

Case Study

The Client

National Association of State Veterans Homes

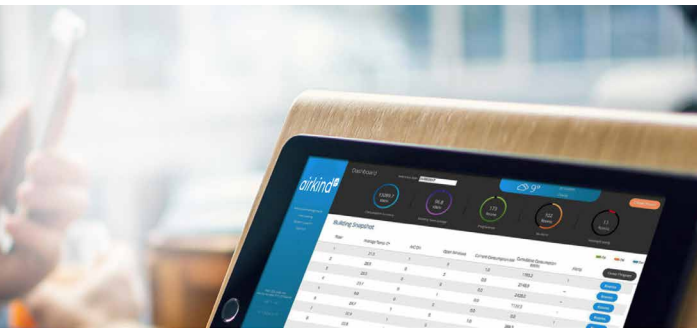
- The site "Casa Del Veterano" is a 25-year-old facility, consisting of 120 controlled zones, and is managed by the The National Association of State Veterans Homes, in Juana Diaz, Puerto Rico.
- Full range of services are provided, from assisted living to skilled nursing care.

The Challenge

- Puerto Rico is an island, with high levels of humidity that are difficult to control.
- To combat wet walls, constant use of HVAC units is required, often forcing tenants to leave their freezing rooms in search of warmer resting areas outdoors.
- Weather changes are drastic, with multiple stormy days and extreme hazardous tornadoes.
- Electricity prices are high and highly irregular.
- The home has a centralized HVAC system with chillers and fan coils.
- No monitoring or control systems were installed in rooms. Rooms are controlled by tenants, maintenance and nursing personnel.

The Airkind System Multi-Room Climate Intelligence

Airkind's Climate Intelligence Platform utilizes the OakRoom and OakWindow/Door sensors, that detect, collect, monitor and control 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 workload of heating & cooling systems, optimizing operational workload and significantly reducing energy consumption.



Climate Intelligence Savings

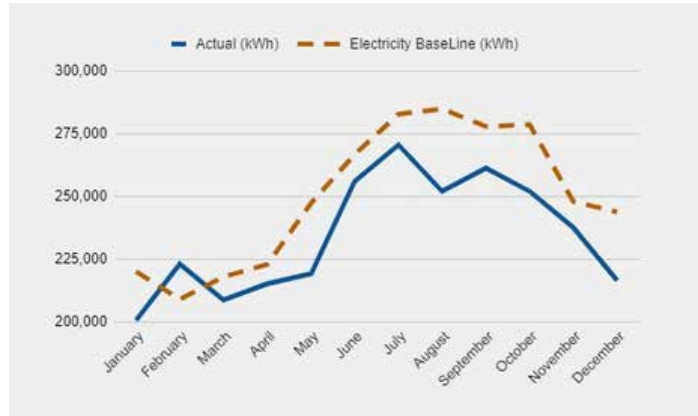
With extreme tropical climate, humidity, rain and tornadoes - Airkind was able to help manage indoor climate:

- Upfront Payment: \$0
- Annual Electricity Savings: \$48,000
- kWh saved after ZES: 233,900 kWh
- Net Annual Cost: \$16,200
- **Net Annual Savings: \$31,700**
- **Lead Time: less than 1 year** (April 2018 - Jan 2019)



Actual Electricity Consumption Vs Predicted Consumption

The numbers below show just how effective the solution is when it comes to energy savings and peak shaving.





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 and does not interfere with WIFI service.
- **Behind-the-scenes automation.** Senses, learns, and automates 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.** Monitors indoor air quality 24/7 in each room, creating the safest environment in the New Normal.
- **De-humidification sequencing.** Smart algorithm based on room and ambient temperature & humidity to enhance indoor climate comfort and energy savings.
- **Predictive maintenance.** The system undergoes constant performance analysis that enables it to identify abnormalities and address them before issues arise.
- **Full remote control.** Easy and intuitive remote monitoring and control from any device. Minimizes technical workload on-site.
- **Personalized climate.** Each room can be personalized to the resident's temperature preference.
- **No Capex.** No capital expenditure. Fixed Climate-as-a-Service monthly fee, enabling product to pay for itself.

La Casa del Veterano experienced a 30% drop in energy consumption, and average energy savings of 29%

"Deploying the Climate Intelligence platform was simple and smooth. Our first quarterly savings have already surpassed the system's annual cost."



-Tim Sadler, Owner
La Casa del Veterano