
EMASESA
Sustainability
Report
2023

EMASESA

Index

Report scope

This Sustainability Report describes the activities undertaken by Empresa Metropolitana de Abastecimiento y Saneamiento de Aguas de Sevilla, S.A., hereinafter **EMASESA,** located in the historic center of Seville and whose registered office is at Calle Escuelas Pías, 1, Seville, 41003. The report's scope includes —without exception— all the centers where **EMASESA** is active in the different municipalities of Seville.

This report has been prepared with the Global Reporting Initiative (GRI) Standards in mind, taking the standards currently in force in their most recent version. In the interests of transparency and integrity, this Sustainability Report is published annually with the aim of reporting on performance in terms of matters related to human rights, the fight against corruption and bribery, as well as environmental, social, and personnel-related issues that were relevant for the entity while doing business in 2023, following the criteria of materiality, timeliness, comparability, and reliability from the GRI Standards.

As for information consolidation, the approach adopted in relation to quantitative information has been to report exclusively on the activities that the Company has operational control of.

Should you have any questions or suggestions regarding this report's contents, please direct your inquiries to the following e-mail address:

observatoriodelaguaemasesa@emasesa.com

EMASESA

2023 Sustainability Report

1. EMASESA 2023

1.1 Letter from the President

It is a pleasure for me to be able to present the **EMASESA** Sustainability Report. **EMASESA** is a company that I have the honor to preside over and that is a true leader in innovation, efficiency, and environmental responsibility — and this will become clear over the pages that follow.

We can speak of responsibility and sustainability at **EMASESA** in all possible senses: from respect for nature and a certain harmony and balance with the environment (both from a social and economic point of view) to the production and consumption of renewable energies. And we cannot forget about sustainable mobility, the circular economy, cost reduction through efficiency, the generation of "green" jobs, etc. And, of course, we must also highlight our social commitment through policies and management measures like co-governance, transparency and training, citizen awareness raising, and measures aimed at greater social protection.

EMASESA is, in short, a public company and a leader nationwide that is immersed in an ambitious transformation plan which is sure to bring us much satisfaction. The company boasts a management model that is the embodiment of the business model that Seville and its metropolitan area wants to (and should) follow in order to face the environmental, social, and economic challenges of today and tomorrow.

My sincere thanks to the team of great professionals who make our work possible each and every day and who watch over our water — a valuable resource for everyone.

José Luis Sanz Ruiz
President of EMASESA

1.2 Letter from the Chief Executive Officer

As the Chief Executive Officer of **EMASESA,** I am particularly excited to present our 2023 Sustainability Report for the first time. This position, which I took on halfway through the year, garners my greatest respect, commitment, and responsibility due to the fact that I am managing water — one of our most valuable resources— and also because I am at the helm of a company that is a leader in contributing to social progress and environmental conservation.

We must also remember that Seville (and its metropolitan area) is especially sensitive to climate change and everything that goes along with it, such as droughts —which are increasingly recurrent and extreme— and episodes of torrential rains. Therefore, **EMASESA's** work is fundamental in terms of consolidating mitigation and adaptation strategies that allow us to overcome our economic, social, and natural vulnerabilities to such a scenario, turning towards a green, sustainable model that is adapted to the new climate and which improves citizens' lives.

To this end, we must mention the colossal work carried out during the severe drought we experienced this year — a situation that brought about the declaration of a state of emergency. Undoubtedly, planned management combined with raising awareness among citizens have helped us to avoid the traditional cuts in supply of previous years — cuts which are both inconvenient for the population and dramatic for commerce and industry.

The public water company is also a model for innovation. This has been demonstrated through the inauguration of the Copero Environmental Complex and our commitment to the circular economy, as well as our implementation of remote meter reading, a fundamental tool for efficiency.

EMASESA, in short, has a great team, great enthusiasm, and a firm conviction to provide better service each day. May this report be a testament to that.

Manuel Romero Ortiz
Chief Executive Officer of EMASESA

1.3 Business Model

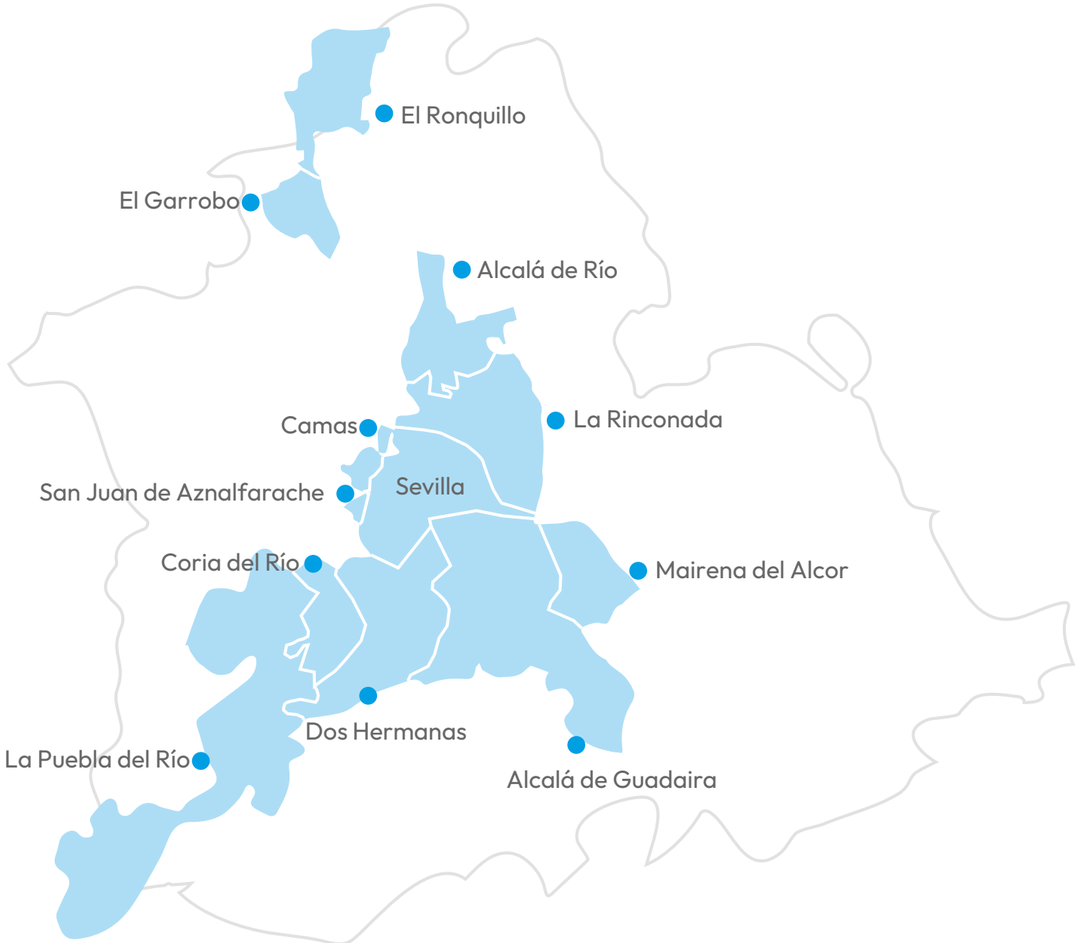
EMASESA —established as a metropolitan company since 2007— is responsible for the provision of services related to the complete urban water cycle (by delegation of powers). We serve Seville and eleven surrounding municipalities (Alcalá de Guadaíra, Alcalá del Río, Camas, Coria del Río, Dos Hermanas, El Ronquillo, La Puebla del Río, La Rinconada, Mairena del Alcor, San Juan de Aznalfarache, and El Garrobo). All of the municipalities we serve are corporate partners.

In all of these areas, we provide complete urban water cycle services (except in El Garrobo, where wastewater treatment is not carried out). We at **EMASESA** make available to all the municipalities we serve the knowledge that we have acquired over our almost 50 years of history (since 1974), guaranteeing these essential services under equal conditions for all and with high levels of quality.

In addition, we supply raw untreated water to 31 other towns in the Asharaf region of Seville through Aljarafesa, the company that works in these towns.

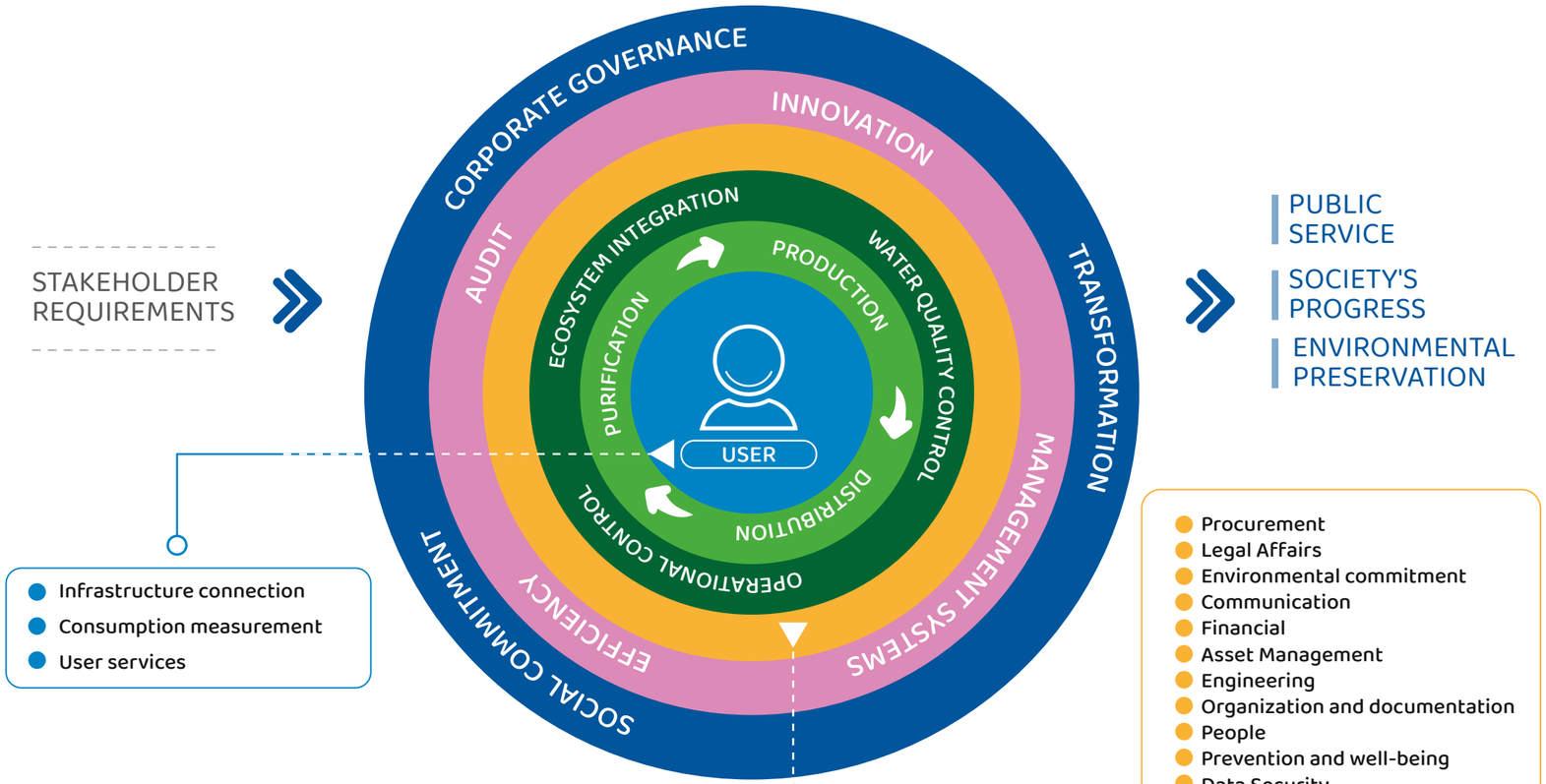
This cross-cutting approach consolidates and strengthens our comprehensive management philosophy, promoting the continuous improvement of processes in order to optimize service provision and consumer experience.

Populations we serve



EMASESA Process Map

- Strategic processes
- Evaluation and improvement processes
- Support processes
- Integral Water Cycle Processes
- Operation Control Processes
- User Relationship Processes



INDICATOR	UNITS	2023
Household Unit Consumption	L/inhabitant/day	106,11
Inhabitants Supplied Directly	Units	1.065.683
Inhabitants Supplied indirectly	Units	333.096
Clients	Units	402.146
Staff	Units	762
Income	Million Euros	170,52
Km of Supply Network	km	3.924
Km of Sanitation Network	km	3.022
Km of Conveyance Network	km	169
Volume of Water Collected	Hm³	94,33
Volume of Untreated Water supplied to Third Parties	Hm³	22,43
Volume of Potable Water	Hm³	69,22
Volume of Purified Water	Hm³	68,73
Recovered Sludge	t	81.253
Hydraulic Energy Produced	MWh	100
Energy Produced with Biogas Cogeneration	MWh	21.900
Photovoltaic Energy Produced	MWh	0,894

1.4 2030 Strategic Plan

In September 2021, we approved our Strategic Plan with the time horizon set to the year 2030. Our plan takes into account the participation of our staff and the validation and additional contributions of stakeholders from the Water Observatory.

It's a plan "by everyone and for everyone."

The plan aims to become a tool that is useful, relevant, feasible, and in tune with current realities and available resources. It is likewise aligned with the national and international context and, more specifically, with the Sustainable Development Goals.

The plan allows us to improve our business activity, place value on the results and impact of our work, identify ourselves more closely with the citizens of the municipalities that **EMASESA** serves, and effectively contribute to society's social, regional, environmental and economic development, as well as to the protection of our natural and urban environment.

PURPOSE

To contribute to the progress of society and conserve the natural environment through water management.

MISSION

To ensure continuity and quality in the provision of comprehensive urban water cycle services, conceiving water as a human right and providing sufficient, healthy, acceptable, accessible, and affordable drinking water and sanitation services for the whole of society.

VISION

To strengthen our position as a leading public and sustainable company, relying on the participation of society and the stakeholders involved in the provision of our services.

VALUES

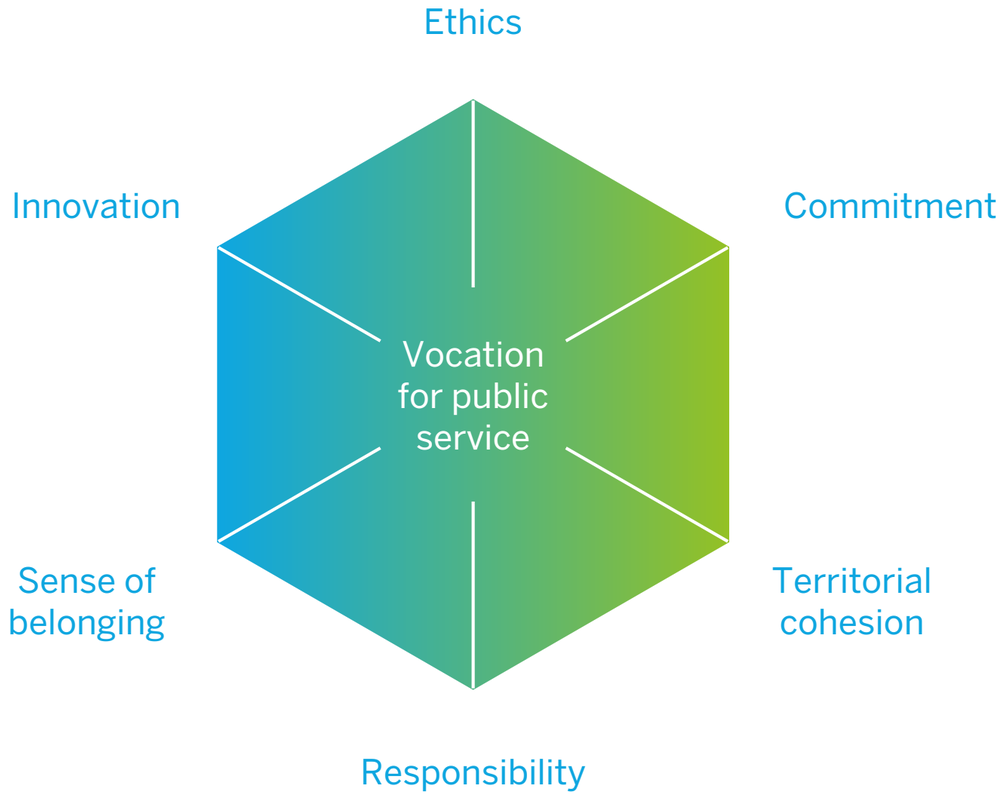
Promotion and advancement of an organization-wide culture that is clearly committed to society, stakeholders, and the local region. Our values materialize as structural elements that govern our policies and actions.

Driving Factors

- **A Vocation for Public Service:** We work on behalf of and for society.
- **Ethics:** We are trustworthy and honest.
- **Commitment:** Our commitment to the natural and urban environment is inherent to our business activity.
- **Regional Cohesion:** We have no doubts about the importance of collaboration between the different public bodies.
- **Social, Ethical, Economic, and Environmental**
- **Responsibility:** We provide an essential public service for citizens.
- **Sense of Belonging:** Everyone at **EMASESA** is aware of their role in the organization.
- **Innovation:** Innovation is the path that should continue to set the course towards our objectives as an organization.

The strategic plan was approved by the board of directors on September 29, 2021. The Management Committee coordinates, evaluates, and monitors the correct implementation of the measures and actions included in the plan, likewise assuming the task of approving possible revisions and adjustments.

The plan's main objective revolves around the user-centered design approach in order to optimize user experience and improve customer satisfaction.



Strategic Areas

PEOPLE

Having an excellent human team that is motivated, properly recognized, and committed.

GOVERNANCE AND CITIZENSHIP

Governance and Citizenship. Generating a more agile and efficient relationship with society, especially better customer service.

INFRASTRUCTURE

Guaranteeing people service continuity and quality through renovated, secure, and technologically advanced facilities, networks, and infrastructure.

ECONOMIC-FINANCIAL BALANCE

Strengthening efficiency, sustainability, and optimal use of public resources.

RESILIENCE WHEN FACED WITH CLIMATE CHANGE

Contributing to greater resilience in society and in natural and urban spaces under new climate scenarios.

DECARBONIZATION AND ENERGY BALANCE

Promoting the energy transition by contributing to a more competitive and sustainable economy.

METROPOLITAN DIMENSION AND URBAN DEVELOPMENT

A commitment to a new urban development model that is more humane, greener, and healthier as it pertains to the comprehensive water cycle.

DIGITAL TRANSFORMATION

Achieving a new digital culture in Society that allows for new, more effective, more efficient, and more innovative ways of working and relating to clients and stakeholders.

PARTICIPATION, EVALUATION, AND TRANSPARENCY

Making society a participant in the management and continuous assessment of the comprehensive water cycle.

WATER CULTURE AND KNOWLEDGE MANAGEMENT

Promoting better water use and consumption habits in society.

EMASESA

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2. Governance

2.1 Bodies and their Powers

We are governed by a General Shareholders' Meeting that includes representatives from each of the city councils that hold a stake in the Company. The General Shareholders' Meeting is **EMASESA's** supreme deliberating body and its decisions and agreements are binding in relation to the issues it has power to decide on.

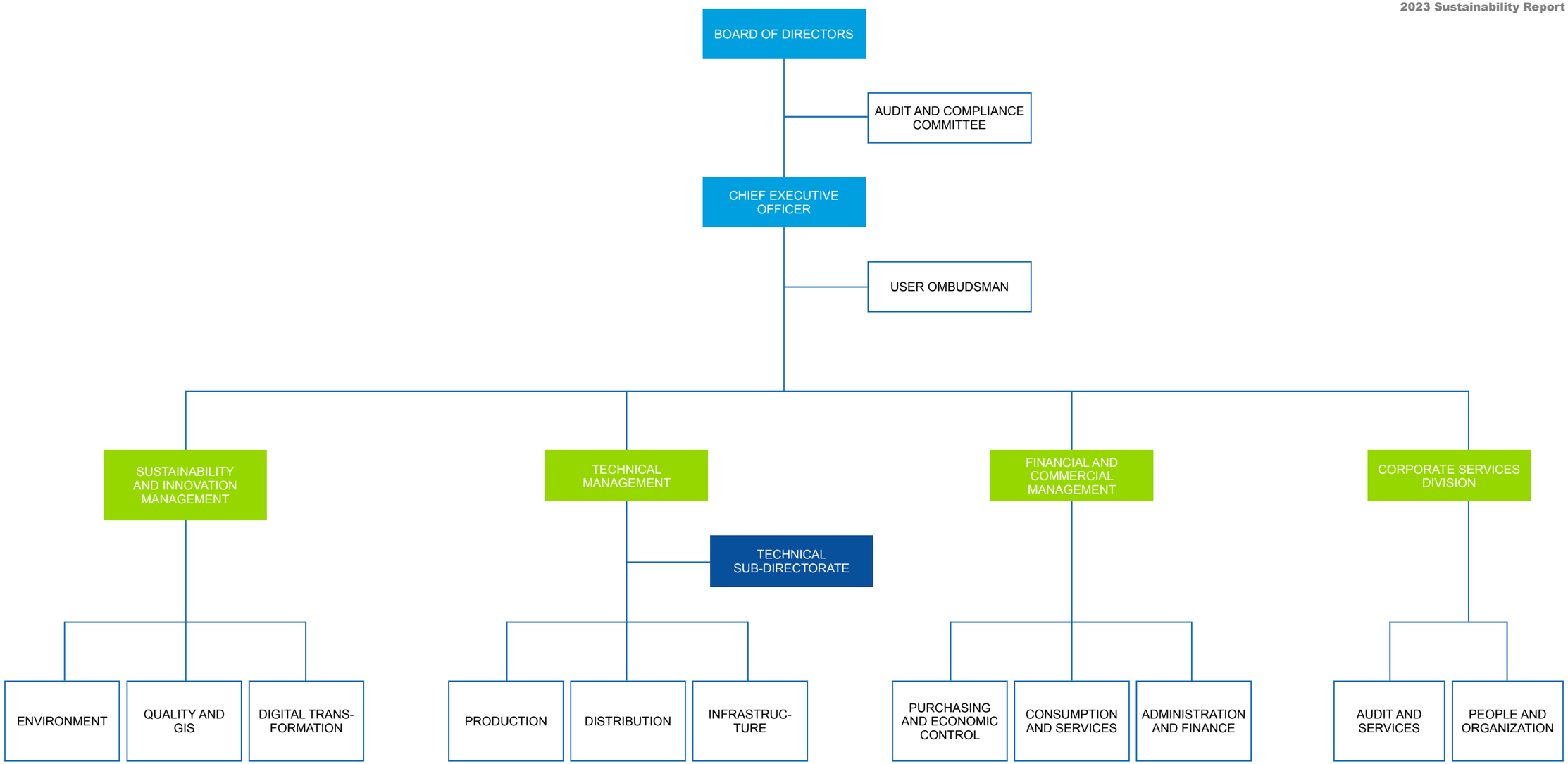
The Board of Directors is responsible for **EMASESA's** management, administration, and representation. It is made up of fifteen directors and has all the powers and authority not legally reserved for the General Meeting and not reserved for the General Meeting in the company bylaws. Board meetings are attended by workers' representatives and by representatives from the consumer and user associations. These representatives have the right to voice their opinions at meetings; however, they do not have voting rights.

The Executive Committee is a multi-person senior management and control body at **EMASESA.** Its members are appointed by the Board of Directors from among the directors themselves.

The Audit and Compliance Committee is the advisory body meant to advise and provide specialized assistance to the Board of Directors and the company itself in relationship with internal and external audits, as well as regulatory compliance within the organization.

At EMASESA we have a corporate governance system that seeks to guarantee public service provision and sustainability in decision-making.

Members of governing bodies


BOARD OF DIRECTORS
AUDIT AND COMPLIANCE COMMITTEE
CHIEF EXECUTIVE OFFICER
USER OMBUDSMAN
SUSTAINABILITY AND INNOVATION MANAGEMENT
TECHNICAL MANAGEMENT
TECHNICAL SUB-DIRECTORATE
FINANCIAL AND COMMERCIAL MANAGEMENT
CORPORATE SERVICES DIVISION
ENVIRONMENT
QUALITY AND GIS
DIGITAL TRANS-FORMATION
PRODUCTION
DISTRIBUTION
INFRASTRUC-TURE
PURCHASING AND ECONOMIC CONTROL
CONSUMPTION AND SERVICES
ADMINISTRATION AND FINANCE
AUDIT AND SERVICES
PEOPLE AND ORGANIZATION

2.2 Management Policies and Systems

Ensuring the objectives defined in the 2030 Strategic Plan requires the establishment of internal evaluation, planning, and monitoring mechanisms. This applies to all functional areas in the organization in a cross-cutting and comprehensive way, operating under the principles of continuous improvement, user-centered services, and cooperation.

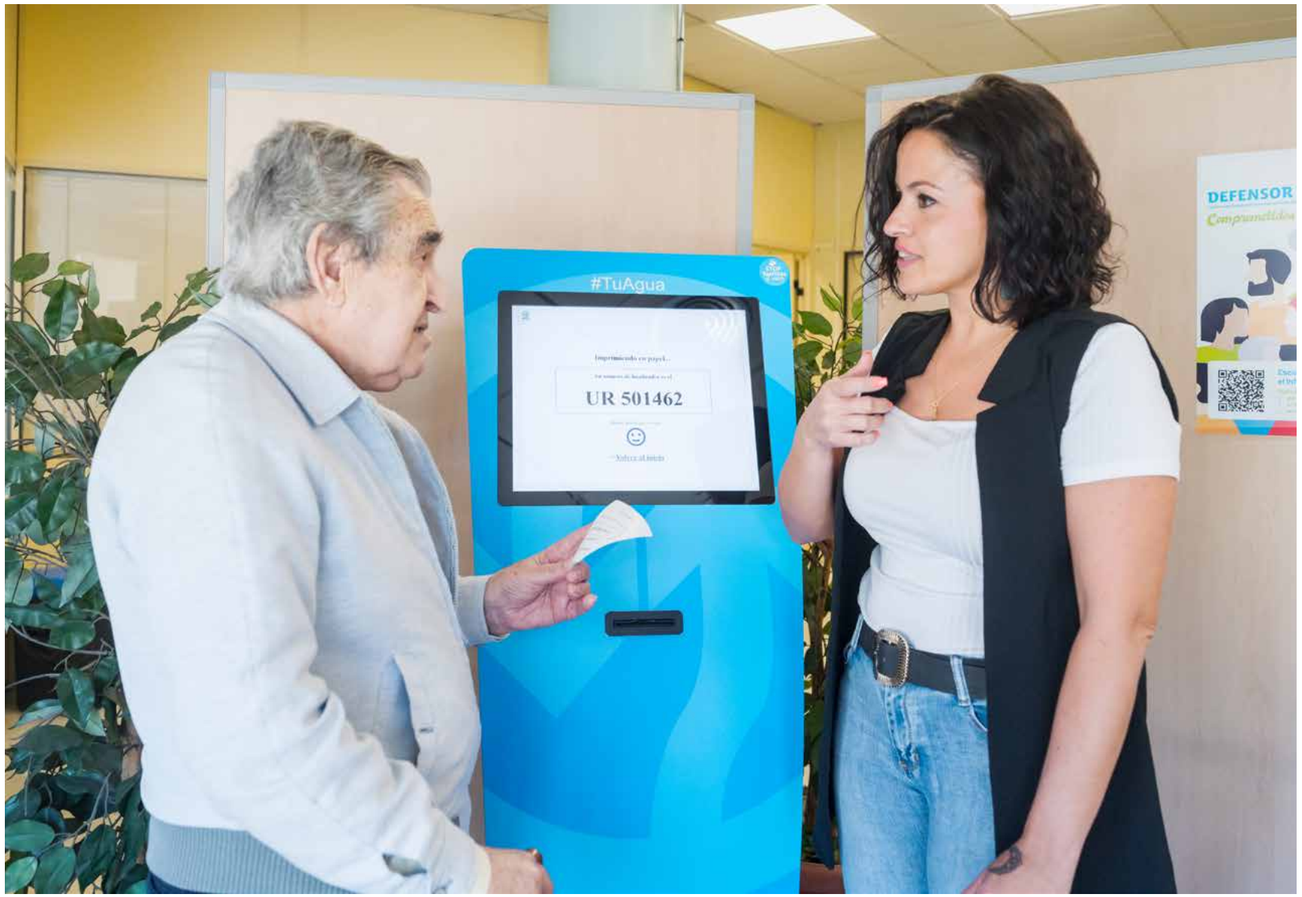
EMASESA has an integrated policy that acts as the backbone of other internal policies and more specific procedures that address environmental, social, human rights, personnel, and anti-corruption and bribery matters more granularly, making it possible to regulate the company's behavior as a whole in order to achieve comprehensive, fair, and honest governance.

Our drive for continuous improvement, as reflected in our policies, materializes through an Integrated Management System that we have implemented and certified for matters of Quality, the Environment, Occupational Risk Prevention, Information Security, Energy Management, Food Safety, and Research, Development and Innovation.

We also have ENAC Accreditation for our Water Quality Control Laboratories, our Meter Laboratory, and our Discharge Control Inspection Unit, in addition to Water Footprint and Hydro Footprint verifications.

This year, we have added the "Commitment to the Elderly" Certificate, issued by AENOR.

International standards and certifications prove the competence of our management systems



- **Quality** (ISO 9001:2015)
- **Environmental** (ISO 14001:2015)
- **Occupational Risk Prevention** (ISO 45001:2018)
- **Research, Development and Innovation** (UNE 166002:2014)
- **Food Safety** (UNE 22000:2018)
- **Energy Management** (ISO 50001:2018)
- **Information Security Management** (UNE-EN ISO/IEC 27001)
- **EMAS, Community Environmental Management and Audit Scheme, Water Footprint under the Waterfoot Print Network** (ISO 14046:2016)
- **Discharge Control Inspection Unit** (UNE-EN ISO/IEC 17020:2012)
- **Water Quality Control Laboratories, Meter Laboratory** (UNE-EN ISO/IEC 17025:2017)
- **Commitment to the elderly** (AENOR)

2.3 Risk Management

The Corporate Strategy area periodically identifies, assesses, and prioritizes risks at **EMASESA** in order to be able to anticipate future situations and be a resilient company in the face today's ever-changing landscape.

To undertake this assessment, the system is executed under the COSO II / ERM methodology, whose procedural logic is comprehensive and integrates strategic objectives, audit planning, and the implementation of consistent and appropriate mitigation measures. To this end, the areas responsible for risk control and monitoring are: the Audit and Compliance Committee together with Management.

Strategic Risks

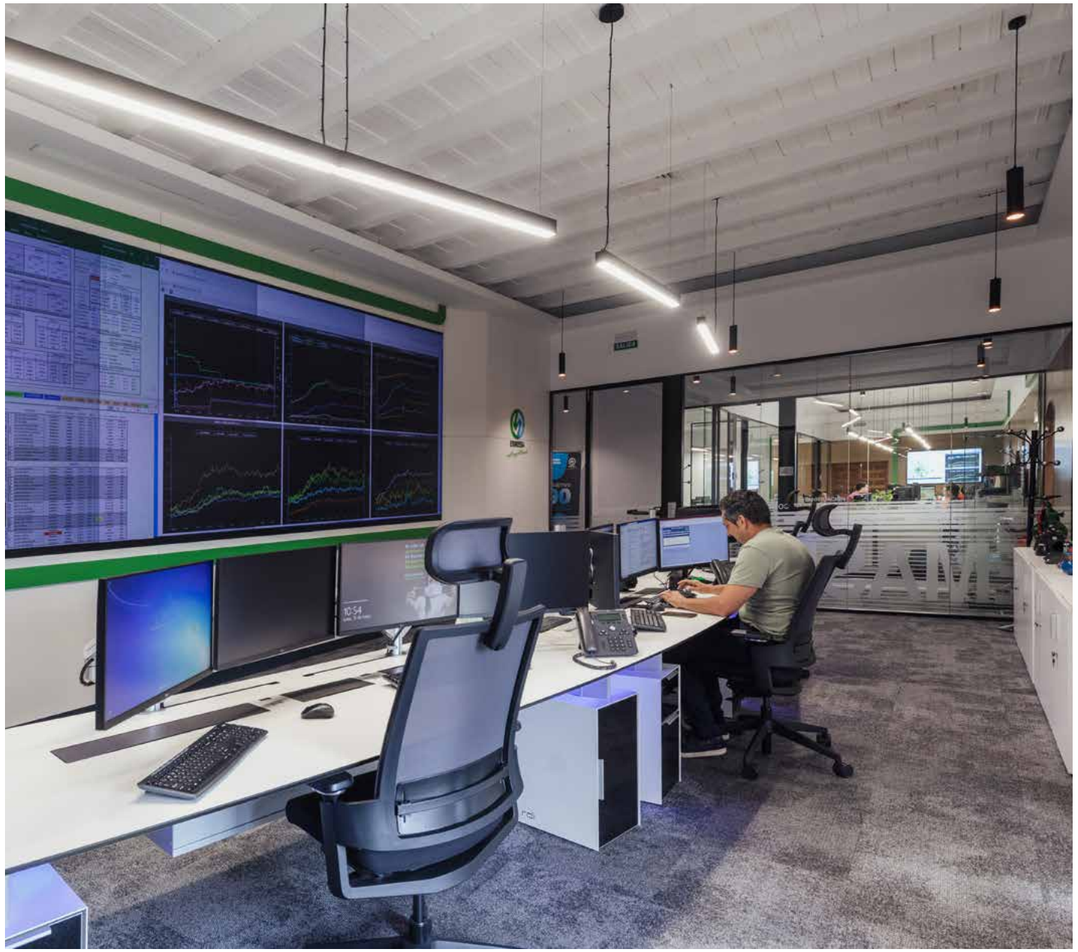
- Dependence on decisions not within **EMASESA's** control.
- Changes in the applicable regulations.
- Geopolitical instability.

Environmental Risks

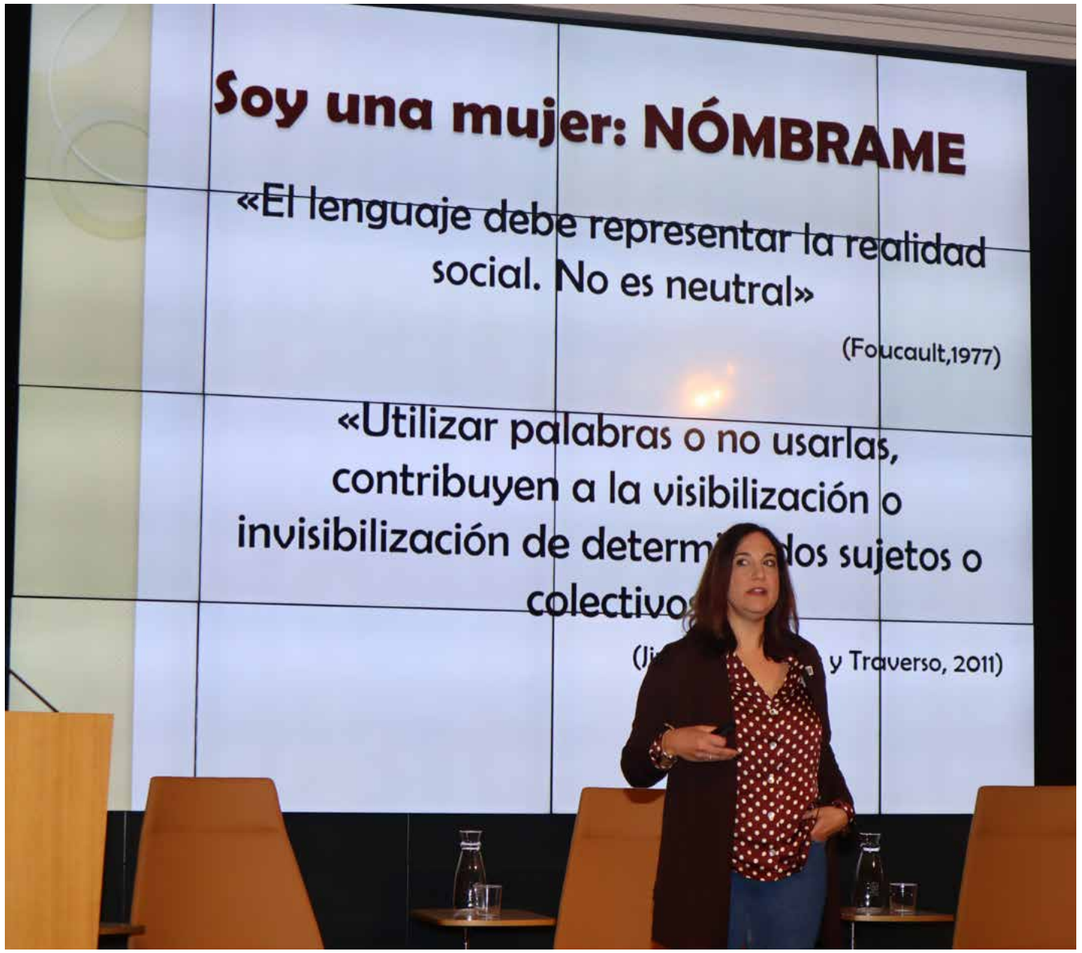
- The impact of climate change on **EMASESA's** operations.
- Drought.

Operational Risks

- Risks related to technology and security.
- Asset obsolescence.



2.4 Due Diligence: Human Rights



Our 2030 Strategic Plan includes premises such as efficiency and sustainability in service provision, being aligned with the Human Right to Water, the Sustainable Development Goals, and the principles of the UN Global Compact, as well as aligning with Water Governance as promoted by the OECD (the European Green Deal and the digital transformation of all our processes). All this is conceived with society and the user at the center of our processes.

In this context, increasingly more due diligence tools have been implemented, among which are our Social Rate (under the context of the Human Right to Water), our Corporate Compliance Protocol (in the field of corporate governance), as well as our Code of Ethics, our Whistleblower Channel, our Equal Opportunities Plan, and our Prevention and Action Protocol to avoid Sexual and Gender-Based Harassment in the Workplace.

In addition, the work of the **EMASESA** Water Observatory must be highlighted, promoting the right to citizen participation and transparency in decision-making as it pertains to public water resource management.

With regard to our Whistleblower Channel, we have internal procedures to classify incoming claims and effectively manage the functional area responsible for duly attending to the complaint. To this end, no complaints related to human rights violations were recorded during 2023.

We at EMASESA are firmly committed to promoting and respecting Human Rights and, consequently, to protecting the environment

We promote the guidelines of the International Labor Organization

1
We ensure that workers' salaries are fair and proportional to the responsibilities they perform, following the principle of equal remuneration.

2
We guarantee that no employees under legal age are hired. This commitment reflects our concern for workers' wellbeing and the protection of workers' rights, in line with international standards.

3
We recognize and guarantee the right of employees to unionize, associate, and participate in collective bargaining. This practice showcases our commitment to social dialog and collaboration between management and employees in order to ensure a fair and equitable working environment.

4
We promote an inclusive and diverse culture in which equality and respect are fostered for everyone regardless of their race, physical or mental characteristics, religious beliefs, age, nationality, gender, and sexual orientation.

2.5 Regulatory Compliance

We at EMASESA are committed to managing the comprehensive urban cycle in Seville and its metropolitan area with integrity, ethics, and transparency

This means avoiding any form of corruption and bribery, as well as complying with all applicable anti-bribery and anti-corruption laws and other regulations.

In this regard, the Board of Directors approved the Corporate Compliance Policy in December 2021, aiming to establish and implement the appropriate mechanisms and controls for the company's management structures, directors, and employees in order to minimize the risk of malpractice and regulatory non-compliance to the maximum extent possible.

- **Corporate Compliance Protocol:** An internal document whose aim is to prevent or mitigate (to the maximum extent possible) the risk of an employee or manager acting against the law while undertaking their work.
- **Code of Ethics:** Fundamental rules for behavior at EMASESA. Its main aim is to define the ethical values that serve as the basis for creating a solid corporate culture.
- **Whistleblower Channel:** A tool that is made available to our staff and third parties so that they can express themselves (without fear of reprisal) in relationship with any situation about which they have a legitimate suspicion of improper conduct, a question, a consultation, or in the event of observing malpractice.
- **Conflict of Interest Action Plan:** A document that includes a set of measures to prevent and correct conflicts of interest that may arise in relationship with any of our business activities or with the companies and entities that work on our behalf.
- **Company Statement of Absence of Conflicts of Interest** (DACI, from its Spanish acronym): Record to be signed by all participants implementing the Recovery, Transformation, and Resilience Plan.

The audit and corporate strategy department collaborated with our legal advisors to train our Directors and Managers in anti-corruption, ethics, and transparency

The whistleblower channel is the communication tool with which players can anonymously raise questions, concerns, and/or accusations of any breaches by third parties that have been detected. This channel is available on the Transparency Portal through a form. Staff can access this channel through the Employee Portal.

If the complaint is specifically related to non-compliance or if it is drought related, special channels have been set up via the telephone service number 955 010 010 (Seville Line 010) or the toll-free number 900 822 010, or through a specific form available on the Transparency Portal.

As regards the Whistleblower Channel, all the accusations and queries received were responded to, most of which were related to matters/complaints about the drought ordinance. Of the 71 complaints, only 3 were related to **EMASESA** staff and there are none for human rights violations.

2.6 Subcontracting and Suppliers

EMASESA, due to its nature as a public company, is subject to the legal framework governing public-sector procurement processes. To that end, Law 9/2017 establishes the inclusion in all specification documents of social, labor, and environmental considerations such as solvency criteria, awarding criteria, and special conditions for execution. These are to be applicable to both the tender and the resulting contract.

The inclusion of social and environmental clauses in the specifications documents is done with dual control measures: first, the basic or intensified legal obligations are verified, which are the same regardless of the nature of the tendered service; second, specific criteria or conditions are established for the work, service, or supply in question.

The Specific Administrative Clauses Document (PCAP, from the Spanish acronym) for each tender includes general legal obligations in terms of social and labor matters, as well as specific environmental obligations depending on the nature of the service.

These policies bring together environmental and social criteria for inclusion in the technical specifications documents. They are based on the principle of the government's role as a catalyst for good practices and a driver for transformation towards common social and environmental goals.

Promotion of the local economy is included as an element to be considered in these policies. To that end, **EMASESA** had the following results throughout 2023.

Our tender procedures are subject to the Public Procurement Guidelines of the City of Seville

RANGE	SUPPLIERS	PERCENTAGE
Local*	5.705	61,76%
Autonomous Region	737	7,98%
National	2.639	28,57%
Foreign	157	1,70%

*Identifies supplier contracting on the provincial level.

2.7 Communication with Stakeholders

Our stakeholders are the main body we listen to and base our strategic planning on at EMASESA.

For us, their concerns and needs guide our daily management decisions, as we are always striving to strengthen relationships and promote active participation and co-governance.

In 2017 we created the Water Observatory to act as a channel for citizen participation processes. The objective of the Observatory is to achieve more participatory, collaborative, transparent, and co-responsible public management of the comprehensive water cycle, allowing us to meet present and future challenges.

Goals

- To guide and back up the decision-making processes in the company.
- To create spaces for negotiation between the company and stakeholders on relevant issues regarding the comprehensive water cycle.
- To promote co-responsibility and collaboration, facilitating consensus-building and inclusive processes.
- To promote a culture of active participation as a new way to achieve continuous improvement.

The Observatory's goals are aligned with the pillars and objectives of the strategic plan: Governance and Citizenship, Participation, Evaluation, and Transparency, and Water Culture and Knowledge Management.

To strengthen its workings, the Observatory is complemented by 4 advisory boards that meet periodically. In the event there is a particular need, extraordinary meetings are held.

At the internal level, the success of **EMASESA's** transformation process requires the coordination, involvement, and commitment of different players. To this end, a structure that would be both participatory and cross-cutting was defined and agreed upon, with Ágora Group as a member, as well as about 60 employees from all work centers, functional areas, and professional levels and classifications. The mission thereof is participation —through discussion— in the company's strategic project proposals.

In the year 2023, there were 3 meetings in which reflections, proposals, and ideas on different topics were shared. Management promotes this initiative in the hopes that the people who are part of it will actively join in and share their opinions so as to become a part of the cross-cutting/ organizational decision-making done by management bodies.

ÁGORA. FOR SHARED GOVERNANCE AND TRUST.

2.8 Materiality Analysis

The materiality analysis allows us to get a glimpse into the strategic and operational priorities that we must pay attention to for the 2026 horizon.

To this end, areas of special interest that affect different dimensions of management in accordance with the Environmental, Social, and Governance (ESG) pillars are defined as “material matters.”

This analysis includes a dual assessment: impact materiality and financial materiality.

- **Financial Materiality.** This identifies the risks and opportunities that a specific material matter may produce in relation to profitability, market position, and access to financing.
- **Impact Materiality.** This identifies the repercussions that a specific material matter may bring about in the environment and in society.

We at **EMASESA** have established our own procedure to identify each stakeholders’ approach for evaluation.

Material Matters

Environmental Matters

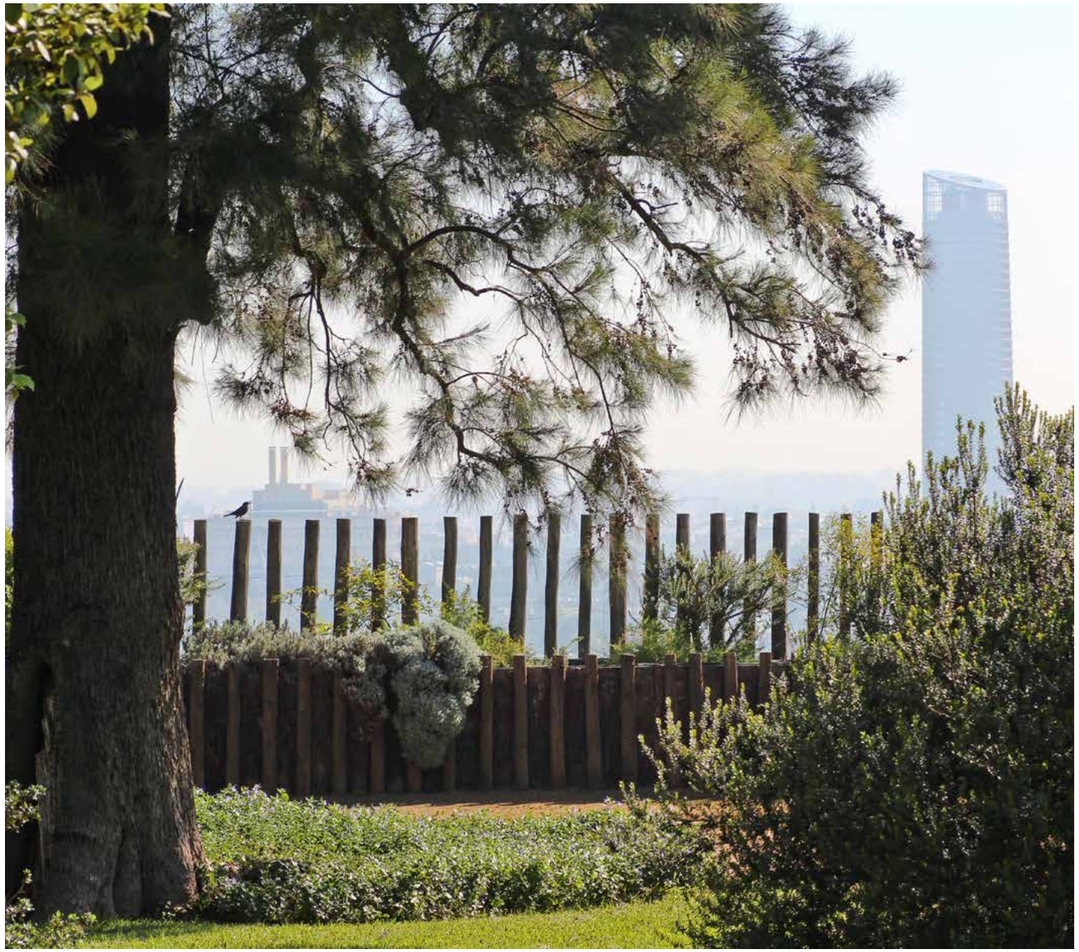
- Biodiversity and Ecosystems
- Effluents
- Energy and the climate
- Infrastructure Efficiency and Resilience

Social Matters

- Occupational Health and Safety
- Occupational Practices and Talent Management
- Diversity, Equality, and Inclusion
- Community Impact

Governance

- Water Quality and Safety
- Innovation and Digitalization
- Good Governance, Transparency, and Compliance.



Dual Materiality Analysis Stages

Identification of Stakeholders

The stakeholders involved and communication channels used for channeling their participation are inventoried.

Identification of Material Matters

The material matters from the different sources queried are consolidated to establish the “material matter universe” evaluated by stakeholders.

Processing and Calibration of Results

The results are processed and the scores given by the respondents are calibrated based on an internal procedure that corrects for possible variations in the judgments made.

Inventory of Reporting Schemes and Rating Agencies

The sector trends are evaluated based on the specific SASB standards for the utilities and comprehensive water management sectors. The materiality of other sectors is also audited, as well as the measurable ESG elements in accordance with the S&P 500 and MSCII rating agencies.

Launch and Monitoring of Results

Surveys are sent to stakeholders and participation is reviewed weekly in order to make timely reminders. To facilitate the evaluation process, an informative video and an instruction manual on the procedure are both provided.

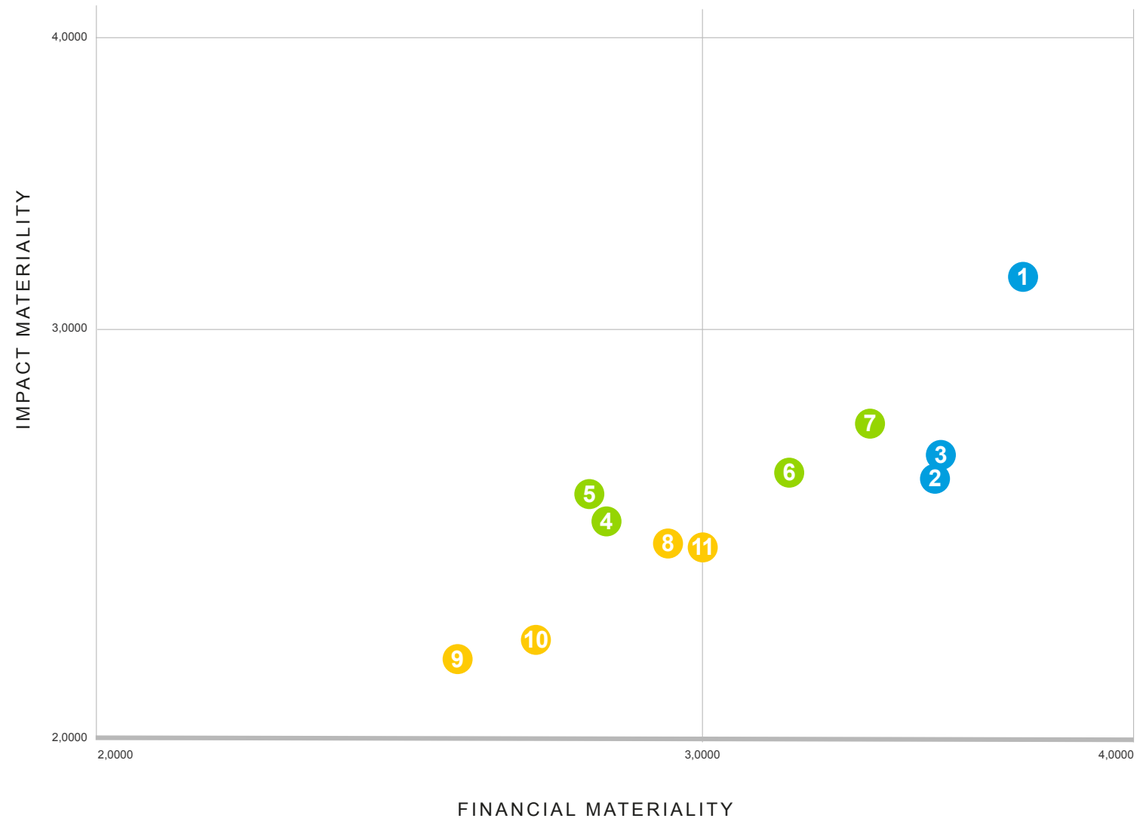
Creation of a Matrix

The matrix is designed in accordance with the results obtained after the data is processed and refined, being grouped by ESG management dimension.

The permanent members of the Water Observatory helped us to undertake the materiality study. At the internal level, their participation was channeled to the directors, managers, heads of division, and heads of department.

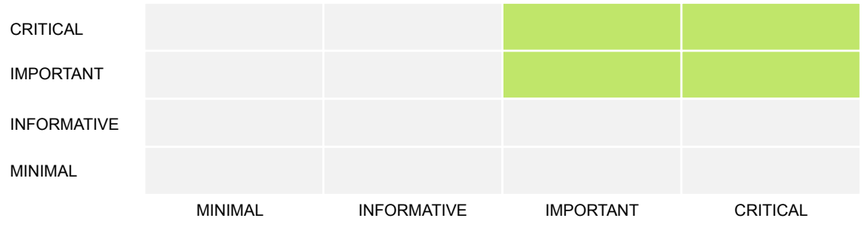
Materiality matrix EMASESA

Environmental Social Governance



MATERIAL ISSUES

1. Water quality and safety
2. Innovation and digitalization
3. Governance, transparency and compliance
4. Ecosystems and biodiversity
5. Effluents
6. Energy and climate
7. Infrastructure, efficiency and resilience
8. Occupational health and safety
9. Labor practices and talent management
10. Diversity, equality and inclusion
11. Community impact



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3. Environment

3.1 Water resources

Our main aim is to supply water suitable for human consumption to the public distribution network, doing so with utmost quality and efficient resource management while also complying with current regulations.

Thus, we seek to guarantee efficiency and innovation in the company's operations and ensure the quality and excellence of the services we provide for the benefit of the community using our services and society as a whole.

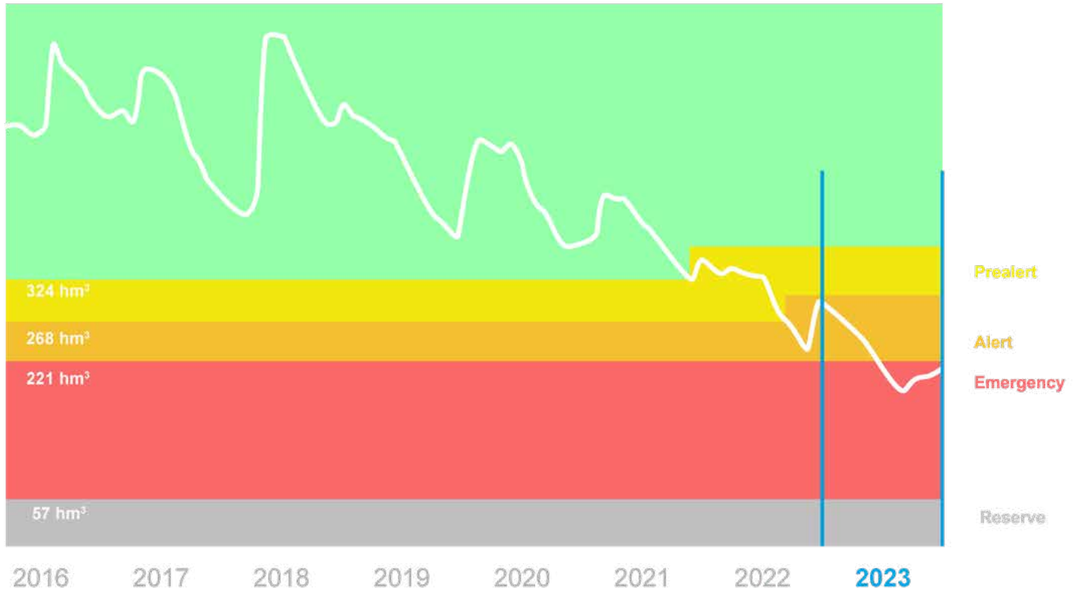
In 2023, we faced the aggravation and prolongation of the drought and the low availability of water resources in the system. This, in turn, had a significant impact on various aspects of life and the economy in the region. The lack of rain and high temperatures caused a critical decrease in the levels of the reservoirs, which were at historical lows.

On January 1st, 2023, the system had 289 hm3 (45%). In application of the Emergency Plan's water resource status protocol and despite having been over the 268 hm3 threshold in December 2022 (the alert threshold), the system's status was set at DROUGHT ALERT, shortages, hoping for more contributions that would bring reserves up to DROUGHT PRE-ALERT levels.

On September 4th, 2023, the monthly drought report published by the Guadalquivir Hydrographic Confederation noted that our water system had a DROUGHT EMERGENCY status, with less than 221 hm3 of water.

As of January 1st, 2024, the available reserves stood at 210 hm3 (less than 33%), thus our system's status was at DROUGHT EMERGENCY, shortages

This situation was aggravated by the lack of precipitation during 2023. Contributions to reservoirs did not compensate for the consumption levels of the system. Thus, the deficit accumulated over the last 5 years amounts to more than 300 hm3, confirming that the current drought (October 2018), which has lasted more than 5 hydrological years (from October 2018), is the worst one on the books since records have been kept.



This situation extended to the entire Guadalquivir Basin, where there were regions with serious supply problems both in terms of quantity and quality. For that reason, the national government approved Royal Decrees 4/2023 and 8/2023, which adopted urgent measures on water in response to the drought.

2023 Drought-Related Actions

Considering the approval of the Royal Decrees and the low amount of rainfall in reservoirs, **EMASESA** implemented a tiered plan of measures for the comprehensive water cycle: availability of resources and infrastructure and actions affecting demand.

1. Actions related with Resource Availability

A request was put in to the Guadalquivir Hydrographic Confederation (CHG, from its Spanish acronym) to ask for the extraordinary mobilization of resources from Huesna, Pintado, and the Guadalquivir River. The CHG approved the transfer of 60 l/s from the Huesna System, equating to 155,000 m3/month.

- A request was put in for water to be allowed to be collected from the Guadalquivir River for incorporation into our drinking water treatment system or for exchange with resources from the El Pintado Reservoir (with the Viar Irrigation Community).

- Negotiations with the Viar Irrigation Community for the exchange of water from El Pintado for river water.
- Collaboration with the Parks and Gardens Department of Seville to create new collection points for non-potable water.
- Extension of irrigation network with non-potable water in the downtown area of Seville and in Dos Hermanas.
- Start of desalination plant project in the Guadalquivir River Estuary.
- Groundwater use study in Alcalá del Río.
- Study to use groundwater from the Las Cruces Copper Mine.

Currently under execution and with an expected completion date of 2024, the Guadalquivir Hydrographic Confederation declared the rehabilitation of the Guadalquivir Pumping Station to be an immediately executable action. This work will allow for the collection of river water upstream of the Alcalá del Río Dam so that said water can be used in the Melonares Collection System. Other work undertaken includes the connection of the Herreros Filter Pump Station with the Viar Pumping Station, which will increase conveyance capacity from Melonares to 100% of what is needed by the system.

2. Actions related with Demand

The year 2023 began with an ordinance restricting non-essential water use as a result of the drought alert.

In relationship with the State of Emergency, our Drought Emergency Plan establishes the goal of achieving a reduction in the distributed water volume of up to 10%.

As one measure aimed at achieving that objective, a new ordinance was published in the month of October in which the restrictions of the previous ordinance were kept and new obligations were imposed:

1. "For cases in which non-potable water is used for any of the prohibited or restricted uses listed herein, the facility owner must clearly and visibly indicate that the water being used is not potable."

2. "A 10% reduction in each user's consumption is set as a savings objective with respect to the same period's consumption in 2019."

Additionally, the Drought Office undertook initiatives to continue raising awareness of the need to keep optimizing our consumers' water use:

Objective 90. Reduce your water consumption to 90 liters per person, per day. A necessary collective challenge in the context of climate change.

- Signs (in digital format and paper format) for the Association of Property Managers with information about OBJECTIVE 90 and the restrictions of the ordinance.
- Advertisements and publications in the media encouraging responsible consumption.
- Three Water Observatory plenary sessions specific to the drought situation.
- Specific communication channels were set up to respond to questions and file complaints in relationship with the drought.
- Inspections and visits were carried out in housing developments where high consumption was detected in common areas.
- Visits were made to hotels where anomalous consumption patterns were detected.

During 2023, the reduction in the volume of water distributed reached 5.2% (in comparison with 2019). It should be noted that the reduction target during the drought alert, as established in our Plan, was 5%

Water Quality and Supply Safety

We at **EMASESA,** as a company that undertakes comprehensive water cycle management, consider quality in the provision of our services to be a key factor in our management. Therefore, we have exhaustive quality control which starts at the reservoirs and ends at the taps of our users.

We work each day to ensure that the services we provide meet the highest requirements set out in current laws, standards, and regulations

To comply with these quality standards, we at **EMASESA** have an extensive monitoring program that covers the entire comprehensive water cycle from collection and delivery to the consumer to wastewater treatment and delivery to the receiver. Said program was designed following the criteria established by regional, national, and European regulations.

To carry out monitoring, we have highly qualified personnel in our control business (water sampling and testing): in our laboratories and in our industrial discharge inspection area. The latter two areas were accredited by ENAC and by standards UNE-EN ISO 17015 and UNE-EN ISO 17020, respectively, being essential tools to guarantee our technical capacity and confidence in the results obtained.

Likewise —and for drinking water— we have implemented a management system based on the identification, evaluation, and management of risks (Water Supply Safety Plan; PSA from the Spanish acronym). All areas of the company are involved in said system and it is verified and certified under the ISO 22000 food safety standard.

During 2023, our Sanitation Safety Plan (PSS, from the Spanish acronym) was developed following the same lines as previously mentioned.

1. Quality at Reservoirs

The Monitoring Program for Aquatic Ecosystems Used for Supply aims to provide the necessary information and knowledge to achieve active resource management, facilitating the remaining stages of the comprehensive water cycle and minimizing its impact on the environment. Thus, the treatment process begins at the reservoirs, selecting the best water quality at source to facilitate subsequent treatment at the potable water treatment plant (PWTP). For this, it is necessary to analyze physical-chemical and microbiological variables, among others. This analysis is carried out by the Water Quality area.

During the year 2023 and in support of the Reservoir Monitoring Program, 1,261 samples were taken and 53,675 analyses were carried out

2. Quality in Drinking Water Treatment Processes

EMASESA has three potable water treatment plants (PWTP). They are located in El Carambolo (Camas), El Garrobo, and El Ronquillo. To guarantee the proper functioning of the PWTPs, periodic controls are carried out at the critical points of the process on the treated water itself and on the reagents used, being done to ensure the quality of the water produced.

Approximately 17,500 samples were taken and about 150,800 analyses were performed.

3. The Quality of the Water that We Distribute

We at EMASESA carry out the health controls established by regulations, in addition to any other controls necessary to achieve the greatest level of guarantees and safety for the user. Thus, our water quality area carries out different types of tests on water intended for human consumption. Checks are carried out at the outlet of the PWTP, in the distribution ponds, at representative points of the distribution network, and at consumer taps. In addition to all of this, we also monitor the cleaning and disinfection initiatives undertaken in ponds and distribution networks.

In 2023, 135,651 analyses were carried out on 5,453 samples.

During the year 2023, 40 incidents were detected. Compliance is 99.9%.
In addition to the control measures established by current regulations, at EMASESA we carry out complementary tests, among which are those undertaken in response to requests from the community using our services (requests that we receive through our customer service channels).

During 2023, a total of 40 requests were received, bringing about the completion of a total of 200 samples (7,236 analyses). It should be noted that the laboratory responds to more than 95% of the requests received in less than 48 hours.

4. Discharge Water Quality

At EMASESA we also carry out an exhaustive program to monitor and control wastewater quality, which includes the control of industrial discharge to the sanitation network, the control of collectors, the control of overflow systems (spillways), WWTP inputs and outputs, as well as monitoring the medium receiving said effluents.

Our monitoring of industrial discharge to public sanitation networks includes two fundamental activities: (1) the inspection of industrial discharge, in which it is verified that the discharge complies with current law, and (2) investigation into the nature and origin of pollutants in the discharge. Thus, **EMASESA** is accredited as an inspection entity under the UNE EN ISO 17020 standard and certified under the UNE EN ISO 9001 standard for the control of industrial discharge.

More than 600 industries are currently monitored. Taking into account the distribution of industries by river basin, Copero and Ranilla would represent 75% thereof.

Actions related with Water Quality

- Implementation of the high-resolution chromatographic techniques required for monitoring new parameters:
  - → Pesticides (herbicides, fungicides, insecticides, rodenticides, etc.) used for agriculture, livestock, and pest control.
  - → Persistent and bioaccumulable organic compounds
  - → Polluting compounds with a pharmacological and personal care origin.
- Implementation of new methodologies for studying cryptosporidium, a pathogen of growing interest in public health.
- Implementation of new methodologies for studying viruses of interest in relationship with microbiological water quality control.
- Start of the "Public Health Observatory in the Comprehensive Urban Water Cycle" project.
- Study on the presence of organic micropollutants in wastewater.
- Monitoring of SARS-CoV-2 in wastewater.
- VASTUM project.

The continuation of this project being undertaken with the University of Seville's Department of Microbiology and aiming to determine the presence of antibiotic-resistant microorganisms in urban wastewater. Work is currently being carried out to analyze the data obtained in the sanitation network in order to present the results to the scientific community, as was done last year with the results obtained in the WWTPs.

- Participation in the following strategic projects for economic recovery and transformation (PERTE, from the Spanish acronym):
  - → Real-time pond outlet monitoring and control at Adufe. Installation of instruments for the real-time monitoring of the physical-chemical characteristics of drinking water in the Adufe Bajo ponds, connected to the main ponds at the outlet of the Carambolo PWTP.
  - → Well water intrusion alerts in 13 network areas for intrusion detection.
  - → Warning system for low chlorine levels in the distribution network. 21 stations for real-time monitoring of free chlorine levels in the most affected areas of the supply network.
  - → Real-time monitoring for trihalomethanes at Alcalá del Río, Carambolo, and the most unfavorable areas of the supply network.
  - → Warning system for reclaimed water contamination at the Ranilla WWTP.
  - → Detection of quality problems in the supply network. Implementation of an artificial intelligence tool on the data lake for the detection of possible water quality problems in the supply network.

Infrastructure

The comprehensive water cycle is composed of a complex network of connected and interdependent pieces of infrastructure to guarantee the supply of drinking water with the highest standards. This techno-industrial system/network includes infrastructure and equipment at all stages:
collection, conveyance, distribution, purification, treatment, and discharge.

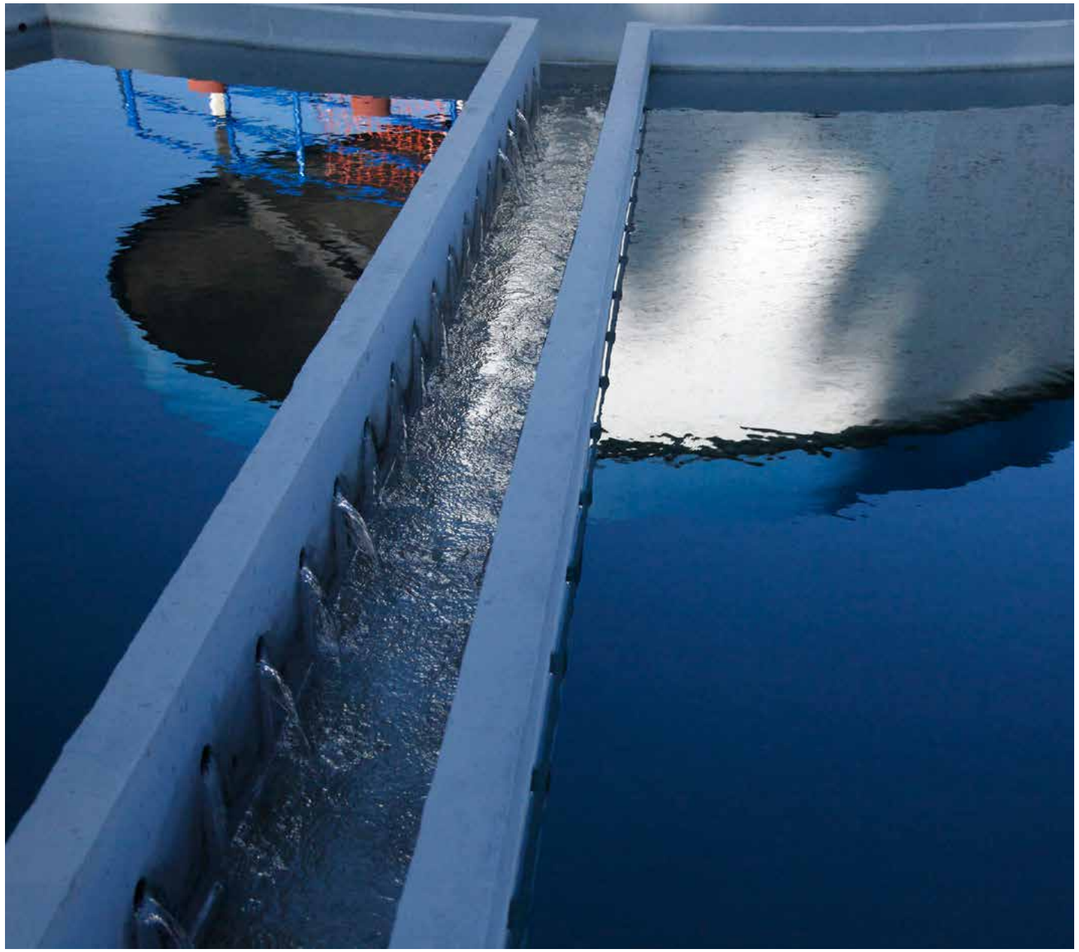
- 6 reservoirs (Minilla and Gergal under direct management). Maximum capacity: 641 hm^3.
- 3 hydroelectric power plants. Total power: 11,277 kW.
- Conveyance lines: La Minilla Canal; Gergal-Carambolo; Melonares Basin and Connection; Emergency Transfer and Lines.
- 7 raw water pumping stations.
- 3 PWTP: Carambolo, El Garrobo, and El Ronquillo.
- Potable Water Ponds: Carambolo (200,000 m^3) and Adufe (162,000 m^3); El Garrobo and El Ronquillo.
- Potable water pumping stations (Adufe area and surrounding areas with the Carambolo PWTP).
- Granular activated carbon filters at the Alcosa Pumping Station.

The maintenance, adaptation, and renovation of these elements is key, strategic, and a priority for optimizing processes, evaluating the suitability of actions, and planning investments

The following actions can be highlighted for 2023:

- Installation and commissioning of the chlorine dioxide dosing system at the transfer pumping station to improve organic matter oxidation processes.
- Definition of the invasive species control and treatment system to be used if water is taken from the Guadalquivir River.
- Completion of the remodeling project for the screen cleaning system at the inlet of the Melonares Reservoir, helping to avoid uptake problems in the event of mass algae buildup.
- Renovation of the flocculant preparation and dosing systems at the Carambolo PWTP with the expectation that the workload will increase due to the deterioration of water quality.
- Start of the remodel project for the granular activated carbon filters at the Carambolo PWTP, given the forecast that operations at this facility will intensify due to quality problems in the water gathered.
- Implementation of numerous improvements in different areas of the distribution network to reduce water retention times in the pipelines.

The Ministry for Ecological Transition and the Demographic Challenge called for, within the context of the second drought decree dated December 28th, 2023 and as a priority action that should be executed immediately, the installation of an ozone treatment plant to allow for improved treatment capacity — necessary to be able to treat the water of the Guadalquivir River with guarantees and to be able to face episodes of worsening water quality at reservoirs due to the drops in volume.



Indicators

WWTP	2023 Treated Water (m³)	Name of the receiving medium
San Jerónimo	11.182.543	Miraflores Stream
Ranilla	13.740.254	Ranilla Stream
Tablada WWTP	6.647.463	Old Guadaíra River Riverbed (Guadalquivir River)
Copero	35.031.464	Guadaíra River
Mairena WWTP	1.963.813	Los Molinos de Campo Stream
Ronquillo	127.907	La Lana Stream

WWTP	Suspended Solids (mg/l)		COD (mg/l)		BOD5 (mg/l)		Nt (mg/l)		Pt (mg/l)	
	Parametric Limit	2023 Average Value	Parametric Limit	2023 Average Value	Parametric Limit	2023 Average Value	Parametric Limit	2023 Average Value	Parametric Limit	2023 Average Value
Copero	35	13	100	52	25	4	-	49	1	0,9
San Jerónimo	35	10	125	44	25	5	10	40	1	0,8
Tablada	15	9	80	46	20	3	-	38	1	0,7
Ranilla	35	9	125	42	25	1	10	8	1	0,9
Mairena-El Viso	35	9	125	45	25	2	15	11	2	1,7
El Ronquillo	35	7	125	38	25	9	-	-	-	-

3.2 Biodiversity and Ecosystems

Ecosystem conservation and protection, together with a sustainable use of the resources ecosystems provide us with, are fundamental elements to move towards a green economy and sustainable development model. This approach seeks to minimize the impact of human activities and recognizes the value and importance of ecosystem services for economic development and social wellbeing.

Our facilities are located in the following natural areas and special interest areas for the protection of the environment and biodiversity:

- **Sierra de Aracena and Picos de Aroche Natural Park:** Includes the Aracena and Zufre reservoirs and hydroelectric power plants. Also the Aracena and Zufre power lines, located within the Province of Huelva.
- **El Gergal Periurban Park:** Houses the conveyance infrastructure for the El Gergal Reservoir.
- **Sierra Norte de Sevilla Natural Park:** Partially covers the Melonares Reservoir basin.
- **Guadalquivir Riverbed:** From Alcalá del Río to the river's mouth is a Special Area of Conservation, home to all the **EMASESA** facilities which cross the riverbed or are located on its banks.
- **La Puebla del Río:** The municipality is a Biosphere Reserve. It is home to all the EMASESA facilities that are located in the municipal area.
- Guadaíra Riverbed: As it passes through the historic center of Alcalá de Guadaíra; it is a Natural Monument and the banks of the river constitute the Natural Monument's Protection Area. It is home to all the **EMASESA** facilities which cross the riverbed or are located on its banks in the region.

During 2023 we continued with our commitment to contribute to biodiversity improvement and conservation while minimizing the impact of our business activity on the environment -- doing so both in natural ecosystems and in the urban context by deploying initiatives linked to different areas.

Actions related with Natural Capital

Natural capital is a concept that combines natural resources and ecosystem services to provide essential benefits for human wellbeing and for biological system balance and the workings of the economy. It includes elements from the natural environment that either directly or indirectly contribute to the production of goods and services, as well as contributing to quality of life.

Natural resources and ecosystem services are essential components for our business, since the comprehensive water cycle depends (to a greater or lesser extent) on the natural assets of the river basins and the services provided thereby: energy generation, CO_2 fixation, etc.

Healthy and well-managed ecosystems can help cushion the impact of natural phenomena and climate change, contributing to environmental stability and adaptation to changing conditions.

At the same time, biological diversity is a crucial component of natural capital, as it underpins the resilience of ecosystems and the ability to adapt to changes and disruptions.

To this end, reports with a natural capital perspective provide valuable information on the degree of interdependence between **EMASESA's** operations and the natural environment, as well as allowing us to identify and assess the financial and social opportunities that can be gleaned from environmental conservation.

Among the projects undertaken in 2023, the following are noteworthy:

- Creation of a natural resource inventory.
- Assessment of the ecological status and potential of aquatic ecosystems.
- In-company and out-of-company diagnosis.
- Development of a roadmap with training workshops and an internal project for integration at **EMASESA.**
- Adaptation of the READS tool to **EMASESA's** reality in order to account for natural capital impacts and dependencies.

Actions related with Biodiversity Conservation

Studies on natural capital and biodiversity find reservoirs to be spaces of special interest for identifying risks and developing initiatives to improve the ability to respond to contingencies while ensuring water supply and quality standards.

- Quantitative evaluation of ichthyosis and a sedimentological study of the reservoirs supplying Seville and its metropolitan area.
- Development of the Invasive Species Early Warning System. During 2023, two campaigns were undertaken.

Actions related with Improving Natural Assets and Ecosystem Services

Actions emphasize interventions in two areas: (1) in the area of hydrological infrastructure and (2) in projects in urban environments related to green infrastructure in the water network to help improve resilience to climate change.

- Projects to bring industrial spaces back to nature. In 2023, 105 trees and 80 shrubs were planted around the sludge composting plant in the El Copero Environmental Complex.
- Due to water shortage, in 2023 there was no planting in the catchment area around the Gergal, nor at the El Arboreto Botanical Garden.
- Planting of trees in the urban context after construction work in order to compensate for our impact on the environment.

Urban Planting in 2023

Feet of Trees	Unit	254
Feet of Shrubs	Unit	6.593
Total planting	**Unit**	**6.847**

Actions related with Construction Work

With a comprehensive approach in mind and since the year 2017, we at **EMASESA** have been voluntarily undertaking environmental inspections in our construction work to allow us to identify and control the environmental impact generated and to establish measures to reduce adverse effects. In general, the following inspections are noteworthy:

- Monitoring of construction and demolition waste (CDW). We have an environmental logging, control, and monitoring system.
- Protection of trees which may be affected during the execution of work.

Thus, **EMASESA's** Technical Service plans the number of inspections that it deems appropriate depending on the characteristics and type of construction work in question.

During the year 2023, 161 inspections were undertaken

3.3 Climate Change

Climate change is a phenomenon of great relevance for our business due to the increase in exposure to environmental risks stemming from extreme weather events and the ever more chronic nature of weather patterns that can bring about conditions and impacts of different natures:

1. **Droughts and Water Shortages.** Climate change increases the frequency and severity of droughts, which reduces the availability of fresh water. This drives us to look for alternative sources and to invest in technologies for reuse and optimization.

2. **Floods.** Extreme rainfall can cause flooding, affecting infrastructure and contaminating water sources. That is why we are working to improve our water management systems to face these extreme events and maintain water quality.

3. **Water Quality.** Rising temperatures and varying rainfall patterns can increase the amount of pollutants in rivers and lakes, as well as promoting the growth of harmful algae. That is why we adapt our water treatment processes to guarantee the supply quality.

4. **Resilience and Adaptation.** Water management infrastructures (such as dams, treatment plants, and distribution systems) must be designed or updated to withstand extreme weather events and changes in water use patterns. This implies significant investments in modernization and maintenance.

Decarbonization

We at **EMASESA** have been working on greenhouse gas inventories since 2015 in order to identify emission sources and their distribution, as well as to effectively plan comprehensive decarbonization strategies.

In 2021, given the substantial modification of our emissions, we updated the base year as a reference and control point for historical emissions, incorporating the UNE EN-ISO 14064 standard into our integrated management system. This scheme establishes the guidelines for conducting greenhouse gas inventories as a tool to account for and manage direct and indirect impacts.

We at EMASESA work from a dual perspective based on the principles of resilience and anticipation of impacts

We deploy projects to decarbonize our operations. Said operations are, in turn, grouped into two areas of special interest based on improving energy efficiency and self-consumption:

1. **Co-Digestion at WWTPs.** This is the joint anaerobic digestion of sludge and waste of different origins with a high organic load. This process is a solution for this type of waste and, at the same time, it brings about an improvement in the production of biogas at WWTPs -- with the consequent increase in the use of renewable energies.

2. **Photovoltaic Energy.** Photovoltaic plants are being used at work centers, pumping stations, ponds, and other facilities that are part of the supply and sanitation system in order to reduce energy import while promoting self-consumption. To this end, the commissioning of 1 MW of photovoltaics under the Integrated Model for Sewage Sludge and other Organic Waste Management (MITLOP, from its Spanish acronym) project stands out.

3. **Hydroelectric Power Generation.** Waterfalls are used for the production of electric energy through three mini, turbine-based hydroelectric power plants with a total capacity of 11.3 MW that are located at the Minilla, Aracena, and Zufre reservoirs.

4. **Modifications in the Operational Control** of some facilities to adapt the demand to energy consumption. The goal is to achieve maximum energy efficiency at work centers, minimizing consumption through better operational management.

Adaptation and Resilience

In terms of adaptation, the actions seek to improve hydro-efficiency and effectiveness in the face of the uncertainties projected by climate scenarios over the medium and long term.

In this sense, water quality is being affected by changes in weather patterns. This is the case of reservoirs, where it is necessary to strengthen limnological monitoring. Hence, we have had the Monitoring Program for Aquatic Ecosystems Used for Supply for more than 40 years.

Other noteworthy actions in 2023 that reinforce the focus on anticipation and resilience can be seen in the results of research projects at the reservoirs that have culminated in publications and academic master's theses.

- **New Measuring Equipment** to improve the monitoring of water characteristics during collection, conveyance, and treatment and thus be able to adapt our treatment to periods of drought in which quality is uncertain.
- **New Sensors** that allow us improve the analytical values of various physical-chemical parameters from the supply network.
- **Limnological Platforms** that allow us to find out the meteorological situation of the reservoir and its influence on the dynamics of the water stored there, as well as the limnological parameters of the water itself

.

An effective, adequate, and sustainable response translates into greater resilience and better services for citizens.

Our adaptation measures also find their way into areas related with awareness raising and the behavior of the community using our services. These actions back up our desire to serve the public, our firm commitment to digitalization, and our comprehensive coordination in responding to user needs.

1. **Remote Meter Reading:** for detecting leaks and fraud.
2. **Citizen Science:** to get to know the community of users better and to design actions to reduce consumption.
3. **Smart Ecological Flows:** to optimize both the guarantee of urban supply and ecological sustainability in situations of scarcity.

Lastly, we continue to promote a new urban development model through projects that propose innovative solutions based on the use of water to combat high temperatures and torrential rains, of which the following are noteworthy:

- **Life Watercool Project.** Based on the implementation of innovative solutions to cope with high temperatures (mitigating the heat island effect) and extreme rainfall episodes through sustainable urban drainage systems (SUDS).

- **Sustainable Urban Drainage Systems (SUDs).** Run-off drainage techniques have been unified and their implementation is being studied to minimize the volume of water that goes into the sanitation network during episodes of torrential rains, decreasing energy consumption and favoring aquifer recharge.

- **Stormwater Retention Ponds (SRPs).** Pieces of infrastructure whose function is to retain water for flow abatement to the sanitation network, thus preventing flooding of the sewer network and limiting polluting emissions to the environment. **EMASESA** has 5 SRPs in operation located at La Alameda and Kansas City (in Seville), Félix Rodríguez de la Fuente Square and Miguel Fleta (in Dos Hermanas), and Parque Centro (in Alcalá de Guadaíra).

We continue to promote a new urban development model through projects that propose innovative solutions

Energy Efficiency

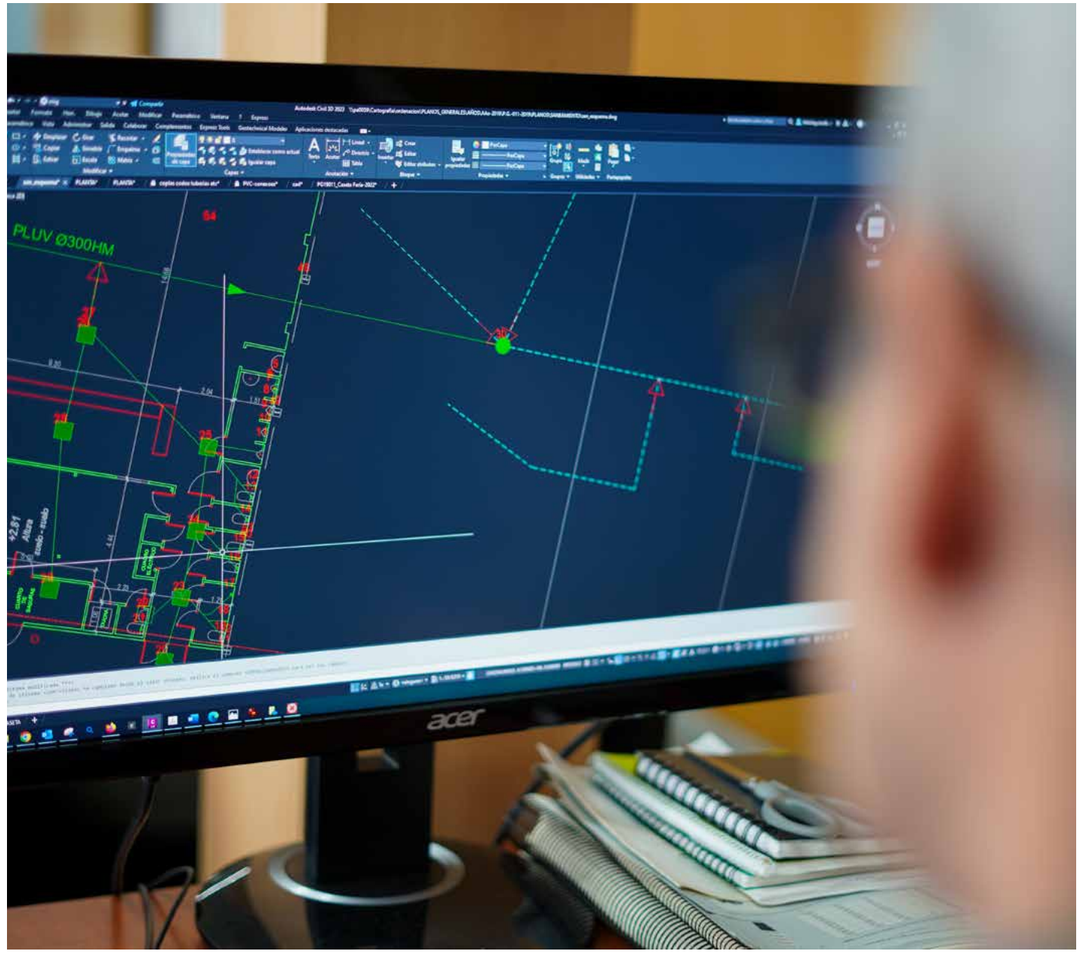
Decarbonization of the integral water cycle is directly and primarily related with reducing emissions generated and improving the efficiency of operations.

Our energy management system has been certified since 2019. As of 2023, the scope of the system includes the processes of collection, conveyance, treatment, and distribution, as well as encompassing buildings and our vehicle fleet.

We likewise have deployed an energy strategy that addresses all significant sources to improve the efficiency of the facilities, planning actions in the following areas:

- Progressive increase in the scope of UNE EN-ISO 50001 certification and the undertaking of energy audits. Successively identify, assess, and implement efficiency improvements at pumping stations, buildings (lighting, heating and air conditioning, insulation, domestic hot water), and in our vehicle fleet.
- Improvement of energy data acquisition and processing from the various facilities for its analysis.
- Awareness raising and informational plan to increase the degree of involvement and awareness of our staff.
- Digitalization of the energy efficiency area, optimizing the drafting of the main energy reports and allowing for improved analysis of energy data.
- Increase in the rated power of the electric cogeneration engines at the Copero WWTP. A 630 kW engine has been replaced by an 810 kW one.
- Installation of a 300 kW photovoltaic plant at the Ranilla WWTP.
- Increase in the rated power of the electric cogeneration engines at the Ranilla WWTP. A 140 kW engine has been replaced by an 800 kW one.
- Installation of lightning rods at the Puebla I and Puebla II plants.

Another line of work deals with projects to maximize energy production, highlighting the development of a dynamic acquisition system (DAS) to undertake photovoltaic plant works at work centers and facilities.



2022 Carbon Footprint Indicators

CATEGORIES	EMISSIONS (TCO_2E)	EMISSIONS ($T\ CO_2E$) INCLUDING BIOGENIC CO_2
Scope 1	6.688	18.726
Scope 2	8.860	8.860
Scope 3	57.718	57.718
Total	**73.267**	**85.304**

Emission points

	2022
Category 1. Direct emissions	**18.726**
Bioreactor	-
Combustion in cogeneration engines and boilers	12.050
Composting	-
Mobile combustion	438
Elimination of nutrients	152
Effluents	6.057
Fixed combustion of generator sets	24
Fixed combustion (domestic hot water)	5
Category 2. Indirect emissions from imported energy	**8.860**
Electricity consumption	8.860
Category 3. Indirect emissions from transport	**1.182**
Transport of workers	1.167
Transport for business trips	15
Category 4. Indirect emissions from products used by the organization	**46.741**
Supplies	6.682
Services	17.483
Construction	22.576
Category 5. Indirect emissions from product use by the organization	**-**
Category 6. Indirect emissions from other sources	**9.795**
Composting of sludge	7.353
Mobile combustion from composting	30
Direct Agricultural Application (DAA)	2.308
Mobile combustion from DAA	104
TOTAL EMISSIONS	**85.304**

2023 Renewable Energy

SOURCE	CENTER	2023 (kWh)
Photovoltaics	Copero Warehouse	8.227
	El Ronquillo WWTP	4.258
	East WWTP (Ranilla)	439.751
	North I WWTP (San Jerónimo)	151.509
	West WWTP (Tablada)	164.135
	Carambolo PWTP	10.416
	Compost Plant	115.673
	TOTAL	**893.969**
Hydroelectricity	Aracena Hydroelectric Plant	0
	Minilla Hydroelectric Plant	39
	Zufre Hydroelectric Plant	100.227
	TOTAL	**100.266**
Cogeneration	East WWTP (Ranilla)	4.572.773
	North I WWTP (San Jerónimo)	4.268.012
	West WWTP (Tablada)	2.187.509
	South WWTP (Copero)	10.871.833
	TOTAL	**21.900.127**
	TOTAL RENEWABLE ENERGY	**22.894.362**

Note. The production of hydroelectric energy at the Aracena and Minilla plants has gone down significantly as a result of the drought conditions in those areas.

3.4 Circular Economy and Waste

The circular economy is an economic and environmental concept that seeks to optimize the use of resources and minimize the generation of waste. It is based on the premise that resources are finite and that, therefore, we need to rethink and redefine the way we produce, consume, and manage products and materials. Its fundamental objective is to reduce pressure on natural resources, reduce pollution and emissions, and promote more sustainable and resilient economic growth.

Our management approach is based on technical life cycle analysis (LCA) methodologies. This perspective makes it possible to evaluate the demand for resources and the impacts generated over the entire service life of products and processes.

To this end, we at EMASESA integrate the LCA approach and apply the principles of action identification, diagnosis, evaluation, and planning at all stages of the water cycle

Our main initiatives launched focus on the responsible management of the waste generated in our processes, prioritizing waste savings, recovery, recycling, and the reduction of waste disposal as much as possible.

- **Hazardous and Non-Hazardous Waste** (Except Sludge). Recovery of more than 80,000 tons of waste generated (97%) throughout the comprehensive water cycle by authorized waste managers.
- **Sludge.** Recovery of 100% of the sludge generated in wastewater purification and treatment processes, tapping into dual agricultural uses: direct application to the field and compost.
- **Sand.** Recovery of more than 900 tons of sand at the three treatment plants (from sanitation network maintenance and the wastewater purification process). This allows for said waste to be separated, reducing it by up to 70%-80% and reusing much of it in construction activities in accordance with regulations.
- **Co-Substrates.** Co-digestion of more than 155,000 tons of high-organic-load waste from other industries at WWTP digesters to increase biogas production.
- **Reuse** of more than 2,729.36 dm3 of process waters at the Carambolo PWTP to minimize the consumption of this precious resource.
- **Implementation of MITLOP Project Phase II.** The “Comprehensive Management of Sludge and Organic Waste” project (MITLOP) establishes a management model for non-hazardous, high-organic-load waste generated in and around the metropolitan area of Seville. This includes WWTP sludge waste and third-party waste. The MITLOP project transforms waste into energy and/or recovered products.

Since October 2023, with the establishment of this facility, advanced sludge composting has been promoted as a way to deal with sludge management. This allows for the management of sludge generated at our facilities to be handled in compliance with current regulations and without the environmental impact inherent to this process.

In terms of actions on infrastructure, the following are noteworthy:

- New thermal hydrolysis process at the Ranilla WWTP that allows for the processing of dehydrated sludge.
- Commissioning of the Odor Management Platform at the Ranilla WWTP.
- New centrifugal dehydrator at the Ranilla WWTP.
- Expansion of co-substrate management process at the Ranilla WWTP, allowing for increased gas production and, in turn, increased electrical energy.
- New coarse screening for pretreatment to optimize the removal of waste reaching the Ranilla WWTP.
- Optimization of the existing thermal hydrolysis by adding machinery to increase the treatment capacity at the Copero WWTP.

Additionally, the comprehensive LCA approach includes the identification of risks and assessment of impacts from the waste generated. Thus, at **EMASESA** we carry out controls and checks:

- 72 analyses of fresh sludge at WWTPs.
- 6 analyses of composted sludge at external plants.

Waste Generated by Center in 2023

CENTER	Non-Hazardous Waste	Hazardous Waste	TOTAL
TPs Grouped	15,295	0,187	15,482
Dos Hermanas	5,256	0,320	5,288
Raw Water Pumping Station	0	0,610	0,061
Copero WWTP	35.289,062	11,369	35.391,431
Mairena del Alcor WWTP	2.731,855	0,400	2.731,895
Ranilla WWTP	15.983,079	2,542	15.985,621
San Jerónimo WWTP	11.103,689	2,411	11.106,100
Tablada WWTP	6.626,785	0,925	6.627,710
Carambolo PWTP	11.095,557	5,076	11.100,633
Carretera Amarilla Industrial Park (PICA)	100,582	0,413	100,995
Compost Plant	0,820	0,746	0,828
STORE	9,750	8,453	18,203
Total (tn)	**82.961,730**	**33,452**	**83.084,247**

Waste Generated by Type

	UNIT	2023
Waste Generated (Non-Hazardous + Hazardous)	tn	83.084
Sludge Generated at our Facilities	tn	81.253
Sand	tn	615
Waste Used for Co-Digestion	tn	155.764

Waste Treatment

	UNIT	OPERATION	QUANTITY	%
Non-Hazardous Waste	tn	Recovery	81.660,101	98,2
Non-Hazardous Waste	tn	Elimination	1.517,275	1,8
Hazardous Waste	tn	Recovery	30,221	93,6
Hazardous Waste	tn	Elimination	2,059	6,4

3.5 Innovative Projects

At **EMASESA,** we seek consistency in terms of the policies and programs for the management of the comprehensive water cycle implemented at the institutional level. Thus, for years we have forged strategic alliances with a number of players from very different fields. Through these alliances, which we promote the design of innovative projects that result in the improvement of the services we provide to citizens.

In 2023, we worked on the following projects in collaboration with various public agencies and institutions:

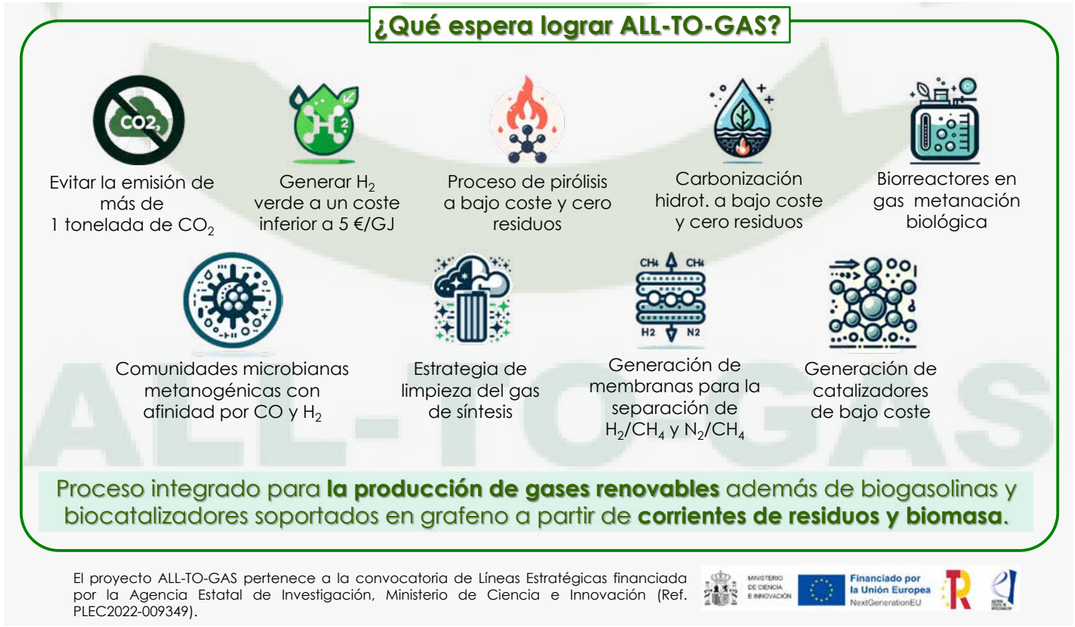
THERM2

The THERM2 Project (Thermal Hydrolysis & Thermophilic Digestion) pursues greater efficiency in terms of energy recovery from WWTP sludge and other organic waste, the securing of sanitized and agronomically recoverable digestates, and greater robustness and flexibility in advanced WWTP sludge management. This is an innovative process that contemplates thermal hydrolysis (TH) —integrated after initial mesophilic anaerobic digestion (MAD)— and thermophilic anaerobic digestion (TAD).

THERM2 goes a step further by evolving MITLOP's technology through the innovative combination of TH with TAD, bringing about greater biogas production — with biogas being a renewable energy that contributes to the mitigation of climate change and the decarbonization of the water sector, allowing for energy self-sufficiency in the process and providing recoverable products in the agricultural sector, in line with the circular economy.

This technology facilitates energy decarbonization in the water sector, contributing to the deployment of the Biogas Route —something crucial to achieve climate neutrality by 2050— and to the development of innovative and efficient waste management models, bringing about cross-cutting business opportunities within the context of the circular economy.

The consortium carrying out this project consists of the companies **EMASESA**, HYDRENS, and TECH4+, as well as the Universities of Valladolid (UVA) and Seville (US).



All-To-Gas. Integrated process for the production of renewable gases in addition to biogasolines and graphene-based biocatalysts from waste streams and biomass.

All-To-Gas

All-To-Gas. Biomass and waste as precursors to hydrogen and methane production in a new energy transition scenario.

ALL-TO-GAS

The main aim of this proposal is to develop a technically and economically viable and sustainable process through the integration of technologies (HTC, pyrogasification, biological methanation, reforming) for the conversion of biomass and waste (both dry and with a high moisture content) into green methane and green hydrogen.

In this way, the use of these renewable gases will be promoted in industry by facilitating their availability at the point of demand (industrial facility), with on-site production supported by the gas network on a need-only basis.

Project financed by the Ministry of Science and Innovation through the 2022 call for grants for Strategic Line Projects (grants subject to GBER).

This is a R&D project that is developed on a laboratory scale and in which the following entities participate as partners: CARTIF Technological Center (project leader), the University of Seville, the University of Valladolid, the Energy, Environment, and Technology Research Center of the Ministry of Science and Innovation (CIEMAT), EDIFESA, and **EMASESA.**

mobiMET

The mobiMET project (new strategies for the sustainable production of reclaimed water by means of modular electroactive wetlands: METlands) addresses the challenge of the climate's impact on the environment and the efficient use of resources. It likewise contributes to sustainable agriculture by generating high-quality water for use in water-scarce areas.

Modular METland® technology taps into a sustainable, mobile, and efficient biotechnological-based solution to clean and reclaim urban wastewater at a low energy cost through a combination of microorganisms capable of using electrically conductive materials to eliminate contaminants.

The project is funded by the Ministry of Science and Innovation, through a call for R&D&i Projects in Public-Private Collaboration, with the participation of the University of Alcalá, IMDEA Agua Foundation, METfilter S.L., and **EMASESA.**

EMASESA

2023 Sustainability Report

4. People

4.1 Our Team, Development, and Training

A comprehensive approach to getting the best results in terms of occupational wellbeing and to meet the expectations of the community we serve.

Our commitment is to bring about a positive impact on communities and forge a sustainable future for everyone. This commitment starts from within, with our valuable human team.

We strive to meet your needs in terms of professional skills, participation, information, promotion from within, and occupational safety, health, and equality at the workplace. After all, we understand that your professional and personal development is key to ensuring high-quality customer care and user satisfaction with our services.

The **collective bargaining agreement approved in 2022** and our company policies represent the fundamental basis of our commitment to employees, guaranteeing respect for the principles of equality, merit, and ability in our human resource management.

We consider it essential to promote the excellence of our team, delving deeper into areas of improvement that bring about greater motivation, recognition, wellbeing, and commitment.

Our Commitment to Stable and Quality Employment

We seek to weave an innovative and resilient network of people capable of adapting to the dynamics of today's business environment.

We create multidisciplinary working teams that can approach projects and initiatives in a shared and collaborative manner, bringing together all areas, divisions, and departments.

In addition, we encourage promotion from within, job rotation, and occupational mobility, as well as the development and strategic identification of key talent over time. This practice ensures organizational excellence and promotes our company's sustainable growth, stability, and continuity.

Most of our workers have full-time contracts for an indefinite term of employment (being permanent employees), regardless of their gender. Having said that, we also offer other contract types to adapt to different people's occupational needs:

Staff Average

	2022			2023		
			TOTAL			TOTAL
Executives and Managers, Technicians, and Administrative Assistants	293	186	479	294	189	483
Laborers	296	-	296	279	-	279
Total	**589**	**186**	**775**	**573**	**189**	**762**

Modalidades de contratos

	≤ 36		36-55		≥ 55		TOTAL
Indefinite Term (permanent employees)	8	3	319	140	214	36	720
Substitution	-	-	2	-	-	-	2
Semi-Retired	-	-	-	-	17	3	20
Labor or Service	-	-	1	-	-	-	1
Relief Contract	1	3	11	4	1	-	19
Total	**8**	**6**	**333**	**144**	**232**	**39**	**762**

Emasesa wrapped up 2023 with:

22
New hires

40
People parting ways

5,18%
Staff turnover rate

Strengthening Policies for Work/Life Balance

To ensure that our people have a flexible working environment that allows them to balance their work and family life, we provide assistance such as pay advances, disability assistance, housing loans, study assistance, education and training, benefit-based assistance, shift changes, paternity leave, flexible working hours, reduced working hours, and family care leave.

In addition, in order to help balance work and family life, the collective bargaining agreement provides for leaves of absence and time off work in relationship with situations of a personal and family nature that any **EMASESA** professional can benefit from, covering needs beyond those provided for in the Workers' Statute.

That is the case, for example, of time off to accompany relatives to specialist appointments in the event that they cannot go alone, international adoption, flexible working hours for legal guardianship of children up to 14 years of age, and attendance at meetings in special education centers, among others.

Throughout 2023, we responded to 1,072 personal requests from our staff.

The most noteworthy indicators in this regard are listed below.

Number of people who benefited

	2023		
			TOTAL
Flexible working hours	113	108	**221**
Unpaid leave	3	11	**14**
Family care leave	0	2	**2**
Reduced working hours	1	5	**6**
Time off/leaves for maternity, paternity, births, breastfeeding, international adoption	7	2	**9**
Time off/leaves for family member medical care	246	139	**385**

In recognition of the valuable service provided by our people, we have created a pension plan

EMASESA makes contributions to the pension fund, which can also be fed with individual contributions from each employee. The fund reached a total amount of €411,547.45 in 2023. This is our way to ensure our employees' long-term financial wellbeing as a token of gratitude for their dedication and effort.

Promoting Development

We at **EMASESA** promote the professional development of our employees through the establishment of multi-annual training plans adapted to the training needs of the moment.

We have also improved the mechanisms that allow training actions not included in these plans to be organized, doing so in order to facilitate our staff's professional development and adoption of knowledge in areas of interest, as well as in areas that are necessary for a certain purpose.

For the second consecutive year, the 2022-2023 Biennial Training Plan has been undertaken. During that period, numerous activities were carried out, coming to a total of 37,331 training hours.

Most of these hours were for occupational health and safety training, one of our fundamental pillars when we manage our workforce:

Hours of training provided

Category			Total
Executives and Managers, Technicians, and Administrative Assistants	16.987	10.000	**26.987**
Laborers	10.294	50	**10.344**
Total	**27.281**	**10.050**	**37.331**

Main Training Activities of 2023

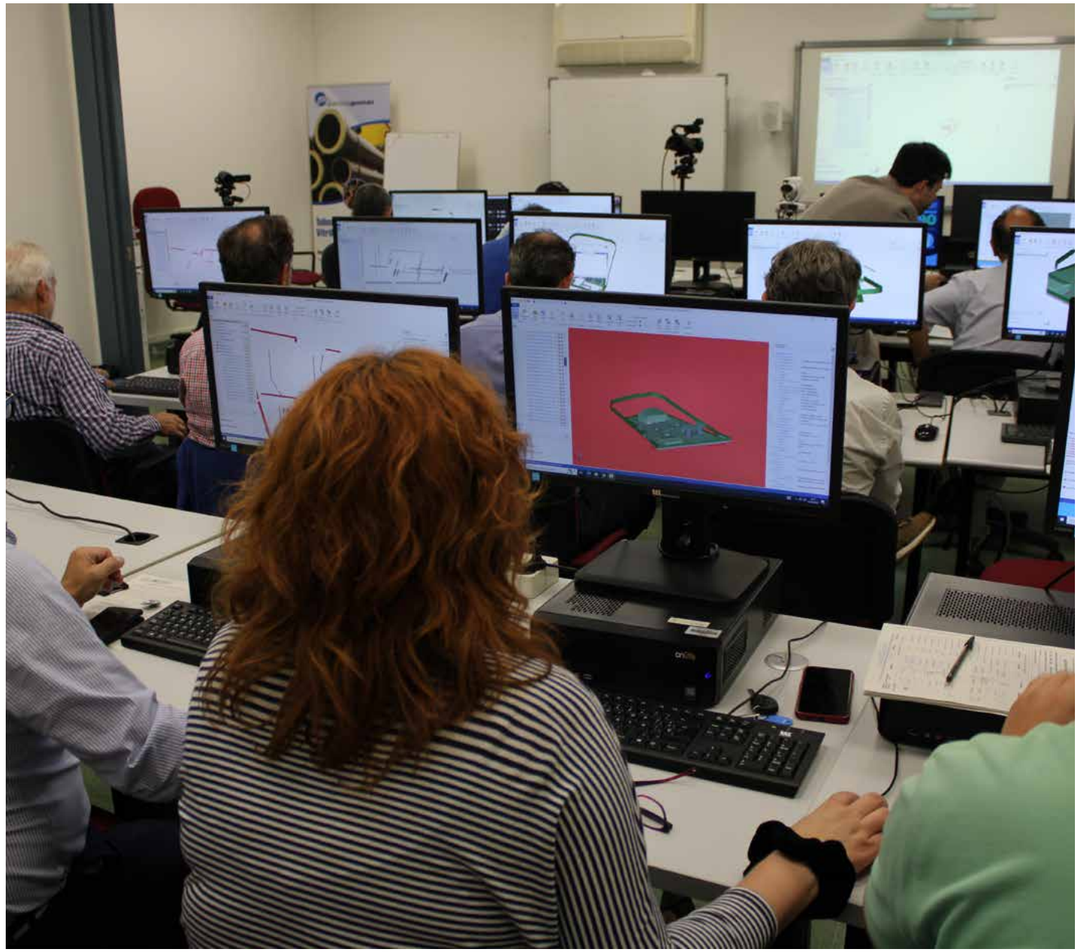
- **Strategic Economic Recovery and Transformation Project (PERTE).** This project, entitled "Digital Reservoir 5.0: **EMASESA's** Digital Transformation," was part of the call for improving the efficiency of the urban water cycle, organized under the Recovery, Transformation, and Resilience Plan. The aim is to implement a new co-management model for the comprehensive water cycle in society, facilitating adaptation to scenarios of scarcity and uncertain resource quality. This will be achieved through collaboration with service users, workers, river basin organizations, and governmental offices and by using digital technology, transparency, and artificial intelligence both intensively and sistematically.

- **Cultural Transformation Project.** This project involves the establishment of a unit dedicated to cultural change inside the organization. Its goal is to ensure that all members are aligned with and prepared for the new paradigm of digital, innovative, transparent, and open management. It includes an organizational training strategy for the digital transformation.

- **BIM Project.** This project focuses on the BIM methodology (building information modeling) throughout the entire organization.

- **Business Intelligence.** Business Intelligence (BI) combines business analysis, data mining, data visualization, data tools, and data infrastructure —as well as recommended practices— to help companies make decisions based on data.

- **Idbox.** This is software for production and operations control and supervision which provides exceptional support in management and decision-making. With the help of reports, graphs, comparative tables, dashboards, alarms, predictive systems, correlation analysis, GIS maps, machine learning, and many other features, IDboxRT provides powerful monitoring, control, and predictive analysis tools in real time for any business.



4.2 Commitment to Health and Safety

For **EMASESA,** it is essential to have a highly competent team specialized in occupational risk prevention and employee wellbeing. This team is a fundamental pillar in terms of protecting the physical and mental integrity of our employees, while likewise contributing to strengthening our company's stability and overall performance.

In addition, this approach allows us to adapt to the peculiarities and specific risks present in our various work environments, all of which have unique characteristics that demand personalized safety measures. Having a specialized team facilitates the identification and assessment of occupational risks specific to each area, allowing us to implement more effective and specific preventive measures.

Therefore, we have our own risk prevention service that defines the control measures in the different processes and critical tasks, as well as in the rest of the production and management activities. This system is certified by AENOR in accordance with the ISO 45001:2018 standard, and its scope includes the whole of the organization's staff.

Safeguarding the integrity of our people is not only an ethical responsibility but also a crucial element for success and sustainability

It even covers those individuals who are not part of the organization but who work in our facilities, such as staff from subcontractors. In this case, our team offers support training and manages the coordination of business activities, in addition to opening an investigation in the event an incident with work-related injuries.

Health in numbers

729
medical check-ups, with a participation rate of 93.82%

31
monitoring medical examinations for employees who have a high risk of asbestos exposure

32.762
hours of health and safety training

351
people vaccinated against the flu

Other vaccinations:
Typhoid Fever: 10;
Hepatitis A: 4;
Hepatitis B: 5

4.913
safety checks at construction sites that required inspection after opening

Our In-House Prevention System

The team:

- Head of the prevention service.
- Occupational doctor.
- Occupational nursing technician, specialized in ergonomics.
- Occupational risk prevention technicians.

Tasks:

- Management of health monitoring.
- Risk assessment at company centers and workplaces.
- Monitoring of planned preventive activity.
- Development of general safety rules.
- Review of prevention management procedures.
- Coordination of business activities.
- Technical reports in response to risk reports and suggestions for improvement.
- Management of the requests from Labor and Social Security Inspectorate.

In addition to these main functions, the prevention service also carries out additional unplanned activities that are equally important:

- Answers to queries for technical advising.
- Management of new hires.
- Processing of workplace incident and accident reports.
- Drafting of reports on occupational risk prevention and health monitoring.

Participation and Consultation

For **EMASESA,** it is especially important for our employees to actively participate and be informed of the latest measures and updates that may affect their safety at our facilities. Therefore, news and updates to technical instructions, procedures, and/or the law are released from our in-house prevention service.

This correspondence may be through different channels such as corporate email, digital noticeboards, the employee portal, and/or the different safety committees.

We have a Health and Safety Committee at each of our centers and a company-wide Health and Labor Committee, which met a total of 25 times in 2023.

EMASESA is part of the Andalusian Network of Healthy Work Centers. Said organization is responsible for promoting the concept of a healthy company through activities aimed at taking care of employees' health -- both in the organization itself and in workers' family life.

Evolution of Severity and Incidence

INDICATOR	2022	2023
Severity*	0,7	0,54
Incidence**	0,35	0,31
Frequency***	25,00	21,60
Accidents with time off work	28	24

*Number of days off work for every thousand hours of exposure to risk.
**Number of accidents/number of workers per thousand people exposed
***Number of accidents with time off work per million hours of exposure to risk.

We offer our employees the possibility of medical examinations to assess their health and identify possible illnesses in advance, especially work-related illnesses.

During the year 2023, 729 medical examinations were made

In order to prevent and mitigate occupational risks, our employees received a total of 32,762 hours of training, covering a variety of topics, including:

- Implementation of the BIM 360 project, specifically the part about safety in building.
- Information on emergency plans, mainly dealing with the tasks of emergency team members.
- Training in outdoor work for staff members who perform physical jobs outdoors under high temperature conditions.
- Specific first aid training for electrical hazards.
- Training in first aid, emergency care, and maintenance of first aid kits and equipment.
- Firefighter program: topics discussed included rescue, health care, how to act against fire in electric cars, etc.
- Road safety campaign: use of scooters, awareness in rear-end collisions, use of communication devices while driving, etc.

Also, as part of our health monitoring efforts and in accordance with the aims of **EMASESA** Healthy Space, we carried out preventive campaigns and courses focused on promoting the early detection of different diseases, improving stress management, and promoting mental health:

- Stress management.
- Time management.
- Mindfulness.
- Improvement of the workplace climate in the company.
- **"EMASESA**: Protected Brain Space" program. In collaboration with the "Freno al Ictus" ("Stroke Stop") Foundation.
- Promotion of gynecological checkups and breast cancer exams.
- Campaign for the prevention of colon and prostate cancer.
- Cardiovascular risk campaign.
- Promotion of the Mediterranean Diet.

Right to Water (UN): The universal right to water is a vital minimum in order to fully enjoy life and it must be protected and guaranteed

EMASESA against stroke.

At **EMASESA** we have created a working group to study and analyze the relationship between the comprehensive water cycle and the ONE HEALTH movement, an international movement promoted by the WHO that highlights the close and complex relationship between human health, biodiversity, and the environments in which they act — especially the collection and discharge basins in which we do business.

Increased collective awareness about this relationship reveals the urgent need to advance in this field in order to face the challenges of sustainability

In relationship with our study, the group suggests focusing our sustainability strategy around the "one health" outlook (the central theme) and, thus, it defines three lines of action:

- Creation of a **map of health initiatives:** identify the core processes of the company and their relationship with health.
- Development of **new projects and actions with a holistic approach to health.**
- Development of a **communication and awareness-raising** strategy to join in promoting a **shared view of healthy progress.**

To this end, we held several sessions internally to advertise this initiative and there was high participation (34 participants from 23 different departments). This gives us a view into the degree of permeability of the OH approach in the actions we undertake.

4.3 Our Inclusive Approach

We Strive for Inclusion, Diversity, and Equal Opportunities

We understand that a heterogeneous and diverse society needs to capitalize on efforts to eliminate barriers and ensure fair and inclusive treatment. We at **EMASESA** work to implement policies and initiatives to guarantee the highest standards and promote equal opportunities regardless of origin, gender, sexual orientation, and/or any other individual characteristics.

Our commitment is based on the belief that a fair and equitable society benefits the whole, and we are convinced of the need to create an environment in which each and every person feels valued, respected, and supported in their personal and professional development.

Regarding equal pay, we guarantee compliance with the provisions of the collective bargaining agreement for each professional category, ensuring non-discrimination and promoting equality in terms of renumeration.

Our staff members begin their career in the company with a starting salary that is significantly higher than the minimum interprofessional wage (SMI, from the Spanish acronym) in Spain in 2023, set at €15,120 per year.

In compliance with our II Equal Opportunities Plan established in 2021, we carried out several initiatives that strengthen our leadership as a company committed to equality. Said plan consists of 28 measures with a main focus on training, awareness-raising, and harassment.

This year we undertook informational campaigns about the resources that the company has to prevent discrimination between men and women, highlighting the role of the Network of Leaders as an instrument of awareness, prevention, intervention, and mediation in situations of harassment — in addition to promoting harmonious coexistence and good treatment among our people.

Regarding harassment complaints lodged, no complaints were reported in 2023. The only identified incident was archived after determining that it lacked grounds.

Other activities that reinforce our status as a leading company in terms of equality are:

- Creation of our **Equality Commission, Network of Leaders, and Operating Commission on Harassment Prevention.**
- **Code of good practices in meetings from an equality perspective.** It is visible in workplace meeting rooms and accessible in the “Room Reservation” section of the Employee Portal.
- To celebrate February 11 **(the International Day of Women and Girls in Science),** we launched a series of actions with the aim of promoting girls' interest in STEM subjects.
- To celebrate March 8 **(International Women's Day),** we gave online training on female empowerment for the entire team and we conducted interviews with leading women in **EMASESA** to inspire other women through their experience.

Women of science at EMASESA.

In addition, the UGT and CCOO trade unions (together with the HR department) organized a Day for Equality through Inclusive Language and Conciliation vs Co-Responsibility, which ended with a round table discussion in which equality within **EMASESA** was discussed.

To celebrate November 25th (International Day for the Elimination of Violence against Women), we carried out a course on cyberbullying for the entire team, as well as a "reminder" campaign on the equality tools that staff members have at their disposal.

Universal Accessibly for People with Disabilities

In 2023, 22 members of our staff had a disability whose degree was more than 33%. Therefore, we feel it is crucial not only to comply with legal requirements regarding accessibility but also to create inclusive environments that ensure the full participation and comfort of all individuals with disabilities, including our own employees.

A specific example of our commitment to accessibility is the recent improvement made to our facilities at Coria del Río. Over the course of this year, we installed 46 meters of tactile strips on the floor. These strips were specifically designed to guide people with visual impairments to the service desk and to the restrooms, thus facilitating the mobility of our visually impaired visitors.

4.4 The User Community at our Core

Our main objective as a company that provides a public service to citizens is to guarantee the human rights to have access to water and sanitation.

This commitment is reflected in our Strategic Plan, where we establish goals that promote cooperation to meet the demands and requirements of our community of users agilely, reliably, and securely.

That is why we strive now more than ever to place the user at the core of our strategic and operational journey, bringing about solid management to handle cross-cutting challenges both inside and outside the organization.

Discover the new online office.

Communication Channels

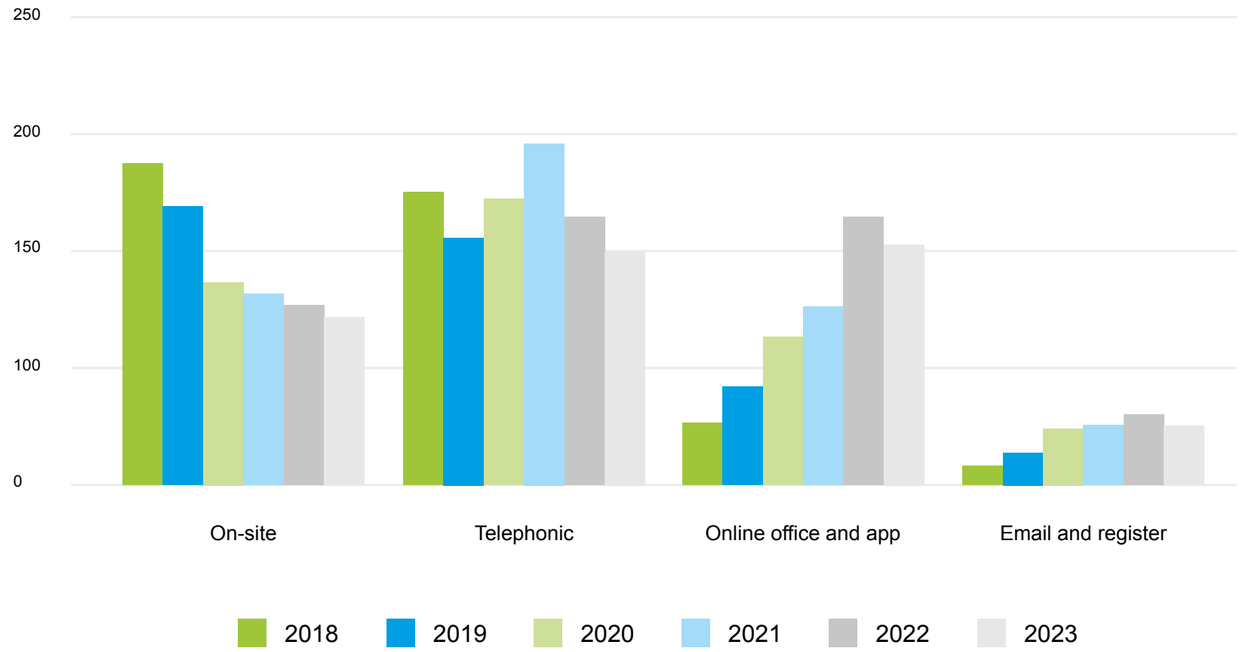
At **EMASESA** we have in-person and remote communication channels that are available 24 hours a day and 365 days a year. Through these channels we seek to provide high-quality public service and improve the satisfaction and experience of our community of users, all the while likewise improving the services we provide.

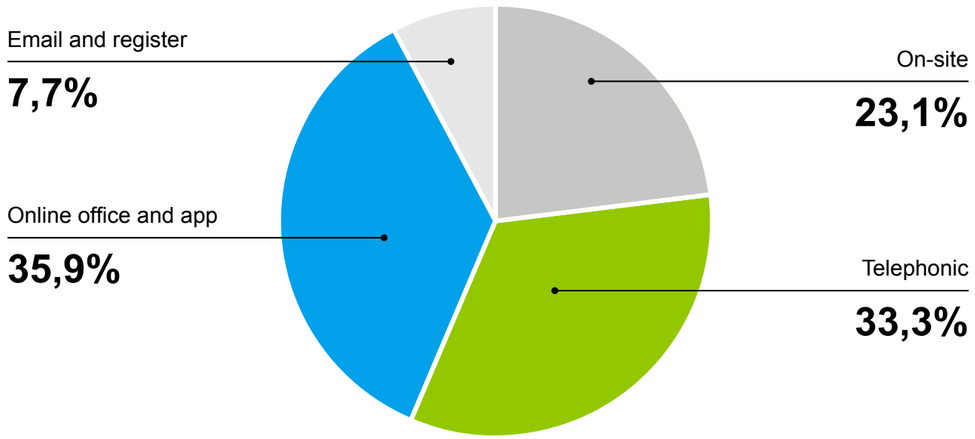
Our communication channels

- Online Office
- MiEmasesa App
- Telephone
- Whatsapp 010
- Suggestion Box*
- Query Box*
- Complaint Box*
- Public Service Points (subject to working hours)
- Our Own Offices (subject to working hours)

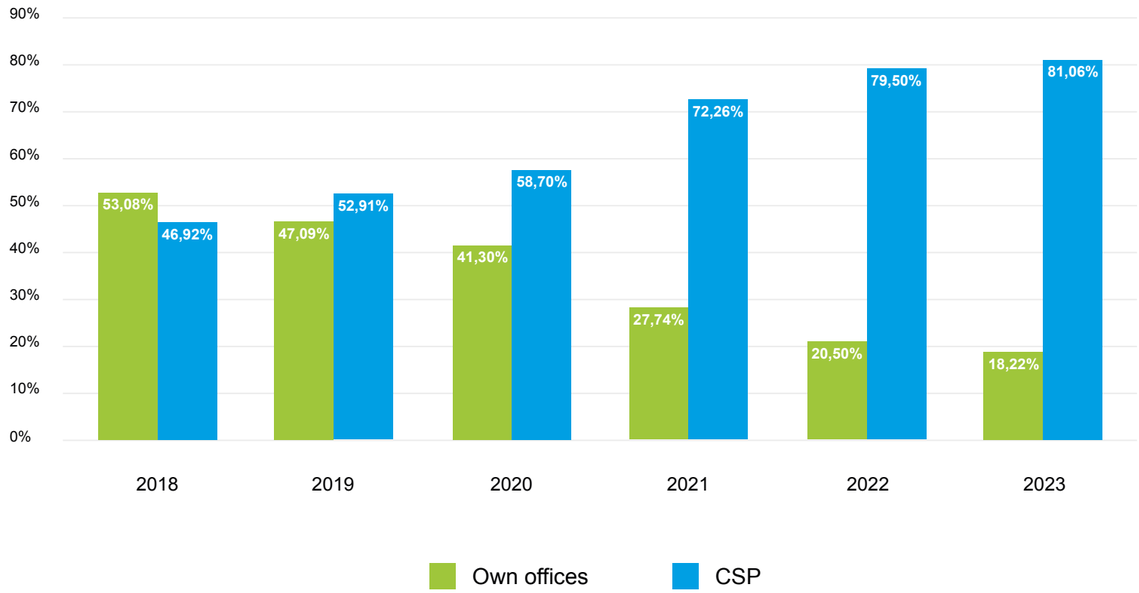
*Via www.emasesa.com.

Since 2018, we have observed a clear increase in the preference for remote communication channels, with more traditional options like in-person and telephone care going by the wayside.





In terms of our in-person channels, we have a solid network of Citizen Attention Points (PACs, from the Spanish acronym) in the metropolitan area of Seville and all of its districts. Thanks to their extensive distribution, PACs are increasingly better received by citizens, who use them to receive basic service without having to travel long distances.



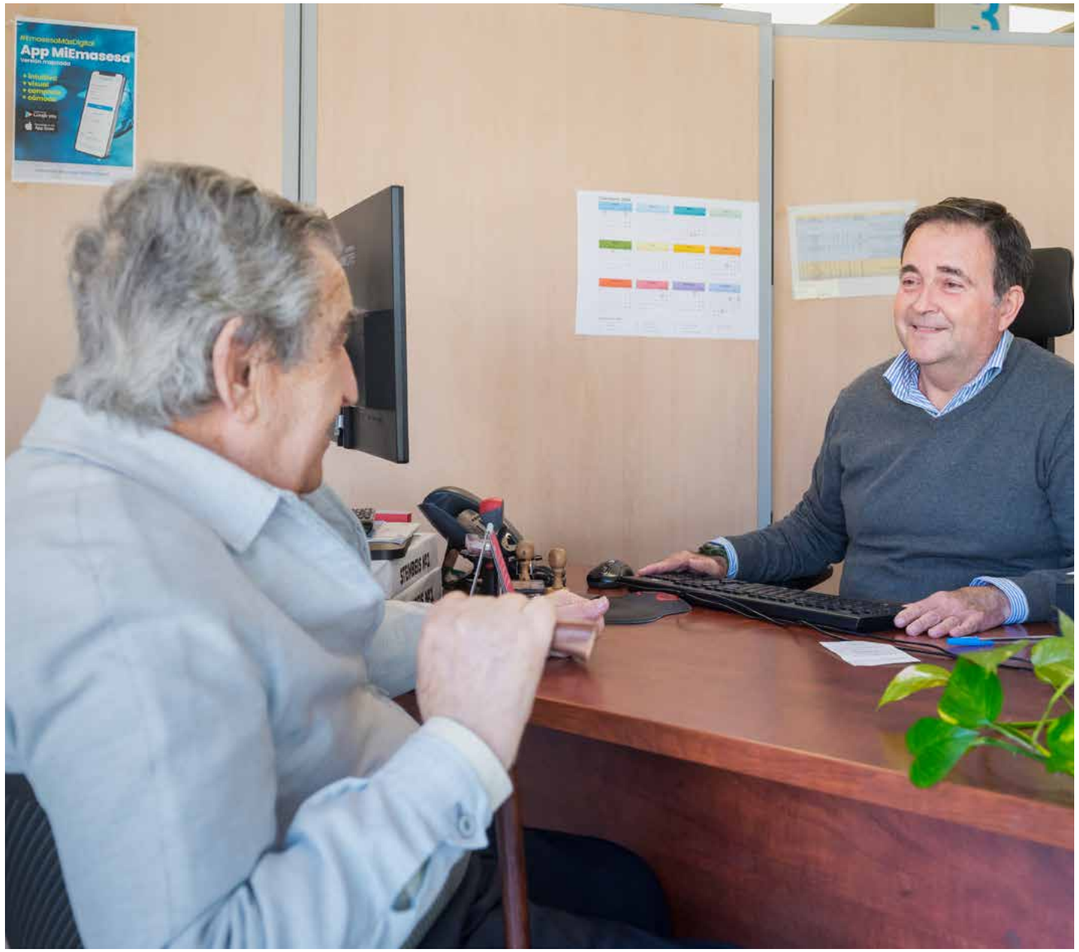
Nevertheless, the current community of users is more digital, demanding, and active. To cater to these new needs and expectations, our goal is to simplify and streamline interactions between users and **EMASESA,** ensuring adequate, comprehensive, and efficient care.

Improvements in digital channels have made it possible to achieve the objectives of phase 1 of the "User at the Core" project, both in terms of reducing travel time to customer care centers and the immediacy of care, as well as in relationship with the much needed digital transformation of the customer service team. Our staff has gained in versatility, comprehensiveness, and adaptability, bringing greater value to the process. As a result, in-person consultations in our offices have gradually decreased.

An example of evolution in our communication channels is the implementation of the **prior appointment 5.0 project,** which continues to gain strength and reached around **4,000 resolved cases in 2023.**

Despite the benefits of digitalization, we at **EMASESA** seek to protect the most vulnerable from the digital divide and maintain maximum availability for urgent situations. Therefore, we continue offering our walk-in service system (which requires no prior appointment), guaranteeing the same close and human attention that has always characterized our company.

Thanks to this drive to serve the most vulnerable, we obtained AENOR certification to accredit **EMASESA** as the first water company in the country that is "committed to the elderly".



User's Advocate

The User's Advocate (UA) is an independent figure responsible for ensuring the protection and defense of the rights and interests of citizens and users in their relations with **EMASESA.**

The User's Advocate Office (UAO) works comprehensively with all areas of the company, involving the different departments in the issues raised by our community of users and the citizens as a whole. The key to providing effective responses is constant communication and coordination. To that end, regular meetings are organized with the different areas of the company and sessions of the specific Quality Circles are convened depending on the needs of the topics at hand.

This collaboration has facilitated the implementation of initiatives aimed at improving water supply and customer service quality.

Committed to citizens.

Reports and Studies

In addition to the aforementioned activities, the UAO stays up to date with changes in the law and the demands for improvement made by citizens, as well as with the reports and technical studies carried out by institutions and agencies such as the National Statistics Institute, ASA, the Spanish Association of Water and Sanitation Supply, etc. Various studies and reports have been done on regulatory issues and processes, including:

- Report on the need for signature identification for documents addressed to users.
- Report on the identification of individuals on the public organizational chart.
- Analysis of complaints and claims and their classification.
- Report on interactions with the Municipal Urban Planning Department to expedite permits for drilling test pits.

These documents not only address regulatory changes and requested areas of improvement but they also include specialized publications and publications by associations from the sector. Thus, they offer insight into the new citizen demands seeking greater transparency, better service, closeness, and accessibility to information.

Quality Circles: Improving Service Provision

The User's Advocate Office is in charge of two Quality Circles: one of a technical nature and the other of a technical/sales nature. The technical circle focuses exclusively on technical issues, while the mixed circle handles issues that affect both the technical and sales areas.

The Quality Circles meet monthly and offer a vital space for dialog, allowing the exchange of views, opinions, and experiences. The aim is to reach compromises and agreements through a constructive debate on the issue in question, thus achieving a common position that effectively covers the needs identified. Once agreements are reached, they are presented to the leaders of the relevant areas for their approval and subsequent implementation.

Throughout the year, 11 sessions were held in each of the Circles, demonstrating our continuous commitment to improving our services.

Social Rate

In 2023, we continued to support families in situations of financial vulnerability through an extensive program full of social measures. One such measure is the adjusted social rate that we implemented in May 2020. This form of assistance allows users who meet the established requirements to access 50% or 100% rate reductions based on per capita consumption and income levels.

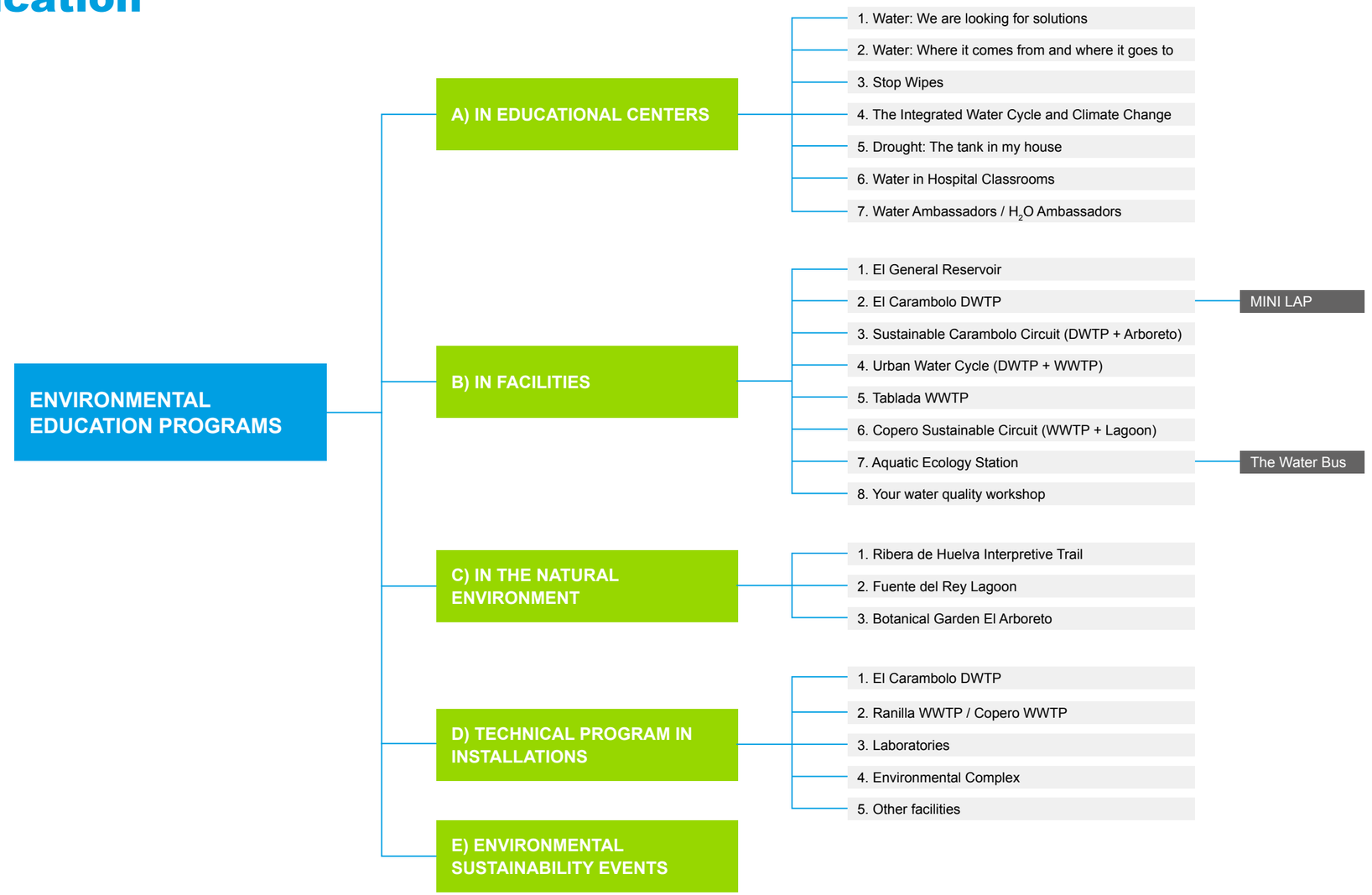
This solution reinforces our guarantee of water as a vital minimum for vulnerable households at risk of exclusion, ensuring consumption of up to 110 liters per person, per day (an amount that exceeds the vital minimum recommended by the WHO) and preventing service cuts due to finances.

Throughout the year, **we served 10,438 households** — up by 5.6% compared to 2022. This reaffirms our commitment to social justice and the wellbeing of our community.

4.5 Environmental Education

Environmental education is a necessary and fundamental area that helps us to address, publicize, and try to solve the environmental problems concerning us — as well as to raise awareness so that we are all part of the change, improving our life habits so that they are more sustainable and respectful with the environment.

Environmental education is a tool for social transformation. Educating for sustainability and for action is basic in raising active and involved generations that are able to face the great global environmental challenges with more strategies at their disposal. We are living at a crucial moment on a damaged planet that is facing major environmental problems which affect us all. Therefore, we at **EMASESA** are working to raise awareness and promote respectful attitudes towards nature as a way to preserve resources and ensure the future of generations to come.



Goals

1. To teach about the comprehensive integral water cycle's facilities from the technical, environmental, and socioeconomic points of view.

2. To transmit how the comprehensive water cycle's is managed and the environmental aspects stemming therefrom.

3. To educate about the importance of taking care of our water by changing our habits and attitudes.

In 2023, the programs could not be executed as a result of special demands due to the emergency drought situation. However, in the last quarter of the year, it was possible to start slightly recovering the programs as we began to have the appropriate resources again.

The classroom programs became more diversified, touching on environmental problems in addition to the usual "Water in the Classroom" talks. Others topics

included "My House the Tank" (about saving resources), "Stopping Climate Change," and "Stop Flushing Wipes."

In addition, we designed a new program about the circular economy to explain the new advanced composting plant.

We continued the "Water in Hospital Classrooms" programs, as well as the "Water Ambassadors" employee program and "H2O Ambassadors," hoping to provide guidance on STEM professions within the water sector.

We carried out some **programs in nature;** for example, at the El Arboreto Botanical Garden, as well as on the "Know your Riverside" Trail at Rivera de Huelva River and around the Fuente del Rey Wetlands.

We carried out the **technical training program at our usual facilities** to round off Bachelor Degree, Master's Degree, and higher level courses, etc. The facilities included in these programs are: El Gergal Reservoir, El Carambolo PWTP, Laboratories, Ranilla WWTP, Copero WWTP, and some stormwater retention ponds (SRPs) and current construction sites.

As something new this year, we designed the environmental education programs to include the new MITLOP Project, an example of **EMASESA's** environmental commitment to the area it serves.

During the complex's construction, we provided environmental education and dissemination programs and activities for citizens, making the public aware of our progress in waste management and the environmental value that a plant of these characteristics will bring with it.

Other new features for this year include the launch of several new education programs on environmental sustainability:

"The Magic Water Circle" Classroom Program

It is intended for 5th and 6th grade students in primary school and its aim is to teach them how the Comprehensive Urban Water Cycle is managed and highlight our sustainable handling of the waste we generate. Training provided in educational centers.

On-Site "Sustainable EMASESA" Program

Students can discover the Copero WWTP facilities and the Fuente del Rey Wetlands, as well as learning about the MITLOP project and the usefulness of the WWTP.

The activities and programs we plan are inspired by a search for solutions to environmental problems, combining theory with practice to facilitate the acquisition of attitudes, values, and skills that allow the population to forge a positive relationship with nature.

Environmental Sustainability Events

Activities are scheduled to align with the most relevant commemorative days related to water and the environment. Activities were carried out on the most important environmental days and current collaboration agreements continue in force:

- Collaboration agreement with the Alcalá de Guadaira Council and the Association of Hoteliers to raise awareness among the population about good practices in the use of toilet wipes. "STOP Flushing Wipes" programs were carried out in schools and at hospitality establishments.

- Collaboration agreement between the Dos Hermanas Council and **EMASESA** to promote, teach about, and disseminate the biodiversity of the Fuente del Rey Wetlands.

Educational guided tours are being carried out around the wetlands with the schools of the areas we supply (mainly from Dos Hermanas), and we are collaborating with all the environmental events that are held in the wetlands by providing environmental instructors, workshops, etc.

We intend to transmit to the population our environmental initiatives and policies covering the different facets of the comprehensive water cycle: water as a resource, water pollution, efficient use of water, and the cost of the resource.

These actions are added to the rest undertaken by our Communication Department through all our channels, and they are accompanied by educational resources and materials to promote citizen participation and facilitate comprehension in terms of water management and sustainability.

"El Arboreto" Botanical Garden

The garden, which covers an area of 4 hectares, was created in 1986 with a dual objective: to shore up unstable terrain along the edge of the El Carambolo hillside and to promote knowledge of botany and respect for the environment among visitors. During the year 2023, 2,587 people visited the El Arboreto Botanical Garden.

Number of participants in the programs in 2023

Technical program

Copero WWTP (Technical)	12
Ranilla WWTP (Technical)	109
El Carambolo PWTP (Technical)	12
Other Facilities (Technical)	196
TOTAL	**329**

Classroom programs

Comprehensive Water Cycle and Climate Change	400
Water: Seeking Solutions	91
Water: Where does it come from and where is it going?	22
Water in Hospital Classrooms	110
Water and H2O Ambassadors	206
Drought: My House the Tank	530
STOP Flushing Wipes	272
TOTAL	**1.631**

Environmental sustainability events

World Water Day	206
Other Environmental Sustainability Events	1.720
TOTAL	**1.926**

On-site programs

Sustainable Carambolo (PWTP+Botanical Garden)	706
Urban Water Cycle (Tablada PWTP+WWTP)	397
Tablada WWTP	298
El Gergal Reservoir	127
Water Ecology Station	1.199
El Carambolo PWTP	196
El Carambolo PWTP + MiniLAP	586
TOTAL	**3.509**

Programs in nature

El Arboreto Botanical Garden	1.314
Fuente del Rey Wetlands	1.443
“Know your Riverside” Trail	889
TOTAL	**3.646**

4.6 Communication: A Key Element at EMASESA

Communication with our community of users and other stakeholders is essential for a public company like us that also manages an essential resource: water. Therefore, we have different communication channels (previously described) that we use to inform about our work, projects, initiatives, news, etc.

Of course, we also have internal communication channels to keep our staff informed and encourage their participation in the different activities we organize.

Relevant Topics

The drought dominated **EMASESA's** information agenda throughout 2023. The scarcity of a vital resource like water captured the attention of the media and generated concern among citizens. That is why our "Objective 90" campaign focused on this issue, dedicating much effort to dissemination and advertising to this end.

Other relevant issues that have been talked about include the inauguration of the Copero Environmental Complex, the implementation of remote meter reading, and the need to adjust our fee structure.

OBJETIVO 90

A New Tool: The Communication Portal

In May of 2023, we launched a new internal communication tool: the Communication Portal. Created in SharePoint and of a participatory nature, it has a main page and different specific sections for projects or areas which generate information of interest to the staff.

During 2023, 359 news items were published, categorized into the different sections that make up the portal and which have been expanding since its launch.

Our 2023 Activity in Figures

Communication Outside the Company

48 events organized

- 18 were organized by the company itself (most of these were streamed).
- 30 were organized with collaborators.

Printed Media

- 418 pieces of news published.

Digital Media

- 2,443 information references.

Radio and TV

- 327 minutes of information broadcast.

Website

In 2023 our new website turned one year old, doubling its number of visits (1.3 million) compared to 2022.

Social Networks

- 431 posts on social networks.
- 1.24 million hits. Breakdown by Social Network:

Twitter: 330.300 hits.

Facebook: 219.468 hits.

LinkedIn: 220.767 hits.

YouTube: 21.568 hits.

Instagram: 448.568 hits.

20,270 users in the online community

This represents an increase of 8.4% compared to last year.

User Breakdown by Social Network Type:

Twitter: 6.106 users.

Facebook: 2.580 users.

LinkedIn: 9.278 users.

YouTube: 817 users.

Instagram: 1.489 users.

In-Company Communication

Apart from the news published on the Communication Portal, special announcements were sent with information about conferences, the company situation, commemorations, campaigns, etc. In addition to advice and collaboration with other departments in the review and editing of press releases.

- 131 news items were released from the **EMASESA** communication account.
- 359 pieces of news were published on the Communication Portal.

EMASESA

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5. 2024 Horizon

Guadaira - RIMAAS Project

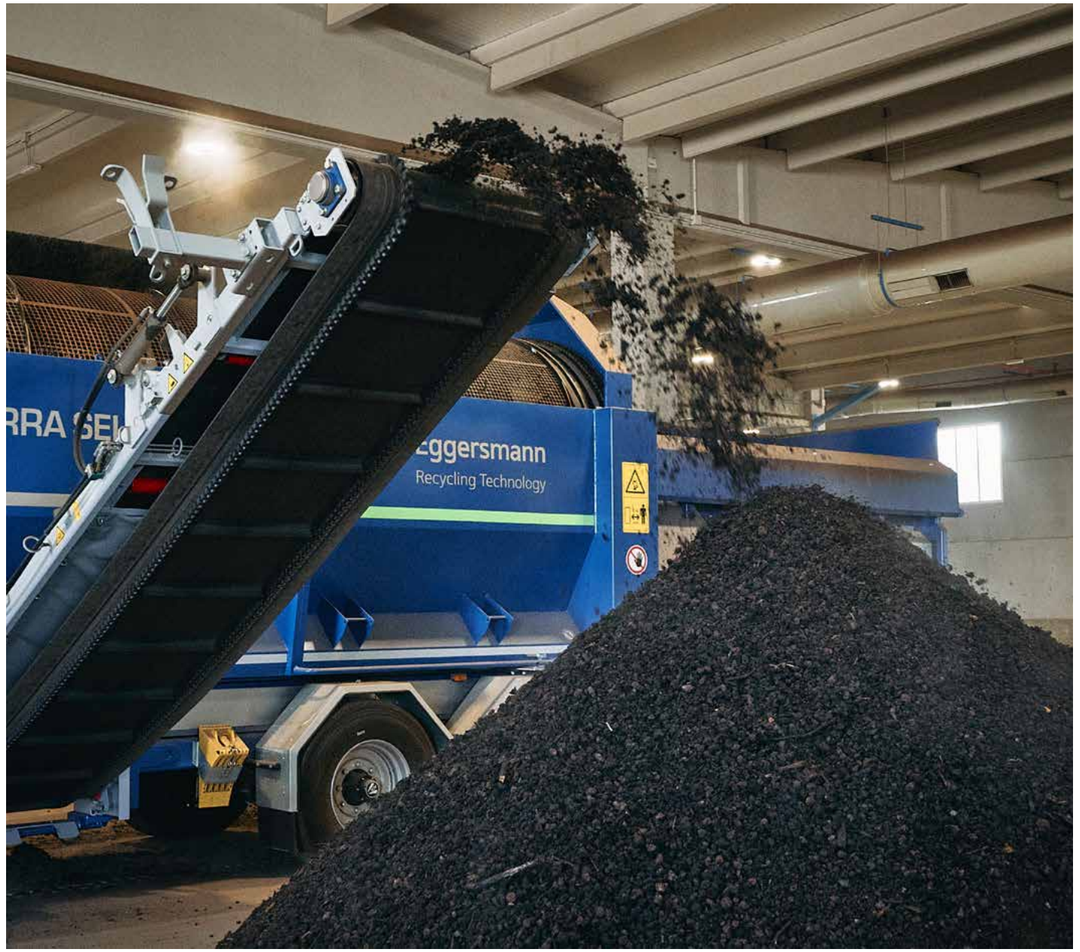
Reducing impacts on environments that receive urban runoff is a challenge for companies managing the comprehensive water cycle at the national level.

Managers of the comprehensive water cycle must consider innovation as an option over the conventional techniques used in engineering in order to identify different systems that offer novel solutions to this problem while reducing the total cost of the system.

To face this challenge before it becomes too great, quantify impacts, and create a replicable model on the country level, **EMASESA** is committed to the RIMAAS (Reduction of Sanitation Spillover Impact on Water Bodies, from the Spanish acronym) innovation project. This project is based on a set of innovative solutions to implement systems that allow for:

1. The design and manufacture of **an efficient system to retain floating objects and pollutants,** allowing them to be collected at spillways or discharge points and quantifiably measured. These systems are accompanied by a reduction-at-source strategy based on the implementation of environmental education and awareness-raising efforts that guarantee good practices amongst the population when disposing of solid waste into the sanitation network.

2. Guaranteeing **pump performance** at 60% during rainy episodes, taking full advantage of the investment.



MITLOP Project - Advanced Composting Plant

The use of the advanced composting plant (the MITLOP Project) started in 2023. Since commissioning, the facility's capacity has progressively increased, with the aim of reaching 100% capacity around the second half of 2024.

The MITLOP project, an eco-innovative and strategic model, will promote the circular economy in Seville and its metropolitan area. By 2027, we plan to operate only two wastewater treatment plants (the Copero WWTP and Ranilla WWTP), both with improved thermal hydrolysis units on their sludge lines and with the advanced composting facility running at full capacity. This scenario will allow for a greater ability to offer services to other sludge producers.

The plant will also include additional facilities and equipment that will generate added value, such as an interpretation center for awareness-raising and environmental education activities, as well as areas for agricultural experimentation and the development of new technologies. These areas will progressively add activities from 2024 onwards.

Environmental and Landscape Integration Project of the Copero Environmental Complex

In order to integrate the facilities at the Copero Environmental Complex with their surroundings (promoting biodiversity and nature) and to naturally connect the Copero WWTP, the Advanced Composting Plant, and the Copero Warehouse, the “Environmental and Landscape Integration Project of the Copero Environmental Complex" is being developed.

The necessary interventions will be carried out in various phases —prioritizing those actions that are simpler to execute and finance— in coordination with the expansion works of the Copero WWTP that are currently underway.

Culebras Stream Project

The Culebras Project in Dos Hermanas is one of the environmental projects that EMASESA wants to launch in the medium term. Currently, this stream has very degraded areas and areas with low flows at certain times. The general goal is to provide a supply of water at the source of the urban stretch of the Culebras stream in order to enhance the environment and recover and regenerate the area's ecology and landscape.

Therefore, a reclaimed water supply system from the Copero WWTP is proposed as the solution. Said supply of water would feed into the stream at the start of the future river promenade designed by the City of Dos Hermanas and, once this section is supplied, the water would then be recirculated back to the start. This would mean the creation of a closed circuit in the stream, with an impermeable riverbed to minimize water loss. Thus, new water supply would only be needed to cover losses that may occur due to evapotranspiration. The result would be the full recovery and revitalization of the area, improving the natural environment and providing a space of enjoyment for citizens.

Photovoltaic Energy Project Tendering

In 2024, we will continue working on the "SDA Photovoltaic" project, started in November 2022, whose main aim —among others— is to increase the production of renewable energy, specifically by tendering photovoltaic power plants at **EMASESA** facilities where their implementation is feasible, thus combining the concepts of self-sufficiency, self-consumption, and return on investment.

In 2023, the photovoltaic installation at the Copero Warehouse was built, featuring 15 kW of power and an investment of €31,500. As of this report's drafting in 2024, the photovoltaic installations at the Entronque pond and Adufe pond 2 (featuring 100 kW and 350 kW of power, respectively) have already been tendered.

The installation at the Entronque pond involved an investment of €167,475, with which it is expected to achieve an approximate savings of 60% on the installation's energy consumption.

Regarding the photovoltaic installation at Adufe pond 2, it will involve an investment of €634,051. This system will contribute to a savings of approximately 40% on the installation's consumption.

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Mayor/Chairman of the El Ronquillo City Council.

D. Jorge Bayot Baz.
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D. Fernando Vázquez Marín.

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Deputy Mayor of the Seville City Council.

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2023 Sustainability Report