

CASE STUDY

IoT Wireless Sensor Management



THE CLIENT

Largest Canadian Propane Supplier



INDUSTRY

Oil, Gas, Electrical and Utilities



REVENUE

2.4 Billion Annually



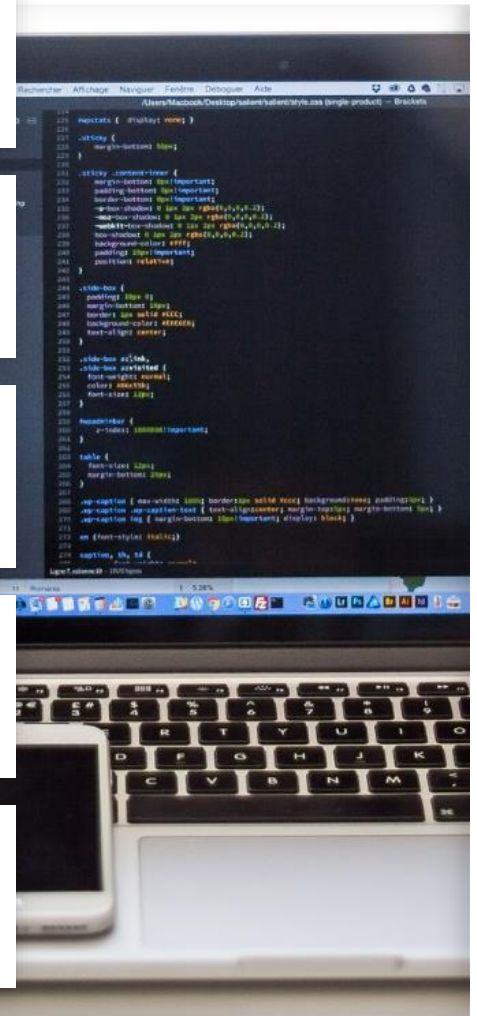
EMPLOYEES

5,000+



LOCATION

Nationwide Canada



They are Canada's leading propane distributor and have been a trusted propane supplier for over 70 years.

Through Canada's largest propane distribution network, they are able to serve homes and businesses virtually anywhere in the country. They offer customers industry-leading digital solutions that make managing propane use easier and more convenient.

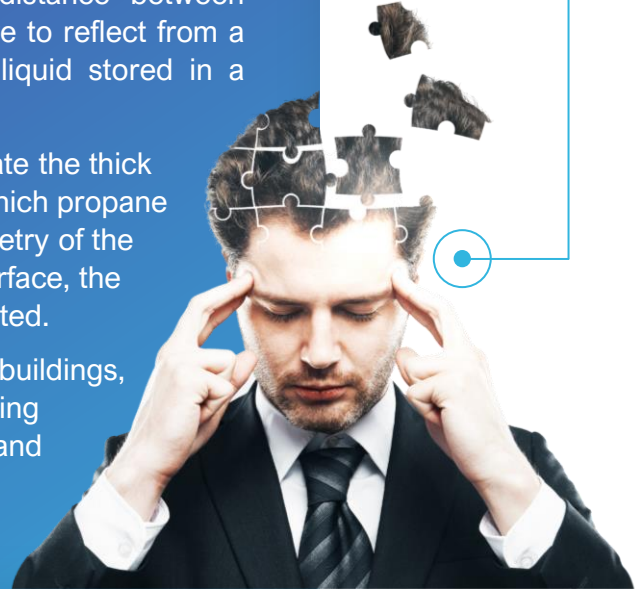
They consistently deliver over 1.5 billion litres of propane annually through a distribution network of approximately 200 locations strategically located to serve customers from coast to coast in Canada.

The Challenge

Sensors installed at the bottom of the cylinders can measure the amount of propane liquid stored in them. These powerful and battery-powered sensors operate on sound waves propagation that measures the distance between themselves and a surface based on the time taken by the wave to reflect from a surface. By using level monitoring systems, the amount of liquid stored in a cylinder can be effectively monitored.

The strong waves emitted from these sensors can even penetrate the thick wall of the cylinders and effectively measure the height up to which propane is present in it. Based on the shape, size, orientation, and geometry of the cylinder along with the distance between the sensor and the surface, the amount of propane present in the cylinder can be easily calculated.

For safety purposes propane tanks are located outside of most buildings, the sensor gauges are located on the exterior of the tank exposing the gauges to extreme weather conditions in both the summer and winter. For this reason gauges must physically be replaced every 36 months.



The Solution

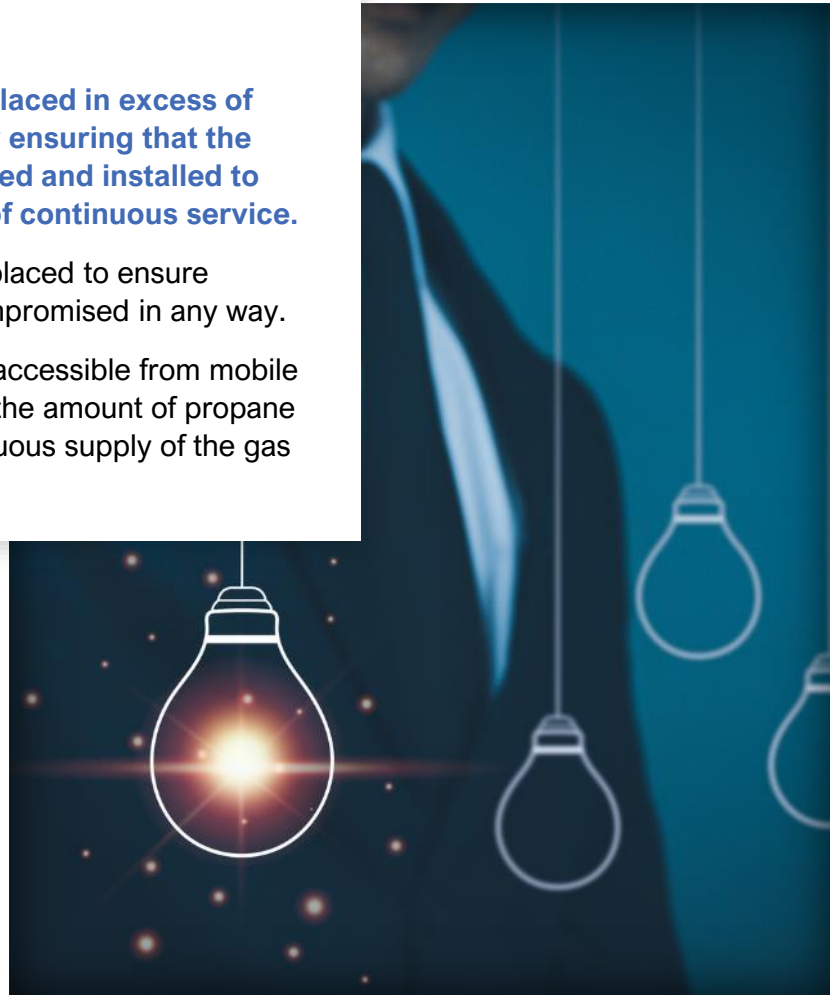
A team of GT Global nationwide technicians replaced in excess of twenty-nine hundred sensors across the county ensuring that the newest and highly reliable sensors were deployed and installed to ensure an additional lifecycle of 36-60 months of continuous service.

In excess of twenty-nine hundred sensors were replaced to ensure performance and reliability of service were not compromised in any way.

Data from sensors can be read on an IoT platform accessible from mobile and desktop devices making it an effective eye on the amount of propane left in a tank can be always kept to ensure a continuous supply of the gas at the place of the requirement.

Benefits of Using Remote Propane Tank Level Monitoring:

1. Real-Time Monitoring
2. Advanced Analytics
3. Highly Scalable and Modular



CONCLUSION

The propane level monitoring solution is one perfect example of the potential of IoT technology.

Its capability boosts even further when integrated and installed with other breakthrough IoT solutions. In any industrial, commercial, or residential system; this amalgamation of solutions can be used to identify inefficiencies, understand market demand, and boost operational methodologies.

Clearly, IoT is one of the most ground breaking technological development in the modern realm. Let us see how the features and benefits of this technology will be utilized in the time to come.

