EnerTEF

TEF DHN Satellite

TEF DHN focuses on improving district heating and cooling networks (DHCN) so as to enhance resource efficiency. It leverages real-time data for integrating energy forecasting models, algorithms and Digital Twins. Its goals cover minimising energy consumption in power plants and substations, as well as providing dynamic energy savings assessments. The satellite is based in Spain and managed by VEOLIA.

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Services

01 Digital Twin DHCN Optimisation

Digital Twin for DHCN Optimization is an AI service that combines artificial intelligence with Digital Twin technology to optimize district heating/ cooling networks. It creates virtual simulations of the network to analyze and improve production scenarios, helping managers make better operational decisions.

02 Energy Demand Forecasting

Energy demand forecasting is a critical AI service that predicts future energy consumption patterns in DHCN networks. It uses historical data, weather forecasts, and building usage patterns to optimize energy distribution and reduce operational costs while maintaining user comfort levels.

03 Energy Consumption Optimisation

The energy consumption optimization service applies AI algorithms to optimize energy consumption at both district level (boilers room) and building level (substation). This service uses advanced technology to manage and improve the energy efficiency of facilities.

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