

IoT in Verticals:

Sustainable, Optimised Energy and Utilities

The call for renewable, sustainable energy and utilities has led organisations to turn to technology as a chance to revolutionise how resources are generated, monitored, and consumed. The demand for reliable, optimised, and responsible utilities is growing at a rapid pace, and the response can be found in the Internet of Things (IoT).

Kaleido Intelligence's recent survey, Enterprise Cellular IoT Demands & Opportunities Report, which breaks down the challenges and opportunities in IoT among key verticals.

These are the top 5 takeaways from the energy and utilities industry:

Hardware Complexity is the Top Scaling Challenge

Hardware complexity is the number one challenge in scaling up IoT operations. This was ranked as the top challenge by 51% of cellular IoT adopters and 60% of non-adopters in the energy and utilities sector¹.

Strong Demand for Device-Focused Services

84% of cellular IoT adopters rate hardware design professional services as "very important," and 80% say the same for device management capabilities¹.

ESG is Critical

45% of cellular IoT adopters in the energy and utilities sector reported that a connectivity partner's adherence to Environmental, Social, and Governance (ESG) frameworks was of the "highest importance," a higher proportion than any other vertical surveyed¹.

Coverage and Reliability are Paramount

54% of cellular adopters ranked "quality of coverage" as their no.1 technical factor when choosing a provider. 52% of all respondents agreed that safeguarding deployments against commercial and regulatory restrictions is their top priority for IoT connectivity¹.

Growing Interest in Private LTE/5G

27% of cellular IoT adopters reported already having a private network deployment. This interest is driven by a need for improved connection reliability (52%) and privacy (53%)¹.

IoT for Energy and Utilities

IoT provides many opportunities for the energy and utilities industry to streamline operations through granular visibility and analytics. Leveraging sensor-based technology that creates actionable intelligence accessible through a unified platform helps build flexibility and optimality into operations and expansion.



Smart Metering

With smart sensors that can monitor usage, it is possible to have streamlined energy consumption and measuring, as well as insight into customer usage and performance to help optimise billing and system monitoring.



Water Conservation

Sensor-based monitoring can help ensure that water mainlines and pipes are not suffering any cracks or damages, leading to slow leaks that are costly over time. Water usage can be optimised leading to less use overall for a greater approach to water conservation.



Tank Monitoring

With affordable, ruggedized sensors and resilient connectivity, tank levels can be monitored to ensure that stocks are maintained at optimum levels to help manage costs and logistics.



Maintenance and Prevention

Through full-scale monitoring of infrastructure, issues can be detected before they become critically problematic, leading to service interruptions, leaks, damage, and costly overruns.



A Single Source for Utilities and Energy Needs

When you're ready to add sustainability and intelligence to your energy and utilities application, you're ready for KORE. With full-scale connectivity options – including an eUICC, Multi-IMSI eSIM – managed services, hardware, security, and holistic platforms, KORE makes IoT a success in utilities. [Reach out to learn more.](#)

¹ Kaleido Intelligence, Enterprise Cellular IoT Demands & Opportunities Report, 2024