

HVAC Energy Conservation

CUSTOMER CASE STUDY



Innovative McDonald's Franchise Owner Slashes Energy Costs With HVAC Motor Retrofits

McDonald's is the world's largest and most iconic fast-food restaurant. Its vast footprint spans more than 38,000 locations in more than 100 countries.

A critical pillar of McDonald's success is its network of owner-operators, who bring their localized expertise to their markets and help McDonald's earn billions in revenue every year. McDonald's and its owner-operator community together are the quintessential American success story.

In addition to business growth, McDonald's also relies on its owner-operators to fulfill its aggressive sustainability goals. McDonald's has set lofty targets to reduce greenhouse gas emissions by 36% by 2030, and to achieve net zero emissions by the year 2050.

Business Challenge

Quick Service Restaurants (QSRs) operate on razor-thin margins. With electricity prices increasing rapidly, innovative franchise owners are deploying energy conservation measures to counteract these threats.

Operating McDonald's locations across Southern California, Francisco Sanchez is no stranger to electric bill increases. He's seen double-digit price increases over the last four years, which made turning a profit more challenging.

Recognizing that utility costs are likely to keep increasing with time, Sanchez took a proactive approach by investigating different energy conservation measures (ECMs) to help him control costs without compromising customer and employee comfort. Maintaining robust HVAC operations is critical to his restaurant experience, as some of his locations are sited in areas where temperatures reach 110°F.

35%

of the energy used in buildings is consumed by HVAC

30%

of energy used by HVAC is wasted by inefficient equipment

Objective

Through Pack-a-Drum, Sanchez learned about the Turntide’s HVAC motor retrofit solution, which slashes energy waste by relying on Turntide’s high-efficiency Smart Motor System.


Sanchez was interested in a deployment of Turntide systems at his store locations to meet 3 main objectives:



Reduce costs and contribute positively to **profitability**



Act as responsible business owners by **reducing** their impact on the environment



Help McDonald’s corporate achieve its **sustainability** goals

Business Outcomes



Sanchez’s 5-store Turntide rollout reaches payback in just 1.26 years.

The 15-motor rollout produced immediate results, saving an average of 58% on motor energy use, with a savings of 111,121 kWh per year. These significant savings met Sanchez’s initial objectives for deploying Turntide motors.

- 1. Cost Reduction:** The project provided \$23,712 in annual utility bill savings, counteracting utility price increases and bringing significant profits back to his bottom line. Furthermore, project costs were further absorbed by utility rebates and the 2020 CARES ACT – bringing payback to just 1.26 years.
- 2. Carbon Reduction:** The project reduced Sanchez’s carbon footprint by 58,709 lbs per year – which is equivalent to burning 8,869 fewer gallons of gasoline.
- 3. Driver for McDonald’s Corporate ESG Goals:** Sanchez’s Turntide rollout proved its ability to accelerate McDonald’s ESG goals as a simple retrofit solution that’s applicable across McDonald’s locations globally.

Savings Details

SCOPE:

15 Turntide Motors
5 McDonald's Locations

1.26

Year Payback

\$23,712

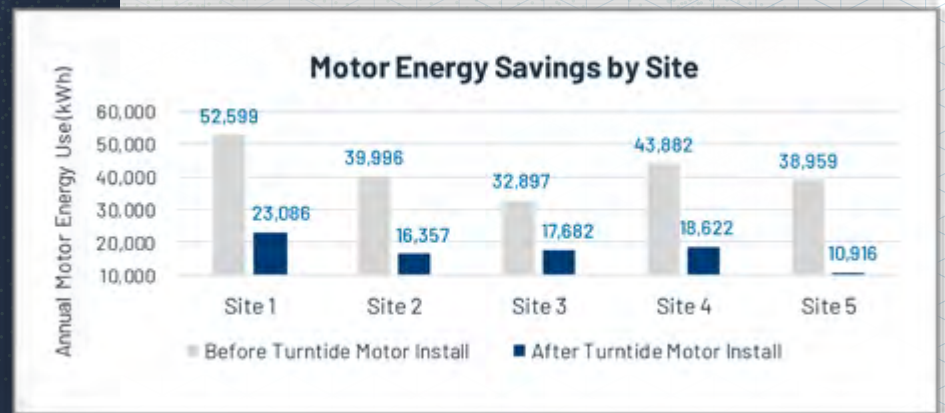
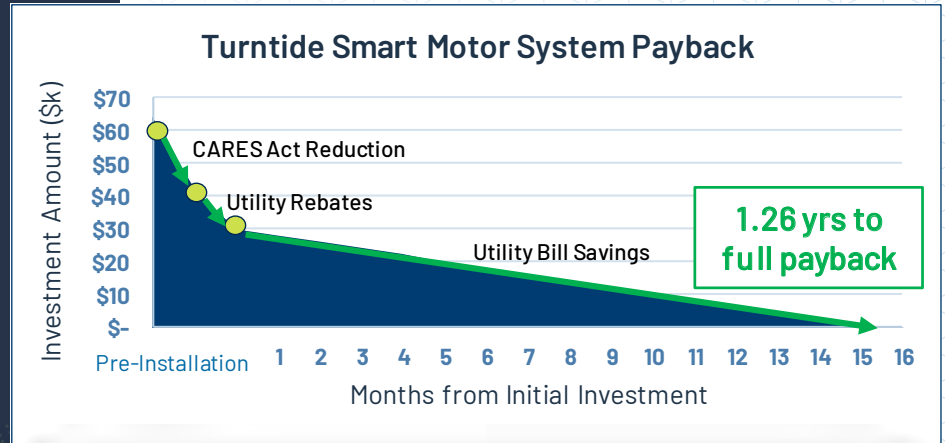
Annual Energy Bill Savings

58%

Motor Energy Savings

111,121 kWh

Annual Energy kWh reduction



With the successful installation of Turntide motors across 5 initial locations, Sanchez is looking to bring Turntide's HVAC retrofit solution across his entire 32-location portfolio. Other operator-owners are also now working with Turntide to install Turntide motors at their McDonald's locations.



Learn More

[Watch Our Video Testimonial with Francisco Sanchez](#)

Speak with our team to learn more about how Turntide for Buildings 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