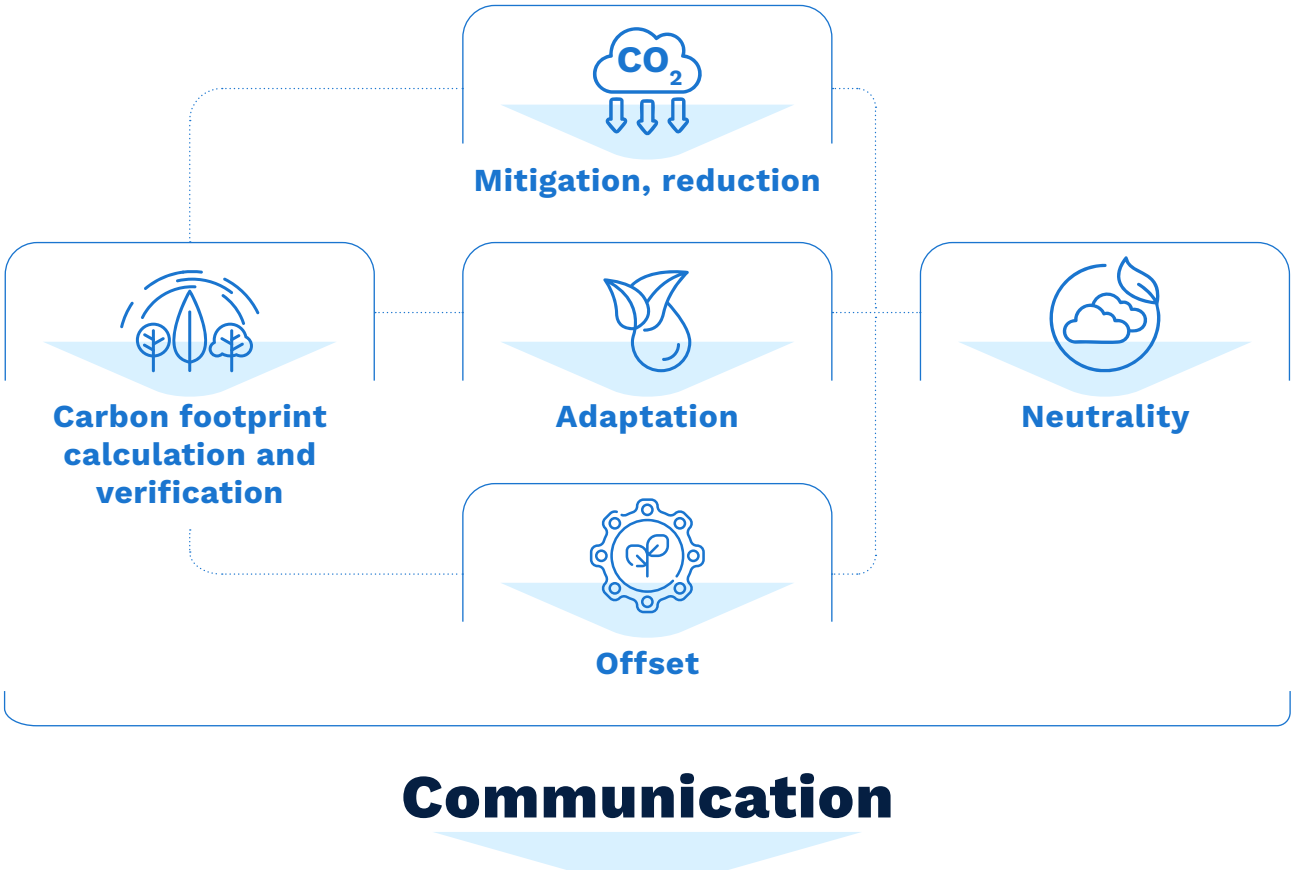
One of our key action lines is understanding the impact of our activities on climate change and pursuing the mitigation and adaptation of that impact. Accordingly, our climate action model targets neutrality across our activities based on the development of mitigation and adaptation actions and the offsetting of our greenhouse gas emissions, given that one of our corporate priorities is to decouple GHG emissions from business growth.

For this reason, decarbonisation is one of the main objectives of our business.

Naturally, these three pillars are based on a detailed, traceable and verified calculation of our carbon footprint. We also meet our transparency obligation by publishing qualitative information and quantitative data in our **Greenhouse Gas Emissions Report**, which facilitates verification of the GHG inventory and transparently informs stakeholders, and in our **Sustainability Report**, which follows the ESRS, GRI and SASB Standards, while specifically tracking goals linked to our PESA and the SDGs.

See the Aqualia Greenhouse Gas Emissions Report

See the Aqualia Sustainability Report



MAIN ACTIONS CARRIED OUT

- Development and verification of the **carbon footprint (Scopes 1, 2 and 3) by country.**
- **Electrification of the fleet and use of low-emission vehicles:** replacing our vehicle fleet is one of our main objectives for reducing our Scope 1 carbon footprint. We therefore continue to add electric vehicles to our own operations and to several of the municipal water services we manage. At the same time, we pursue a policy of reducing unnecessary travel by leveraging our IT systems and the fibre-optic connectivity available at most of our facilities.
- **Capture and utilisation of biogas** in waste water treatment processes.
- **Climate risk** maps for the geographic areas where we operate.
- **Water risk management** plans and **business continuity** plans for prolonged droughts.
- **Improvement of critical infrastructure** (resilience to extreme events).
- **Network digitalisation** to prevent water losses and manage events predictively.
- **Public-private partnerships** to strengthen water governance.
- Investment in R&D for **low-climate-impact water treatment technologies.**
- **Internal training and awareness-raising** on climate change for all staff and suppliers.
- Gradual roll-out of **smart LED lighting** with presence sensors for energy savings and smart-meter counters.
- **Participation in carbon capture or sequestration** projects verified by accredited bodies.

Circular economy

Promote a regenerative model that contributes to climate mitigation and adaptation.

At Aqualia we incorporate circularity criteria into our business model. Within integrated water cycle management, we promote sludge recovery and water reuse initiatives to help cut GHG emissions, while keeping the supply chain running and minimising the use of new resources.

We thereby make use of the waste with organic content that is generated in water and effluent treatment and at our treatment plants. Specifically, our waste water treatment plants (WWTPs) work to purify water, thereby producing sludge that can be landfilled or, as in our case, can be used to generate energy such as biogas.

Water reuse is another of our strategic objectives. We recognise the importance of exploring various ways to reuse this vital resource. From reuse in agriculture and industry to treating and recycling waste water for non-potable uses, we develop different initiatives that likewise contribute to mitigating environmental impact.

MAIN ACTIONS CARRIED OUT

Reuse of treated water

- Investment in technology for use in agriculture, industry and urban irrigation.
- Setting regional targets to increase the share of reclaimed water (+30 % in water-stress areas).
- Collaboration with municipalities to promote the non-potable use of recycled water.
- Development of innovative desalination and water reuse technologies to secure alternative sources of water collection.

Sludge reuse

- Use of WWTP sludge to produce biogas through anaerobic digestion.
- Use of biosolids as agricultural fertiliser in compliance with health and environmental regulations.
- Study of applications in construction materials or innovative biomaterials.

Energy from waste

- Expansion of self-generation projects using sludge, organic waste or industrial by-products.
- Integration of urban biorefineries in advanced treatment plants.

Circular materials

- Progressive replacement of conventional materials with recycled, recyclable or biodegradable ones in hydraulic works and maintenance.
- Public tenders with circular-economy clauses and suppliers with ESG criteria.

Digital platforms for circularity

- Development of traceability systems for by-products and internal flows.
- Integration of AI models to detect opportunities for heat, energy and nutrient recovery.

Energy efficiency and use of renewable energies

Increase the use of renewable energies and minimise those derived from fossil resources.

Our 2030 goal is to use 50 % renewable energy generated through our own facilities, PPAs or purchasing.

We are progressing steadily by installing self-consumption plants, using biogas from sludge digestion for electricity generation and for self-consumption at our own plants and implementing cogeneration systems, as well as hydropower generation, among other actions.

Specifically, lower electricity consumption is delivered through the **Energy-Efficiency Improvement Plan** we are developing under ISO 50001 Energy-Management Systems.

Flagship efficiency projects include across-the-board upgrades to aeration automation and control, biogas reuse and the implementation of renewable energies at facilities comprised in the water cycle. Moreover, the development of new AI-based applications is also key, which are targeted at the energy optimisation of production processes at desalination plants.

MAIN ACTIONS CARRIED OUT

- **100 % renewable energy** procurement for treatment and pumping plants.
- **Energy optimisation** at pumping stations, WWTPs and DWTPs.
- **Capture and utilisation of biogas** in waste water treatment processes.
- **Public-private partnerships.** We work together with governments, communities and industrial corporations to find effective solutions to water-supply, sanitation and treatment challenges, based on models that prioritise energy optimisation and renewable energies.
- **Collaboration** with start-ups and tech centres to improve water and energy efficiency.
- Programmes for **renewable-powered desalination and advanced reuse.**
- **Pilot projects for green hydrogen production** that use surplus solar energy generated on site to create an alternative to fossil fuels. The process employs electrolysis, separating hydrogen from water using electricity. Once produced, the hydrogen is stored under pressure and later used for energy generation.
- **Installation of photovoltaic panels** with the aim of reducing diffuse emissions and providing a new renewable source to lower electricity consumption. Photovoltaic modules are positioned on the ground or on the roofs of our facilities, depending on their characteristics and geographic location.
- **Hybrid self-generation systems are installed** to avoid the use of fossil fuel generators at our facilities.

- **Gas generation from waste water and sludge treatment at WWTPs.** The process is based on anaerobic digestion, a biological treatment that converts organic matter from waste water into biogas, consisting mainly of methane and carbon dioxide. The methane produced is used as a renewable substitute for electricity and natural gas.
- **Mini-hydraulic plants** with significant water storage are being upgraded to harness hydropower from small dams. In these cases, water is channelled through pipes to plant turbines, where pressure generates electricity.

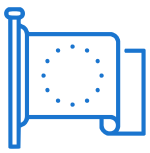
Impact, risk and opportunity management

In line with our commitment to fight against climate change and in compliance with the EU Taxonomy, we update our physical climate risk analysis by taxonomic activity using advanced climate projections up to 2040 and 2060, based on IPCC scenarios, to assess the vulnerability and exposure of our activities to climate threats.

As a part of the FCC Group, Aqualia has defined a methodology for identifying, assessing and prioritising climate-related risks and opportunities linked to our activities so that appropriate response measures can subsequently be established.

The methodology has been developed in line with IPCC guidelines and the COSO Enterprise Risk Management (ERM) framework, and it is essentially qualitative.

Assessment of risks and opportunities. Implementation phases



Identification of activities that are aligned and not aligned with the EU Taxonomy

Selection of potential climate scenarios

The scenarios for assessing physical and transition risks and opportunities derived from climate change are selected considering the IPCC's SSP assumptions, plus those of the International Energy Agency (IEA), together with regional (EU) and national policies, plans and strategies such as Spain's Integrated National Energy and Climate Plan (PNIEC) 2023-2030[16] and other national plans in the countries where we operate, for the purpose of establishing transition scenario assumptions.

[16] https://www.miteco.gob.es/content/dam/miteco/es/energia/files-1/pniec-2023-2030/PNIEC_2024_240924.pdf

Based on this analysis, we have defined three scenarios that group families of assumptions related to physical and transition risks.

1. Baseline scenario

Temperature increase by 2050	Description	Based on
1.5 °C–2.0 °C above pre-industrial levels	An energy mix is achieved that is balanced but still dependent on fossil fuels. It represents a pathway of intermediate emissions compared with other scenarios.	IPCC SSP2-4.5 IEA Stated Policies Scenario (STEPS)

MAIN IMPLICATIONS

Physical aspects	Economic aspects	Demographic and social aspects
Global warming of 2 °C, rising to 2.7 °C by century-end: Extreme-temperature events could be 5.6 times more frequent and 3 °C hotter. Heavy rainfall events and the associated flooding are expected to become more intense and frequent. Moderate increase in aridity and fire-prone weather conditions.	Development and rising incomes are uneven; most economies remain politically stable. Globally connected markets function imperfectly. Emissions do not reach net zero until 2100. Socio-economic factors follow historic trends with no marked change.	World population growth is moderate and stabilises in the second half of the century. Income inequality persists or improves very slowly; together with limited social cohesion, this sustains challenges to reducing vulnerability to social and environmental changes, and it limits significant progress on sustainable development. Global and national institutions work slowly towards achieving the SDGs, such as improved living conditions and access to education, drinking water and healthcare.

2. Climate neutrality

Temperature increase by 2050	Description	Based on
1.5 °C–1.7 °C above pre-industrial levels	Accelerated steps towards sustainable development and carbon neutrality. Strong regulatory and market adjustments to achieve the Paris Agreement.	IPCC SSP1-2.6 IEA Announced Pledges Scenario (APS)

MAIN IMPLICATIONS

Physical aspects	Economic aspects	Demographic and social aspects
Temperatures stabilise about 1.8°C above pre-industrial levels by century-end. Gradual changes in physical variables due to global warming, following observed trends.	Sustainable, equitable development marked by lower economic inequality and stronger technological progress. Emphasis on economic growth transitions to a broader focus on human well-being. Emissions reach net zero shortly after 2050, followed by net-negative emissions. High share of renewable energy and strong energy-efficiency measures.	Investments in education and healthcare foster a high population growth rate over the coming decades, which peaks and then gradually falls to more stable levels. Development objectives are met, reducing inequality and the consumption of resources and energy. Changes occur in society's behaviour and consumption habits. Greater urbanisation is observed.

3. High emissions development

Temperature increase by 2050	Description	Based on
1.6 °C–2.4 °C above pre-industrial levels	The global economy grows rapidly, fuelled by the exploitation of fossil fuels and energy intensive lifestyles. Current CO_2 emission levels roughly double by 2050.	IPCC SSP5-8.5

MAIN IMPLICATIONS		
Physical aspects	**Economic aspects**	**Demographic and social aspects**
Global warming above 2 °C and up to 4°C: Extreme events will occur 9.4 times more often and be 5 °C hotter. Intensification of very wet and very dry weather and climate phenomena, leading to floods or droughts. Heavy rainfall events and the associated flooding are expected to become more intense and frequent.	Economic and social development is driven by abundant fossil fuel resources and intensive use of resources and energy.	The world population reaches a maximum and declines during the twenty-first century. Heavy investment is made in healthcare, education and institutions to improve human and social capital. At the same time, the push for economic and social development goes hand-in-hand with abundant fossil fuel exploitation and resource- and energy-intensive lifestyles worldwide.

It should be noted that the information sources—and therefore the climate scenarios considered in the assessment of climate risks and opportunities—are subject to periodic revisions, in line with future advances in climate studies and projections.

Climate change risks can be physical risks or transition risks. They will be considered material risks when they affect, or are reasonably expected to affect, the company's financial position, financial results, cash flows, access to finance and cost of capital in the short, medium or long term.

Physical risks

They are the direct result of our organisation's dependence on nature. They may be acute, chronic or both. They arise when natural systems are compromised due to the impact of:

- Climate phenomena (e.g. extreme weather conditions such as drought).
- Geological phenomena (e.g. seismic events such as an earthquake).
- Changes in the balance of ecosystems, such as soil quality or marine ecology, which affect the ecosystem services on which organisations depend.

Transition risks

They result from a potential mismatch between our—and investors'—strategy and management and the changing regulatory, political or social landscape in which we operate. Events related to climate or nature damage—such as government measures, technological advances, market changes or evolving consumer preferences—can create or alter these risks.

Because physical and transition risks differ in nature, the evaluation process and the results obtained vary from one type of risk to another. The **assessment of physical risks** considers three variables: threat, exposure and vulnerability; whereas the **assessment of transition risks** considers two variables: probability and impact.

As for **opportunities**, we analysed the external events we cannot control but can use to our advantage in order to improve our strategic objectives related to the environment and financial results.

Identified transition risks

Regulatory risks

They refer to existing regulations on carbon pricing mechanisms, tighter emissions disclosure obligations, standards and requirements related to products and services, and regulation and supervision of climate risk in the financial sector, among others.

	Time horizon
Greater disclosure obligations on climate-related aspects	Short term 2023–2025
Insufficient staff training on climate risks	Short term 2023–2025

Identified physical risks

Acute risks

	Time horizon
Increase in incidents due to heavy rainfall and flooding	Short and medium term (10–40 years)

Chronic risks

	Time horizon
Infrastructure damage caused by sea-level rise	Short and medium term (10–40 years)

Chronic and acute risks

	Time horizon
Incidents affecting infrastructure, staff and processes due to rising temperatures	Short and medium term (10–40 years)
Process constraints due to water stress / drought	Short and medium term (10–40 years)
Incidents affecting infrastructure, staff and processes due to rising temperatures	Short and medium term (10–40 years)

Identified opportunities

Resource efficiency opportunities

Related to improved resource efficiency in production and distribution processes, buildings, machinery/equipment and transport/mobility.

	Time horizon
Smart water management in all geographic areas where Aqualia operates	Medium term 2025–2034

Market opportunities

Opportunities in new markets or asset types that can help the organisation diversify its activities and be better positioned for the transition to a lower carbon economy.

	Time horizon
Rising demand for seawater desalination plants in water stress regions	Medium term 2025–2034
Expansion of activities considered sustainable under the EU Taxonomy	Short term 2023–2025

Product and service opportunities

Related to innovation and the development of low-emission, climate-adapted new products and services.

	Time horizon
Growing demand for climate change mitigation projects	Medium term 2025–2034
Capacity building for improved sustainability across the value chain	Medium term 2025–2034
Participation in strategic R&D&I alliances in the industry	Short term 2023–2025

Resilience opportunities

Related to developing adaptive capacity to respond to climate change.

	Time horizon
Higher demand for adaptation, conservation and water reuse solutions	Long term 2034–2051

Metrics and targets

We actively address environmental challenges while contributing to society's well-being through specialised management of the integrated water cycle, thereby providing health and safety in a world of growing risks.

As part of the FCC Group, we participate globally in the **two strategic objectives** set for 2050:

Contribute to climate neutrality by driving decarbonisation

Through a commitment to energy efficiency and renewable energies, as well as more sustainable materials and products within a circularity approach.

Take advantage of climate change opportunities to improve the services offered to customers

Resulting in services that are more resilient to climate risks.

In turn, for managing climate-related impacts, risks and opportunities, we have established a set of additional metrics and targets linked to our own integrated water cycle management.

2026 targets

Mitigation, adaptation and carbon offsetting	Circular economy	Energy efficiency and use of renewable energies	Innovation
100 % country-specific carbon footprint calculation 35 % low-CO_2-emission vehicles for operations in Europe	2 % increase in the use of reclaimed water 98 % of sludge recovered out of total sludge produced	50 % of total energy consumed is renewable coming from our own installations, PPAs or purchasing: Management Water Cycle (MWC) and Build-Operate-Transfer (BOT) contracts	2 new R&D projects started per year, including the development of innovative climate-action solutions

2050 targets

Mitigation, adaptation and carbon offsetting	Circular economy	Energy efficiency and use of renewable energies	Innovation
CO_2 emissions neutrality by 2050 (Scopes 1 and 2)			

Calculation, KPI monitoring and verification

Transparency is nothing new to us. In fact, it is so deeply ingrained in who we are that it forms a part of our corporate values and attributes. As providers of a public service, we always aim to act according to the highest standards of transparency, honesty and integrity.

Analysing GHG emissions is essential for designing a strategy for the long term that can reduce those emissions and reach carbon neutrality by 2050. Our GHG emissions calculation covers all three scopes: 1 and 2 for direct and indirect emissions from energy use, and Scope 3, defined as indirect emissions generated in the value chain outside the organisation's direct control (transport, procurement of goods and services, waste management, etc.)[17].

2023 Target

100 % country-specific **carbon-footprint calculation**

2030 Target

CO_2 emissions neutrality (Scopes 1 and 2)

In addition to tracking the targets set in our **2024–2026 Sustainability Strategic Plan**, each year we publish a **greenhouse gas (GHG) inventory report** that meets UNE-EN ISO 14064-1 requirements: 2019 Greenhouse Gases. Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

The report is externally verified and covers our operations related to management of the integrated water cycle (abstraction, distribution, customer management, sewerage and treatment) in Spain, France, Italy, Portugal, the Czech Republic, Egypt, Algeria, Oman, Qatar, the United Arab Emirates, Saudi Arabia, Mexico and Colombia, including affiliates over which we exercise operational control.

See Aqualia's Strategic Sustainability Plan 2024-2026

See the Aqualia Greenhouse Gas Emissions Report

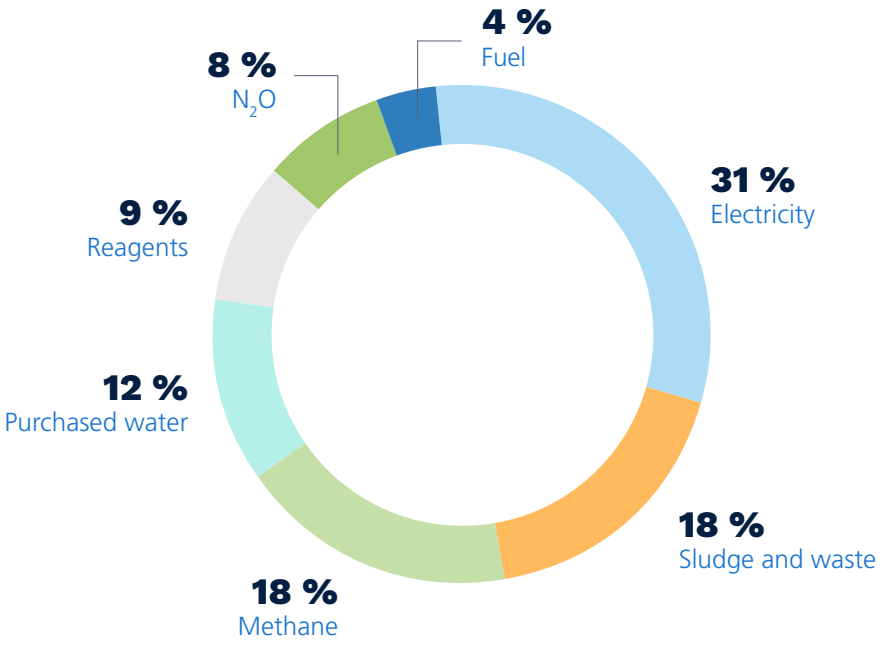
[17] In recent years, and in line with our duty of transparency, we have been progressively expanding Scope 3 and its geographic limits, to the point where the entire perimeter is covered.

Under our concession business model, the consolidation of GHG emissions from Aqualia's management of the integrated water cycle follows an operational control approach. According to this criterion, direct and indirect emissions from activities over which we have operational control (i.e. the authority to introduce operational policies) are accounted for.

Scope 1	• Mobile combustion: fuels (diesel, petrol, CNG and LPG) in vehicles and mobile machinery with combustion engines, e.g. vans, sewer cleaning trucks and civil engineering machinery. • Combustion at stationary facilities (diesel, natural gas and coal) with combustion engines such as boilers and generators. • Diffuse methane emissions in pre-treatment and other anaerobic areas of the WWTP water line, as well as biogas leaks and unburned biofuel in biofuel combustion equipment at WWTPs (motor-generators, boilers and flares). • Diffuse N_2O emissions from biological reactors at WWTPs. • Anthropogenic CO_2 emissions from biogas combustion in boilers, motor-generators and flares at WWTPs.
Scope 2	• Emissions due to electricity consumption. Emissions are estimated using the (located-based) and (market-based) approaches. The difference between the two methods lies in the emission factor (kg CO_2 per kWh) used in the calculations.
Scope 3	• Indirect emissions from transport due to business travel by company staff. • Indirect emissions from goods and services used by the organisation: · Emissions due to the energy losses that occur in energy production and in the electricity transmission and distribution networks of electricity companies. · Due to the life cycle of the fuels consumed (diesel, petrol, LPG and CNG). · Purchase and leasing of vehicles. · Purchase of treated water. · Consumption of materials: meters as the activity's most representative material. · Consumption of drinking water treatment reagents: bisulphite, chlorine gas, coagulants, flocculants, acidic pH correctors, basic pH correctors, descalers, sodium hypochlorite, oxygen, sludge dewatering agents and potassium permanganate. · Consumption of waste water treatment reagents: antifoaming agents, coagulants, flocculants, polyelectrolytes (in sludge dewatering and thickening), carbonating reagents, hypochlorite in tertiary treatment, caustic soda in deodorisation, citric acid, sodium bisulphite, chlorine gas and reagents used in the chemical precipitation of phosphorus. · Management of sewage sludge in landfills. · Management of waste water treatment plant waste. · N_2O emissions in the discharge of treated water.

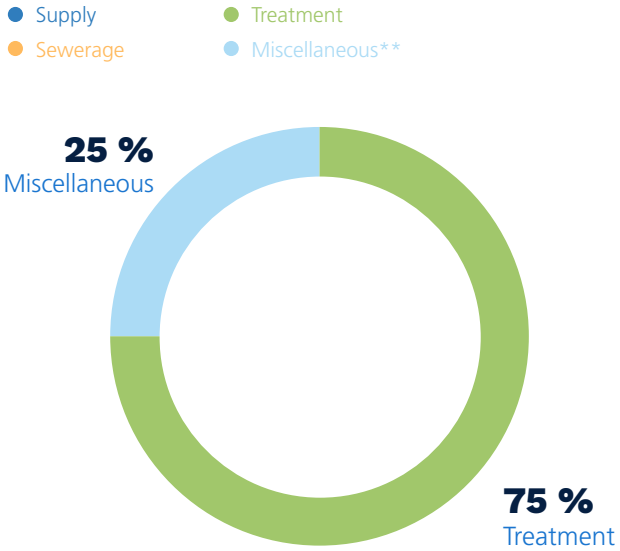
Based on this calculation, we conclude that, by sector, electricity consumption is the largest emitting source in the company's activity, accounting for approximately 31 % of total emissions. Other significant emissions are linked to waste water management, whether inherent in the operated infrastructure or dependent on the inflow volume and pollutant load.

Aqualia GHGs by emitting source



We also calculate the emissions produced and the emissions avoided for each process in our activity. We succeed in avoiding emissions by consuming energy from renewable sources and implementing energy efficiency measures.

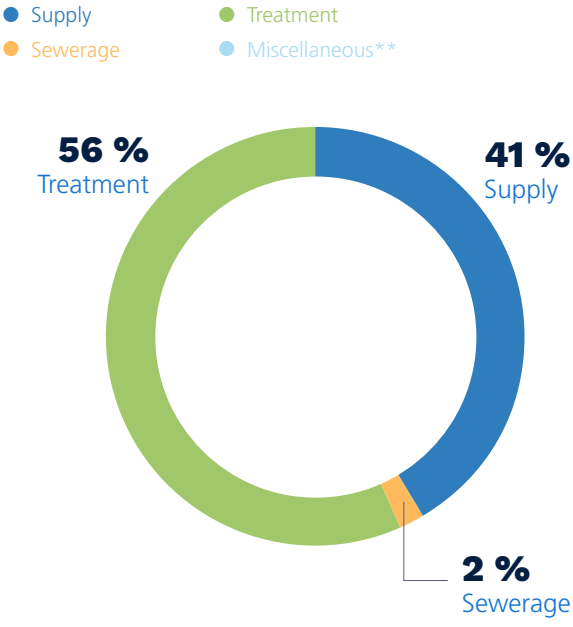
Emissions avoided by process*



* Data assessed from 1 November 2023 to 31 October 2024.

** The "Miscellaneous" category includes emissions associated with multiple processes, such as those generated by the vehicle fleet and those avoided through electricity generation at various facilities (turbines and photovoltaic panels).

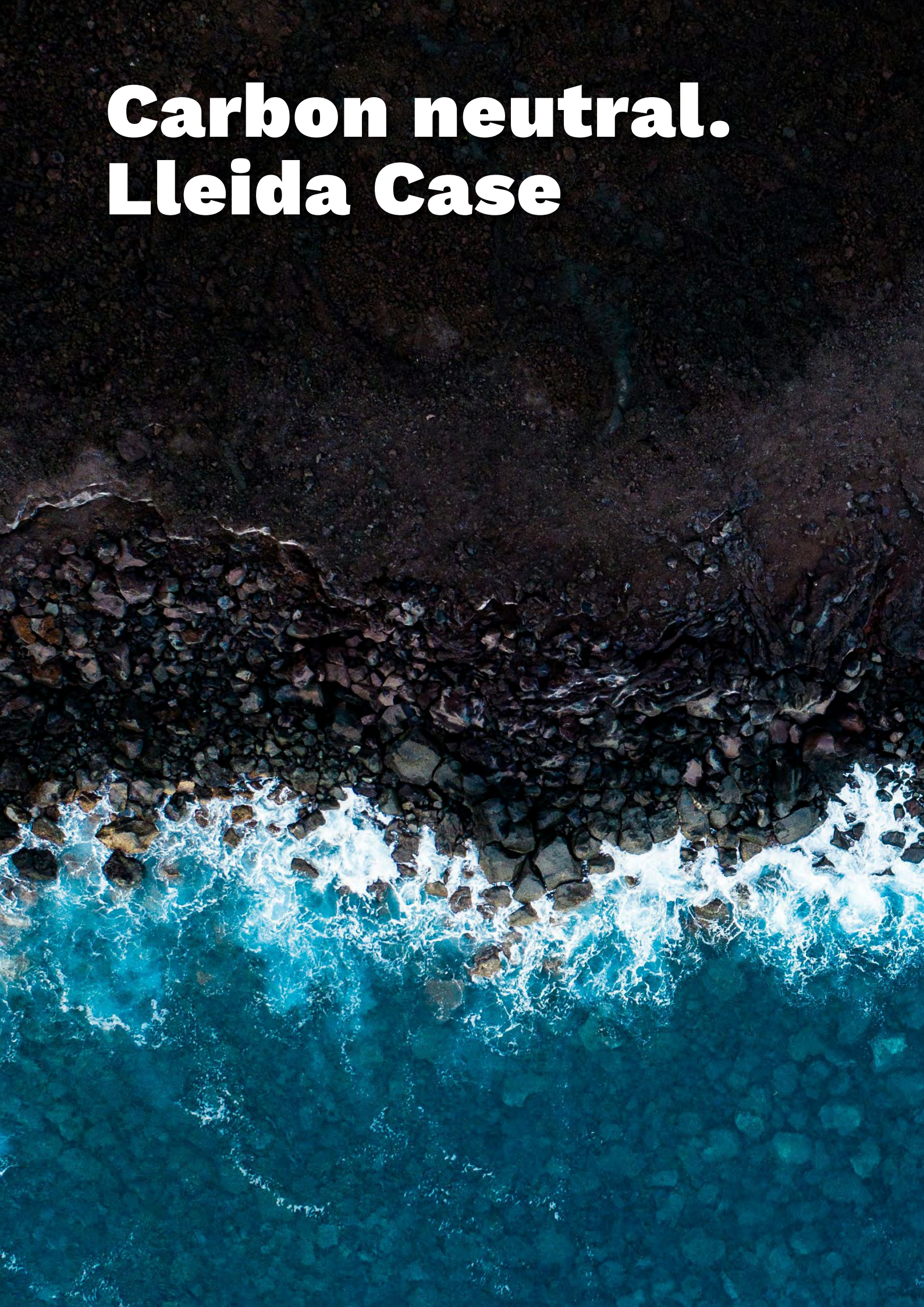
Emissions produced by process*

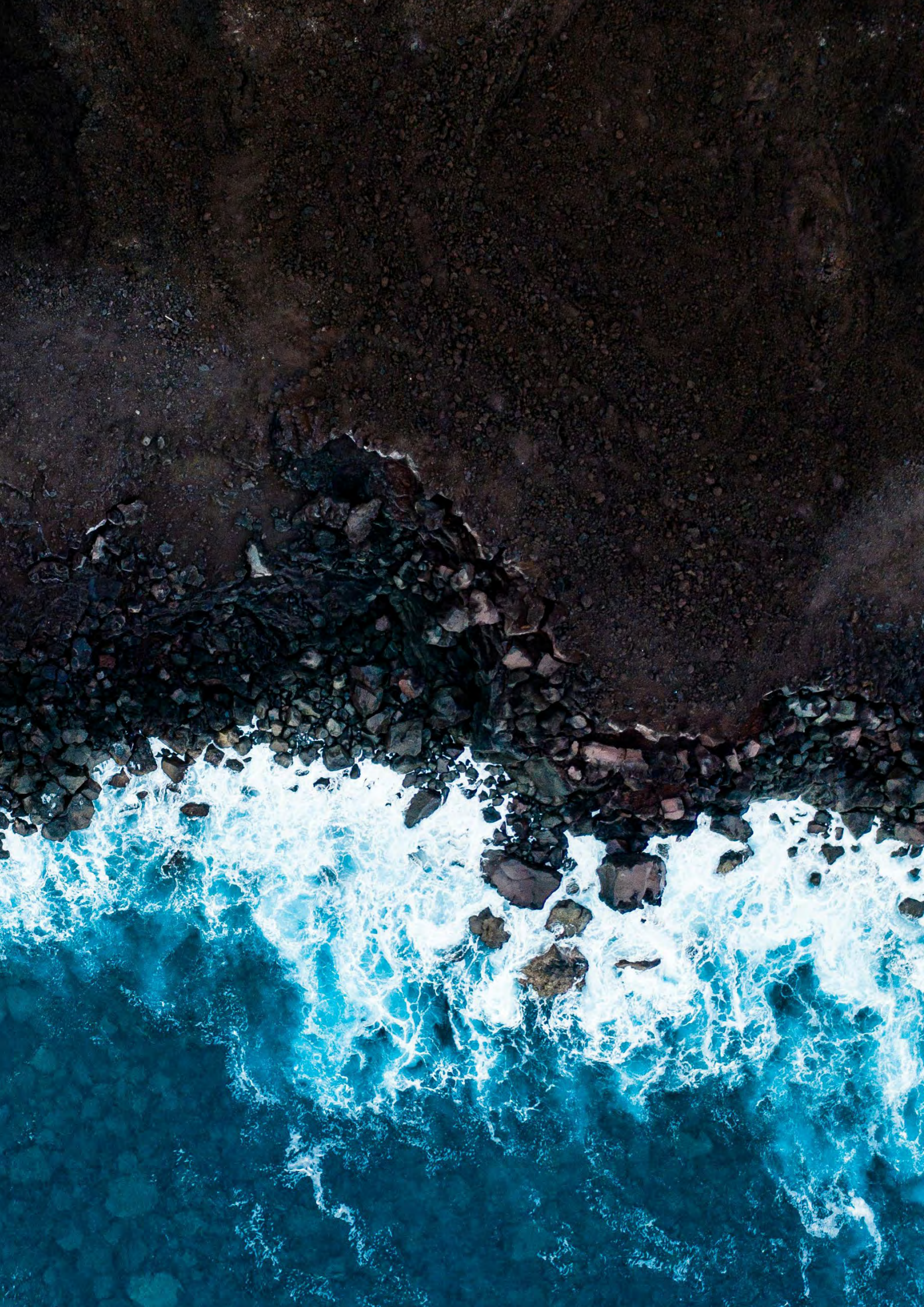


* Data assessed from 1 November 2023 to 31 October 2024.

** The "Miscellaneous" category includes emissions associated with multiple processes, such as those generated by the vehicle fleet and those avoided through electricity generation at various facilities (turbines and photovoltaic panels).

Carbon neutral. Lleida Case





Being more sustainable is a long-term challenge, and at Aqualia we put sustainability into practice every day through the management of over 5,000 facilities (water treatment plants, desalination plants, reservoirs, pumping stations and waste water treatment plants), while aiming for maximum efficiency, full water circularity, the creation of high-performance infrastructures and the introduction of smart city technologies in the water cycle.

One of the major challenges we face is turning waste water treatment plants (WWTPs) into true bio-factories that actively contribute to tackling the climate emergency. We therefore conduct research aimed at the recovery and transformation of organic matter into "bio" by-products that can gain a new life.

Our goal is to convert these WWTPs into circular stations or bio-factories that can recover, transform and make use of waste as a resource for agriculture or for waste-to-energy.

Many projects driven by Aqualia include solutions that ensure waste water is treated efficiently, safely and with respect for the environment, thereby contributing to combat climate change.

An example of the work we carried out years ago is Aguas de Lleida, which in 2015 became the **first water management service to calculate and verify its CO_2** emissions, thereby improving its energy efficiency and fostering an environmental culture throughout the integrated water cycle, meaning from abstraction to treatment.

The initiative was an exercise in transparency and a step forward in our commitment to efficient and sustainable management, and it enabled Aguas de Lleida in 2025 to become the **first water service in Spain to certify a Zero Carbon Footprint.**

At Aqualia we operate the complete integrated water cycle in Lleida, from abstraction, supply and sewerage to the WWTP, where the water is treated and returned to the Segre River. In recent years we have launched several initiatives that have enabled AENOR to certify their carbon neutrality, including photovoltaic power, biogas production and energy efficiency measures, while offsetting any remaining Scope 1 and 2 emissions.

Technology and know-how at every stage of the water cycle to advance in the fight against climate change

2022–2024

Carbon footprint Calculation, Reduction, Offset and Neutrality project in Lleida (Spain), with the neutrality declaration verified by AENOR (PAS 2060)

2020–2023

Footprint calculation and verification

2023–2025

Carbon footprint reduction plan

2024

Carbon credit purchase: 1,850 tonnes of CO_2

AENOR verification, PAS 2060 standard:

Neutrality declaration

Carbon footprint calculation

Thanks to the purchase of 100 % renewable-sourced electricity and increased on-site PV generation, the Lleida service prevents CO_2 from being released to the atmosphere.

We have cut Scope 2 indirect GHG emissions by 100 % through the implemented energy efficiency and emissions reduction plans. As a result, total emissions have fallen by 24.28 % since 2020, from 2,359.60 t CO_2e to 1,786.70 t CO_2e—roughly what 112 vehicles emit in a year.

Indirect emissions from purchased or acquired electricity accounted for 0 % of the total 2023 footprint. This means that all energy consumed came from certified renewable sources, thereby ensuring support for sustainable generation and avoiding emissions from biogas combustion for power.

Emissions offsetting

Because full reduction is not yet feasible in the short term, we have achieved carbon neutrality by offsetting through three projects:

The largest share (90 %) is the

Para REDD project in Portel, Brazil,

which consists in stopping Amazon deforestation and simultaneously preventing millions of tonnes of GHG emissions. The land is managed as a private conservation reserve, scrupulously complying with all current regulations. On this project, we work with VERRA, *Standards for a Sustainable Future*, on land encompassing 135,105 ha. Thus, we help generate multiple benefits for local biodiversity, communities and the climate.

To a lesser extent, we are working with

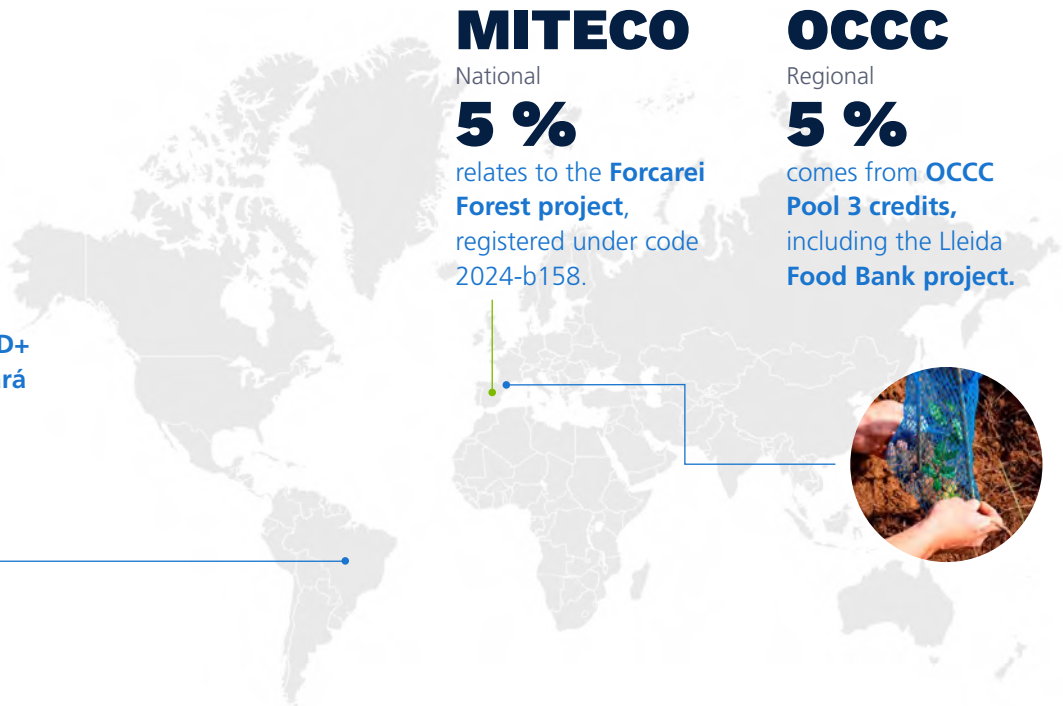
Spain's MITECO

on a **CO_2-offsetting project—approximately 17,236 t CO_2—in the Forcarei Forest (Pontevedra).** This initiative consists in planting several species—*Pinus radiata, Pinus sylvestris* and *Betuula spp*—on degraded land in order to restore it and create a future woodland. The planted areas will be protected from animal damage for the first few years.

Finally, we also **purchase credits of Bolsa 3 (offset pool)**, which includes the

Lleida Food Bank project,

issued by Catalan Climate Change Office (OCCC). This programme reduces emissions in Catalonia through initiatives run by social organisations.

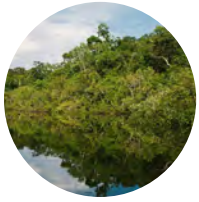


VERRA

International

90 %

offset via the **REDD+ ADPML Portel-Pará Project** in Brazil.



MITECO

National

5 %

relates to the **Forcarei Forest project**, registered under code 2024-b158.

OCCC

Regional

5 %

comes from **OCCC Pool 3 credits,** including the Lleida **Food Bank project.**

The treatment plant, in full transformation into a bio-factory

A large share of the carbon footprint decrease in Lleida's integrated water cycle comes from the WWTP, which is undergoing digital transformation to become a bio-factory, consequently integrating technologies and processes to cut energy use and to reuse resources produced during treatment. At this plant, sludge is received, mixed and homogenised before being stabilised in the WWTP's anaerobic digester, thereby increasing biogas production. In addition, fats generated during the process undergo pre-treatment with alkaline hydrolysis before entering the digester. This reduces the waste that requires management, and it boosts biogas generation.

It is a long transformation that began in 2015 and has entailed sustained technological innovation. It has been guided by sustainability and energy efficiency criteria and has been driven by the need to meet stricter environmental rules, cut operating costs, raise treatment efficiency and lower energy use and the carbon footprint.

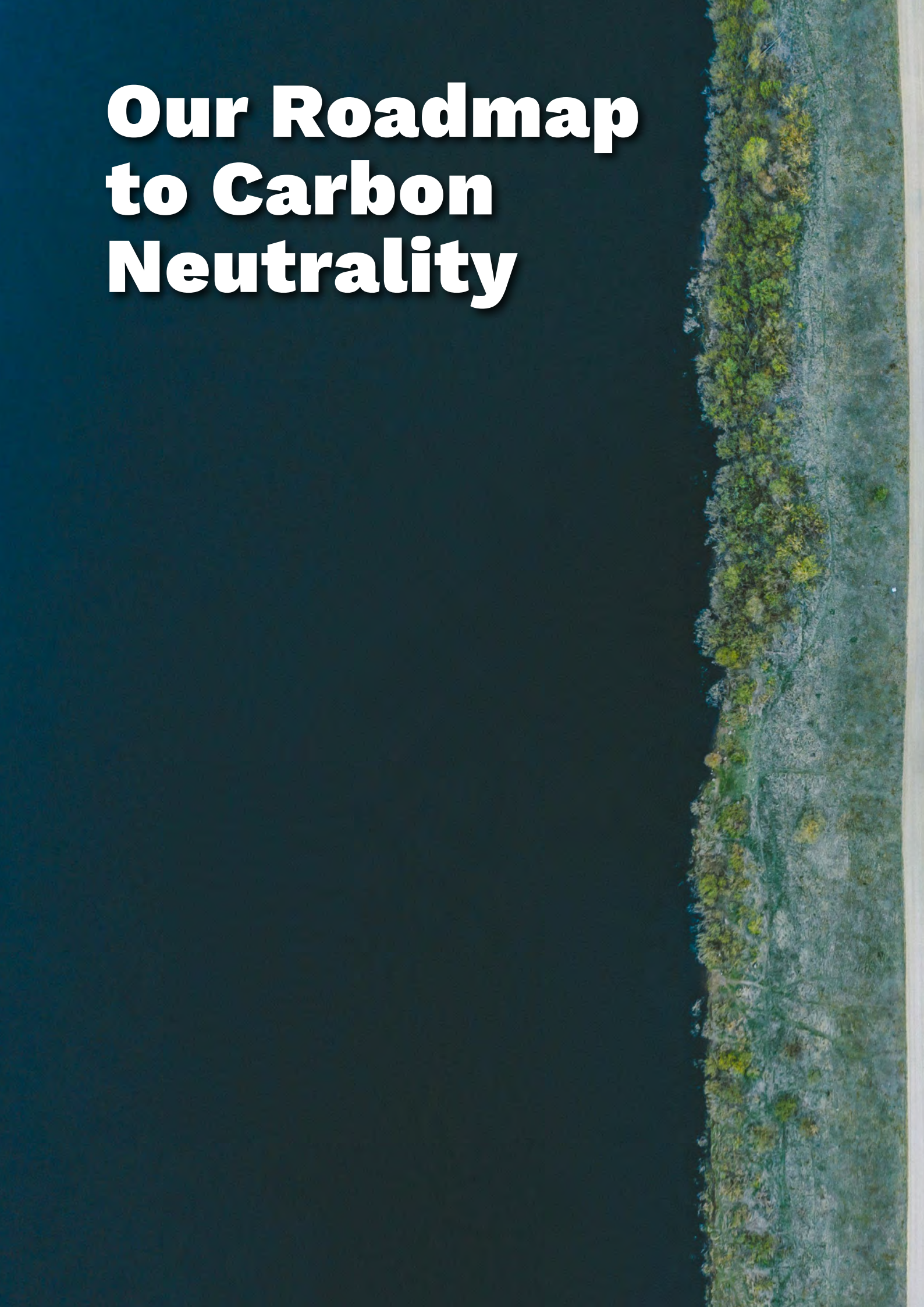
The various strategies used—based on AI technologies for data analysis, process control and the creation of virtual sensors—have cut energy and reagent use, increased energy self-sufficiency and reduced sludge production.

The anaerobic digestion of sludge produces biogas, which is cleaned and converted to biomethane. The Lleida Water Service now operates eight CNG vehicles fuelled with WWTP-produced biomethane, which allows them to travel over 100,000 km a year. This has avoided emissions totalling over 73,000 kg CO_2e over the past five years.

Regenerated water from the WWTP is also used for municipal services such as street cleaning and irrigation. And the installation of photovoltaic panels further reduces the plant's energy use.

The WWTP's transformation into a bio-factory shows how technological innovation and sustainability can go hand in hand to create efficient, environmentally friendly solutions.

Our Roadmap to Carbon Neutrality



The real impact of our initiatives, viewed over time, will be the true measure of both our achievements and our mistakes. Aqualia's decarbonisation milestones mark a path of evolution, commitment and continuous improvement.

Our **roadmap to carbon neutrality by 2050** positions us as a global leader in climate change mitigation and adaptation in the water sector, while complying with international standards and adding sustainable value across all our operations.

Our Roadmap to Carbon Neutrality

- On calculation and verification
- On mitigation or reduction
- On adaptation
- On offsetting

2010

Approval and implementation of the **Energy Management System** under UNE EN ISO 50001, still in force today.

2012

Aguas de Lleida, the first water management service to calculate and verify CO_2 emissions. Calculation and verification of the carbon footprint of the integrated water service in the city of Lleida **under UNE-EN ISO 14064-1:2012** *"Greenhouse Gases". Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals."*

FCC Group 2020 Climate Change Strategy.

2014

Calculation and verification of the carbon footprint according to ISO 14064-1 for the activity involving the construction of water treatment, purification and desalination plants and ancillary installations carried out by the subsidiary **Aqualia Infraestructuras.**

2015

Aqualia, the first operator to integrate the carbon footprint calculation across all its activities. Calculation and verification of the carbon footprint **according to ISO 14064-1** covering the entire activity of "management of the integrated water cycle (abstraction, distribution, customer management, sewerage and treatment)" in Spain, where we have operational control (updated annually from now on).

First registration of **Aqualia Infraestructuras** in the **Carbon Footprint Register of Spain's Ministry of Agriculture, Food and Environment.**

First registration of **FCC Aqualia** in the **Carbon Footprint Register of Spain's Ministry of Agriculture, Food and Environment** and definition of a **Carbon Footprint Reduction Plan.**

2016

Calculation and verification of the carbon footprint according to **ISO 14064-1** for **Aqualia Portugal** (also carried out in 2018, 2020 and 2022).

First GHG Reduction Plan for 2016–2019 (Spain).

First verification of the carbon footprint of **Smvak** (Aqualia subsidiary in the Czech Republic).

Implementation of an **Energy Management System** at **SmVak** (Aqualia subsidiary in the Czech Republic).

2018

Participation in the **Climate Project of the Carbon Fund for a Sustainable Economy** run by Spain's Ministry of the Environment, a climate finance tool in which we took part until 2022.

2020

Second GHG Reduction Plan for 2020–2023 (Spain).

Registration of **FCC Aqualia** in the **Carbon Footprint Register of the Spanish Ministry for the Ecological Transition and the Demographic Challenge.**

First **long-term renewable power purchase agreement (PPA)**, signed by Aqualia and pioneering in the water sector, to secure green energy and venturing on a transition to more sustainable energy sources.

2021

Aqualia's carbon footprint methodology for "integrated water cycle management (abstraction, distribution, customer management, sewerage and treatment) (A GIA)" is adapted to the new ISO 14064:2019; Spain's footprint is calculated under this methodology between November 2021 and October 2022, inclusive.

2022

Development of the **project to calculate, reduce and offset the carbon footprint** of our **facilities in Lleida for 2022–2024.**

Spain's MITERD recognises Aqualia's progress in reducing its carbon footprint and awards it the **"Reduzco" label** based on data from the past four years.

2023

Development and launch of a **GHG Reduction Plan for 2023–2025 (Spain).**

Development and launch of the **comprehensive carbon footprint calculation, reduction and offset project** via a pilot contract (Lleida).

Participation in the **Climate Risk Project developed by FCC for 2023–2024**. Work is currently under way to include new activities and countries in order to estimate the financial impact of priority risks and opportunities.

2024

Third GHG Reduction Plan for 2024–2026 (Spain).

Calculation, verification and registration, in the Balearic Carbon Footprint Register, of the 2022 carbon footprint of our facilities in the **Balearic Islands**.

Calculation and verification of the carbon footprint in Spain for 2020–2023

AENOR verification of **compliance with PAS 2060**, a pathway to carbon neutrality.

Registration under the **"Compenso" label** awarded by the Spanish Climate Change Office.

Projects to Offset 1,850 tCO_2e by cancelling the following projects:

- **Project: Pacajai REDD+ Project** (VCU serial no. 11082-278316489-278318088-VCS-VCU-259-VER-BR-14-981-02012012-31122012-0): 1,600 t CO_2e.
- **Project: BOSQUIA FORCAREI REFORESTATION in Pardesoa, Forcarei (Pontevedra), Ministry for the Ecological Transition and the Demographic Challenge** (code No. 2024-b158). 100 t CO_2e.
- **Catalan Office for Climate Change: Voluntary Offsetting Programme - Bolsa 3, a project promoted by the Lleida Food Bank.** 100 t CO_2e.

Aguas de Lleida, first municipal water service in Spain to obtain the **zero-carbon-footprint certificate**, proving that the city's water cycle produces no carbon dioxide emissions. AENOR Verification Statement for FCC AQUALIA, S.A. from the **2023 CO_2 Emissions Neutrality Report for the Lleida Integrated Water Cycle.**

2025

Definition of a climate change strategy.

Preparation and submission of a Carbon Disclosure Project (CDP) report.

ISO 14064-1 verification of the carbon footprint.[18]

Publication of the first Greenhouse Gas Emissions Report for 2024.

[18]Does not include Chile, Peru or the United States.

www.aqualia.com