

SMART UTILITIES CASE STUDIES





Connect

- Kepware – Edge Communications
- Edge Connectivity
- Native Device Cloud
- 3rd Party Device Cloud Support



Build

- Rapid Development Tools
- Mobile App Development
- Enterprise Extensions and process management
- 3rd Party System Connectors
- “Thing” Management and Optimization
- 3D “Thing” builder



Analyze

- Automated Machine Learning Technology
- Rules, Alerts & Notifications
- Pattern & Anomaly Detection
- Automated Predictive Modeling & Scoring
- Prescriptive Intelligence



Experience

- Digital Twin Experience
- Augmented Reality



Collaborate

- Developer Community
- Developer Zone
- Marketplace
- Industry-Leading IoT Specific Events

Centralized Generation



Users: Plant operators, plant owner, utilities

Bring all energy production data into one solution to monitor and take action on:

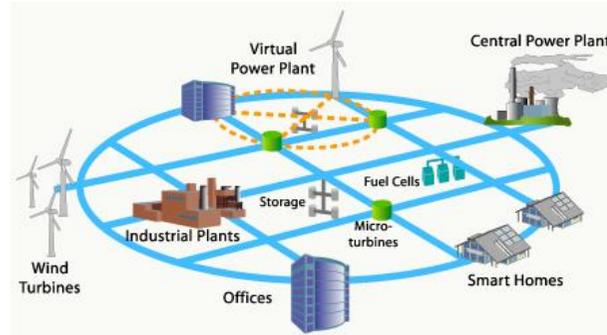
- Production (across plants)
 - Next gen operational intelligence
 - Unified KPIs
- Predictions of energy production
- Energy quality
- Equipment Health

In deployment in Turkey:

ThingWorx Partner:



Smart Grid Operations



Users: Utilities, city, retailers

Grid management across transmission and distribution operations and equipment

- Local production visibility and maximize efficiency
- Volt/VAR monitor
- Demand response
- Grid stability
- Remote control

In beta deploy. in Switzerland with:

ThingWorx Partner:



Distributed Energy



Users: Mfg, utilities, cities

Deliver connected products with integration to demand needs to enable

- Remote Service
- Remote Monitor and Control
- Predictions of production
- Production/storage balance
- Demand side management
- Security & Theft

ThingWorx Customer in Denmark

Smart Meter



Users: Consumer, City, Utility, Meter Mfg,

Meter data collection and control

- New consumer programs/services
 - Issue detection
 - Demand side management
- Theft and prepayment
- Safety
- Outage detection

ThingWorx Partner in Portugal, project commencing:



Water Facility Monitoring

- Deliver realtime monitoring and control systems to water and sewage service providers.
- Software and services integrate real-time systems and sensor data for water and wastewater operations and asset management.
- Includes an SMS and voice alarm facility for out-of-hours alerts, creating a virtual control center.

Deployed in
UK with:

ThingWorx
Partner:



Building Greywater Recycling

- Monitoring system for small but sophisticated water treatment plant in the basements of top-end London commercial properties.
- Toilets are flushed and the green roof terrace are irrigated with harvested rainwater and greywater.
- System alarms are sent and acknowledged via a smartphones. Service response time and time to fix the problem are measured. Energy and water efficiency performance is monitored.

Project deployed,
ThingWorx Partner:

