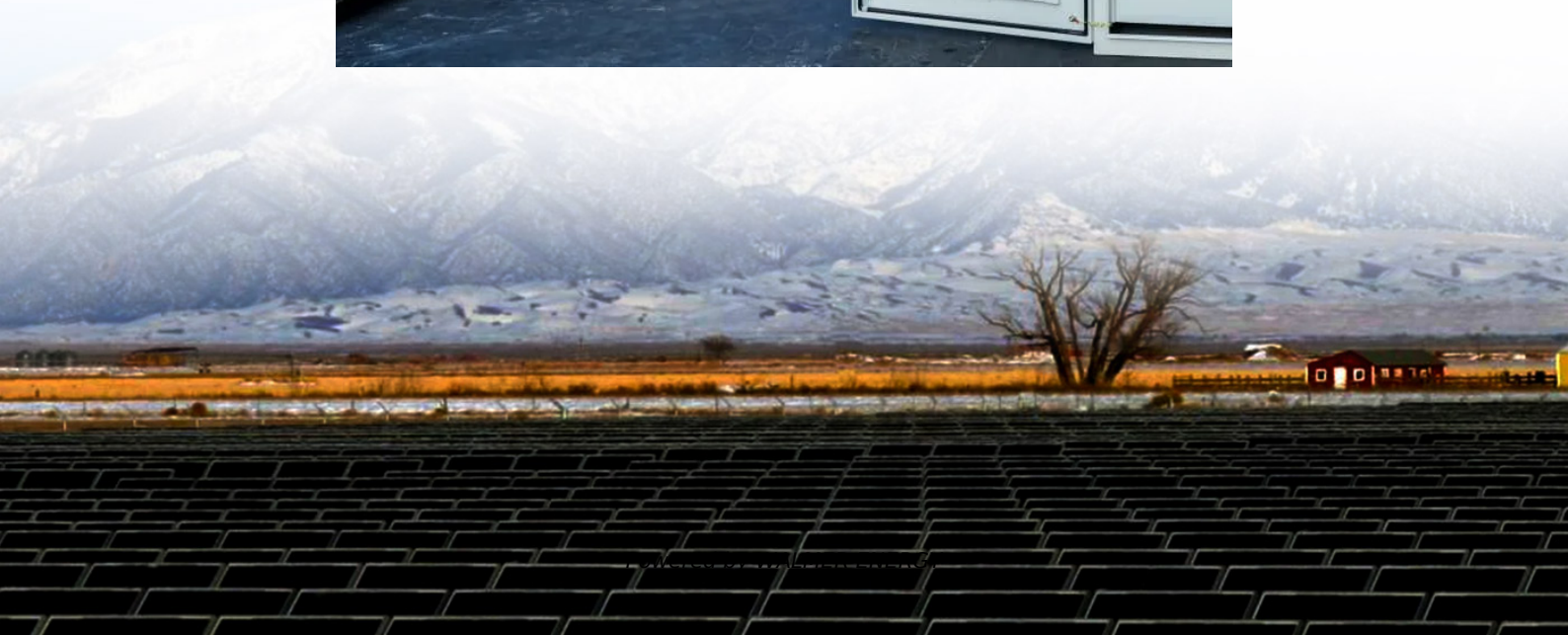


Liquid Cooling Energy Storage Ethylene Glycol





Overview

Does ethylene glycol affect EV battery temperature management?

This comprehensive study delves deeply into the realm of electric vehicle (EV) battery temperature management, with a central focus on optimizing cooling systems using ethylene glycol solutions. The research rigorously examines the interplay between ethylene glycol concentrations and cooling methods on EV battery performance.

Can ethylene glycol be used to cool a battery pack?

Six different methods of the battery pack cooling system's heat transfer behavior have been considered numerically, with ethylene glycol solution used as the solvent at various concentrations. There were no experimental findings that can be utilized to contrast the outcomes with those expected.

What is ethylene glycol & propylene glycol?

What is Glycol?

Glycol, specifically ethylene glycol and propylene glycol, is a type of alcohol used in various industrial applications. It is known for its excellent thermal properties and ability to lower the freezing point of water, making it an ideal choice for cooling systems.

What is the cooling effect of ethylene glycol solution?

Coolant Concentration Impact: The cooling effect of ethylene glycol solution exhibits a discernible trend where its efficiency increases as the concentration decreases. Specifically, a 30% concentration of ethylene glycol proves to be the most effective coolant in terms of heat extraction rate.



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