# **R&D+i strategy: innovation** and cooperation to meet our challenges

Our R&D+i strategy focuses on identifying opportunities and developing and implementing **solutions** to meet the environmental, social, technological and legislative challenges associated with the management of the end-to-end water cycle. Internal and external collaboration is key to the effective transfer of knowledge that drives innovation at Aqualia and its contribution to sustainable development.

### We work in six **areas of action** with multiple projects



#### Sustainable water treatment

These solutions based on nature (aerobic technologies) offer low-cost options with excellent performance in line with European regulations on treatment of urban wastewater.



#### Circular economy, eco and bio-factories

Solutions for the use of waste and the transformation of WWTP into eco and bio-factories that minimise consumption of energy and reagents, reduce waste production and generate new products



#### **Reuse, drinkability and** desalination

Faced with the problem of water stress, purification and reuse of wastewater solutions adapted to the size of the population and the water quality required by regulations.



Ongoing projects managed by Innovation and Technology







#### Industrial water

Industrial activity must be increasingly sustainable: we provide solutions so that our industrial clients can adapt the use of water in their processes and optimise the treatment of their effluents.

## Energy efficiency

Harnessing wastewater as an energy source and exploring other renewable alternatives, such as transformation of organic matter into bioenergy (biomethane, hydrogen) in WWTPs.

#### **2024 HIGHLIGHTS**



**INTEXT HUB** Wastewater treatment project for small population centres.



END-TO-END WATER CYCLE **INNOVATION CENTRE AT THE SALAMANCA WWTP** 

Coordinates national and international activities to develop innovative solutions.



**REUSA HUE** Platform for regeneration and advanced reuse of urban wastewater.



**ELSAR® TECHNOLOGY IN BREWING** Bioelectrically stimulated reactor that optimises the purification process and makes it possible to obtain energy and resources from industrial wastewater.



**INNOVATION IN PHOTOVOLTAIC AND WIND ENERGY** Installation of innovative solutions to generate photovoltaic and wind energy at the Linares WWTP.







#### Digital developments

Advanced technology to improve management of the water cycle: Internet of Things, interconnection of multiple sensors, data analysis and AI. This combination enables early detection of problems, rapid response and process optimisation.



LIFE RESEAU Development of our own granular technology to treat larger volumes of water in a smaller space. This has been put into practice at the Moaña WWTP.