Operational Nanofluid-Based Solar Panel Cooling System

The world is striving for a sustainable future, the power of the sun is our most abundant resource

Solar owners are face with an expected challenge – extreme heat. Solar panels, are losing efficiency in the blistering sun

Temperature (°C)   Efficiency Loss (%)			State	Over-Temperature Issues	Efficiency Loss Threshold (*F)
			Arizona	Common	120'F
25		0%	Nevada	Common	120'F
			Texas	Occasional	110°F
35		2%	California	Occasional	110'F
45		5%	New Mexico	Occasional	110'F
55		8%			
		12%	Florida	Occasional	105°F
65		12%	Colorado	Occasional	100'F
75		15%			

The average efficiency loss due to overheating in solar panels is estimated to be around 10-20%, depending on location and environmental conditions. The goal is to keep the panels below these critical temperature thresholds to maintain or even enhance their efficiency.

**ONSCS** is an innovative, low-cost, and easy-to-implement technology that significantly boosts the efficiency of solar panels by actively cooling them. This solution is designed to overcome the limitations of existing passive techniques and deliver a sustainable, cost-effective, and commercially viable product.