



REAL-TIME OPTIMIZATION SOFTWARE FOR WATER DISTRIBUTION NETWORKS



**ÁGUAS DO
CENTRO LITORAL**

Grupo Águas de Portugal

COMPANY

SCUBIC's mission is to help water utilities on the digitalization of their processes and on the transition to Industry 4.0. SCUBIC develops smart management solutions that enable utilities to reduce their energy costs, the carbon footprint, and to increase the sustainability of water sources.

SCUBIC was commissioned by the company Águas do Centro Litoral from Águas de Portugal Group and responsible for the management of the water supply network of the county of Penacova (Coimbra), to develop a system capable of reducing the water distribution costs.

The platform was installed on Ronqueira water treatment plant, which distributes water for 40.000 inhabitants with an annual consumption of 1.700.000 m³ (450.000.000 Gallons).



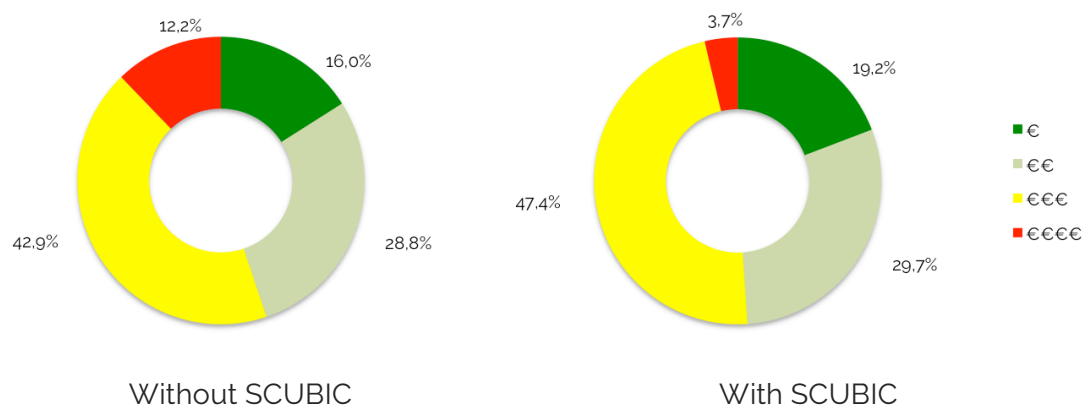
Source: Penacovactual.pt

With the main purpose of reducing costs with water distribution, SCUBIC developed a platform that centralizes the different data sources (SCADA, Telemetry, Sensors), and together with artificial intelligence algorithms can predict the future (24h) water consumption. This information is then grouped in the optimization module with the daily energy prices and with the self-production capability (solar panels), to find the lowest cost operation, which is displayed on our user-friendly dashboard.

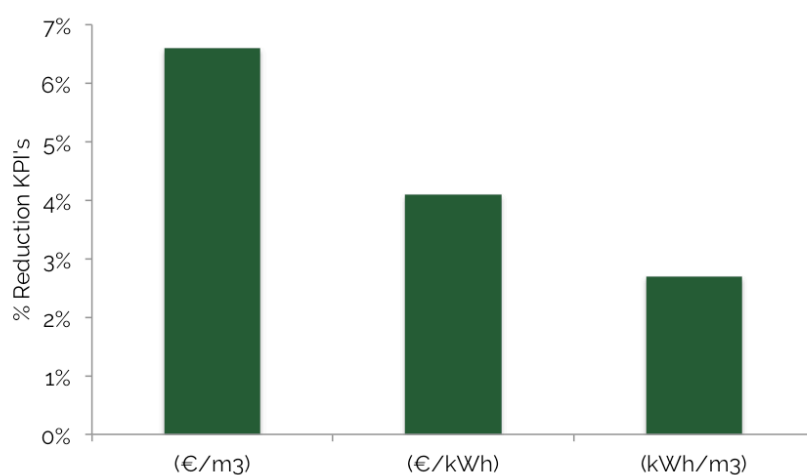


RESULTS

The real-time optimization capabilities of SCUBIC platform made possible to streamline the operation and reduce the costs related to the water distribution. In the following charts, it is represented the distributed energy consumption per energy tariff, in the same homolog period, before and after SCUBIC.



With the digitalization of the water distribution and with the help of advanced analytical solutions, it was possible to reduce the specific costs of production ($\text{€}/\text{m}^3$), the specific costs of energy ($\text{€}/\text{kWh}$) and the specific energy consumption (kWh/m^3), as can be seen in the chart below.



"The use of the SCUBIC platform, witch user interface is very friendly, was another important step towards maximizing efficiency in AdCL's water supply systems."

José Caseiro
Maintenance Director at Águas do Centro Litoral

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**LET'S OPTIMIZE YOUR
WATER DISTRIBUTION NETWORK!!**

