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# Solar-driven Stirling engines get to work

by [Martin LaMonica](#)

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(Credit: Salt River Project)

Business and government officials on Friday cut the ribbon on a solar array in Arizona that uses giant parabolic dishes to generate electricity from the sun.

Solar plant developer Tessera Solar [installed](#) 60 solar collectors, called the SunCatcher from Stirling Energy Systems, in Peoria, Ariz. Each dish is rated at 25 kilowatts and the entire facility will have a capacity of 1.5-megawatts of generation.

Utilities installing large-scale solar power generation are typically using arrays of flat photovoltaic panels or concentrating solar power systems, where mirrors or [reflective troughs](#) create heat to make electricity.

The Stirling Energy Systems technology also captures heat by using a mirrored parabolic dish that moves to track the sun. But instead of heating a liquid to make steam for a turbine, the heat is directed at a hydrogen gas-filled piston, which drives a [Stirling engine to make electricity](#).

The company claims its technology delivers electricity more efficiently and uses less water than other technologies. Infinia is another company that has built a solar-powered [Stirling engine using a parabolic dish](#), although it is smaller.

Tessera Solar said that it has contracts to install as much as 1,600 megawatts' worth of capacity in California and Texas.

*Updated with correction at 1:15 p.m. PT.*



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