

Powerplant emission monitoring in Hazira, Gujarat

Our Client

Essar Hazira Limited is one of the leading power generation companies in India. It established India's first new-generation independent power project at Hazira, India, in late 1990. The Essar Hazira power plants are multi-fuel combined-cycle power plants located near the Essar Steel facility in Hazira, Gujarat. It also has power generation units that work with coal in Hazira, which also happens to be next to the Essar Steel plant. They have a capacity of producing 500-515 Megawatts and supply energy to various governmental and private projects.



The Challenge

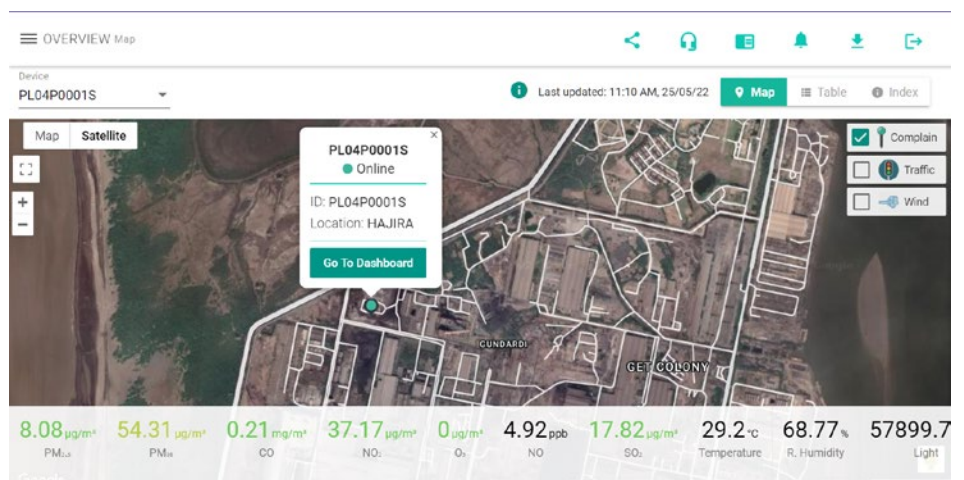
The Essar Hazira plants were required by the Ministry of Environment, Forest and Climate Change(MOEFCC) to monitor the PM levels and other air pollutants. To fulfil their obligations to the forest department, having an air quality monitoring system was essential. Monitoring the emissions from the plants like $PM_{2.5}$, PM_{10} , NO, NO_2 , SO_2 , O_3 , and CO within a single compact device was necessary. Essar also required that such a device be capable of displaying the various parameters on an LED display.

The Solution

Oizom with Pollucon offered Polludrone to be installed in the Essar Hazira powerplant to monitor the air quality on a real-time basis. Polludrone is capable of monitoring PM_{2.5}, PM₁₀, NO, NO₂, SO₂, O₃, CO, temperature, and humidity levels. It comes equipped with a Data Analysing and Visualization software (Envizom), which collects the data from the monitor and can display it through Essar's LED displays. Polludrone offers a wide range of connectivity options like GSM, Ethernet, Wifi, MODBUS, etc. It can also display historical trends and statistics on various gaseous levels.

Installation Details

Polludrone Smart has been installed in the Essar Power-plant situated in Hazira, Gujarat.



“Polludrone is a reliable product in monitoring air quality. We are happy with the quick support by Oizom whenever required. Software (Envizom) has a simple interface and is informative about the various levels of air pollutants.” - Dishank Oza, Deputy GM, Essar

The Result

The Essar Hazira powerplants are now capable of monitoring the air pollutants on a real-time basis. The real-time monitoring capabilities of Polludrone have helped them reassure the MOEFCC of the industry complying with the norms of the government. The Data analysing and Visualization software has helped the company understand the historical trends and patterns of various air pollutants. The compact and versatile nature of Polludrone has been useful in achieving all the necessary requirements of monitoring the air quality by limiting its requirements of space and budget.

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.