Sunshine and Shenanigans - The Real Story Behind Solar Farms and Land Prices

For a moment, imagine that you've worked your whole life to build up your farm or rural property. Maybe it's been in your family for generations—perhaps the land itself hails back to when your ancestors first set foot in America, chasing the promise of opportunity and a future built with their own hands. Maybe you poured every last bit of sweat equity into it, turning raw earth into something productive, something lasting. Either way, it's not just land—it's home, your legacy, and a key part of your financial security.

Now, imagine waking up one morning to find out that a solar farm the size of a small country or a forest of 600-foot wind turbines is about to be installed right next door.

You call your local realtor and ask, "What does this do to my property value?" And you hear the dreaded words:

"It's...complicated."



Actually, it's not that complicated. When industrial-scale renewable energy moves in, property values go down—sometimes significantly. This is common sense to anyone who's seen the realities of these developments firsthand. Yet, if you ask a wind or solar developer, they'll tell you there's no impact at all. In fact, they'll point to industry-funded studies claiming your property value might even increase—as if the average homebuyer is lining up to live next to a sea of solar panels or a wind turbine humming like a jet engine at takeoff.

That's the lie. And it's a big one.

For years, some of the most well-known appraisal firms in the country have been generating appraisals seemingly more advantageous to their clients than perhaps what is factual, and unloading this "science" on landowners and policymakers across the U.S. These reports claim to be "independent" and "data-driven," but dig a little deeper, and you'll find cherry-picked data, flawed methodologies, and conclusions that defy basic real estate principles.

But here's where it gets even more absurd: Some renewable energy developers use other studies—ones that actually show property value declines—to argue the opposite. How? By selectively quoting sections out of context or manipulating conclusions to downplay the impact. If a study finds that homes closest to a wind or solar facility suffer major losses but homes 10 miles away are unaffected, guess which part they highlight? That's right—the "no impact" on homes far from the development. The ones right next to it? They quietly sweep that part under the rug.

This isn't science. It's marketing dressed up as research.

Here's the hard truth:

Would you buy a home with a 2,000-acre solar farm next door?

Would you pay top dollar for land shadowed by 600-foot wind turbines?

Would you invest in property where the night sky is flooded with flashing red aviation lights and the landscape is dominated by metal and glass?

No? Neither would most buyers. And that's why property values in these areas drop.

This paper will try to cut through the smoke and mirrors to expose:

• How property values are actually affected when renewable energy projects move in.

- The real estate data the renewable industry doesn't want you to see.
- How so-called "independent" appraisers are stacking the deck in favor of wind and solar developers.
- The deceptive ways developers manipulate even legitimate studies to mislead the public.
- What you can do about it—because letting this misinformation stand is not an option.

We're here to set the record straight. No spin, no industry talking points—just facts, and common sense.

Stay tuned. This is going to get interesting.

How Renewable Energy Developments Undermine Property Values

When a wind or solar facility moves in, it fundamentally changes the landscape of a community. This isn't just about personal preference—it's about how buyers view the desirability and investment potential of a property. Here's how:

1. Visual Pollution - Say Goodbye to the View

The old saying goes, "You can't put a price on a beautiful view." But if you could, you'd find that buyers are willing to pay a lot more for an unspoiled landscape than for a view of industrial solar panels or towering wind turbines.

Now, according to renewable energy developers and their appraisers, this shouldn't be a problem because, apparently, everyone in rural America lives in a single-story ranch house with average-sized windows that sit just a few feet off the ground. But here's the reality: plenty of us live in two- and two-and-a-half-story homes with 8, 9, even 10-foot ceilings and tall windows.

So, if you think the view out of your ground-floor windows is bad enough, just wait until you go upstairs. What was once a sweeping, picturesque landscape of rolling farmland or tree-lined pastures is now a sea of reflective solar panels, industrial fencing, and access roads cutting through the fields like a bad game of Tic-Tac-Toe. And if you've got wind turbines nearby? Well, good luck escaping the sight of 600-foot-tall spinning behemoths that dominate the horizon in every direction.

And here's where it gets even more laughable: developers love to talk about their "vegetative barriers" and "screening" as if planting a few rows of shrubs is going to hide an industrial energy facility. Maybe—maybe—those trees will soften the eyesore at ground level after a couple of decades of growth, but they sure won't do a thing

when you go upstairs. No amount of carefully placed shrubbery is going to obscure thousands of gleaming solar panels or 60-story wind turbines when you've got a second-floor bedroom with a window facing that mess.

2. Zoning and Land Use Changes - From Rural to Industrial

- Bitcoin mining operations and AI data centers are frequently popping up right next to renewable facilities, taking advantage of cheap electricity.
- Supporting industries for renewable energy developments—like maintenance hubs, substations, and transmission line infrastructure—will also want to build close to the facility to minimize their own overhead costs.
- Once zoning is changed to accommodate a renewable project, it's much easier for more industrial development to follow.

Buyers don't just look at what's on a property today—they look at what's likely to happen in the future. When zoning laws shift to accommodate large-scale energy developments, property values take a hit long before the first panel or turbine even goes up. Moreover, many times these unanticipated solar developments are contrary to prior expectations of a community for planned organic growth. For example, the solar development may interfere with future growth patters established by a pre-existing Comprehensive Plan.

3. Comparative Sales - What the Market Actually Says (and What It Doesn't)

At the end of the day, property value isn't based on wishful thinking—it's based on what buyers are willing to pay.

Yet, many industry-sponsored studies ignore two major factors that skew real-world sales data:

- "Good Neighbor" Agreements: These agreements often include payouts to nearby landowners who sign away their right to complain. Some landowners may even accept these payments in exchange for agreeing to never publicly disclose any issues with noise, flicker, or declining property values. This means fewer formal complaints, and no public record of the actual impact.
- Developer-Purchased Properties: Renewable energy companies often buy out landowners who can't sell their homes due to the project's impact. These properties sit on the developer's books until the "study" is complete, at which point they are quietly resold—often at a loss—after the research window closes. The study data then reflects a misleading stability in property values because those loss-generating sales are conveniently excluded from the final analysis.

The market doesn't lie—but the renewable industry sure tries to make it seem like it does.

The Reality Developers Don't Want to Admit

Would you invest in land knowing that Bitcoin miners, AI data centers, and industrial transmission hubs could be your next-door neighbors?

Would you pay the same price for a property that comes with built-in noise, environmental, and aesthetic issues?

Of course not. And neither would most buyers.

That's why property values drop when industrial wind and solar facilities move in.

Next, we'll dive into the actual evidence of property value losses—evidence that the renewable energy industry doesn't want you to see.

Industry-Funded Appraisal Reports - Conflicts of Interest

The biggest red flag in any study is who paid for it. If an appraisal or economic impact report is funded by the renewable energy industry, the conclusions are almost certainly tilted in favor of the industry. It's no different than a fox writing a report on henhouse security—expect a glowing review.

A prime example? CohnReznick, one of the largest financial advisory firms in the renewable energy sector.

CohnReznick - The Renewable Industry's Favorite Consultant

CohnReznick is deeply embedded in the renewable energy sector, boasting over 100 renewable energy clients, including developers, investors, and power producers. The firm actively consults on financial strategies for solar and wind companies—meaning it directly benefits from the expansion of these projects. This raises an obvious question: how can a firm that makes money off renewable energy developments possibly be objective in analyzing their impact?

Beyond consulting, CohnReznick has hosted industry conferences, written white papers, and lobbied for renewable energy incentives, making it anything but an unbiased, independent appraiser. Their 2018 SunVest Solar Impact Study—which claims solar farms have "no impact" on property values—was commissioned by

SunVest Solar, one of their renewable energy clients. This is a direct conflict of interest that undermines the credibility of the entire report.

Imagine hiring a tobacco company to conduct a study on whether smoking causes lung cancer. You already know what the conclusion is going to be.

Dissecting Three Industry-Sponsored Reports

Now let's take a hard look at three major industry-funded reports and break down exactly where, how, and why they are flawed.

CohnReznick - SunVest Solar - Solar Farm Impact Study (2018)

One of the most widely cited reports claiming that solar farms don't negatively impact property values, this study was conducted by CohnReznick on behalf of SunVest Solar. The results, of course, were predictably favorable to the solar industry.

The study relies heavily on cherry-picked comparisons, carefully selecting properties that fit its narrative while conveniently ignoring homes that lost value or failed to sell. It also conducts a short-term analysis, examining property values only within a limited timeframe rather than analyzing long-term trends that would reveal gradual devaluation.

Another glaring issue is the mismatch in project size. The median project size in the study was 27-41 acres, with most projects producing less than 20 MW (yes, there were significantly larger solar facilities which could have utilized in this analysis)— hardly representative of the 1,000+ -acre, 100+ MW mega-facilities being proposed today. By lumping together small-scale solar projects with industrial-scale ones, the study distorts its conclusions, misleading policymakers and landowners alike.

Furthermore, the report fails to account for buyer perception—a crucial factor in real estate. Homebuyers don't just consider the numbers; they make decisions based on how they feel about a property. Would you pay the same price for a home with a panoramic farm view versus one that now overlooks an industrial-scale solar farm? Of course not.

Gilbert Michaud - Assessing Property Value Impacts Near Utility-Scale Solar in the Midwest

Another study frequently wielded by developers is the one conducted by Gilbert Michaud, a renewable energy researcher with a track record of supporting pro-solar policies. Unsurprisingly, this study concludes that utility-scale solar has no

statistically significant impact on property values—but a deeper look reveals some glaring flaws.

First, the study uses a broad data scope to dilute impact, blending properties miles away from solar farms into the analysis. This approach obscures the true effect on the properties immediately adjacent to these developments. It's like averaging the temperatures in Texas and Alaska and claiming there's no such thing as extreme weather.

The study also **relies on Zillow "Zestimates**" rather than real market-based appraisals. This is problematic for several reasons. Zillow estimates fail to capture buyer hesitancy, failed sales, or extended time on the market. While useful as a rough starting point, Zestimates routinely lack the precision of a professional appraisal or a realtor's comparative market analysis (CMA). They are merely automated home value estimates generated by Zillow's "proprietary algorithm or valuation model". They provide an approximate market value for a property based on public data, user-submitted information, and recent real estate transactions. Unlike independent appraisals, which compare actual property sales before and after a solar farm is installed, this study simply aggregates sales data, diluting the localized effects that homeowners actually experience.

Additionally, the study ignores failed sales entirely. If a home doesn't sell, it doesn't show up in the dataset—meaning significant property devaluation is swept under the rug. It also fails to incorporate buyer perception or realtor data, omitting one of the most critical factors in property desirability. Even if home prices don't immediately drop, the reality is that properties near solar farms take longer to sell and attract fewer buyers.

Kirkland Appraisals - Jefferson County, Indiana (Idlewild Solar Study)

The third study, conducted by Kirkland Appraisals, was commissioned explicitly as part of a zoning application for Idlewild Solar. That means it wasn't intended to be an independent analysis—it was designed to convince local officials to approve the project.

This study fails to isolate rural home impact, instead lumping together suburban and industrial-zoned areas to make it seem like solar farms are just another neutral land use. It also employs faulty comparisons, arguing that solar is less disruptive than heavy industrial use. That's like arguing that because a landfill is worse, you should be thrilled about having a junkyard move in next door.

Most troubling, the study ignores the long-term effects of zoning creep, where one solar project leads to others (commonly referred to as the cumulative effect), shifting agricultural land into industrial energy zones, which in turn makes nearby properties less desirable for residential buyers.

How the Industry Manipulates Data

The renewable energy industry follows a predictable playbook to hide the real impact of solar farms on property values:

- Paired Sales Trickery Carefully selecting data points that fit their desired conclusion while excluding negative cases.
- Short-Term Study Periods Avoiding long-term trends that show gradual devaluation.
- Good Neighbor Agreements and Non-Disclosure Clauses Many agreements include NDAs, silencing affected homeowners and keeping complaints out of the data.
- Ignoring Failed Sales If a home can't sell, it doesn't show up in the data—making it easier to claim no impact.
- Misleading Comparisons Comparing solar farms to worse alternatives (landfills, heavy industry) to make them seem benign.

The Truth Behind the Spin

The next time a solar developer waves around a study claiming "no impact" on property values, ask them: Who funded this study? Did it exclude failed sales? Were Good Neighbor Agreements and NDAs used to suppress data? When you start asking these questions, the cracks in their argument become clear.

The reality is, property values DO decline when industrial-scale wind and solar developments move in. The only ones pretending otherwise are those profiting from it.

EVIDENCE OF PROPERTY VALUE DECLINE

What the Industry Doesn't Want You to See

For years, rural communities have been reassured by renewable energy developers that industrial-scale solar and wind farms have no impact on property values. With glossy reports, polished presentations, and carefully curated data, they attempt to lull landowners into a sense of security. But when you strip away the PR spin and dig into

independent research, a different picture emerges—one that developers would prefer you didn't see.

A prime example of this deception is the Grange Solar project in Logan County, Ohio, developed by Open Road Renewables. Their promotional materials insist that solar farms do not reduce property values, citing reports that conveniently align with their interests. However, upon closer inspection, these reports are riddled with misleading comparisons, omitted data, and conclusions that don't hold up under scrutiny.

In this section, we will explore independent studies, real estate data, and expert analysis that reveal the truth about how large-scale renewable energy developments negatively impact property values. Unlike the carefully managed messaging of industry-funded reports, these studies provide an unfiltered, fact-based look at the consequences for rural homeowners and landowners.

<u>Independent Studies Confirming Property Devaluation - The Impact of Solar Farms</u> on Residential Property Values

A study conducted by researchers at the **University of Rhode Island (2020)** analyzed 400,000 property transactions over a ten-year period. Their findings were clear: homes within 0.5 miles of a solar farm experienced an average property value reduction of 1.7%. But the situation worsens with proximity.

The study notes: "We also examine heterogeneity in treatment effects in several ways. First, with respect to proximity, we find substantially larger negative impacts on homes located within 0.1 mile of solar installations (-7.0%)."

Further, the researchers estimated a staggering \$1.66 billion in aggregate housing value losses in Massachusetts and Rhode Island alone due to proximity to solar installations. If this is the impact in just two states, imagine the losses nationwide.

A **2023 study from the Lawrence Berkeley National Laboratory** examined nearly 500,000 home sales in areas with large-scale solar installations across multiple states. The results mirrored previous findings, reinforcing the reality that solar farms drive down property values.

Key findings from the study include:

- Homes within 1 mile of a utility-scale solar installation saw property value declines of up to 5%.
- The biggest losses occurred in rural and agricultural areas, where solar farms disrupted scenic views and altered land use.

• The effect was most pronounced for properties within 0.5 miles, with homes declining in value by 4% six years after construction.

"When looking at individual states in our sample, we observe no effect on sales prices in CA, CT, and MA, but find sale price reductions for homes 0–0.5 mi away from a LSPVP of 4%, 5.8%, and 5.6% in MN, NC, and NJ, respectively."

In other words, while developers love to cite cases where property values remained stable in select areas, they conveniently omit that other states showed statistically significant devaluation.

The Texas Study: A Conveniently Selective Analysis

One of the most widely cited reports by solar developers is the 2023 Real Property Analytics study, which examined residential market trends surrounding six utility-scale solar projects in Texas (a study performed in partnership with Advanced Power Alliance and the Solar Energy Industries Association). This study claims that no significant negative impact on property values was observed. But upon closer examination, the methodology and conclusions raise serious questions.

The Study of Residential Market Trends Surrounding Six Utility-Scale Solar Projects in Texas analyzed solar developments in Tom Green, Bell, Lamar, and Bee Counties, focusing on general housing market trends such as sale price per square foot, sale-to-list price ratios, and time on market. However, it fails to account for one crucial factor: proximity-based valuation differences.

Rather than distinguishing between properties adjacent to solar farms and those further away, the study lumps them together—effectively diluting the impact of solar farms on directly affected properties. This is akin to averaging test scores from an entire school while ignoring that one classroom got all failing grades.

Additionally, while the report does mention that homes with a direct view of solar farms may experience declines, it tries to downplay the issue by stating: "In general, and consistent with the published literature, any potential for individual sales to be affected tends to involve properties with a direct view of a utility-scale solar project; but overall, it appears a market and demand exists for those properties at competitive prices."

This carefully worded conclusion suggests that even if some homes lose value, someone will eventually buy them—just perhaps not for what they were originally worth.

Despite attempting to paint a neutral picture, the Texas study conveniently excluded key findings from other research (although cited/referenced in this study). These omitted findings include:

- A 2021 study in the Netherlands analyzed 12,650 sales surrounding 107 solar farms and found that home values within 1 kilometer declined by an average of 2.6%. A multi-state analysis found that while three states showed no statistically significant impact from solar farms, three other states saw property values decline within 0.5 miles of a solar installation by an average of 1.5% compared to homes further away.
- A 2023 study in England and Wales used hedonic regression analysis to examine the impact of solar farms on residential property values. The results? Homes within 750 meters (~0.5 miles) of operational solar farms lost an average of 5.4% in value.

Not surprisingly, these studies are never mentioned when developers cite the Texas report as proof that solar projects have no impact on property values.

Independent Appraisals and Property Damage Assessments

Beyond academic research, independent property appraisals conducted by experienced professionals further confirm what developers try to deny—utility-scale solar farms negatively affect property values. One such example is the work of Mary Clay, a certified appraiser who has prepared detailed property damage assessments for communities affected by industrial solar developments. Her reports provide real-world evidence that contradicts industry-funded studies and underscores the financial risks imposed on neighboring landowners.

The Mary Clay. MAI Report: A Case Study in Property Devaluation

A 2024 report prepared by Mary Clay, MAI (The MAI designation is earned by professionals who provide a range of services on all types of real property related to providing opinions of value, evaluations, review, consulting and advice on investment decisions, among other things. MAI designation is for a certified appraiser and member of the Appraisal Institute who has met strict testing, standards and experience requirements.) for Kansans for Responsible Solar examines property devaluation in areas directly impacted by large-scale solar projects. Her findings illustrate clear and measurable declines in property values due to proximity to solar developments, often exceeding the declines reported in broad market trend studies. Key takeaways from Clay's assessment include:

- Sales Price Depressions: Properties within one-half mile of a solar farm consistently sell at discounted prices compared to similar properties located farther away, with losses ranging from 6% to as much as 30%.
- Time on Market Increases: Homes near solar projects remain unsold for significantly longer periods, reflecting diminished buyer demand.
- Financing Barriers: Mortgage lenders frequently require additional underwriting scrutiny for properties adjacent to solar farms due to concerns over resale value.

Her work provides concrete evidence from actual real estate transactions, reinforcing the argument that solar farms harm nearby property values.

Why Independent Appraisals Matter

Unlike industry-backed studies that rely on selective data sampling and broad market trends, third-party property damage reports from professional appraisers assess real-world impacts at the local level. These appraisals focus on actual sales data, market trends, and buyer behavior, painting a far more accurate picture than reports funded by the renewable energy industry.

The reality is clear -when independent appraisers evaluate properties near solar farms, the findings consistently show significant reductions in marketability and value. The fact that these findings rarely appear in developer-sponsored reports should raise serious concerns about the credibility of industry-backed claims.

The Real Evidence Speaks for Itself

When you look beyond the carefully curated data of industry-backed studies, the conclusion becomes clear:

- Industrial-scale solar projects reduce property values, particularly in rural communities.
- Buyers are hesitant to purchase homes with direct views of solar farms.
- Developers routinely cherry-pick studies that downplay these impacts while ignoring contrary evidence such as:
 - Relying on correlation instead of causation.
 - Failing to account for buyer market segmentation.
 - Selectively citing studies with favorable outcomes.
 - Ignoring empirical evidence of depreciation from aesthetic, economic, and community disamenities.

So, the next time a developer tells you that solar farms won't impact property values, ask them about the studies they conveniently forgot to mention. After all, your land, your home, and your financial future deserve more than a one-sided sales pitch.