

# Case Study - Office Building

Data- Driven decisions - TVOC



## **Introduction:**

Project background

The office building is located in a high-tech park, it's basement is connect with underground garage and kitchen, the office building is needed to tackle the complex challenge associated with TVOC has risen above the acceptable standard during the working time especially in the morning.

Tongdy is an IAQ solution provider that is making a difference in helping you make the healthy indoor air quality. As one of the earliest companies in China engaged in air quality monitoring products, Tongdy has been always focusing on its strong technology development and design capabilities on the indoor air quality monitors.

## **Findings:**

*Phase 1*

Monitoring Period: 1<sup>st</sup> May - 27<sup>th</sup> May

Monitoring Place: 1<sup>st</sup> - 4<sup>th</sup> Floor of the office building

Monitoring Product: MSD

Monitoring Gas: TVOC

Data Analyze result: TVOC reaches to peak in the early morning of everyday meanwhile the other time still remains high

Image 1

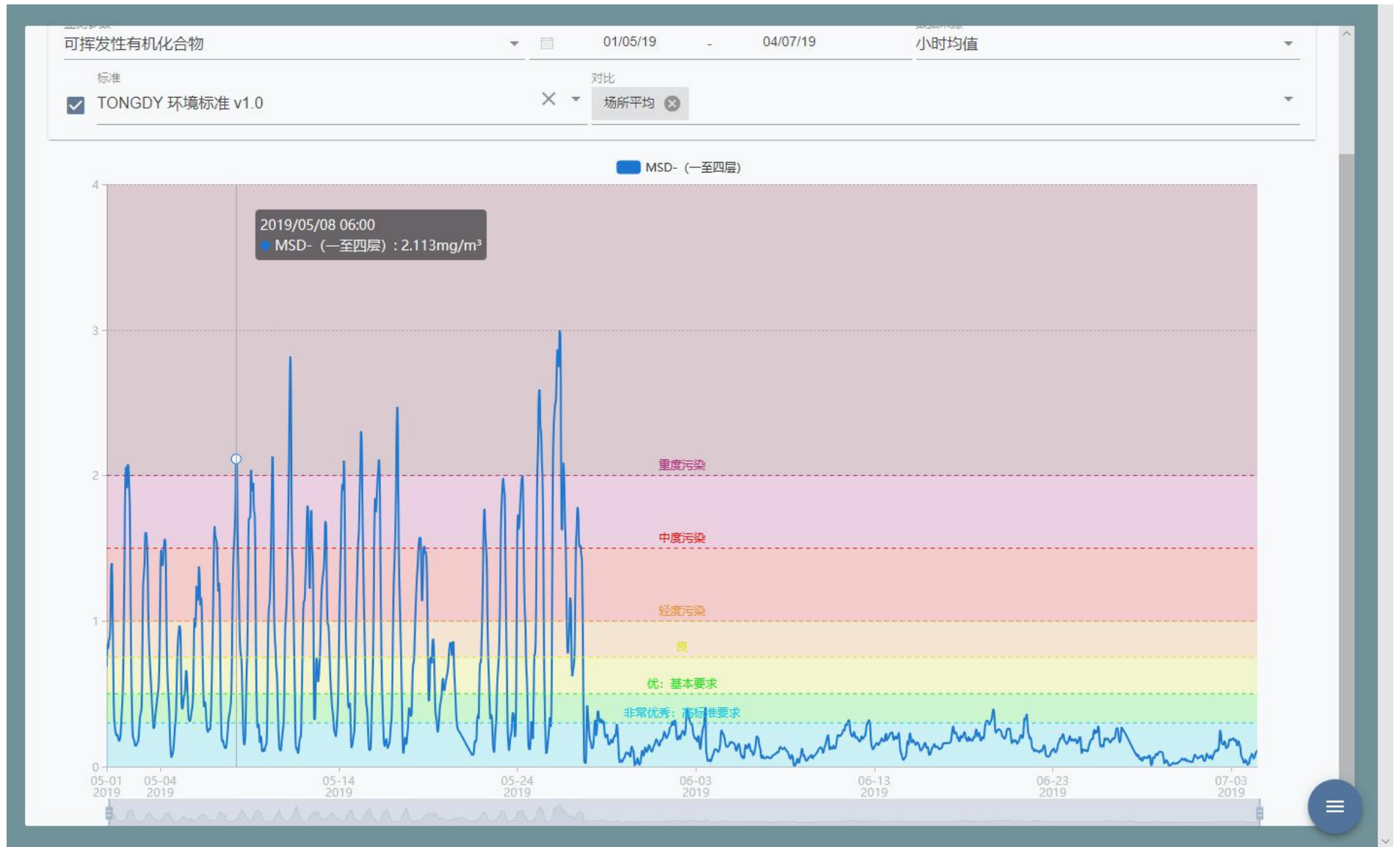


Image 2

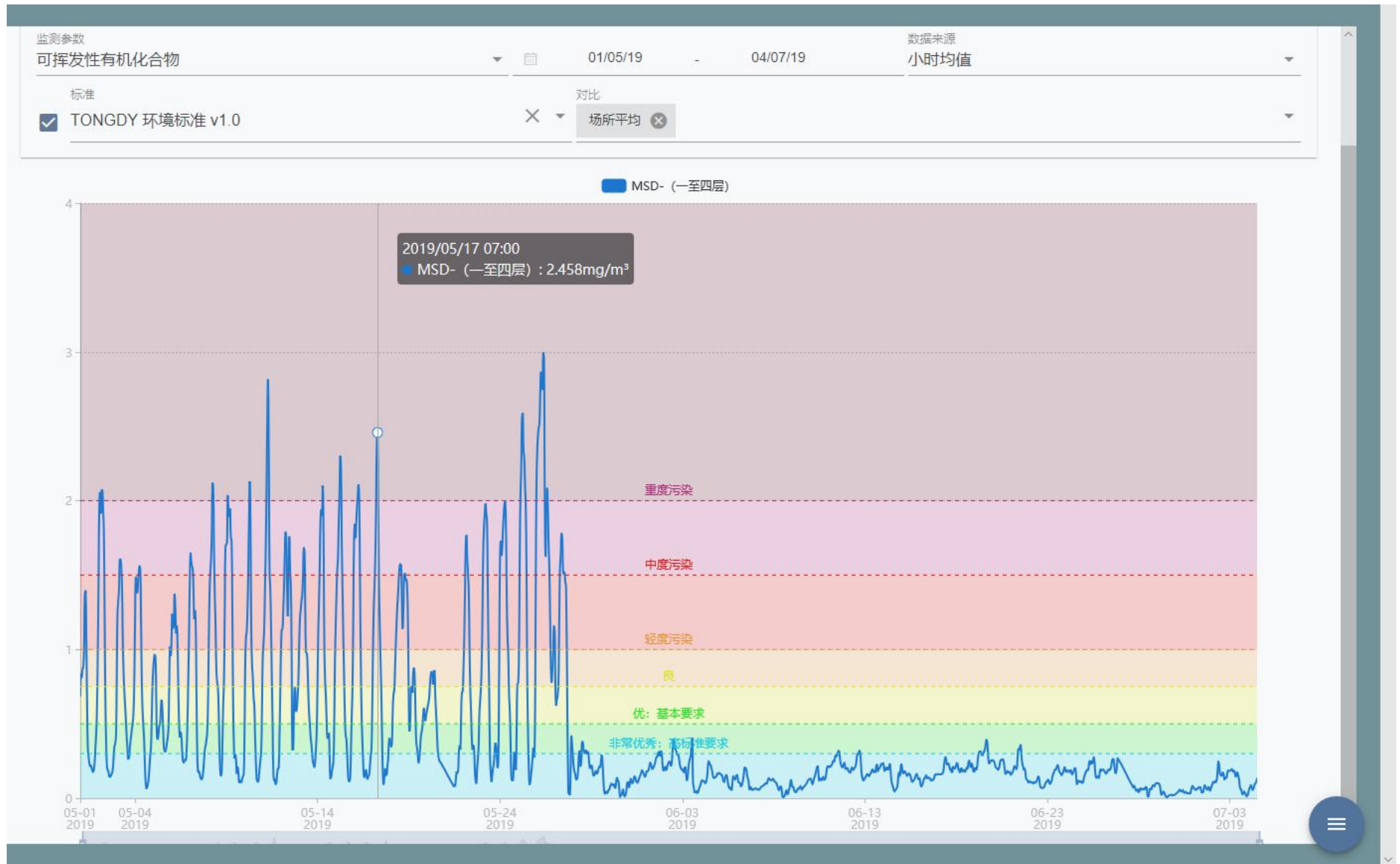


Image 3



Image 4



## **Improvement method**

Through the analysis of underground public space, the TVOC comes from the underground kitchen; It is difficult to isolate complete by blocking all underground air intakes.

By simultaneous analyzing CO2 concentration, it is judged that the fresh air volume in the building is sufficient.

Adopting the method of reducing exhaust air in time intervals, so that the indoor positive pressure is maintained, making it difficult for underground air to enter the office building. So solve the problem of TVOC risen above the acceptable standard, to help build and maintain a healthy indoor environment.

### *Phase 2*

Monitoring Period: 28<sup>th</sup> May- 5<sup>th</sup> June

Monitoring Place: 1<sup>st</sup> - 4<sup>th</sup> Floor of the office building

Monitoring Product: MSD

Monitoring Gas: TVOC

Image 5

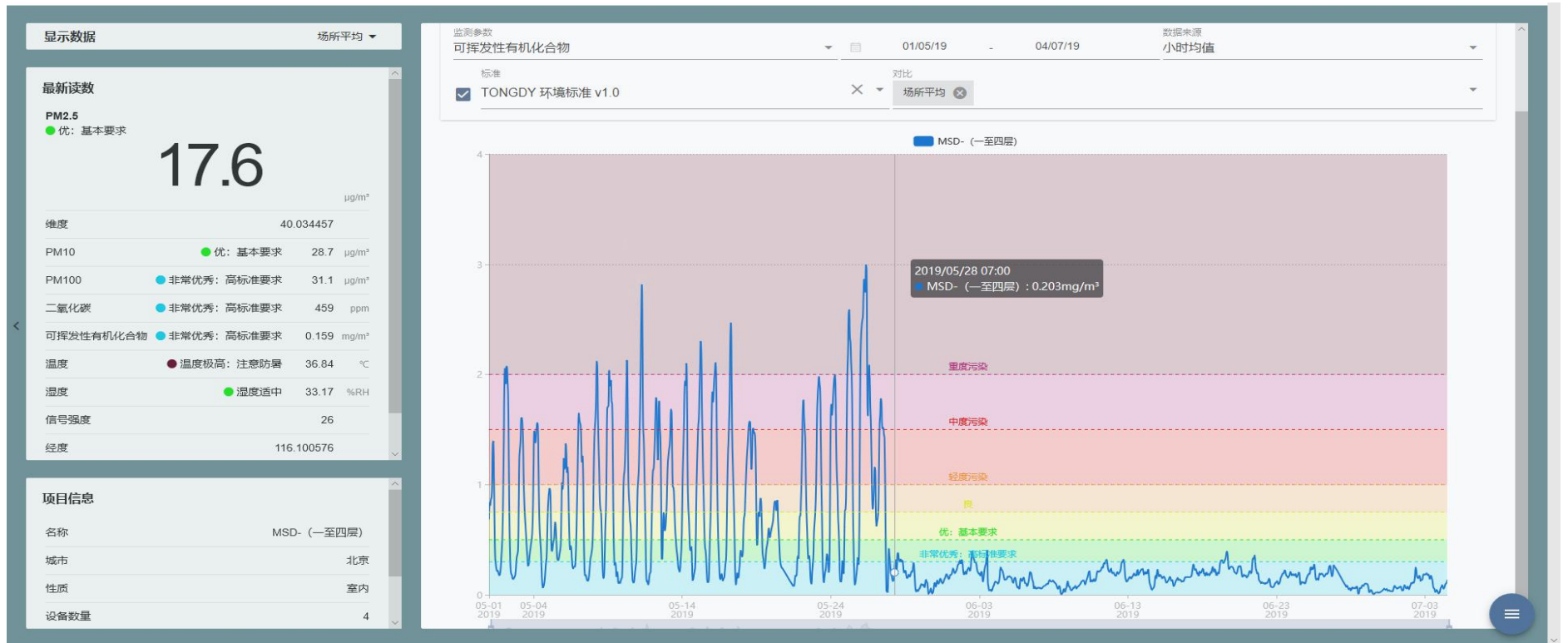




Image 6



## Conclusion

By comparing the Data at the peak and the trend of the curve, TVOC concentration significantly reduced. Tongdy's MSD help you to make the right decision.

### Related Monitoring product



24 hour online real-time detecting

Commercial Grade

Detection Gas: PM2.5, PM10, CO2, TVOC, HCHO, Temperature and Humidity

24VDC/VAC or 100~240VAC

Modbus RS485, WIFI, RJ45 Ethernet

Extra RS485 for WiFi/ Ethernet type to configure or check the measurements

Three-color light ring indicating different level of indoor air quality

Ceiling mounting or wall mounting

RESET Class B

For more information on Tongdy solution go to <https://www.iaqtongdy.com>.