Email to Natalie A. Zine, Zoning Planner, Kane County Development & Community Services Department.

It is with much dismay that I am writing you. Why in the world would the county approve a solar installation next to a subdivision? Solar panels belong on the roofs of industrial buildings and those homeowners who decide to put one on their roof. Instead, Kane County chooses to destroy farmland as well as the property values of the neighboring residents and unfortunately it is all done without contacting the "victims." This reminds me of the ComEd debacle and those hideous rusty poles running the length of the railroad track and ruining the usability of the farmers land to the west. Madigan probably got what he wanted, though.

I find it rather strange KC would think solar in our area is great when we don't have that many days of bright sunshine. <u>https://www.currentresults.com/Weather/Illinois/annual-days-of-sunshine.php</u>

What's next? Wind turbines?

Consider adding solar to industrial building roofs, etc.

Thank you.

## Elise M. Nodurft

## The dirt on clean energy – Alice Jones Webb, Kinute – Feb, 2024.

While it may give the environmentally conscious warm fuzzy feelings about "clean" energy, solar companies aren't gobbling up thousands of acres of land as an unselfish civic duty. There is tons of cash to be made in solar power, largely due to "green energy" initiatives. In 2020, the global solar market reached a staggering \$422 billion.

Of course, pumping tons of cash into an industry that could help steer the planet away from a potentially catastrophic climate crisis should be worth the investment. Unfortunately, while solar energy systems may produce electricity with practically zero carbon emissions, it doesn't mean they don't have an environmental impact.

It is highly feasible that we are trading one form of environmental degradation for another.

Solar installations on the scale needed to supply power grids are massive, transforming pastoral vistas into industrialized landscapes of metal and glass surrounded by security fences. These sprawling arrays can alter everything from sun exposure to surface temperatures, which can have vast and unexpected impacts on plants and animals and even alter the area's microbiome.

The dark surfaces of solar panels absorb most of the light and heat that reaches them. However, only about 15% of incoming energy is converted to electricity. The rest is returned to the environment as heat. Because the panels are so much darker than the surrounding vegetation, large swathes of solar fields will absorb and emit heat at higher rates, which can have unknown consequences on the surrounding environment.

According to Jeffrey Lovich, a research ecologist with the U.S. Geological Survey, some solar panels "can incinerate insects and burn the feathers of birds that fly through."

A few burnt insects in rural areas might not seem like a big deal, especially if you've ever seen



the insect carnage on a windshield after a drive down twisting backroads. However, the scale of solar installations it would take to put a significant dent in the current demand for fossil energy could have regional and even global effects on the climate.

And this is all without touching on the potential environmental impact of solar panel production. Although labeled as "clean energy," solar panels harbor a cocktail of toxic chemicals, including cadmium compounds, silicon tetrachloride, hexafluoroethane and lead.

Those solar panels won't last forever. The industry standard for the lifespan of most solar panels is 25 to 30 years. Those toxic compounds are a concern not only during the manufacturing process but also when spent panels have lost their usefulness and must be disposed of. There is also the concern about toxic substances leaking from the panels if damaged.

The disposal of used solar panels is something that worries Mayo. He's afraid that his neighbors' coils will be stuck with the byproducts of turning fields into solar arrays, even if they change their minds in the future.

"If you were to take a field out of solar, the infrastructure that was put in the ground to support the panels, the concrete, and the galvanized metal these things sit on, they're going to leach zinc into the ground. The galvanized metal under the surface can result in high readings of zinc in soil samples. Zinc may be an essential micronutrient, but if too much leaches into the soil, there's no way of getting it out," Mayo said.

Mayo's concerns about the long-term effects on soil quality are justified. Focusing on the short-term financial benefits without considering the long-term consequences of putting industrial power plants on agricultural land is irresponsible.

As the Essex County Conservation Alliance points out, "farmland lost is farmland lost forever."

In other words, once a field has gone to solar panels, the chances of it returning to crops aren't high.