



KEY MOTOR GROUP

Manchester, CT

SOLAR CASE STUDY

FSG Powers Up Key Motor Group with Solar Lighting Upgrade



Owner

Key Motor Group

Contract Type

Solar

Cost Savings

\$8,225.12

Annual kWh Reduction

38,783

CHALLENGE

FSG successfully executed a solar lighting upgrade for Key Motor Group - Hyundai in Manchester, Connecticut. This turnkey project included installation, materials, labor, and administration, while also securing state and utility funding through the CT Small ZREC incentive program. FSG's goal was to reduce operating costs, improve lighting quality, and lower maintenance expenses for the automotive dealership.

SOLUTION

FSG integrated a 142.6 kW solar system along with an advanced lighting system to achieve substantial energy and maintenance savings. The project aimed to offset 75% of the annual kWh consumption, with the solar system projected to produce 162,061 kWh in the first year. The lighting system upgrade included high-efficiency fixtures designed to enhance illumination quality while minimizing energy use. FSG managed the project from start to finish, including securing CPACE financing and managing all required documentation.

RESULT

The solar lighting upgrade provided Key Motor Group - Hyundai with significant financial benefits, including an estimated annual energy savings of \$7,523.94 and annual maintenance savings of \$701.17, totaling \$8,225.12 in yearly savings. The project delivered a rapid payback period of 2.54 years and an impressive annual return on investment of 39%. Over a 25-year span, the cumulative cash flow is projected to reach \$420,000.00. FSG's comprehensive approach ensured a positive cash flow of \$20,246.34 over five years and \$61,371.91 over ten years, solidifying the dealership's commitment to sustainability and operational efficiency.

