Midwestern Auto Group Paves the Way for Car Dealerships to Go Solar

Challenge
Luther Auto is the largest privately owned automotive group in the Midwest. With expanding operations, the management team made a strategic decision to offset electricity costs and enhance the community-minded company’s sustainability efforts with solar installations on several of their Minneapolis/St. Paul dealerships.

SunPower’s Solution
From 2012 to 2017, Luther Auto installed high-efficiency SunPower® solar systems on 10 new or existing dealerships, for a combined system size of 454 kW.

Customer Benefit
Taking advantage of their dealerships’ large, flat roofs, Luther Auto saves more than $45,000 in energy costs annually with solar, not including additional savings through energy-efficiency measures and LED lighting. Over the next 25 years, Luther Auto is expected to save an estimated $2.1 million with solar.

Quick Facts
- **454 kW**
  Combined System Size
- **10**
  Locations with Solar
- **$45,100**
  Estimated Annual Savings
- **$2.1 Million**
  Projected 25-Year Savings
Luther Auto “Drives to Serve” With Solar

For Luther Auto, “the drive to serve” is more than a mission; it’s a business imperative. With 33 dealerships across five states, the family-owned and operated auto group has seen many changes over the 65 years it’s been in business. But the Luther family’s commitment to serve the communities where they live and work has never wavered.

For any auto dealership, energy costs are a consistently rising expense. Dealerships consume significant electricity to light their showrooms and expansive display lots, and for large HVAC systems to keep customers and employees comfortable. The Luther team realized that the flat, wide-open roofs of their dealerships lent themselves to solar, and they were attracted to the environmental benefits. But when they first explored solar, the numbers didn’t pencil out.

However, as solar costs went down and incentive programs from local utility Xcel Energy opened up, the Luther team revisited the idea, and in 2012 they added solar to the roofs of their Luther Toyota and Luther Honda dealerships in suburban Minneapolis.

Craig Tarr, PE, President of Energy Concepts, a leading solar company based in nearby Hudson, Wisconsin, worked with the team to develop an innovative design that maximized available roof space and made the solar system visible to Luther Toyota and Honda’s customers.

As a SunPower commercial dealer, Craig recommended SunPower’s high-efficiency panels, which produce up to 45% more energy than conventional panels over 25 years¹—translating to more power and savings.

“Craig brought engineering expertise to our projects, and a passion for solar that was just contagious,” said Linda McGinty. “When Craig brought SunPower to the table, he brought a wealth of knowledge, and a level of support with SunPower involved in the project. One of the major selling points was the fact that SunPower’s panels are so good—they can be

¹. Environmental and economic benefits compared to conventional panels over 25 years.
One of the major selling points was the fact that SunPower’s panels are so good—they can be depended on to produce more clean power over the next 25+ years.”

Linda McGinty
VP of Real Estate
Luther Auto Group

Solar That Makes Business Sense

As Luther Auto remodeled some dealerships and built new facilities, solar became an integral part of each facility’s energy-efficient design. From 2012 to 2017 an additional eight dealerships added solar, bringing the total to 10. Utilizing the 30% Federal Investment Tax Credit combined with tax depreciation benefits, the company saved approximately 55 percent of the overall installed cost. Xcel Energy rebates provided an additional $292,000 savings on project costs.

“Solar just makes good business sense in today’s energy environment,” Linda explains. “If you’re only going to be in business for 10 years, it might not make sense. But if you understand that what you’re doing has a very positive effect long term ... And it’s clean power on ‘unthought of’ spots. On top of a car dealership is a place that surprises people.”

Customers love the fact that a car dealership is thinking outside the “combustion-engine box” by installing solar, Linda notes. And in today’s hyper-competitive auto industry, the dealerships’ general managers appreciate the low maintenance of SunPower panels.

Our General Managers are very busy running their stores,” Linda says. “Handling guests well is a big job. The less time they need to devote to their buildings, gives them more time to focus on the quality care of their guests.”

“SunPower 327W compared to a Conventional Panel on same sized arrays (260W, 16% efficient, approx. 1.6 m2), 3% more energy per watt (based on PVsyst pan files), 0.75%/yr slower degradation (Campeau, Z. et al. “SunPower Module Degradation Rate,” SunPower white paper, 2013).