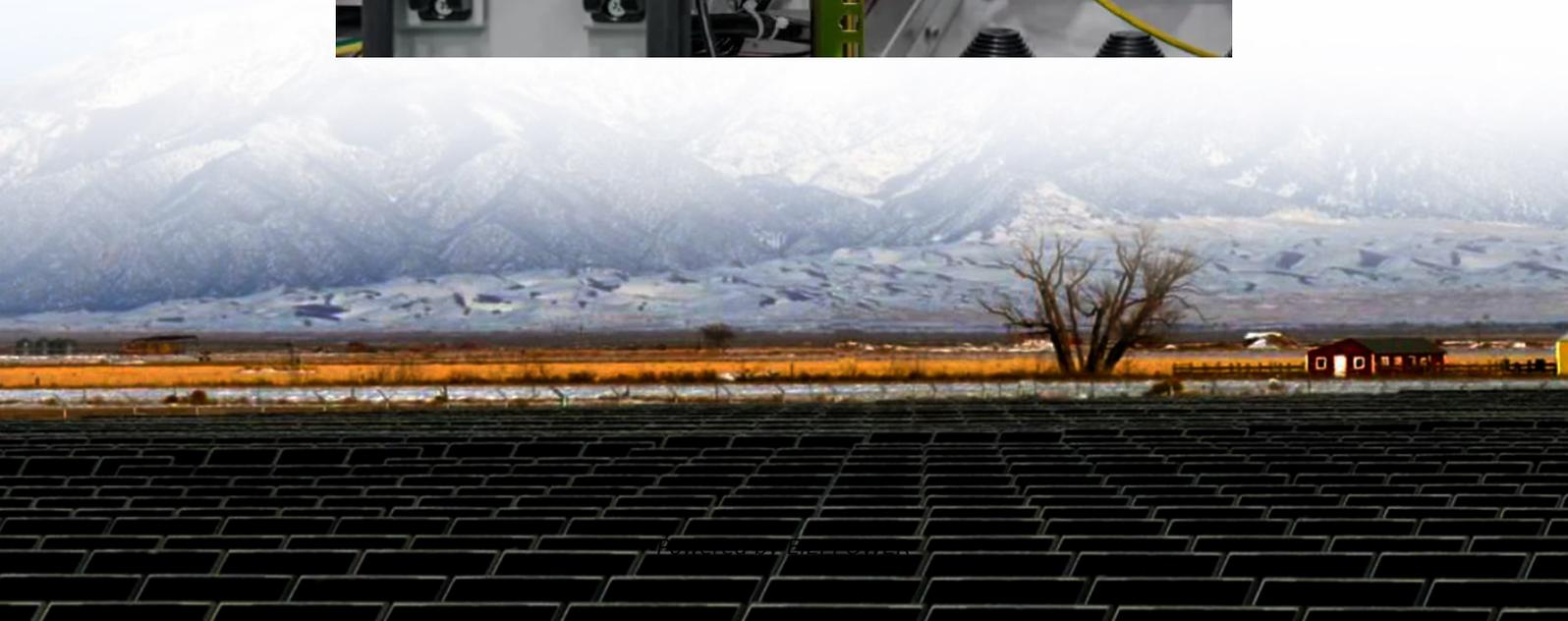


Economic benefits of solar air conditioning





Overview

Can solar energy be used in building air-conditioning systems?

Singh and Das [23 - 26] investigated the potential application and operational strategies of solar energy in the field of building air-conditioning systems, the findings revealed that the incorporation of solar energy can substantially decrease the energy consumption of air-conditioning systems while enhancing their economic viability.

Is solar photovoltaic a viable alternative to air-conditioning?

1. A strong techno-economic viability is found in the integration between air-conditioning and solar photovoltaic systems, especially in tropical latitude regions where air conditioning systems are crucial to provide thermal comfort to building occupants; 2.

Why are solar thermal systems becoming more efficient?

The primary reason for this trend is that in zones with abundant solar energy resources, solar thermal systems can more easily maintain higher driving temperatures. In addition, the efficiency of solar collector is closely correlated with irradiance.

Can photovoltaic energy be used to activate air conditioning systems?

In this way, the idea of using photovoltaic energy for the activation of air conditioning systems is strongly linked to it, as it was presented in Cao, Dai and Liu where a review of state of the art HVAC and its link to the net-zero energy building concept has been applied in the last 10 years.



Economic benefits of solar air conditioning



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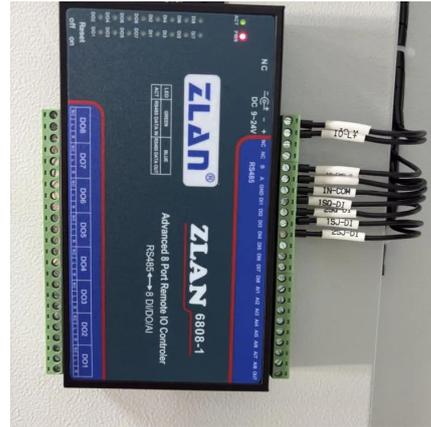
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