ACCIONA AGUA: quality, innovation and sustainability

Operating on the five continents, ACCIONA Agua, is a leading water manager, offering global solutions.

As a leader in its sector, ACCIONA Agua has demonstrated time and again its considerable end-to-end water cycle management capabilities, from capture through potabilisation and treatment up to its return to the environment.

Thanks to its innovation in the design, execution and operation of drinking water, sewage and desalination plants, the Company is a leader in providing global solutions that contribute to sustainable development in the water sector. That includes designing, building and operating plants for treating drinking water and waste water, tertiary treatment of waste water for reuse, and reverse osmosis desalination.

Since inception, the Company has contributed to treating, processing, reusing, desalinating and managing water for over 70 million people in 20 countries over the five continents, always to the highest standards of quality, innovation and sustainability.

ACCIONA Agua, a world leader in sea and brackish water desalination by reverse osmosis, has built more than 75 desalination plants, which produce more than 2.3 million m$^3$/day to supply over 10.5 million people. ACCIONA Agua also operates the majority of those plants.

Additionally, over its history ACCIONA Agua has built 115 drinking water treatment plants with a total capacity of over 7 million m$^3$/day, supplying more than 26 million people. It has also built over 300 sewage treatment plants with a total capacity of more than 13.2 million m$^3$/day, serving over 54 million people.

The Company also operates and maintains water treatment plants of all kinds.

End-to-end water management

ACCIONA Agua aims to optimise water cycle management processes by minimising energy consumption, ensuring optimal sewage treatment performance, monitoring water quality, and assuring proper environmental management of sludge, waste and by-products from the treatment processes.

The Company seeks to minimise operating costs and maximise facilities' useful lives.

ACCIONA Agua currently provides end-to-end water management services to over 180 cities in Spain (including water distribution in 105 towns in Catalonia), serving a population of over 7 million people.

... in business terms*

9,358 B€ BACKLOG
409 M€ TURNOVER
3,208 EMPLOYEES
27.8 M€ EBT

* Data at December 2014.
In response to new technological needs in connection with plant operation and design, the Company created a new department in 2014 to pool its know-how: the Automation and Control Department, which executes projects related to automation, control, telecommunications and software, and whose objective is to optimise advanced technology processes and solutions.

One of the most notable projects on which the department has worked was to design, programme and implement the control system for the Adelaide desalination plant in Australia.

The automation of these processes sets ACCIONA Agua apart from the competition.

A total of 90% of ACCIONA Agua's activity in the Design & Construction area took place outside Spain in 2014.

The Water Infrastructure Operation & Maintenance area’s international activity has expanded from 6% of the total in 2012 to 22% in 2014.
D&C PROJECTS AWARDED IN 2014

EUROPE
- Sopuerta sewage treatment plant (Spain).
  Design, build and commission a sewage treatment plant with the capacity to treat 800 m³/day for a population of 2,500. It will later be expanded to 1,145 m³/day and will have the capacity to serve more than 3,700 people.
- Alcalá de Henares sewage treatment plant (Spain).
  Refurbishment of the Alcalá de Henares sewage treatment plant to adapt the design to the flow rate of 59,000 m³/day (equivalent to a population of 280,250) in compliance with the legislation in force.
- Vila do Bispo sewage treatment plant (Portugal).
  Design, construction and commissioning of the Vila do Bispo sewage treatment plant in the Algarve region, to serve a population of 14,000. The projected flow rate is 3,551 m³/day. ACCIONA Agua will be responsible for all of the plant’s civil engineering work, equipment, electricity and automation.

AMERICA
- Sao Gonzalo sewage system (Brazil).
  This contract covers the construction of an end-to-end sewage system which includes a sewage treatment plant (Alcântara) with a capacity of 1.2 m³/second and a pumping station, with a flow rate of 1.99 m³/day, as well as sewer networks, the Yamagata pumping station (1,560 l/s), 8 low-capacity pumping stations and connections to households. The project, which has an execution period of 36 months, aims to restore the environment in the Alcântara and Mutondo river basins. It will serve approximately 250,000 people.
- Ministro Hales seawater desalination plant (Chile).
  Expansion of the Ministro Hales seawater desalination plant, with a capacity of 1,440 m³/day. The project includes the construction of a robust pretreatment system that guarantees operational continuity and reliability in the handling of feedwater with high levels of silica and suspended solids, as well as re-engineering, construction, assembly and commissioning of the new system.
- Trinidad and Tobago sewage treatment plant.
  The plant, in San Fernando, with a capacity to treat 45,000 m³/day, will serve a population of 111,600.
  The installation will comprise 16.3 km of sewers, of which 12.5 km will be micro-tunnels, with 109 service connections.

AFRICA
- Seawater desalination plants on Sal and São Vicente islands (Cape Verde).
  The contract to build and operate two desalination plants on Cape Verde islands, serving 100,000 people, has been awarded by Cape Verde company ELECTRA to a consortium comprising ACCIONA Agua (60%) and SADE-CGTH (40%). The plants have a combined capacity of 10,000 m³/day.

END-TO-END WATER PROJECTS AWARDED IN 2014

EUROPE
- Canal Isabel II (Spain).
  Contract with CYII to operate Madrid’s sewer network for four years.
- Batch 3 Madrid (Spain).
  Operation and maintenance of Canal...
Isabel II’s sewage treatment plants in Madrid, specifically Batch 3, which is the largest of the four batches and includes O&M on 15 plants in the middle reaches of the Jarama and the Henares rivers in Madrid. It will serve the equivalent of one million people, with an annual volume of over 75 million m³.

- **La Llagosta Group (Spain).** ACCIONA Agua obtained the contract to maintain and operate La Llagosta Group’s sewage plants, waste water pumping stations and sewer mains network for the Besós River Consortium (CDCR). The consortium’s total treatment capacity is 40,000 m³/day.

- **Conca Barberà (Spain).** ACCIONA Agua has a 50% stake in the joint venture that will maintain and operate the sanitation systems in the Conca de Barberà region (Tarragona) for the next four years. The sanitation systems include five sewage treatment plants and the corresponding waste water pumping stations, as well as sewers in Vimbodi, Poblet and Las Masias.

- **Montsià district (Spain).** ACCIONA Agua renewed its contract to maintain and operate sanitation systems in the Montsià district for the third time. The 13 sewage treatment plants currently serve 95% of the district’s population. They will handle a total of 17,600 m³/day (equivalent to 89,500 people).

- **Facilities in Melilla (Spain).** Contract to maintain and operate the sewage treatment plant, wastewater and rainwater pumping stations and other water treatment plants in Melilla.

- **Alcarrache (Badajoz).** Renewal of the contract to capture drinking water for the Alcarrache drinking water plant (Badajoz). The four-year contract may be renewed for another four-year period. The contract covers treatment and supply of over 4,800 m³/day.

- **Water supply in Pantelleria, Linosa and Lampedusa (Italy).** Management of drinking water supply on the three islands. In Pantelleria, ACCIONA operates the Sataria and Maggiuluvedi desalination plants, which process seawater and brackish water, respectively, and have a total annual capacity of 2.2 million m³. The Lampedusa and Linosa plants will process up to 2.4 million m³ of seawater per year.

- **O&M for Abbanoa SpA (Sardinia, Italy).** Operation, surveillance, control and maintenance of sewage treatment plants and pumping stations, and maintenance, adaptation and refurbishment of the plants owned by Abbanoa SpA in Northern and Central Sardinia.

  The contract is for three years and covers over 200 sewage plants and more than 500 pumping stations organised into three groups. The plants have a capacity to treat close to 300,000 m³ per day and serve almost 1.5 million people.

**AMERICA**

- **Corrective maintenance, southern services area Item 1 (Lima, Peru).** End-to-end maintenance of networks in Lima, drinking water systems and sewers in the southern services area, which comprises 8 districts in Lima. This is ACCIONA’s first water management contract in Peru.

...and a strong player in water treatment...

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<th>300</th>
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<td>SEWAGE TREATMENT PLANTS BUILT</td>
<td>MILLION M³ OF DRINKING WATER PRODUCED EACH DAY</td>
<td>MILLION PEOPLE SERVED</td>
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AFRICA
- **Water capture in New Cairo (Egypt).**
  Operation and maintenance of waterworks to feed water to New Cairo, Egypt. Includes water capture from the Nile River, its transportation over a distance of 40 km, and treatment at the drinking water treatment plant, which has a capacity of 500,000 m³/day. The capture system comprises two mains, each 2.6 m in diameter, measuring 42 km in length and with three pumping stations.

ASIA
- **Majis seawater desalination plant, Sohar port (Oman).**
  Operation and maintenance of the Sohar desalination plant for five years, with a possible 2-year extension. The plant is expected to produce 20,000 m³ of water/day, which can be for drinking or industrial use, and includes two sections of drinking water mains and two back-up pumping stations for desalinated water.

PROJECTS COMPLETED IN 2014
- **Mundaring drinking water plant (Australia).**
  The Mundaring drinking water plant in Perth, Australia, was inaugurated in March 2014. The Company designed, built and now operates the plant, and will be responsible for its maintenance for 35 years. The plant produces 165,000 m³/day, serving 500,000 people.
- **Copiapó seawater desalination plant (Chile).**
  Inauguration of the Copiapó seawater desalination plant in Chile. The Company designed, built and commissioned the plant, and will oversee operation and maintenance for the next 25 years.

*Adelaide seawater desalination plant passed the Proving Period Test.*

The Period Proving Test of a plant certifies that its construction meets contractual targets in terms of processes; the tests were performed two years after plant commissioning.

The Mundaring drinking water plant in Australia and the Copiapó seawater desalination plant in Chile were the **main projects** completed by ACCIONA Agua in 2014.