

**MD.16.**

<b>Title</b>	<b>Aeolian-solar hybrid system for domestic water heating</b>
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<b>Patent no.</b>	<i>Patent application, OSIM A/00579. 10.08.2018</i>
<b>Description</b>	The invention relates to water heating systems, namely to heating water with wind and solar thermal energy. The problem that the invention solves is the widening of the technological possibilities, the increase of the conversion efficiency and the operational safety. The solar-wind hybrid system includes the solar thermal installation, the vertical-
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axis wind turbine and the hot water accumulator. The wind turbine includes the aerodynamic blades rigidly connected to the main shaft which, in turn, is connected by the shaft coupling of the thermal generator with turbulent currents. The solar energy is converted into thermal energy by the solar thermal installation. Wind energy is transformed by the aerodynamic blades into rotational motion of the main axis that generates turbulent currents in the thermal generator and converts it into thermal energy. To protect the solar thermal system from overheating, the wind turbine includes a turbocharged brake.

Class no.

2. Energy and sustainable development.