

Myths about Solar Development

Solar Smart Hudson Valley Scenic Hudson

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“Solar Doesn’t Work in Cold Weather”

Conductivity actually increases in cold temperatures, making electricity flow more efficient. In much higher temperatures, panel efficiency decreases.

New York is a great place for solar!

“Solar Doesn’t Work in Snowy Climates”

Weather can reduce the amount of energy produced, but the panels can still work efficiently. The angle at which the solar panels are set in order to maximize solar generation allows snow to slide off panels.

Germany, with a similar climate, has one of the most successful solar initiatives in the world.

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“Solar Requires Constant Maintenance”

Solar arrays are built to be durable, and require minimal maintenance. Very few moving parts are involved, and over the typical warranty life of 25 years, the only major expense is inverter replacement, ground maintenance, and occasional washing in dusty locations.

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“Financial Incentives: Too Good to Be True”

Almost every US state has some kind of incentive for solar energy, and that helps drive costs down. New York has some of the best incentives anywhere, and the NY State Energy Strategy sets long-term goals that will ensure continuing support. Federal tax credits allow New Yorkers to bring home taxes paid to Washington. Tax credits and incentives are available for solar photovoltaic (PV), solar heating and cooling, and concentrating solar technology.

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“You Need an Expensive Battery”

Most residential and small commercial solar is “behind the meter” and very cost-effective even without a battery. Solar works first to offset your usage, then excess is sent to the grid. Exports earn credits that can be applied to offset later consumption—using the grid as a battery! Batteries are increasingly affordable—and can generate added value.

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“Solar Damages Roofs”

Solar panels protect and preserve roofs, saving on expensive repairs. And solar panels reduce air conditioning loads. The roof should be inspected and be free of defects and damages before the solar panels go up. And if the roof is shaded or faces the wrong way, off-roof options are increasingly available.

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“You Have to Own Your Roof”

New York is home to some of the most progressive community shared solar programs and regulations in the U.S. These options allow multiple customers to share in the ownership and benefits of solar generation even if they are renters or don't have a roof that is ideal for solar.

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“Solar Panels Cause Glare”

Solar panels are designed to absorb light, not reflect it. The panels are mostly made up of dark-colored materials (blue or black) and are covered with anti-reflective coatings. Modern solar PV panels reflect as little as 2% of the sunlight they receive. If needed, minor adjustments such as positioning, direction, and location of the panels can eliminate any glare issue.

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“Solar Panels are Toxic”

The two most common cell technologies, monocrystalline and polycrystalline cells, are composed up of silicon (glass), aluminum (frame), and copper (wiring). Thin-film PV modules often contain heavy metals like Cadmium or Telluride. There is little to no evidence of leaching from these solar modules while they are in use. Solar manufacturers must use clean manufacturing techniques, and solar companies should provide a strong recycling programs for modules that have reached their useful lives.

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“Solar Power Plants are Just Power Plants”

Solar farms are like power plants in a few ways – they connect with electrical switch gear. But since solar can be scaled and configured to fit with local needs, and can be built in or on existing structures, they can be adapted to minimize intrusive effects and safety concerns. After construction, solar farms operate cleanly, quietly, and with only minimal additional noise and site traffic.

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“Solar Farms Make Land Useless”

Solar farms can coexist with building construction, brownfields re-use, highway and railroad easements, airport no-build buffer zones, military reservations, and parking lots. Solar farms can be designed to complement erosion prevention planning. Solar production royalties make a great economy-proof revenue stream that can help keep farmlands whole and productive.

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“Solar Farms are a Visual Blight”

Solar farms have low profiles and can easily be shielded from view with a tree or hedge placement. They never produce a smoke or steam plume. They don't have a smoke stack or a cooling water intake or output structure.

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“Solar Farms are Noisy”

The noisiest components in a solar farm are the inverters that create a buzzing sound during conversion from direct current to alternating current. Tracking equipment which allows the PV panels to face the sun throughout the day generates low level of noise. The noise generated by solar farms is generally inaudible.

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“Decommissioning is Hard and Messy”

At the end of a solar farm’s useful life, the easiest course it to “re-power” it with new, more efficient modules. (And recycle the old ones.) But if you really need the site back, the solar farm comes apart as fast as it went it. Wires are unclipped, panels and racks are unbolted, and piers are pulled from the ground.

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Sources

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