

Township of Dennis
Consolidated Land Use Board
571 Petersburg Road
PO Box 204
Dennisville, NJ 08214

Stephen Schall
151 25th Street
Avalon, NJ 08202

April 21, 2026

To whom this may concern,

I am the owner of property at Block 248 Lot 12 also known as 601 Kings Highway, and have concerns about the plans for Block 248 Lot 13 also known as 641 Kings Highway, the property adjoining mine, known as the "Study Area".

From what I understand is that the "Study Area" directly to the north of my property may be turned into a Solar Power Plant / Farm, and I have the following concerns:

Point 1,

If this passes and comes to fruition, will the township require a six to eight foot hedge around the project, so it's not visible from any adjoining properties or from auto traffic on Kings Highway ?

Point 2,

Will there be a structure(s) built on the property somewhere for maintenance, and or electrical distribution, where would they be located, at 641 Kings Highway ? And what size commercial building(s) are we talking about ? Will there be any noise, humming, or anything else from transformers, inverters, or any other equipment located on that property ?

(I am aware that the solar panels themselves make no noise.)

Point 3,

The Solar Power Plant / Farm will produce the Photovoltaic Heat Island effect also known as PVHI effect that can increase local temperatures, potentially impacting wildlife, ecosystem functions, and even home values in nearby residential areas.

Thank You for addressing my concerns,


Stephen Schall

Copy to: Jessica Bishop, CFO

Dr. Pavao-Zuckerman Discovers Solar Heat Island Effect Caused by Large-Scale Solar Power Plants

Temperature rise has direct implications for local ecosystems and potential to impact human health and land-use planning

November 1, 2016



[Mitchell A. Pavao-Zuckerman](#), an assistant professor from the University of Maryland's College of Agriculture and Natural Resources has concluded through empirical research that large-scale solar power plants raise local temperatures, creating a solar heat island effect, similar to that found in cities. This finding contradicts early modeling studies that predict a decrease in temperatures and an assumption of the efficiency and economic benefits of green power produced by solar panels. This research has potent implications for the future as we consider new plant installations and design techniques to mitigate environmental impacts.

As part of a multi-disciplinary team from the University of Arizona, University of Madison-Wisconsin, and the Nevada Center of Excellence, Pavao-Zuckerman examined the "heat island" (PVHI effect) with experiments that spanned three native desert ecosystems in Arizona: a natural desert ecosystem, the traditional built environment of a parking lot surrounded by buildings and photovoltaic (PV) power plant (Prior studies on PVHI effect were confined to just one biome). For this study, the team defined PVHI effect as the difference in ambient air temperature between the PV power plant and the desert landscape. Findings demonstrated that temperatures over a PV plant were 3-4 °C warmer than the wildlands which is in direct contrast to earlier predictions.

This result demonstrates that there are potential costs to generating green power although ongoing measurements dissipate as you move away from the power plants. The heat island effect fundamentally changes the efficiency of solar panels, but has the potential to affect how choices are made when converting natural ecosystems into large-scale solar facilities.

"The understanding of energy balance - how heat moves in and out of ecosystems that change from natural to built settings is a big game changer for the future. Consider how PV panels absorb and reflect certain types of radiation which prevents the soil beneath from cooling like it would under a regular night sky," said Dr. Pavao-Zuckerman. "With this knowledge at our fingertips, we can mitigate environmental impacts by creating novel systems to make PV power plants work more efficiently and

produce other co-benefits.”

Pavao-Zuckerman and team produced a paper titled “The Photovoltaic Heat Island Effect: Larger solar power plants increase local temperatures”, which was [recently published](#) in the journal Nature Scientific Reports. Continuing studies will focus on determining how far away from PV power plants does the temperature increase reach, and mitigating impact through such strategies as growing plants next to and under solar panels.
