

Powered by sunshine

Ford has teamed up with solar systems manufacturer SunPower® of San Jose for an integrated approach to "Drive Green for Life." A high-efficiency 2.5-kW rooftop system from SunPower can provide enough renewable energy production to offset the energy needed for charging the new Ford Focus Electric—which arrives by the end of this year—producing an estimated 3,000 kilowatt hours (kWh) of electricity annually.

A rooftop array of SunPower E18 Series solar panels generates an average of about 50 percent more electricity and occupies a smaller footprint on the roof than earlier systems. The system was sized to accommodate a customer who drives about 1,000 miles per month.

The complete SunPower system has a typical base price of under \$10,000 (after federal tax credits; assuming normal installation conditions; not including modifications to a roof, electrical service panel or excessive wire requirements; and not including sales tax). Local and state rebates and other incentives may drive the cost down even more, depending on a customer's location. SunPower also offers financing. Included is a residential monitoring system, with the ability to track the system's performance online or via an iPhone app.

A thousand miles a month, if consuming gasoline at

30 miles a gallon, would consume 33.33 gallons of fuel. At four bucks a gallon, that'd be \$133.33 a month, or \$1600/year. The ten grand initial payment, then, would offer a break-even against fuel costs at six and a quarter years, based on those assumptions and at current rates. Compared with 20 mpg, just over four years. EPA minimums for fuel-powered vehicles are set to climb dramatically, but if gasoline becomes more expensive, or supplies become disrupted, then the solar-electric advantage is only moreso. Evolving electric car technologies are likely to be with us indefinitely, and the SunPower system is backed by a 25-year warranty.

The SunPower rooftop solar system will be compatible with the C-MAX Energi plug-in hybrid electric vehicle Ford is rolling out over the next year or so. Ford launched the Transit Connect Electric small commercial van in 2010 and will launch the all-new Focus Electric later this year. Ford's strategy includes the launch of five electrified vehicles in North America by 2012. Next in North America will be the new C-MAX Hybrid, a second next-generation lithium-ion battery hybrid and C-MAX Energi plug-in hybrid.

In addition to its solar partnership with SunPower, Ford has an agreement with Best Buy to offer a 240-volt home charging station. ■

