

Italy's Enel opens innovative solar power plant

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Italian Environment Minister Stefania Prestigiacomo (L) poses with Enel company general director Fulvio Conti during the inauguration ceremony of Archimede, the new combined cycle thermodynamic solar power plant. Italian energy company Enel on Wednesday inaugurated an innovative solar thermal plant that stores heat from the sun in molten salts.

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The Archimede plant, near Syracuse in southeastern Sicily, is the first to use molten salts as a heat transfer fluid, Enel said in a statement.

The plant "can collect and store the [heat](#) of the sun for many hours in order to use it to generate electricity at night or in overcast conditions, (overcoming) the common limitation of this [renewable source](#), namely that you can use it only when nature makes it available," Enel said.

The system involves some 30,000 square metres (320,000 square feet) of mirrors that concentrate solar rays onto 5,400 metres of pipes containing the molten salts.

The heated salts are used to power a steam generator driving a turbine in an adjacent combined-cycle power plant, Enel said.

The plant has a capacity of about five [megawatts](#) and is expected to save some 2,100 tonnes of oil equivalent per year and reduce [carbon dioxide emissions](#) by about 3,250 tonnes, it said.

Its name recalls the "burning mirrors" that Greek scientist Archimedes of Syracuse is said to have used to set fire to Roman ships besieging the city during the Punic War. A Roman soldier killed him towards the end of the war in 212 BC.

Italy is Europe's second largest producer of solar power after Germany, according to the government.

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