



## Technical Solutions Monitoring

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# Next-Generation Air Quality Monitoring System using High-Precision Sensors (GBiot)

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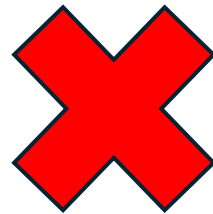
Director, Green Blue Corporation

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# Challenges in Air Quality Monitoring

- ❑ **Current Issue:** Air pollution is a global crisis, but there is a severe lack of reliable data.
- ❑ **The Barrier:** Conventional automated analyzers require station construction and high expertise, creating significant cost and location hurdles.
- ❑ **The Need:** Sensor technology that achieves high precision, low cost, and easy operation simultaneously.
- ❑ **Flexibility:** System must be adaptable to various locations, such as rooftops, roadsides, and ground level.



**Expanding networks:** From sparse bulky stations to dense sensor grids.

# GBiot: Bridging Cost and Accuracy

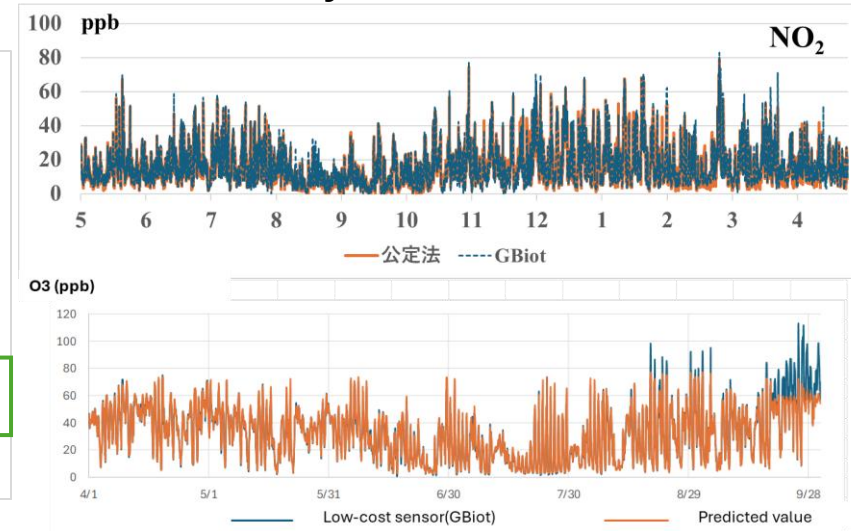
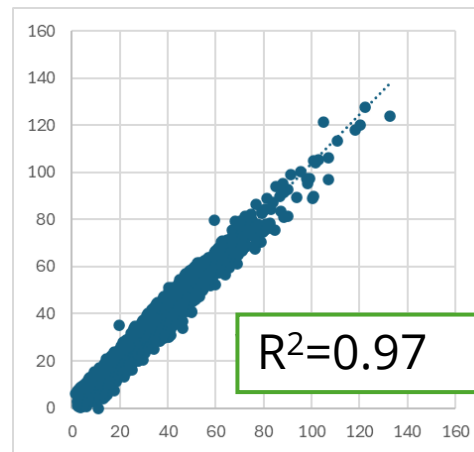
- ❑ **All-in-One Sensing:** Simultaneously measures PM<sub>2.5</sub>, NO<sub>2</sub>, O<sub>3</sub>, CO, and meteorological data (Wind, Temp, Humidity).
- ❑ **Unmatched Resilience:** Features automatic data re-transmission after power or communication outages—essential for unstable infrastructure.
- ❑ **Robust Power Supply:** Supports USB-PD and Solar power to operate in unstable infrastructure environments.
- ❑ **Proven Reliability:** Extremely high correlation with reference methods (e.g., NO<sub>2</sub>: R<sup>2</sup>=0.96, O<sub>3</sub>: R<sup>2</sup>=0.97).
- ❑ **AI Calibration:** Ongoing development of AI calibration linked with reference methods to achieve high-grade precision.



Installation by local staff



Easy installation



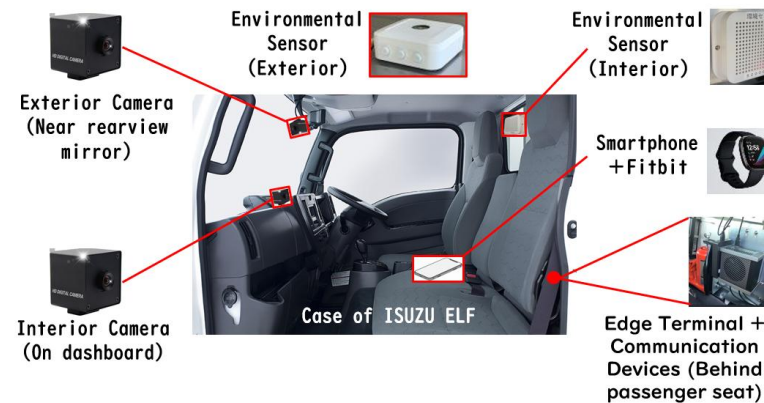
High correlation with reference methods (R<sup>2</sup> > 0.9).

# Proven Impact and Integrated Solutions

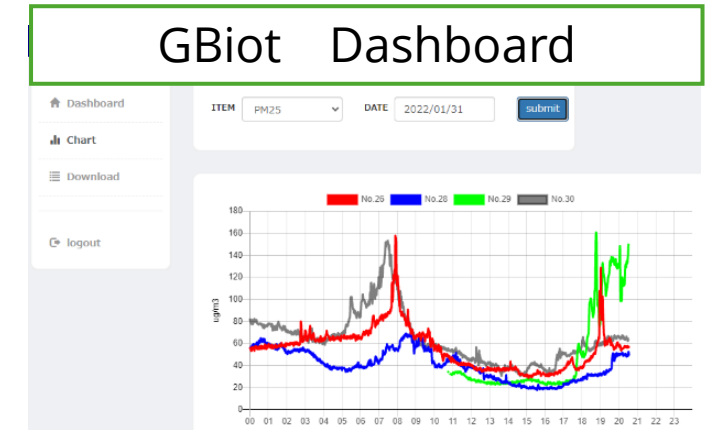
- ❑ **Success in SE Asia:** Proven implementation and tech-transfer in Myanmar, Vietnam, and Cambodia.
- ❑ **Resilient Monitoring:** Established know-how for maintaining data continuity during power and communication outages in Yangon.
- ❑ **Mobile Hotspot Identification:** Integrating vehicle sensors with video analysis to pinpoint traffic-related pollution "Hotspots".
- ❑ **Total Solution:** Beyond hardware, providing AI-powered dashboards for real-time visualization and future prediction.



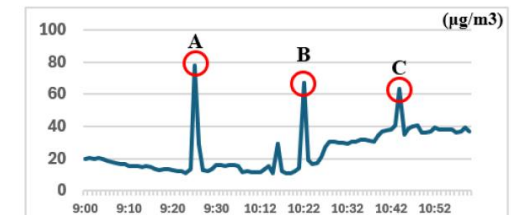
Technology transfer



Integrated mobile solution:  
Combining air sensors with video analysis.



Real-time data visualization



PM2.5 Hotspots and their Causes

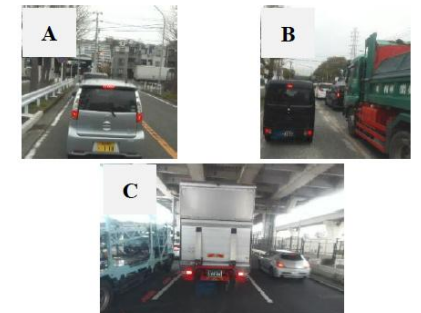


图4 高濃度地点映像

# BAQ 2026

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# Thank you for listening!

For any questions, feel free to reach out to [sales@greenblue.co.jp](mailto:sales@greenblue.co.jp).

