

# Verdant Energy Management Solutions

## The Marshall Case Study



### About the Property



Number of Units  
**226**



Developer  
**Aptitude  
Development**



Year Built  
**2021**



Building Location  
**Arkansas**



Building Type  
**Student  
Housing**

Owned and developed by Aptitude Development, The Marshall is a leading student housing facility with **647 beds** just a stone's throw away from the **University of Arkansas** Campus. Heavily focused on increasing the value of their assets, the group was facing a challenge when evaluating investment opportunities: **How to maximize operational efficiency to ensure long-term growth while reducing CO2 emissions and enhancing students' experience?** Although HVAC-related energy optimization seems to be top of mind, there is no one-size-fits-all when it comes to efficient energy management for large commercial properties.

### Energy Management Ecosystem



Verdant System  
Installation Period  
**July 2021**



HVAC  
Technology  
**Split Systems**



Climate  
Zone  
**Mixed Humid**



Electric  
Rate  
**\$0.096**

# The Marshall Fayetteville: a Verdant Success Story

## Random occupancy patterns

With students being mostly away from their dorms during the end of semesters or for school breaks, student housing properties are exposed to fluctuating occupancy patterns. Chances of **overheating or overcooling unoccupied rooms** are very high.

## Commercial-grade technology

As a solution, large student housing properties like The Marshall require commercial-grade smart thermostats that can automate energy reduction **based on real-time occupancy** in common areas and dorms across multiple units and buildings from **one central platform**.

In an effort to strengthen their commitment to sustainability and increase The Marshall's NOI, Aptitude Development opted for the Verdant smart technology.

## Accelerated payback

By installing **226 Verdant networked thermostats and 41 balcony door switches**, The Marshall was able to reduce its HVAC runtime and achieve a payback period of only **15 months**.

## At a Glance



Payback Period

**15 Months**



Average Monthly Savings [\$]

**\$4,153**



Average Monthly Savings [kWh]

**52,519 kWh**



Added Resale Value\*

**\$830,813**



Annual Cars Off the Road

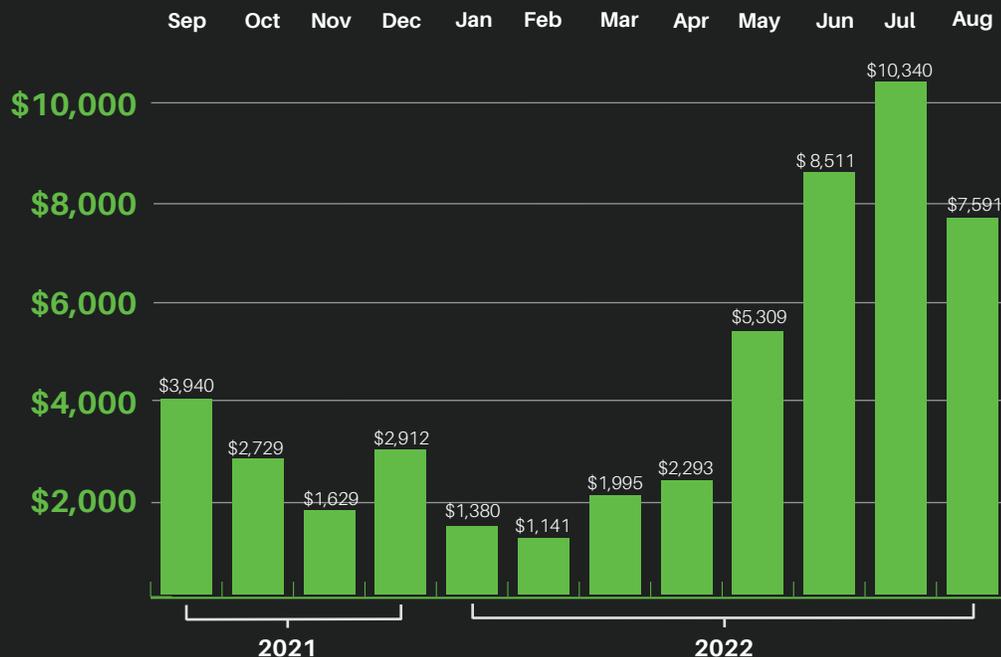
**96**

\*A typical property is valued at 16.67x EBITDA.

12-month  
Cumulated Savings\*  
**\$ 49,838**

Monthly HVAC  
Runtime Reduction  
**22.2 Hours**

\*Calculated among 226 units from September 2021 to August 2022.



# About Verdant

Trusted by thousands of Multifamily, Senior Living & Student Housing owners and operators. Verdant's energy management thermostats combine smart occupancy sensors with patented software to reduce HVAC energy consumption and achieve ESG goals.



Installed in over  
**7,000 Properties**  
in North America



**45+ Years**  
of expertise



**Plug & Play**  
solution



## How it Works

Our smart thermostats use advanced occupancy sensing technology to scan the room for motion and body heat.

When residents are present, they're given full control over room temperature. When they leave the room, Verdant thermostats enter 'setback mode,' allowing room temperatures to drift naturally while recovering residents' preferred temperature as soon as they re-enter the room.

Verdant's patented communication protocol leverages low-frequency radio waves that easily penetrate thick walls and cover long distances, without relying on WIFI, ZigBee or additional networking equipment.

## Perks of the System

### ESG Strategy

The Verdant technology allows you to reduce energy consumption and provides supporting data for ESG reporting.

### Unrivaled Compatibility

With most HVAC systems including exclusive integrations with leading VRF manufacturers (LG, Mitsubishi, Carrier)

### Effortless Integration

The Verdant system can integrate with BMS, lighting controls and other smart home technology.

### Quick Payback

Cuts HVAC runtimes by up to 40% on average\*, and typically pays for itself in as little as 18-30 months\*.

\*Actual savings may vary according to utility cost, climate, available rebates, and other variables

Want to learn more?

**CONTACT US**

**888 440 0991**

**verdant.sales**

@copeland.com

**verdant.co**

