



Innovations in Solar Power

Solar power is the conversion of energy from sunlight into electrical or thermal energy. It boasts being both the most abundant and cleanest energy source available. As countries look to diminish anthropogenic pollution and the use of non-renewable energy sources, mitigation of solar power's drawbacks is a high priority. Fortunately, the ways in which we capture solar energy have been vastly improved upon and continue to evolve, such as in the following innovations.

Floatovoltaics

Capturing solar power is becoming cheaper by the day. Photovoltaic cells, which convert solar energy into electricity, used to be "limited because of high manufacturing costs." (Solar Power) Recently, that cost has dropped to mere pennies, and photovoltaic cells have come into widespread use. (Yale Climate Connections) "Floatovoltaics" are a new iteration of this technology created to float on reservoirs, dams, and other bodies of water. This increases their efficiency and eliminates the use of valuable real estate. (Solar Reviews) In addition, these floating farms cost less to install and can reduce loss of water due to evaporation.

Solar Roadways

After an explosive crowdfunding debut in 2014, Solar Roadways was waylaid with myriad issues. The company seeks to create a "smart highway" of solar panels that can direct collected energy into signage and ice melting. The original project was cancelled due to cost, LED fading, and heating element difficulties among other issues. The installation of a new pilot project utilizing their new and improved SR4 panels in Baltimore, MD hopes to revive this technology.

Solar Skins

A common critique of solar power is the lack of aesthetic appeal. However, Solar Skins by Sistine Solar hopes to remedy this problem with transformative overlays reminiscent of ad wraps displayed on bus windows. (KC Solar) These can help blend solar panels seamlessly into rooftops and lawns or prominently display custom images like logos, advertisements, and flags. (Solar Reviews) This new technology may help to integrate solar panels into public spaces while avoiding the look of blue photovoltaic panels in silver frames that so many detest.

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