Case Study

Brigade Uses Ambee’s Environment & Climate Monitoring Systems To Enhance Workplace Wellness

About Brigade Group

The Brigade Group is one of the leading property developers in the sub-continent. The company has more than three decades of expertise in building positive experiences for people who trust them. Brigade assures best-in-class design and top-of-the-line facilities that exude elegance and sophistication in all their projects. They support the environment by making conscious choices and sustainability efforts through green building opportunities.

These decisions and the attitude of the mega-builders, Brigade group, paired with an innovative mindset, have created an outstanding reputation. Brigade’s uncompromising quality of the projects has led them to partner with Ambee to create a safe, healthy, and clean working environment for their employees and other stakeholders.

Brigade’s Goals

Monitor Indoor Air Quality In The Premises

There’s enough scientific evidence to prove that cleaner air leads to a fresh and energized work environment. Being a highly reputed property developer known for its quality consciousness, Brigade wanted to monitor the quality of air its employees breathe. This was mainly to bring about awareness of the pollutants on the premises.

Enhance Workplace Wellness

One of the Brigade group’s core values is its employees’ well-being. By providing a cleaner, safer environment, Brigade wanted to decrease health issues and allergies among the workers. It drove the brand to create a healthier workspace and safe common spaces and reduce any symptoms of allergies amongst allergy sufferers.

Increase Employee Productivity

With the never-ending deadlines, customer interactions, and large walk-ins daily, Brigade premises wanted to provide its employees with a health-friendly space. A space that would increase employee productivity and help them understand the external reasons that might be affecting each individual’s work patterns.

The Solution – Partnership – Environment & Climate Monitoring Systems (ECMS) by Ambee

According to a report by WHO, breathing in polluted air causes increased drowsiness, loss of concentration, and reduced attention spans. The Brigade group identified these factors within their community and found Ambee to help them solve the predicament. Ambee customized the environment & climate monitoring systems to fit the requirements that Brigade had put forth.

We, at Ambee, worked with Brigade to install monitoring sensors at critical locations to monitor air quality levels for several parameters. Ambee also designed a one-of-a-kind dashboard to evangelize the data generated by the sensors to bring awareness about the pollution levels on the premises. This dashboard brings attention to the pain points in the Brigade grounds.

It helped the company take adequate measures to tackle it. Insights generated from Ambee's proprietary AI algorithms were displayed in an easy-to-read format for employees of all segments to take the necessary precautions. The data representation helped liven up the work environment, instilling confidence in the employees about their workplace.

> *"We at Brigade place immense value on quality consciousness, innovation, and social responsibility. These are our core values, and Ambee understood just that when we approached the company to provide ambient air quality sensors. Our primary focus was to instill confidence in our employees about their workplace and to improve the quality of breathable air on the premises."*
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> *"The real-time data, display systems, monitoring devices, and data collection on cloud services provided by Ambee truly showcases why they are the pioneers in the market. The whole process was easily accessible too. Indeed an incredible feat by team Ambee."*
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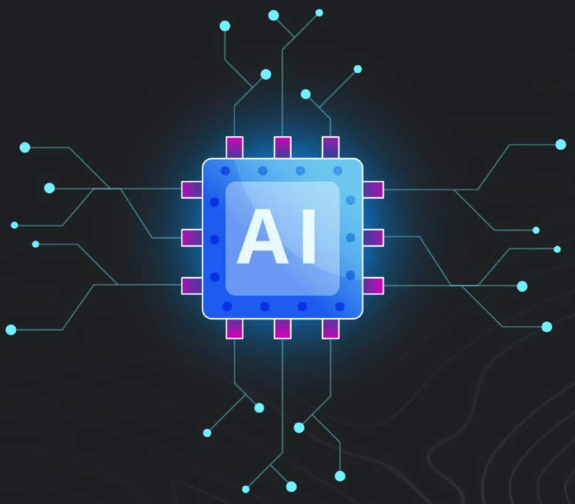
> **- V Chandeeswar G, Sr Manager.**

About Ambee Environment & Climate Monitoring System

Ambee's environment & climate monitoring system (ECMS) brings awareness of the air in your surroundings. It helps enhance productivity and creates avenues to experience better breathing, health management, and allergy prevention. The custom-designed sensors paired with insights generated through Ambee's proprietary AI support stakeholders to design a better environment for their customers. Our autonomous 24/7, real-time environment & climate monitoring systems help businesses take appropriate actions. These actions, in turn, help prevent health issues, curb sources that pollute the air, enhance strategic infrastructure planning, and implement systems to improve health and wellness.



Ambee's ECMS is a cross-functional system of air quality monitors and real-time analytics that display trends and variations in hyperlocal air quality. The dashboard designed for Brigade shows a comparative analysis of the air quality with AQI standards set by the USEPA. It also represents the risk levels of the pollutants depending on the values sensed via the AQ sensors.

Information on how Brigade can implement corrective actions was also made available to enable holistic protection of the employees and residents. As the air we breathe dictates the quality of life we lead, Brigade group, the pioneers in building sustainable and innovative homes, made no delay in choosing Ambee's ECMS.

What did Ambee's air monitors

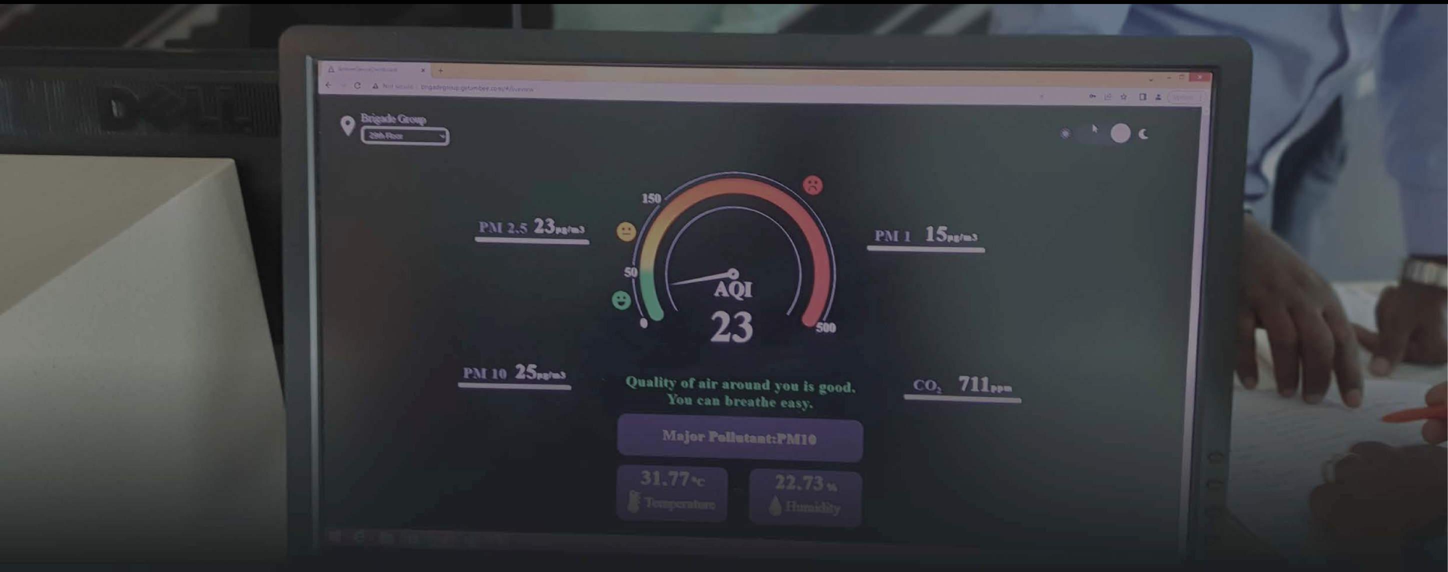
measure for Brigade?

- Criteria pollutants (according to WHO, EPA, EU)
- Particulate matter (PM10, PM2.5)
- Temperature and Relative Humidity
- Weather Variations

Why did Brigade choose Ambee's ECMS for the job? (key features)

- Near real-time multi-parameter monitoring
- Simultaneous measurement of volatile gases, criteria air pollutants, and weather intelligence
- Capable of monitoring as per WHO requirements

- Over-the-air updates
- EPA benchmarked equipment
- Low cost of acquisition and operation
- Low power requirements
- Internal data-logger
- Fully autonomous, easy installation and configuration
- Completely modular in architecture
- Multiple communication options with autonomous reports, alerts, notifications, real-time data visualization, easy UI UX, etc.



Quality of air around you is good.
You can breathe easy.

How Did The Brigade Group Benefit From Ambee's ECMS?

Indoor air, unlike outdoor air, traps pollutants and allows them to build up within closed spaces, big or small. The main aim of this partnership was to identify these spaces and bring about a positive effect on human health, comfort, and work performance. Ambee's ECMS effectively measured air quality parameters for more than 11500 hours in all Brigade campuses.

It enabled the building management to reduce health risks associated with poor indoor air quality by detecting and alerting high pollution levels. They were identified whenever the PM2.5 range exceeded from medium to high. It was reported to be more than 3972 times in a year.

Ambee's dynamic dashboard also showcased the alerts 4120 times when AQI crossed from medium to high level. Using these alarms, the management could control and implement preventive measures that helped tackle any worsening air quality levels. This one step created a safer and more harmonious environment for people on the premises.

11358

is the total number of hours monitored in all Brigade Campuses

3972

times the level of PM2.5 has reached the Medium to High range.

4120

times AQI has crossed Medium to High level.

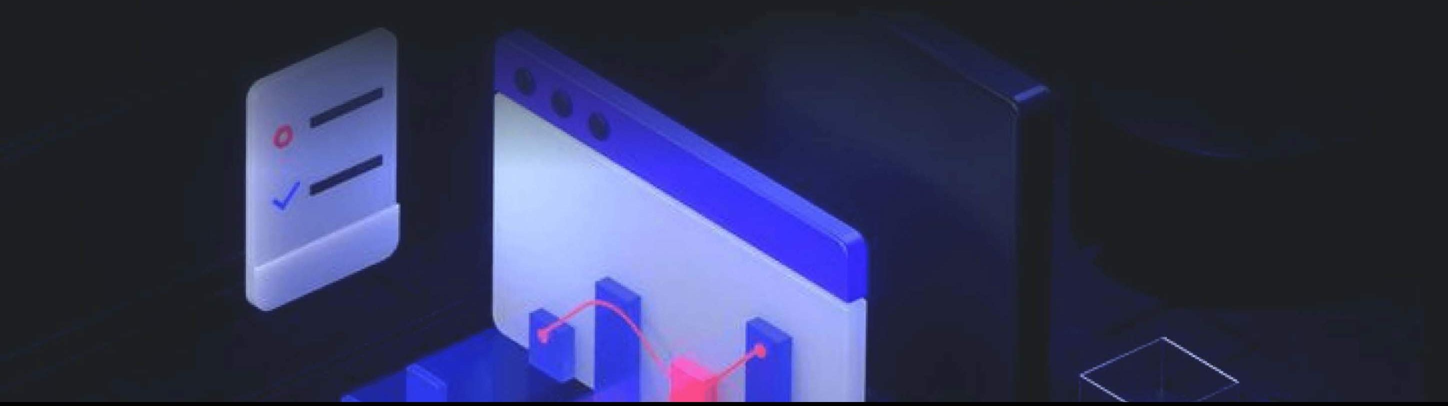
Additionally, many other positive developments were also identified as a result of taking one step toward campus air quality awareness.

Increased Overall Health Quotient

Along with fulfilling the goals set by the partnership, Brigade premises saw developments in specific other segments too. The premises where sensors were installed showed the trend of AQI and the associated risk levels. This helped the employees in workspaces and residents in apartment complexes to take adequate measures to prevent any illnesses.

Poor indoor air quality could cause eye irritation, nose and throat irritation, headache, nausea, dizziness, and in some cases, chronic obstructive pulmonary disease (COPD) too. But Brigade premises saw a decrease in severe health issues resulting in an overall increase in health and wellness quotient.

The employee productivity saw a hike too. The company also identified a spike in employee productivity, absenteeism, higher retention levels, and holistic upliftment of the workplace atmosphere. From wearing masks during high pollution levels to workers enjoying a healthier space with cleaner air, were reported.



Improved Environmental Quality & Maintenance

Ambee’s sensors installed around the premises helped efficient management of buildings, resulting in a high liveability score for the residential complexes. The atmosphere around the Brigade campuses is comparable to Switzerland’s in terms of high quality of living and cleanliness.

Brigade achieved this with collaboration from Ambee's ECMS team and its onsite building maintenance crews. They identified defunct HVAC systems, environmental tobacco smoke, vehicle exhaust emissions, and inadequate ventilation. After implementing corrective actions, the Brigade spaces are deemed the best on the market for residential complexes in Bangalore, India.

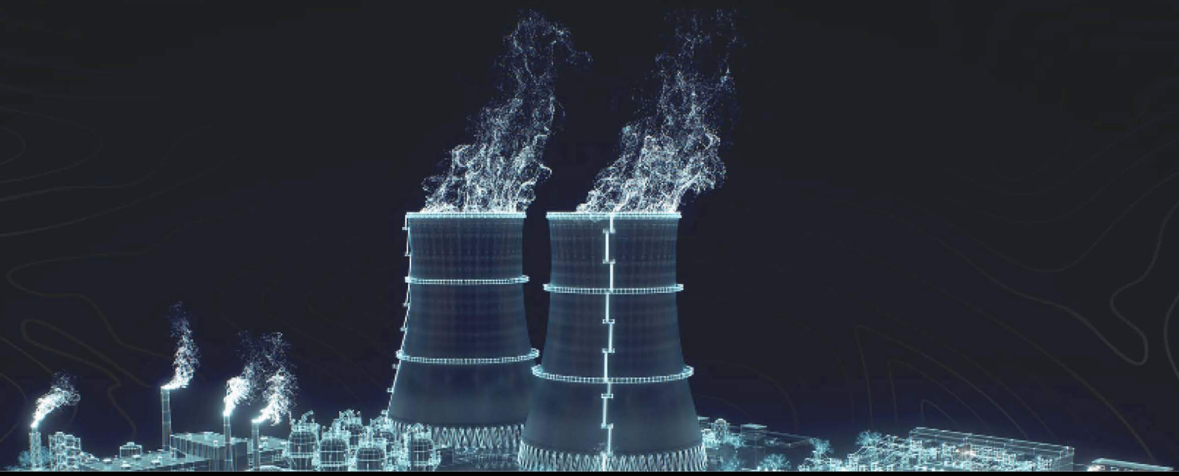
Implementation of corrective measures such as HVAC maintenance scheduling, monitoring & repairs, designating tobacco smoking areas, and building of green walls were initiated immediately. All of this was triggered after the sensors detected the problem areas around the Brigade premises. In addition to increasing the market value of Brigade homes, these factors also support the brand in the quality certification processes such as LEED and other building standards.

Identifying Climate Risks & Building Toward Sustainability

Air pollution is a significant contributor to climate change and the most prominent environmental threat to human health. Furthermore, indoor air pollutants from poor building maintenance, sub-par quality constructions, and harmful materials pose a heightened risk to humankind. One strategy for creating net-zero buildings is to manage viral transmissions via ventilation.

Through Ambee's partnership, Brigade has taken the first step towards achieving sustainable, net-zero buildings. As businesses aim to achieve energy efficiency and carbon neutrality and pledge to develop cities sustainably, installing and monitoring air quality has taken the construction company a step closer to meeting the SDG goals.

By increasing health quotient, equity, and economic prosperity via efficiency, automation, and smart building construction methods, Brigade has leveled up towards growing sustainably. Ambee, in partnership with Brigade, has encouraged change towards overall community health, supporting steps that help reduce the effects of climate change at the community level. All this is achieved while providing the utmost occupant satisfaction and creating experiences that move humanity beyond the present.



About Ambee

Ambee, now an environmental tech company, was first conceived when CTO, Madhusudan Anand, put together a rudimentary air sensor to check the air quality levels near his house. The idea for this experiment was sparked by a near-tragic incident and solidified when he found out the nearest air quality sensor was 13 km away.

The sensor provided real-time air quality readings at a hyper-local level. Results from this experiment were shocking and fuelled the need for him to build a more comprehensive and accurate dataset.

Today, Ambee is one of the few global environmental intelligence and tech companies that provide real-time, hyper-local data with the highest accuracy levels. The goal is to strive for excellence in delivering rich, accurate, and true-to-real data. It holds power to transform businesses, make informed decisions, and improve individual health and the overall health of our communities to the planet.

Ambee's environment & climate monitoring systems are designed to help bring this mission to practice. It enables companies like Brigade to break outstanding records, create comfortable living spaces, prevent health risks, and enhance productivity in multifunctional areas.
To know more about Ambee's environmental & climate monitoring systems, visit us here, and if you want to try out the sensors on your premises, write to us at **contactus@getambee.com.**