

# Possibility vs. Probability vs. Plausibility

As NIMBYs (Not In My Backyard-ers for the uninitiated), we're often accused by renewable energy developers—and their well-funded advocates—of spreading misinformation to sow fear and rally opposition. These developers seem to count on people not “doing their homework” while using tactics straight out of Saul Alinsky's 12 Rules for Radicals. Their go-to move? Attack those of us presenting rational, fact-based arguments and then ridicule us for daring to care about our communities.



I could spend countless hours explaining how this behavior is the opposite of being a "good neighbor," but I'll save that rant for another day. Instead, let's talk about the balancing act we all face when deciding if a utility-scale renewable energy project is in the best interest of our families and communities. For me, it boiled down to two core questions:

1. Possibility vs. Probability vs. Plausibility
2. Risk vs. Reward

Here's a simple (maybe overly simple) account of how I wrestled with one particular issue: the potential leaching of toxins from photovoltaic (PV) solar panels and the contamination risks that come with it.

### **First, Some Definitions (Because We Like to Be Clear Around Here):**

- Possibility: The condition of something being able to occur, exist, or be achieved.
- Probability: The likelihood or chance of a particular event happening.
- Plausibility: How believable or reasonable something appears based on logic, evidence, or common sense (even if it's not guaranteed).
- Risk: The chance of loss, harm, or a negative outcome.
- Reward: The positive gain or benefit received from an action or decision.

### **The Issue: Toxic Leaching from Solar Panels**

When I first heard about the massive utility-scale solar development planned to engulf my community, I dove headfirst into researching potential adverse effects. I discovered a concern that resonated deeply: the leaching of toxic materials, PFAS (forever chemicals), and GenX chemicals from solar panels. These substances could either seep from the panels themselves or come from the coatings applied to their exteriors.

#### Step 1: Validate the Risk

Before grabbing my torch and pitchfork, I wanted to ensure this wasn't just a case of "ill-informed NIMBY hysteria." I reminded myself to put aside my personal anger about the development (easier said than done) and focus on credible, defensible research—no blogs, no trade magazine fluff, and certainly no "I heard it from my cousin" stories. If I was going to speak up, I needed to stand on solid ground backed by real studies.

#### Step 2: Do the Homework

I reviewed countless academic papers, such as:

[Leaching via Weak Spots in Photovoltaic Modules](#)

[Leaching of Cadmium and Tellurium From Cadmium Telluride Thin-Film Solar Panels Under Simulated Landfill Conditions](#)

[Initial metal contents and leaching rate constants of metals leached from end-of-life solar photovoltaic waste: An integrative literature review and analysis](#)

[Thin-film photovoltaic cells: Long-term metal \(loid\) leaching at their end-of-life](#)

[Experimental investigation to evaluate the potential environmental hazards of photovoltaic panels](#)

[Cadmium telluride \(CdTe\) and cadmium selenide \(CdSe\) leaching behavior and surface chemistry in response to pH and O<sub>2</sub>](#)

[Long-term leaching of photovoltaic modules](#)

And the list goes on. After reading through these studies, one thing was clear: **YES, IT IS POSSIBLE** for toxic elements to leach from solar panels. The developers, however, conveniently leave this little tidbit out of their glossy PowerPoints. Curious, isn't it?

### Step 3: Determine Probability

While it's **possible** for leaching to occur, how **probable** is it? That's where things got murky. Documents from entities like the Ohio Department of Health often hedged their statements, saying, "The determinations within this document were made based upon a review of literature available at the time of its original publication. As scientific information changes over time, and as photovoltaic technologies and the landscape of solar energy within Ohio changes, ODH will reevaluate these conclusions as needed. ODH did not conduct independent, peer-reviewed research to produce this document." This vagueness left me with an unsettling realization: while leaching is undeniably possible, the probability is hard to measure due to insufficient studies. My conclusion? "100% possible, probability unknown."

### Step 4: Assess Plausibility

Given the evidence and logic, I concluded that leaching wasn't just possible—it was plausible. The only question left was whether the risks outweighed the rewards.

### **Risk vs. Reward: Weighing the Scale**

As someone who relies on well water and lives in a community where drinking water comes from nearby watersheds, the risk of contamination weighed heavily. If toxins leached into the waterways feeding local reservoirs, the consequences could be devastating. On the other hand, what was the reward? Developers touted tax revenue

for 30-40 years (assuming the solar farm remained operational that long), but to me, that reward seemed paltry compared to the potential risks to my family's health and my community's water supply.

When I put it all on the scale, the risks clearly outweighed the rewards. And just like that, the decision was clear. Developers can "gaslight" all they want, accusing me of being "anti-education" or "anti-farmer," but that doesn't make their arguments valid—or their behavior any less divisive.

## **Final Thoughts**

I'm not here to tell you how to think or what to believe. I'm simply sharing my process to illustrate the tactics renewable developers use to manipulate public opinion while vilifying taxpayers—the very people subsidizing their projects.

So here's my advice:

- **Do your homework.** Don't let anyone—especially a slick-talking developer—treat you like a hick in flyover country.
- **Stand firm.** Unite with your community, encourage your local officials to listen, and advocate for what you know is right.
- **Stay sharp.** If someone's profiting from you, question their motives.

And for Pete's sake, don't let anyone baffle you with BS. You're smarter than that—and they know it.