

**From:** [Richard Gill](#)  
**Subject:** Concerns Regarding Large-Scale Solar Development on Farmland and Corresponding Atmospheric Heating  
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To Whom It May Concern,

I am writing to express significant concerns regarding the proposed large-scale solar panel development on thousands of acres of farmland. This initiative, while commendable in its aim to contribute to renewable energy generation, raises crucial questions about its environmental impact, particularly regarding atmospheric heating and its effect on local residents.

Research published in Nature (<https://www.nature.com/articles/srep35070>) has shown that solar farms in desert regions can cause a 4-5 degrees Celsius increase in local air temperatures. This effect, termed the "solar farm heat island effect," is a critical environmental consideration. Moreover, it's plausible to believe that this heating effect could be more pronounced in areas where solar panels replace vegetation, which naturally cools the environment through processes like evapotranspiration.

Given these findings, it is imperative that the developers provide comprehensive evidence to address the following concerns:

**Extent of Atmospheric Heating:** What are the projected increases in local air temperatures due to the proposed solar farm, especially considering the replacement of vegetative land cover? Detailed climatic impact assessments should be conducted to understand the extent of this heating effect.

**Impact on Local Residents:** How will this increase in temperature affect the local residents and ecosystem? It is vital to evaluate the potential health and environmental implications of higher local temperatures, especially during the summer months.

**Balance of CO2 Reductions vs. Heating Effect:** Does the expected reduction in CO2 emissions from the solar farm justify the potential increase in local air temperatures? It is essential to weigh the benefits of CO2 reduction against the possible adverse effects of atmospheric heating.

In conclusion, while the transition to renewable energy is a critical component of our environmental strategy, it should not be pursued without a thorough understanding of the potential negative impacts. The proposed solar farm development warrants a comprehensive evaluation to ensure that its environmental benefits do not come at the expense of local ecosystems and communities.

Sincerely,

Richard Gill