

Polludrone Providing Accurate Data Withstanding -40° C for Sustainable Waste Management

The robust, innovative solution provided real-time environmental data in Alberta's harsh conditions and could calculate the Canadian Air Quality Health Index. As a result, the waste management company could monitor pollution levels efficiently, enhancing its contribution to a cleaner, sustainable future.



November
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Canada



Polludrone

Our Client

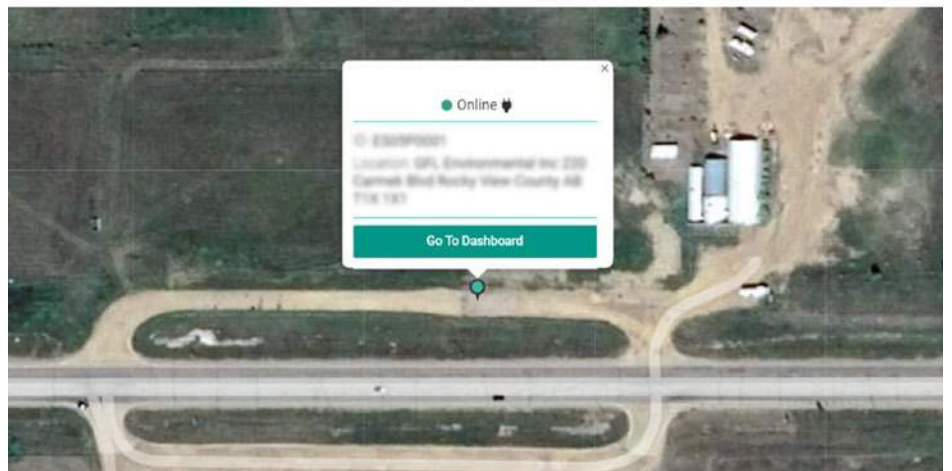
The client is a company deeply conscious about the environment, offering comprehensive waste management solutions to various industries and communities worldwide. They offer a broad spectrum of services - from recycling and hazardous waste management to landfill management and organic waste processing. They even tailor their offerings to meet the unique needs of each client while also championing a cleaner, greener future. They harness advanced technologies to responsibly collect, transport, treat, and dispose of waste materials. Their broad range of services helps businesses and communities lessen their environmental impact, contributing to a healthier planet.

The Challenge

The client was concerned about the complaints of odour and dust in areas surrounding their sites. They required a sophisticated, user-friendly monitoring system to provide real-time data on environmental parameters like PM_{10} , $PM_{2.5}$, $PM_{1.0}$, NO_2 , O_3 , wind speed, wind direction, noise, light, UV, temperature, humidity, and pressure. This system needed to withstand the harsh cold conditions of Alberta while ensuring accurate performance. They required a cost-effective and robust solution to track and mitigate environmental factors.

The Solution

In November 2022, Oizom's partner- ES Canada, implemented Oizom's Polludrone Custom - a sophisticated air monitoring system, in a rural community in Alberta. This solution provided real-time data on multiple parameters and was built to withstand the extreme cold environmental conditions of Alberta, ensuring its reliability and accuracy. Moreover, the Oizom team customised their software specifically for the Canadian market, enabling it to accurately calculate and present the Canadian Air Quality Health Index (AQHI). This pioneering feature positions the Oizom Polludrone as one of the first products in the Canadian market to provide this advanced functionality, further enhancing its value as a comprehensive air monitoring solution.



The Result

With the Oizom Polludrone system, the client was able to monitor their dust pollution and air quality levels around the clock. This system was easily installed by the client's team on-site. The management can now confidently monitor their operations and receive automatic alerts when dust or pollutant gas levels reach predefined levels. The product has proved its robustness, withstanding weeks of temperatures below $-40^{\circ}C$. The system not only responds to the current needs of the client but also provides data that can be reviewed in case of any future disputes or complaints. This collaboration with Oizom has significantly assisted the client in understanding the impact of their industrial processes on the neighbouring community, thereby helping them in their commitment to promoting a cleaner and more sustainable future.