energyworx

a gridspertise company

Demand Forecaster

Leveraging meter intelligence to enhance demand predictions



Understanding Demand Forecasting Challenges

Forecasting at network level hides local changes. EV charging, heat pumps and solar panels create demand shifts that hat require far more **granular visibility**.

Customer behaviour and distributed generation make consumption unpredictable. Without detailed insight, utilities risk higher costs, inefficient planning, and operational blind spots.

Manual analysis simply can't scale. Utilities need an **automated**, **data-driven approach** that can deliver **precise forecasts across millions of meters**.

Our **Demand Forecaster** solves this with machine-learning models that predict demand at a very detailed level. It turns **complexity into clear, actionable intelligence**.

Discover the Solution

The **Demand Forecaster** leverages advanced analytics to transform validated metering and weather data into highly accurate demand predictions. Built on the trusted **Energy Data Manager module**, it ensures consistency and reliability across all datasets.

Using machine learning, the module delivers **granular forecasts**, accounting for **weather**, **behavioural patterns and emerging consumption trends** at meter level. This enables utilities to plan procurement, optimise operations and reduce imbalance risk.

It works seamlessly with other modules such as **Load Pattern Analyzer** and **Advanced Smart Grid Analytics**, providing a unified approach to forecasting and grid intelligence.

Delivered as **Software as a Service (SaaS)**, the solution offers **scalability, continuous updates** and **secure integration** with utility systems for future-proof forecasting.



Granular accuracy at scale

Forecasts at meter level, not just for the whole network. Handles millions of data points with cloudnative architecture.



Automated, selflearning models

Machine learning improves accuracy automatically and adapts to new behaviours like EV charging or solar generation.



Seamless integration & SaaS delivery

API-first design for easy integration with MDM and ERP systems. Delivered as SaaS for scalability, security and zero infrastructure overhead.

Covered Use Cases

Converting raw data into reliable demand forecasts for improved decisions.

What it enables...

More accurate energy procurement

Granular forecasts at meter level reduce imbalance costs and improve purchasing decisions. Utilities can plan ahead with confidence, avoiding expensive over- or under-buying.

Smarter tariff and pricing design

Detailed demand insights support time-ofuse pricing and flexible tariff strategies. Utilities can create tariffs that reflect real behaviour, reducing peaks and improving customer engagement.

Targeted and efficient demand response

Identifies high-impact customers and optimal time windows for flexibility programmes. Utilities can maximise programme efficiency and ROI by focusing on where it matters most.

EV and solar impact visibility

Automatically detects new load patterns from EV charging and rooftop generation. This insight helps utilities prepare capacity and maintain grid stability without manual adjustments.

Heat pump readiness for seasonal loads

Forecasts **seasonal load shifts** caused by heat pump installations. This enables proactive capacity planning and **prevents transformer overloads** during winter peaks.

Long-term trend tracking for investment planning

Monitors evolving behaviours like electrification and decentralised generation. These insights guide smarter network investments and ensure readiness for future demand patterns.

Business Impact



Improved forecast accuracy

Machine-learning models increase precision by **20–30%**, reducing imbalance penalties and procurement risk



Automation that saves time

Fully automated workflows cut analysis time by up to **70%**, enabling faster decisions without manual effort.



Scalability without extra cost

Cloud-native SaaS handles **millions of meters** without costly IT systems, lowering total ownership costs significantly.