Case Study: Group I Automotive, Elite Acura PV Solar System

Elite Acura



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Group 1 Automotive Plans for the Solar Future with Elite Acura and TerraSol

Group 1 Automotive, an international automotive retailer with dealerships across the US as well as the UK and Brazil, began handpicking locations at which to install solar systems.



The project was a practical and preparatory decision as well as a financial one. The mission was to offset electricity costs and save money, as well as to showcase sustainability and support of leading technology.

Auto dealers in general are seeing a renaissance – as car manufacturers roll out more and more electric cars, they will need either greater power from utility, or be able to produce their own power. Group 1 felt that the best way to prepare for powering vehicles by renewable means is to have it available right there on site.

Group 1 chose Elite Acura in Maple Shade, NJ as the very first stop, and tasked TerraSol with full project management and roof-top installation.

Elite Acura



+ Challenges

Auto dealerships are unique in the business hours they keep. Elite Acura is open Monday through Saturday, generally from 8:00 AM to 8:00 PM. That allowed TerraSol very little time to work on the project during while the business was closed.

That becomes a bigger issue when working with an open site, like a dealership is. TerraSol had to be cognizant of both employees and customers going in and out frequently. The parking lot itself is always full, and customers are often taking cars for test drives.

TerraSol took several measures in order to complete the work as unobtrusively as possible. First, they were able to minimize the number of parking spaces needed, taking away only six parking spaces from the entire lot during the installation period. In addition, they carefully timed delivery of equipment and parts so that it would not interfere with the business's operations.

In addition, when installing a solar system, it is necessary to dedicate a day to shutting down the power completely. This presented another issue to tackle, as the dealership's hours meant they could only shut the power down on a Sunday without the dealership losing business.

Typically, shutdowns are never performed on a Sunday. However, TerraSol worked with the local township as well as the utility company to allow this to happen. Thanks to this, Elite Acura did not lose a day of work and profitability. It was an important accomplishment, as the dealership estimates that a single day brings in around \$20,000.

Finally, TerraSol only had a relatively small rooftop space to work with. Obstructions like multiple AC units meant a lot of space taken up that couldn't be used for solar. To solve this, TerraSol had to maximize the amount of space they did have with extremely high-performing panels.

+ SunPower[®] Solution

In order to make the best use of the small roof space, TerraSol designed a solar system using Sun-Power's highest efficiency, highest wattage panels. Using these high-performing panels ensured the most efficient use of the roof space and the maximum possible offset of power.

It worked –99% of Elite Acura's electricity is now produced through solar.

+ Customer Benefit

As mentioned, the new solar system was able to offset the cost of electricity by 99%. This represents an incredible 20% Internal Rate of Return on a 25 year investment. And Elite Acura was able to achieve this without a single minute of interrupted business.

Another major benefit comes down to one of the unique features of auto dealerships – a continual client stream that enters and spends time in a showroom. As part of the project, TerraSol installed a TV monitoring screen in the Elite Acura showroom which displays a live feed what the solar system is producing. It shows the solar system on the roof, and exactly how much power it's feeding into the building in realtime, alongside historical data too.

It's a great way for a steady flow of clients and prospective buyers to easily see the commitment Elite Acura has made to solar and the tangible impact it's making.





+ Hitting the Accelerator on Solar

Energy represents the third largest business expenditure for auto dealerships, and as was the case with Elite Acura, solar power can drastically reduce it or even eliminate it entirely without any need to interrupt business as usual. It also boosts branding and increases marketability, as the demand for sustainable energy grows.

With their solar initiative underway and an extremely successful start, Group 1 Automotive plans to continue rolling out solar upgrades to more of its dealerships across the country. TerraSol has already taken on its second project with Group 1 Automotive at dealership Boardwalk Honda in Egg Harbor Township, NJ.

TerraSol looks forward to more opportunities to assist Group 1 Automotive in the shared goal of leading the auto industry into a sustainable future.



QUICK FACTS

POWER 280 kW Total System Size

REDUCES 284 tons of CO₂ per year Carbon Footprint Reduction

size 778 Solar Panels

GENERATES 364,100 kWh Annual Electricity Generation

TerraSol was easy to work with, very professional and very considerate of our customers and staff during the installation process. We are using them for additional solar installations as well.

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