

## Our Client:

Large Office Building (since 2019)

## Use Case Site:

- A large office building residing in the busy heart of Tel-Aviv, containing a centralized HVAC system with 7 chillers.
- The site has 3 types of spaces: Private offices, open workspaces, and common areas (kitchen, conference room, etc).
- There is a whopping total of 1,150 controlled zones (rooms, conference halls, common areas), making management of the entire building very cumbersome.
- The end users are office employees, covering a wide range of comfort levels and personal preferences.

## The Challenge:

- The use of HVACs was mostly during peak demand hours, between 7am to 7pm.
- Many large open spaces were very difficult to maintain, especially with varying levels of comfort for the employees.
- No monitoring or control in rooms. Rooms are controlled by the employees themselves, often changing the temperature manually.
- Weather normally remains hot and humid, as the climate in Tel-Aviv is greatly influenced by the proximity to the ocean.

## Our System:

### Multi-Room Climate Intelligence

The Climate Intelligence Platform utilizes a network of climate nodes, connecting to all HVAC units and sensing all key parameters in every room (temperature, humidity, occupancy, openings, etc.). Applying sophisticated data analysis models and deep learning algorithms, the fully integrated system maximizes climate comfort while minimizing the workload of heating & cooling systems, optimizing operational workload, and significantly reducing energy consumption.



### Climate as a Service:

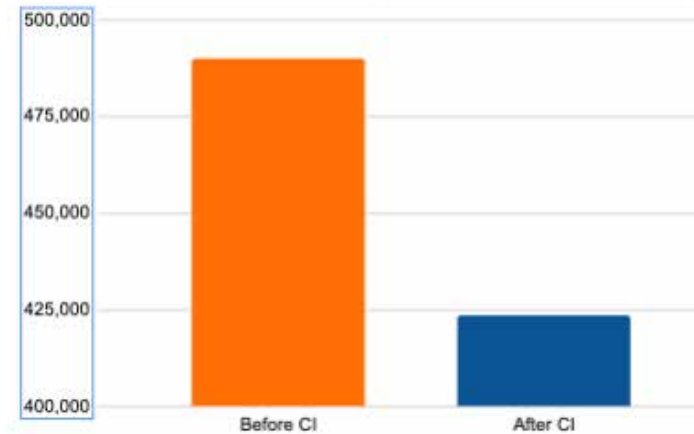
With the Climate intelligence platform, Airkind was able to save 19.4% in the cost of energy in the utility bills, and a 30% savings in HVAC energy consumption (validated by the Israeli department of Energy). With 65% of total energy being used for HVACs, this is a major accomplishment (energy audit conducted by an external monitoring company).

- Upfront Payment: \$0
- HVAC energy consumption: 65% of total
- Total Annual Cost Savings: 19.4%
- **Total Cost Consumption in HVAC Savings: 30%**



### Monthly HVAC Consumption (May)

Before CI 2018 - 2019, After CI 2021 (2020 excluded due to COVID19)





# Airkind Features & Benefits:



- **Compatibility.** A climate node network, that can connect to and control all end-units: fan coils, heat pumps, PTACs, etc.
- **Plug & Play, seamless installation.** A very quick installation that can be executed in the time it takes for a room to be cleaned.
- **Wireless sensing precision.** The Climate Intelligence platform is connected via a scalable wireless ZigBee network- does not interfere with WIFI service. Sensing is done at the precise location (not where wiring is).
- **Behind-the-scenes automation.** Sensing, learning, and automating climate comfort in every room. Demonstrated energy savings- **up to 45%**- without compromising climate comfort.
- **Demand management.** The platform controls all end-units, taking into account local weather and Utility tariffs, enabling automated peak-demand control.
- **IAQ Sensing and Monitoring.** Enabling you to create the safest environment for guests and tenants in the New Normal.
- **Predictive maintenance.** The system undergoes constant performance analysis that enables it to identify abnormalities and address them before issues arise for our customers.
- **Full remote control.** Easy and intuitive remote monitoring and control from any device. Minimizes technical workload on-site.
- **Personalized climate.** The platform offers the capability of integrating with hotel PMS. With our systems, brands are now able to offer their loyalty club members personalized climate settings upon check-in.
- **No capex.** No capital expenditure. Fixed Climate-as-a-Service monthly fee, enabling product to pay for itself.



## New Normal Post COVID19:

- The Airkind platform is agile, enabling staff full control of rooms while occupied, as well as enabling activation of energy saving modes when the rooms are vacant.
- The new IAQ Oak sensor allows monitoring indoor air quality in every room 24/7, providing improved indoor air quality in healthcare management facilities.