



## **Remote Airside Management**

Leveraging the native Building Management System to remotely manage a building's airside as an extended arm for the local engineering team.

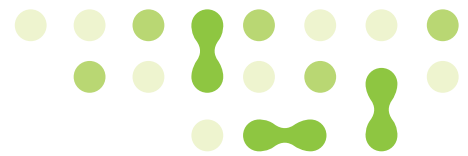
## **COVID-19 and Airside Management Imperatives for Building Operators**

In 2020, it has become critical to manage indoor air quality for all occupants in the building environment. Properly maintained and operated heating, ventilation and air-conditioning (HVAC) equipment are critical in line with the best practices and guidelines<sup>1</sup> from industry organizations like the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the Federation of European Heating, Ventilation and Air-Conditioning Associations (REHVA).

The Command Center of EcoEnergy Insights provides remote HVAC Airside Management through centralized operations which is made up of an experienced pool of engineers, data scientists and analysts who proactively manage airside equipment. The 24\*7 Command Center has a decade long expertise of managing over 400 million sq. ft. of floor space covering over 150,000 pieces of equipment across 17,000+ buildings spread across North America, Europe, Asia and Australia.

<sup>1</sup><https://www.ashrae.org/news/ashraejournal/guidance-for-building-operations-during-the-covid-19-pandemic>;

<https://www.rehva.eu/activities/covid-19-guidance>



## Overview

Remote Airside Management covers the remote management of building HVAC equipment such as roof top units, air handlers, variable refrigerant flow (VRF) units, DX/cassette units, variable air volume (VAV) units, fan coil units (FCU), and ventilation and exhaust fans that are commissioned in major building management/automation systems such as the WebCTRL® system, iVu® system, Tridium, Niagara, Novar and Trane.

Remote Airside Management includes planned assessments by experts on:

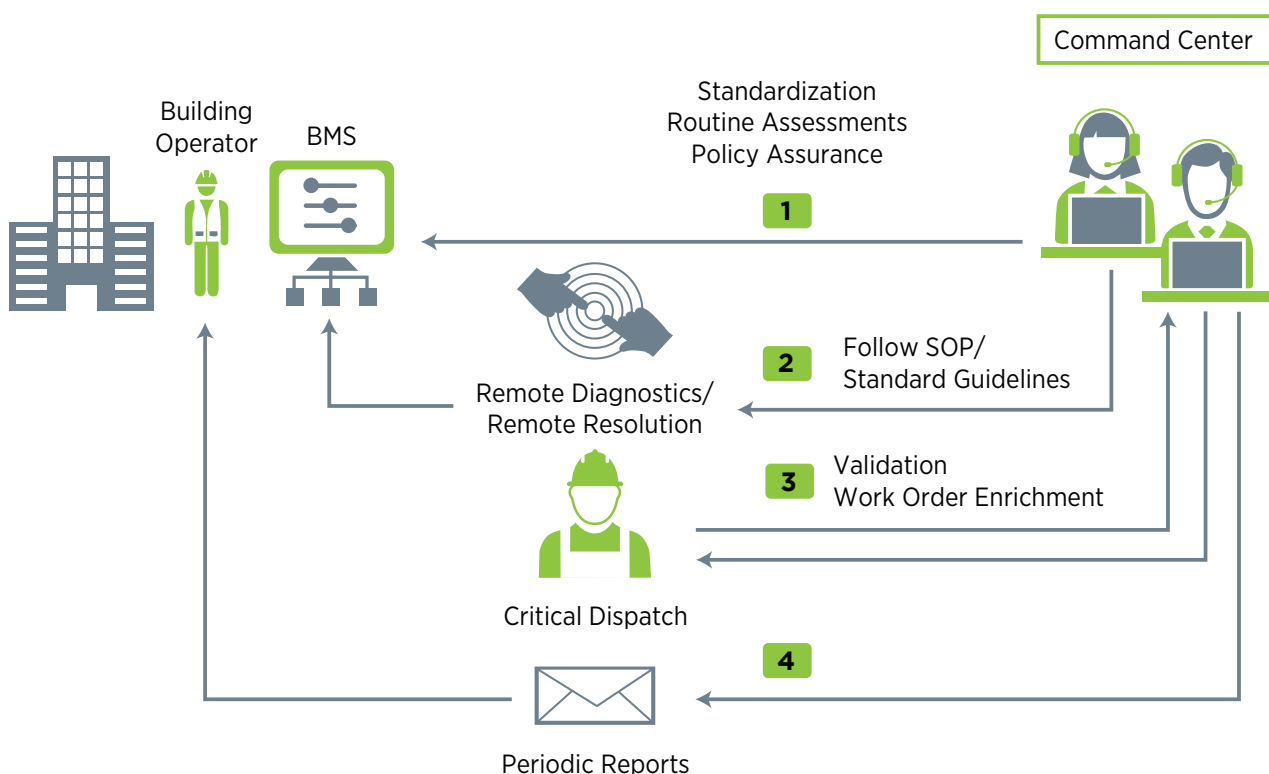
1. Indoor air quality parameters based on policies and industry standards
2. Operational health of filter and filtering elements
3. Operational health of airside equipment and sub-equipment
4. Sensor health
5. Control system operational health

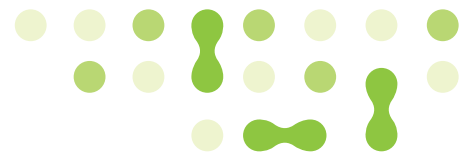
In addition, there is:

1. Need-based scheduling of exhaust and ventilation equipment to meet ventilation requirements like air purges, ventilation rates, demand-based ventilation
2. Remote help desk assistance to guide technicians for effective troubleshooting on site

To enable the above, the Command Center follows a structured operational rhythm that includes planned assessments by experts, remote updates, remote diagnostics and remote resolutions based on pre-agreed standard operating procedures. Where a remote resolution is not feasible, a detailed work order with a description of the issue, the root cause and the recommended field action is generated for the local engineer to act upon. Such work orders are tracked till they are completed with post-fix quality assessment. Additionally, periodic reports are generated for the building operators, which provide a comprehensive view on airside key performance indicators like indoor air quality, ventilation and filtration, number of remote and local resolutions and trend and critical airside deviations.

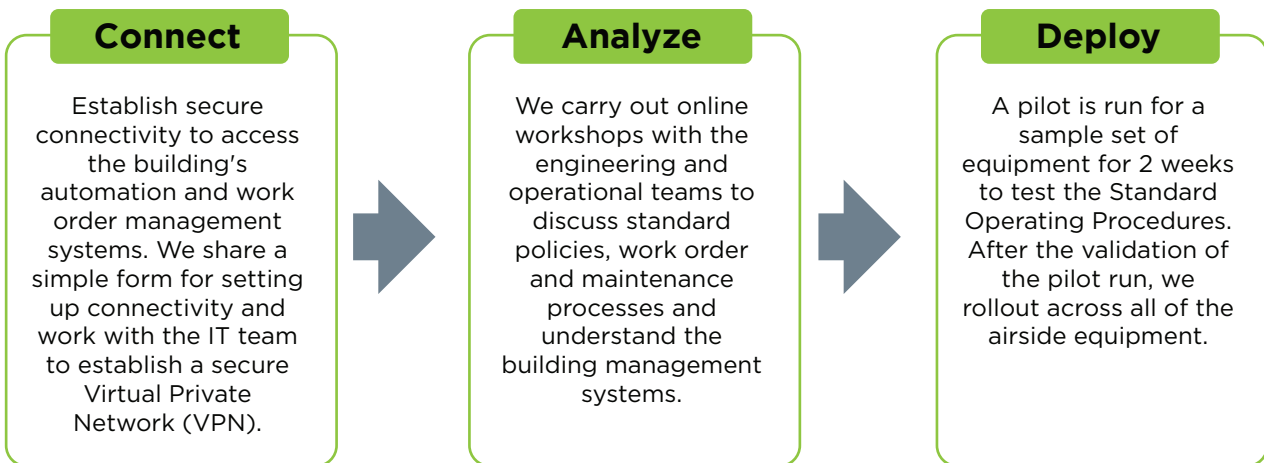
The operational overview of the Command Center is depicted below:





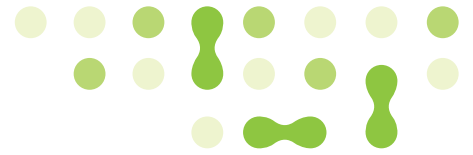
## Deployment

The Remote Airside Management is launched in 3 quick steps:



## Benefits

- Dynamic management of the indoor air quality and ventilation in line with industry best practices
- Remote actions and resolutions to overcome the absence or shortage of staff on premises to make changes, as well as the availability of field technicians to fix deviations
- Optimization in buildings' ongoing maintenance and operational costs in line with its operations



## **Elevate building operations with a connected building management service - powered by the CORTIX™ platform**

Building operators have the option to upgrade to a connected service that deploys the CORTIX™ platform – an AI and IoT platform. The platform understands the unique context in which buildings and equipment operate considering an exhaustive set of factors such as IoT data from equipment, business details like operating hours, weather patterns, service management data, and more. It collects data from multiple sources, analyzes it, acts on defined deviations autonomously and offers predictive actionable insights. The Command Center leverages these insights to proactively make remote interventions or plan maintenance activities to avoid equipment failures or prolonged downtimes. The focus of the service is to digitally transform building and equipment operations to a proactive model. Building operators are empowered to achieve objectives such as improving occupant comfort, improving energy efficiency, reducing maintenance costs and enhancing equipment life.



Write to us at [info.ecoenergy@carrier.com](mailto:info.ecoenergy@carrier.com) for more on remote airside management.

### **About EcoEnergy Insights**

EcoEnergy Insights is a leading provider of AI and IoT-enabled solutions to digitally transform building and equipment operations. Their CORTIX™ platform collects data from multiple sources, analyzes it, acts on defined deviations autonomously and offers predictive actionable insights. The platform, combined with expert human analytics, has been delivering award-winning outcomes in comfort, maintenance and energy efficiency across multiple industries such as retail, hospitality and banking. EcoEnergy Insights is a part of Carrier Global Corporation, a leading provider of innovative HVAC, refrigeration, fire, security and building automation technologies. For more information on EcoEnergy Insights and the CORTIX™ platform, visit [www.ecoenergyinsights.com](http://www.ecoenergyinsights.com) and [www.cortix.ai](http://www.cortix.ai).



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