

Smart Buildings

**CUSTOMER
CASE STUDY****SPROUTS™**
FARMERS MARKET

Eco-Conscious Sprouts Farmers Market Upgrades HVAC Systems to Boost Profitability While Helping Save The Environment

Sprouts Farmers Market has been one of the fastest growing grocery chains in America, with a footprint that spans 360 stores that employ over 35,000 Sprouts team members. Sprouts has focused on making natural and organic foods accessible to everyone at affordable prices, expanding the availability of healthy food into more communities.

Since its founding in 2002, Sprouts has always put sustainability at the forefront of its operations, and has demonstrated proactive commitment to environmental stewardship. In 2020, Sprouts reduced its per store refrigeration-related emissions by 35% over a 2016 baseline, and also reduced carbon emissions per square foot by nearly 10% from 2019. Sprouts has also made food waste reduction and natural resource conservation a top priority, and it received the Food Recovery Challenge Award from the EPA in 2019 for its intensive efforts.

Transform how you consume energy

Business Challenge

Grocery stores stock a wide range of produce, meat, and other food products that must be maintained to optimal freshness and shelf life. To make sure that its goods stay fresh for shoppers, grocery stores rely on robust and reliable HVAC systems.

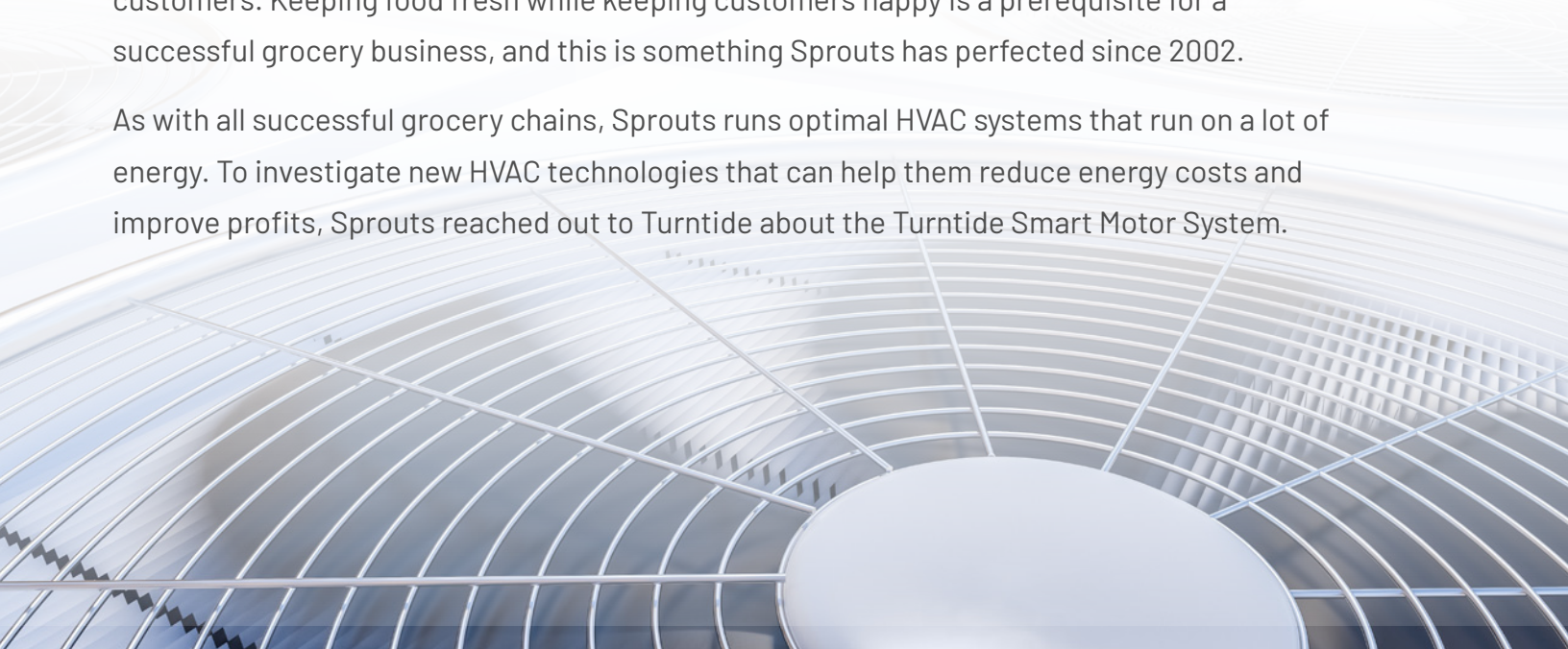
It is essential that HVAC remains operational 24/7 for any grocery business - any disruptions or down-time lead to food spoilage, which in turn leads to lost profits in a challenging low-margin business. For example, grocery stores need to closely monitor in-store humidity levels, as humidity can adversely affect shelf life on produce. With robust HVAC controls and systems, grocery stores can implement a dehumidification strategy to ensure their produce stays fresh.

Immediate Impact of Turntide Smart Motors

- ✓ DEHUMIDIFICATION
- ✓ AIR MOVEMENT
- ✓ RELIABILITY (NO DOWNTIME)
- ✓ INDOOR AIR QUALITY (IAQ)

As grocery stores accommodate an influx of shoppers, they also need to monitor foot traffic closely to ensure their HVAC systems deliver optimal comfort and healthy air for their customers. Keeping food fresh while keeping customers happy is a prerequisite for a successful grocery business, and this is something Sprouts has perfected since 2002.

As with all successful grocery chains, Sprouts runs optimal HVAC systems that run on a lot of energy. To investigate new HVAC technologies that can help them reduce energy costs and improve profits, Sprouts reached out to Turntide about the Turntide Smart Motor System.



Objective

Sprouts' main objective was to explore how the Turntide Smart Motor System could help them reduce energy costs to make its stores more profitable.

Turntide deployed the Turntide Smart Motor System at a Sprouts location for an initial pilot in Sunnyvale, CA, which consisted of retrofitting 5 rooftop units (RTUs) which covered the large 35,000 sq. foot grocery store.

Prior to deployment, Turntide installed an Energy Monitoring Kit and performed measurement and verification (M&V) of the existing RTU motors, to help Sprouts understand the true impact a Turntide Smart Motor has on energy cost reduction.

The Business

Sprouts Farmers Market

Location: Sunnyvale, CA

Building Square Footage: 35,000 sq. ft

HVAC System Size: 5 Rooftop Units (RTUs)

The Solution

Turntide Smart Motor System

+ 3x 10HP motor systems (V03/P05)

+ 1x 5HP motor system (V02/P05)

+ 1x 3HP motor system (V01/P04)

Turntide Monitoring Systems

+ Remote Monitoring Kit (RMK-001)

+ Energy Monitoring Kit (EMK-001)



Business Outcomes

After the Turntide Smart Motor System was deployed within all 5 RTUs in its Sunnyvale, CA location in 2019, Sprouts saw an immediate impact on energy consumption. By the end of 2019, Turntide reduced energy use by an average of 68.6%.

The smart motors have remained operational in Sprouts' Sunnyvale location, and since 2019, Sprouts has reduced energy use in the store location by 75%, which represents \$18.4k in total savings. Sprouts achieved its objectives from the pilot, leveraging a simple retrofit to its RTUs to improve the profitability of its Sunnyvale location.

Aside from helping Sprouts save money, Turntide helped Sprouts save 12,253 gallons of gas worth in CO₂ emissions at its Sunnyvale location. Due to the success of the pilot, Sprouts rolled out Turntide motors across several locations across California and has been able to reduce energy use on a larger scale. Already one of the most proactive sustainability leaders in the grocery industry, Sprouts has been able to leverage Turntide to further its commitment to reduce the adverse effects of climate change.

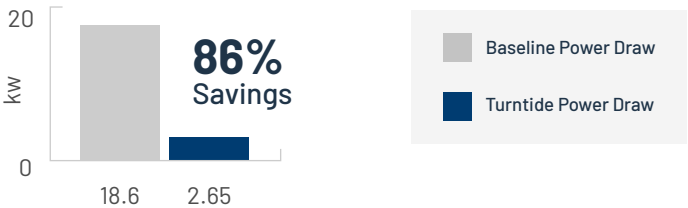
Immediate Impact of Turntide Smart Motors

- ✓ \$18.4K TOTAL SAVINGS
- ✓ 75% TOTAL ENERGY REDUCTION
- ✓ 153,649 KWH IN ENERGY SAVINGS
- ✓ 1.37 YEARS TO PAYBACK

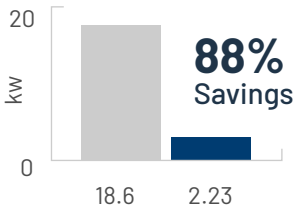
With Turntide, One Sprouts Grocery Store Saves...

- ✓ 12,253 GALLONS OF GAS
- ✓ 133 ACRES OF FOREST
- ✓ 109 METRIC TONS OF CO₂

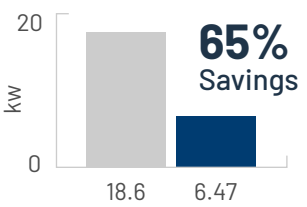
Avg Vent Mode Power Draw



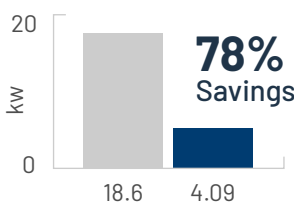
Avg Cool 1 Mode Power Draw



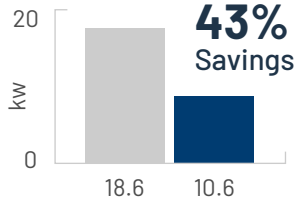
Avg Cool 2 Mode Power Draw



Avg Heat 1 Mode Power Draw



Avg Heat 2 Mode Power Draw



Turntide for Grocery

Offering a win-win solution to help supermarkets such as Sprouts achieve optimal sustainability and profitability, the Turntide Smart Motor System is a no-brainer solution to help grocery chains save money, save energy, and save the environment. Contact us today to learn how Turntide can help you with simple sustainable operations solutions that help you keep loyal customers happy with consistently fresh and nutritious produce.



LEARN MORE >

Speak with our team to learn more about how Turntide can help you drive down energy costs, boost your bottom line, and meet your sustainability goals.

TURNTIDE TECHNOLOGIES

Our breakthrough technologies accelerate electrification and sustainable operations for energy-intensive industries