



<b>COMPANY</b>	EXERGY
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## EXERGY: Turkish Akça geothermal plant in operation

**E**XERGY has announced entry into operation of a new geothermal plant in Turkey for Akça Enerji, employing Exergy's novel combination of organic Rankine cycle with its "radial outflow" turbine.

EXERGY says it is the world's first facility to have a two-pressure-level cycle operating with a single-disk turbine. The Turkish Ministry of Energy and Natural Resources confirmed in June that the plant meets the required performance targets and will therefore benefit from increased revenues coming from the government feed-in-tariff.

The Akça facility, situated in the Denizli region, is a low enthalpy geothermal plant

(fluid temperature 105 C°/220 F°) generating a power output of 4 MW.

Exergy says use of the innovative radial outflow turbine enabled it to offer "superior plant performance with two pressure levels with a single expander, producing up to 20% more power than competitors using a single pressure level system." Performance tests indicate high turbine efficiency, "over 5% more than the guaranteed figures provided to the client", says Exergy.

The new technology promises to "increase the feasibility of low-enthalpy 3-8 MW range plants down to 100°C," says Exergy, and opens up new possibilities for the efficient



The Akça geothermal plant

and economic exploitation of small scale low enthalpy geothermal resources, the company claims.