



## Sustainability Fact Sheet

# Spain

### **AWS is building a more sustainable business in Spain, collaborating with local communities, and investing in the region's future.**

Our sustainability work includes enhancing energy efficiency, transitioning to carbon-free energy, reducing embodied carbon, using water responsibly, driving a circular economy, and help our customers be more efficient.

At AWS, we focus on efficiency across all aspects of our infrastructure. We use industry-standard metrics to measure efficiency and seek the optimal balance of energy and water use.

For more information, visit the [AWS Cloud Sustainability webpage](#).

### **Efficiencies of Scale**

Our scale allows us to achieve higher resource utilization and energy efficiency than the typical on-premises data centre. A study released by Accenture and AWS estimates running optimized workloads on AWS's infrastructure is up to **4.1 times more efficient than on-premises**.

For more information, visit the full report, "[How moving to the AWS cloud reduces carbon emissions.](#)"

### **Key Sustainability Metrics**

AWS Europe (Spain)	2024	2025
Average PUE	1.07	1.06
Average WUE (L/kWh)	0.24	0.12

Power Usage Effectiveness (PUE) and Water Usage Effectiveness (WUE) (in litres per kilowatt-hour) for data centres operated by AWS between January 1 and December 31 of each year.

# Building a More Sustainable Business

## Our Progress

- 17 carbon-free projects in Aragón, part of 100 projects across Spain generating 3.8 GW once fully operational.
- In 2024, we continued to match 100% of electricity used in our global operations as well as in our local Region in Aragón.
- All AWS data centres in Spain are currently ISO 50001 - Energy Management System and ISO 14001 - Environmental Management System certified and conform with the 2025 Best Practice Guidelines for the European Code of Conduct on Data Centre Energy Efficiency.
- We are building water reservoirs in Aragón to store rainwater that will be treated for use within our data centres. In conjunction with additional community water infrastructure restoration projects, this will help alleviate water scarcity and facilitate water access for local residents.
- Water used for cooling is an energy ally, not an environmental problem. It allows for savings for 25-35% of electricity during peak grid stress periods.



# Water Stewardship in Spain

## Conserving Resources, Supporting Communities

### Water Use in Spain

We recognize that water is a precious resource and strive to source water from more sustainable sources, such as recycled and/or harvested rainwater, to minimize demands on public water supplies.

In 2025, AWS data centers in Aragón used ~68 million liters of water (0.068 hm<sup>3</sup>) in their operations. According to the Ebro River Basin Management Plan 2022-2027, the industrial water demand in the Ebro River Basin District amounts to 208 hm<sup>3</sup>/year.

Our water usage then represents only 0.03% of this industrial demand. In other words, if the industrial water consumption of the Ebro basin were represented by a 2-liter bottle, AWS data centers in Aragon would represent just 13 drops.

To learn more, see the [Amazon Water spotlight page](#).

### Our Water Positive Commitment

AWS is committed to being water positive by 2030, meaning we will return more water to communities than we use in our direct operations. As of the end of 2025, we are 75% of the way towards this goal globally.

Over the next 10 years, we expect to return ~1.53 billion liters of water annually to local communities through the water management projects we support in Aragón.

“Thanks to AWS, we are saving up to 50% of water annually, around 93 million liters, improving our harvests and reducing costs. We waste less water, respect the environment, and grow better products, benefiting both our farm and our community.”

*- Miguel Ángel Ferrer, agricultural director of Finca El Forado in Aragón*

# Water Stewardship in Spain

Conserving Resources, Supporting Communities

## AWS Water Projects in Spain

- €17.4 million investment in three major water projects:
  - **Agricultural Runoff Management:** AWS worked with Mediodes to capture agricultural runoff through a 2Km pipeline and redirect it to irrigate a 70-hectare municipal poplar grove. This project, announced in 2023, effectively uses the same water twice while reducing nutrient-loaded runoff entering the Ebro River and is expected to deliver 864M litres of clean water annually to the community.
  - **Leak Detection via Machine Learning:** AWS deployed machine learning technology to detect leaks in community water pipeline systems in Aragón. Operational since 2023, the project uses advanced algorithms to identify and locate water losses in the distribution network, helping conserve water resources and improve infrastructure efficiency.
  - **Zaragoza Flood Management:** Artificial intelligence (AI) and Internet of Things (IoT) platform benefiting 700,000 residents with predictive flood risk assessment and early warning system, complemented by infrastructure works to prevent flood risk.
  - **Agricultural Efficiency:** Partnership with Agrow Analytics to support 430 farmers in El Burgo de Ebro and Villanueva de Gállego in maximising crop yields while reducing their water footprint — saving 200,000 m<sup>3</sup> of water per year through data-driven intelligent irrigation.
  - **Huesca Water Infrastructure:** Modernizing San Julián de Banzo pipeline serving 56,000 residents, expanding water accessibility in Huesca.

For more, see our [Water Replenishment Project Portfolio](#).

# Supporting Communities in Spain

## Making a Difference to the Local People

### By the Numbers

Since launching in Aragón, AWS has positively impacted 54,000+ people, including STEM training for 7,400+ students, cloud skills for 2,000+ learners, sustainability initiatives benefiting 3,300 residents, and 60 hyperlocal projects reaching 10,000+ beneficiaries.

- 114 local projects supported
- \$1.76M invested
- \$3.95M of social return of investment (SROI) estimated by COMGO
- 54,000+ direct beneficiaries
- Additional €30 million commitment to support community programs across Spain through 2035
- Three community funds supporting 60 hyperlocal community projects in Aragón

### Project Highlights

- We drive local projects around STEM Education, Skills Development, Sustainability, and Hyperlocal Social Impact that generate lasting positive impact where we operate our infrastructure.
- We advance environmental stewardship through partnerships with [ECODES](#) to naturalise schools and create energy communities; and with [Apadrina un Olivo](#) to digitalize rural entrepreneurship across 43 municipalities in Aragón through the [Aragon Despierta Futuro](#) project.
- Our community funds have supported 48 social projects & 12 non-profits' digital transformation. [Hyperlocal partnerships](#) with ASPACE, Fundación San Blas and CADIS, among others, show community roots, while alliances with Real Zaragoza and SD Huesca deliver youth programs and community experiences around sport as a tool for social cohesion.
- 50 local self-employed individuals through digital training and funding, and 550+ students in 43 municipalities inspired through entrepreneurship workshops, as part of a collaboration with the local NGO 'Apadrina un Olivo' to digitize the rural entrepreneurial ecosystem of Aragón.

# Supporting Communities in Spain

## Making a Difference to the Local People



### STEM Education & Workforce Development

- In 2023, AWS launched "[Think Big Space](#)", a robotics training program reaching 7,400+ students across 45 schools in Huesca, Zaragoza and Teruel.
- In 2022, AWS partnered with Government of Aragón to train +2,000 students in IT vocational training through AWS Academy program.
- In 2024 we launched AWS re/Start program in Aragon, providing free cloud skills training for unemployed and underrepresented community members.



## Investing in Spain

**€33.7 billion** planned investment through 2035 (announced in March 2026).

**€31.7 billion** estimated contribution to Spain's GDP (€18.5 billion to Aragón specifically).

**29,900 jobs supported annually** in local businesses across Spain, including direct, indirect, and induced (13,400 in Aragón).

Of those, **6,700 are full-time jobs** from Amazon's direct investment (4,200 in Aragón).

Planned supply chain facilities in Aragón will add **1,800 additional jobs when operational** and will include:

- Server manufacturing plant
- Manufacturing fulfilment warehouse
- AI/ML server manufacturing and repair facility (circular economy)

**High-quality job profiles:**, including operations managers, electrical engineers, sustainability supervisors, hardware technicians, logistics' experts, security operators.

### AWS Partner & Vendor growth:

- **ALAN COMMISSIONING:** The arrival of AWS infrastructure in Aragon allowed us to specialize in commissioning and testing services for data centers, and thanks to this opportunity, we have expanded our service offerings. Today, ALAN COMMISSIONING has a team of 65 professionals and is a leader in the infrastructure sector. "In line with AWS's work in Aragon, we are also firmly committed to young Aragonese talent by creating an internal training program aimed at recent engineering graduates from the region," says Ángel Bernad, COO and founder of ALAN COMMISSIONING.
- **Hiberus Tecnología:** has expanded to approximately 3,500 employees (more than 200 AWS services specialists), becoming a leading AWS partner that helps companies throughout Spain migrate and optimize their cloud environments.