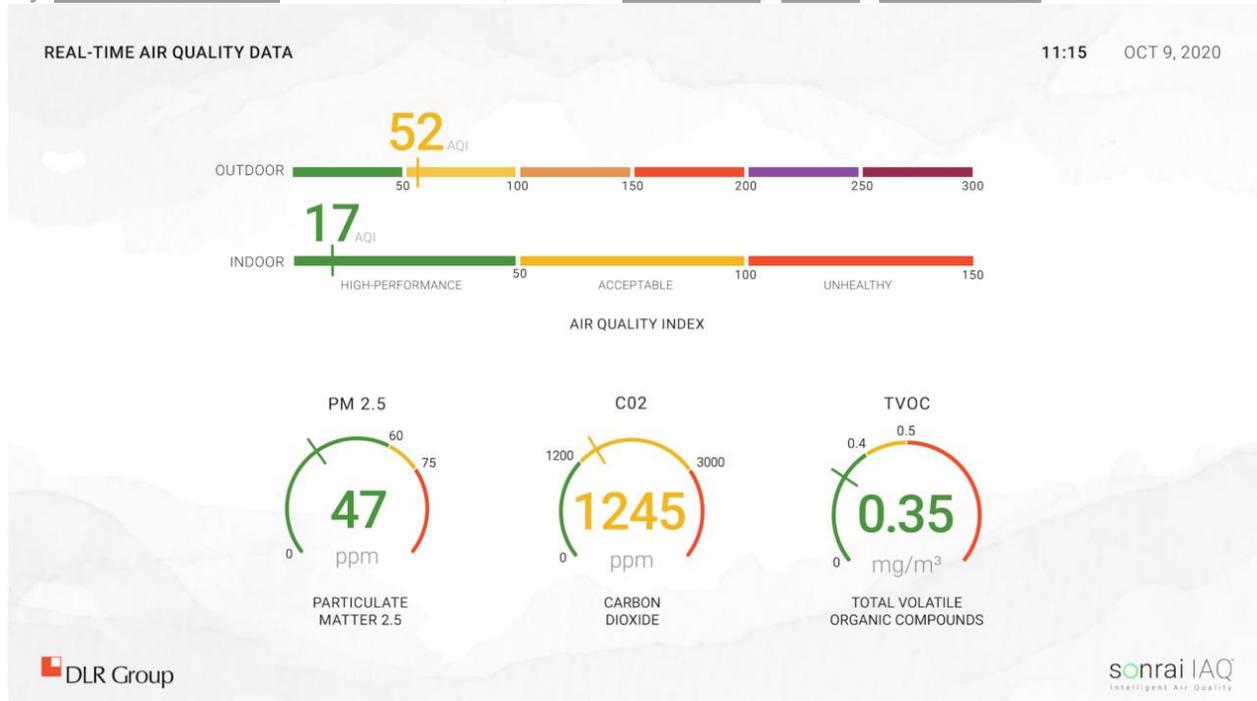


DLR Group launches a new building analytics platform

By [Matthew Marani](#) • December 17, 2020 • [Facades+](#), [News](#), [Technology](#)



The sonrai IAQ dashboard, tracking real-time air quality in a building (Courtesy DLR Group)

The present pandemic has, if anything, led to a renewed debate on the infrastructure and ventilation of contemporary buildings. While “sick building syndrome” is nothing new, attempts to ameliorate such conditions are relatively novel and often fail to reach their full potential due to uncategorized and inaccessible streams of data. After nearly a decade of research and development, global integrated design firm [DLR Group](#) has launched [sonrai IAQ](#), a new air quality analytics platform that integrates data streams across an array of [smart IoT devices](#).

“As an industry, we have been very focused on energy and carbon reduction over the last ten years, but, as we were assessing different building performances, it became apparent to us that energy alone is not the only metric for how well or poorly a building is performing,” said DLR Group principal and building optimization lead Ruairi Barnwell. “You can have a low-energy building that is not an inherently pleasant place to be, and, about five or six years ago, we initiated a project to quantify these metrics and gauge what sort of key performance indicators should be used to benchmark buildings.”

What are the implications of this organized data foundation for the industry at large? To begin with, architects and engineers, and owners, will be able to more successfully gauge post-occupancy results both for hardware and user experience. Contemporary facade and building systems are finely tuned machines, and keeping track of the efficiencies of each individual component can inform future project methodologies and material specifications. Additionally, retrofits, such as the DLR Group’s overhaul of [The Portland Building](#), require the identification of building systems failures and faulty components.

“We have built this platform on top of a very power analytics engine, which allows us now to not only gather data but to identify trends and anomalies,” continued Barnwell. “Through analyzing trends of particulate matter in a specific space, we can use that to verify the success of ventilation and filtration strategies.” And, in a bid for transparency for building occupants, the data itself is readily accessible and clearly displayed across devices.