

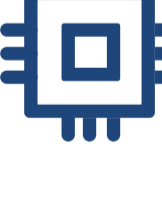




Stanford Medicine Children’s Health cuts HVAC energy use 30% with AI-Driven optimization

Stanford Medicine Children’s Health operates 24/7. However, the administrative areas are only used intermittently in the evenings and weekends, resulting in energy waste from over-ventilating unoccupied administrative spaces.



| | | |
|---|----------------------|-----------------|
|  | Building Type | Hospital |
|  | Location | Palo Alto, CA |
|  | Area | 521,000 sq. ft. |
|  | BMS | Alerton |

R-Zero’s AI energy efficiency solution was deployed across 4 floors of the main hospital. Using low profile sensors, R-Zero continuously sends data to the building BMS, which dynamically adjusts ventilation levels per ASHRAE code based on actual occupancy counts.

30% Energy saved

9.72 Metric tons of CO2 avoidance

100% Temperature & comfort satisfaction

When a space has been unoccupied for 15 minutes, the system switches to the lower airflow standby mode to conserve energy. Once occupancy is detected again, ventilation rates automatically return to the desired levels to ensure occupant comfort. This strategy results in significant energy savings across the hospital.

66%

Standby Mode

72%

Airflow Reduction

23,000 kWh

Reduction

“By integrating occupancy driven ventilation directly into our building automation system, **Stanford Medicine Children’s Health is seeing 30% energy savings** in some areas. The integration was completed without interrupting hospital operations, enabling us to realize meaningful dollar savings immediately.”



Bryan Ciruolo

Facilities Systems Engineer



R-Zero measures energy savings by trending BMS data and comparing it to existing control sequences, highlighting how the new adjustments save energy.



Continuous commissioning ensures the system is deployed and operating as intended.



This read-only solution increases transparency between R-Zero and its customers and helps identify additional faults and maintenance issues.

Save Energy with R-Zero

R-Zero’s smart building solutions help owners & operators reduce OpEx while improving health and comfort. Visit rzero.com/audit or scan the QR code below to kick off your custom energy audit today.

