



The Challenge

Aduriz operated a distribution network built with equipment from multiple manufacturers using **incompatible protocols**, across substations with limited or no external connectivity.

Its existing systems could not collect, store, or analyze operational data in real time, leaving the company **without visibility into grid behaviour** or the ability to respond quickly to incidents.

SUCCESS STORY

Substation Virtualization and Smart Grid Digitalization

With Barbara's support, Aduriz deployed edge nodes across **two low-voltage substations**, transforming them from a dark edge into an intelligent one. Using Barbara's Platform, WiBee sensors, FTP meter concentrators, and Modbus line-breakers were **unified within a single data layer**, with data stored locally for historical analysis.

No-code workflows automate on-site responses to grid events, while Barbara's Platform orchestrates every application remotely or, when full local autonomy is required, entirely on-premises.

Key Results



Legacy Equipment Unified. Continuous data streaming from multi-vendor devices using different legacy protocols.



Autonomous Grid Response. Incidents detected and addressed locally in real time, without relying on central systems.



AI-Ready Critical Infrastructure. Secure device communications and centralized certificate management, ready to run AI in the substation.