








GENERAL INFORMATION



-  LOCATION: PALMA DEL RÍO (SPAIN)
-  NET PRESSURE DROP: 20 METERS
-  FLOW: 26 LITERS/SECOND
-  POWER: 3,75 kW
-  USE OF THE ENERGY: GRID TIED SELF-CONSUMPTION

BACKGROUND

The municipality of Palma del Río has an elevated tank for supplying drinking water to its 22,000 inhabitants. The outlet pipe of the tank has several pressure reducing valves arranged along the route of the pipe. Until now, the excess pressure has been dissipated with a turbine located next to the drinking water treatment station, but there are still other points without any use.

THE SOLUTION

Thanks to the installation of the turbine arranged in parallel to the pressure reducing valve, a power of 3.75kw is generated throughout the day. The energy generated by the turbine is used 100% for self-consumption in the public lighting network of a part of the population. With this installation, the municipality already has 2 turbines in operation in different locations generating a total of 55,000 kWh per year, which translates into an annual saving of more than € 6,000 in electricity bills.