



### The Challenge

Acciona relied on **slow laboratory analysis** to determine chemical concentrations across its globally distributed desalination and water treatment plants.

By the time the results reached operators, they were often outdated and unreliable. This led to suboptimal reagent dosing across hundreds of facilities, significant operational costs, and exposure to **regulatory penalties**.

## SUCCESS STORY

# Deploying Adaptive AI in Distributed Water Plants

With Barbara's support, Acciona deployed a scalable Edge AI architecture across its water treatment operations in **more than 40 countries**. Using Barbara's Platform, Machine Learning models are trained on historical plant data and **deployed directly at the edge** to predict chemical values in real time.

Barbara's Platform securely manages the deployment and remote orchestration of edge nodes and AI model lifecycles across the global fleet, eliminating dependence on laboratory results.

## Key Results



**Over \$70M in Savings.** Optimized reagent dosing across 89 desalination plants during the first three years.



**Global Scalability.** Hundreds of plants across 40+ countries unified under a single infrastructure.



**Accelerated AI Deployment.** 800% faster go-to-market for new AI models across the distributed fleet.