

# Ensuring environmental safety and reassuring communities at Dangote Cement Plant

## *Our Client*

The Dangote Cement Plant, which opened in May 2015, is a 2.5Mta plant, less than 90km from Addis Ababa in Ethiopia. With extensive limestone reserves of about 223 million tonnes, it is the largest cement plant in Ethiopia and can produce high-quality 32.5 and 42.5-grade cement to meet market needs at competitive prices.



## *The Challenge*

Communities in the nearby town of Reiji, close to the Dangote Cement Factory, had raised a huge number of concerns about pollution and dust from the plant which led to bad air quality. The factory had been designed with advanced technology and machinery with low particulate outputs, and the senior team was confident that there was no need for concern. But there was a lack of precise data or ambient environmental reports to be able to reassure local communities and other stakeholders.

### Installation Details

4 Polludrones were installed at the cement plant's border periphery.

1 Dustroid with Anemometer installed at the limestone crusher

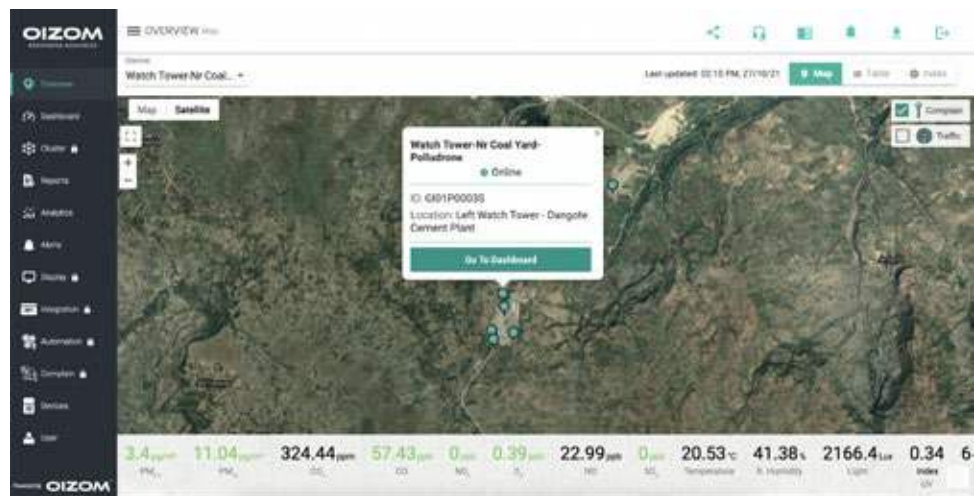
1 Dustroid with Anemometer installed at Admin Office Building.



### The Solution

Oizom Polludrone is our smart city-specific environmental monitoring solution that works on IoT technology, and the Dustroid is a system used to measure the number of dust particles in the air. Capable of being deployed in any location, powered by either a solar or non-solar power supply, the smart combination of Polludrones and Dustroids was the ideal solution for the cement plant.

The Dustroid is an effective solution for places like Dangote Cement Plant which are heavily dust-laden. Polludrone efficiently provides the precise data to monitor air quality, measuring a wide range of environmental parameters including particulates, toxic gases, odors, radiation, traffic, noise, weather, light levels, and more. With real-time data, the senior team at the plant would have instant access to insights to assess the surrounding environment efficiently.



### The Result

With Polludrone and Dustroid installed in the area, the factory now has instant access to real-time environmental data and reports which are generated through our hardware and software systems. This data showed that air quality in all locations around the plant is perfectly safe for everyone, reassuring the communities living nearby.

“We really liked the Oizom data visualisation application as it solves all our live environmental data requirements. Email & SMS alerts generated when a threshold is crossed for pollutants will help our site engineers to take immediate action.”

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.