ZERO ENERGY SOLUTIONS

Our Client:

Monarch Healthcare Management

Use Case Site:

- A Healthcare Management chain with 30 facilities, founded in 2015.
- Monarch provides a full range of services for skilled nursing and assisted living communities
- Weather conditions include freezing cold winters and blazing hot summers.
- Assortment of different PTAC units, as well as various heating devices and radiators
- Provide health and personal services to their ageing tenants, with varying levels of care.

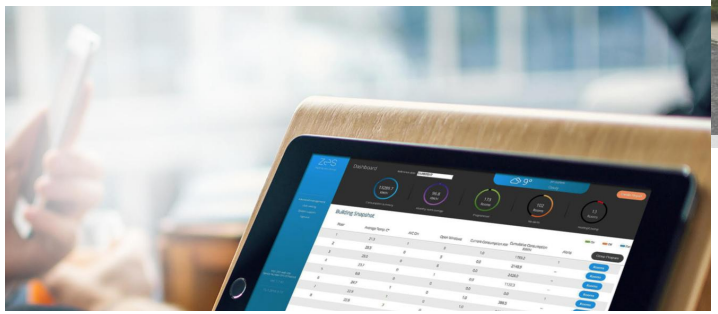
The Challenge:

- Partial installation on site.
- PTAC units of varying models and brands.
- No monitoring or control in rooms. Rooms are controlled by maintenance and nursing personnel.
- Heating devices and radiators of varying models and brands in the rooms, with no overview of inventory.
- Weather changes drastically, with difficult to manage cold winters, making the tenants uncomfortable.

Our System:

Multi-Room Climate Intelligence

The Climate Intelligence Platform utilizes the OAK Socket, that connects to all PTAC units and senses 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. What's Next? Monarch is rapidly expanding ZES technology throughout their portfolio.



Climate as a Service:

With only partial installation deployed, annual savings in year 1 returned 3.5X of the investment in that year.

- Upfront Payment: $0
- Annual Electricity Savings: $15,700
- Annual Gas Savings: $15,000
- Total Annual Savings: $30,700
- Net Annual Cost: $8,700
- **Net Annual Savings: $22,000**

Energy Cost Comparison:

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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 ZES 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.