

Monitoring hazardous gas levels at an Oil refinery in Tehran

Our Client

The Department of Environment is a governmental organisation of Iran established in the year of 1956. It is responsible for formulating policies that help maintain and secure the country's Air quality within safe breathing standards. The Behran oil company's Oil refinery in the Tehran province hosts a number of workers every day. It is important to monitor the hazardous gaseous levels that could pose a threat to their health.



The Challenge

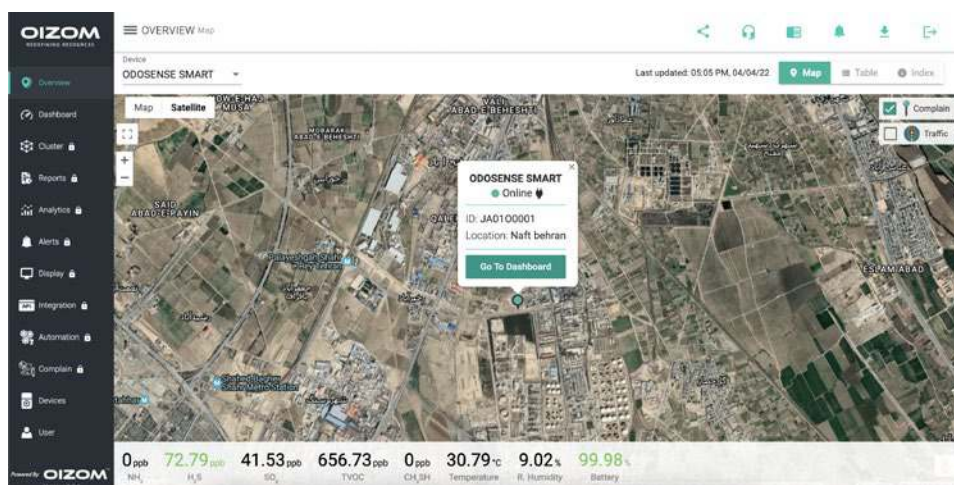
The Department of Environment, Iran was not equipped with an air monitoring system that notified them of hazardous gases and particulate matters in the air around an Oil refinery in the Tehran Province. To optimize the safety and security of the workers in the Behran Oil Company's Oil refinery, detecting odours and harmful gases like nitrogen oxides (NO_x), carbon monoxide (CO), hydrogen sulfide (H₂S), sulfur dioxide (SO₂), and other Particulate Matters like PM_{2.5}, PM₁₀ were necessary. In times of leakage or when the gaseous levels cross the threshold level, the governmental body did not have an easy means to procure the information and help warn the workers and the residents of the Tehran province of the same.

The Solution

Oizom offered its sustainable and patented “e-breathing technology”, Odosense, to the Department of Environment of Iran. It was a perfect solution as Oizom’s expertise lies in detecting and monitoring such harmful gases as mentioned above. Odosense can help the governmental body to get a smart, affordable and accurate reading of the gaseous levels in the air on a real-time basis. It can even be done remotely through a wide range of network connectivity options. This function is designed to help in notifying the authorities, workers and residents in and around the Oil refinery in case of any leakage or any presence of harmful substances in the air.

Installation Details

1 unit of Odosense is installed in the vicinity of the oil refinery of the Behran Oil company in the Tehran province of Iran.



The Result

The Department of Environment, Iran is now empowered to examine a real-time reading of the gaseous levels present in the air. The workers and residents in and around the Oil refinery can now rest assured that monitoring of the harmful gases is in process. With the help of Oizom’s air quality monitoring software, Envizom, the authorities can now enable smart alerts (email & SMS alerts) to be notified of any leakage, concentration of gas, or particulate matter. This ensures timely notification, and the authorities can adopt appropriate corrective actions that best suit the need.

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“Oizom’s Odosense’s performance in monitoring the environmental conditions has been exceptional. Dept. of Environment-Iran highlighted that the data analytics platform & the real-time data feed is helpful in monitoring the air quality.”

-Mr.Saeid Foroughi, Managing Director-Jarf Andishan

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Oizom is an environmental IoT company offering data-driven environmental solutions for better decision making. With our sensor-based hardware, we monitor various environmental parameters like air quality, noise, odour, radiation, weather conditions, etc. Our data analytics platform derives many actionable insights for authorities, communities, and industries. Oizom strives to play an essential role in a sustainable future through smart environmental solutions and data science.