



Fresh Air

The Newsletter of the Mid-Hudson Group of the Atlantic Chapter

Summer 2022 | Vol. 54 | Issue 2

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Note: Beginning in 2022 *Fresh Air* is published three times per year.

Chair's Corner by *Lalita Malik*

The onslaught of bad news in the media at the macro level made me want to stop listening to the daily news. The news is dominated by the ongoing war in Ukraine, mass shootings, the predictable rulings by SCOTUS and the inability of our elected officials to legislate. News about weather disasters, floods, and forest fires took a much-needed break. But as hurricane season approaches and summer progresses these weather disasters will continue where they left off last year. It seems like a losing battle. But look closer, and we see a network of silver linings. All we must do is stay the path we have chosen and continue winning where we can. Our grass roots work is succeeding and failures do not deter us. So tune in to your local Sierra Club news from Chapters and Groups around the country.

Let's start with news from your local Group. In the Hudson Valley, after many years of advocacy by Sierra Club and our partners, we have a victory against the proposed Danskammer fracked gas peaker plant. Nancy Severns reports the status of Danskammer and Wheaton Place in Poughkeepsie. We lost the first round to save Wheaton Place but we have not given up. The fight continues.

Last year we had one industrial project that threatened the "Gateway to The Catskills". This year we have two. Check out Marie Caruso's report about the two projects and the lawsuit against one of them to stop illegal activities at the site. It takes many years to stop these projects but persistence will pay off. If your leaders and our partners had not been actively opposing this project since it started you would have been greeted by fumes and noise as you drove along Route 28 into the Catskills.

To combat the recent increase in energy prices we must wean ourselves away from fossil fuels and adopt more renewable energy sources. There are many skeptics but it can be done. Nivo Rovedo's article debunks the myth that renewable energy will not be sufficient to meet all our needs. Sarah Kennedy points out that those in power do not act to improve the living conditions of the masses as they believe they will be protected by the dangers of pollution because they live elsewhere. They do not seem to realize that polluted air and water know no boundaries and can travel everywhere and affect everyone.

It is not within our power to stop the war in Ukraine but it is within our power to change our lifestyle to reduce energy use and to switch to sources of renewable energy. If you have been considering adding solar panels for your energy, this is a good year to do so. New York State rebates have increased and the 26%

Federal Income Tax credit may be reduced or eliminated next year. If the demand for fossil fuels decreases, the market for them will evaporate. Buy an Electric Vehicle now. Federal rebates for EVs are in jeopardy so acting now will save you money on your purchase and your EV will save you money in the long run by not needing to gas up.

It is up to us to elect representatives to congress who will act on our behalf. In the next issue we will publish the list of candidates who support Sierra Club's goals. It is important to vote for representatives who will make the changes we need.

Much of the work for our Sierra Club Mid-Hudson Group is done by a handful of members who are active as members of the Executive Committee or other sub-committees. We recently sent out an email to ask for volunteers. If you have ideas, skills, or related projects that will benefit the community please contact us. Listen to Sandi Schwartz when she tells you that Environmental Volunteering is good for your health and happiness.

Conservation

Mid-Hudson Group Conservation Committee

by Nancy Severns

Danskammer

Let's start off with good news for the Conservation community! An Orange County judge ruled that the NY State Department of Environmental Conservation (DEC) has authority under the state's Climate Leadership and Community Protection Act (CLCPA) to deny permits for new polluting gas plants that interfere with the law's greenhouse gas (GHG) reduction mandates. He dismissed a lawsuit filed by Danskammer Energy LLC seeking to overturn the DEC's denial of a permit necessary for them to build a fracked gas plant in Orange County NY.

Bluestone Wild Forest

The Mid Hudson Group of Sierra Club funded one of the many studies to help convince the Town of Kingston Planning Board to request an Environmental Impact Study for a proposed concrete and steel plant on Route 28. Both our Group and the Atlantic chapter has provided additional funding for on-going legal work. A determination by the Town Building Inspector that the use of the property for storing equipment, vehicles and other construction equipment was a permissible "Contractor Storage Yard" was challenged. A decision in court has not been made on the standing of parties in the suit or the merits of the case.

Wheaton Park and Pelton Mansion

City of Poughkeepsie Mayor Rob Rolison signed a closing agreement on March 29, transferring ownership of Wheaton Park to Pelton Partners, the company of Hudson Valley real estate developer, Steven Tinkleman, and business partner, Wayne Nussbickel. Seven years and multiple meetings with expressed community opposition have gone by.

Meetings

The Conservation Committee meets every other month on the third Thursday of the month at 630pm via Zoom. Our members provide updates on four topics (Route 17 expansion, Bluestone Wild Forest, Danskammer, and Wheaton Park). The next meeting is July 21 2022. Join us! Send an email to Nancy via midhudsonsierra@twc.com in order to receive the Zoom link.



A postcard from the Poughkeepsie Public Library showing children in Wheaton Park, dated 1913

(Conservation continued)

BlueStone Wild Forest

by Marie Caruso

Industrial Projects Threaten The “Gateway To The Catskills”

Decisions are pending on two industrial projects in the Town (not the city) of Kingston that may greatly alter the character of the Route 28 corridor known as the “Gateway to the Catskills”.

Our Mid-Hudson Group and the Atlantic Chapter of the Sierra Club are helping to fund a lawsuit filed by Catskill Mountainkeeper, the Woodstock Land Conservancy, and a Town of Kingston resident challenging the decision of the Town of Kingston’s Code Enforcement Officer and Zoning Board of Appeals (ZBA) to allow storage of vast amounts of heavy equipment and construction materials at 850 Route 28, which is not zoned for industrial use. The ZBA had previously dismissed the plaintiffs’ appeal on the grounds that they lack standing. The lawsuit, filed on March 28, is presently awaiting a decision from Judge Kevin Bryant of the Ulster County Supreme Court.

This is the very site where an application is pending to build a large concrete slab and steel manufacturing facility involving, among other activities, blasting, rock crushing, and heavy truck traffic in the midst of the Bluestone Wild Forest, which almost completely surrounds it. The site extends to the edge of Pickerel Pond, and lies within ¼ mile of Onteora Lake, a very popular area for hiking, fishing, and low-impact water sports.



Thankfully, last July, after two years of public activism, the Town of Kingston Planning Board issued a Positive Declaration that the project may have significant adverse impacts and the developer must file an Environmental Impact Statement (EIS) and undergo a complete SEQRA (State Environmental Quality Review Act) review. However, a year later, there has been no sign of an EIS and the developer, in addition to storing heavy equipment, has engaged in certain construction activities which resulted in a Cease-and-Desist order from the DEC.

Also before the Town of Kingston Planning Board is a proposal for a hot asphalt processing plant at 530 Route 28, an old quarry just inside the Town line, about two miles west of the Kingston Thruway exit. This property, which also adjoins the Bluestone Wild Forest, is quite visible from Route 28. Concerns have been raised about noxious fumes, heavy truck traffic, and various other adverse impacts associated with this industry. Despite this, the Planning Board, on July 18th, issued the project a negative declaration, meaning that it can proceed to be built without an EIS or a full SEQRA review.

You can find more details about these issues on the [Take Action](#) page of our website, and at www.saveonteoralake.org.

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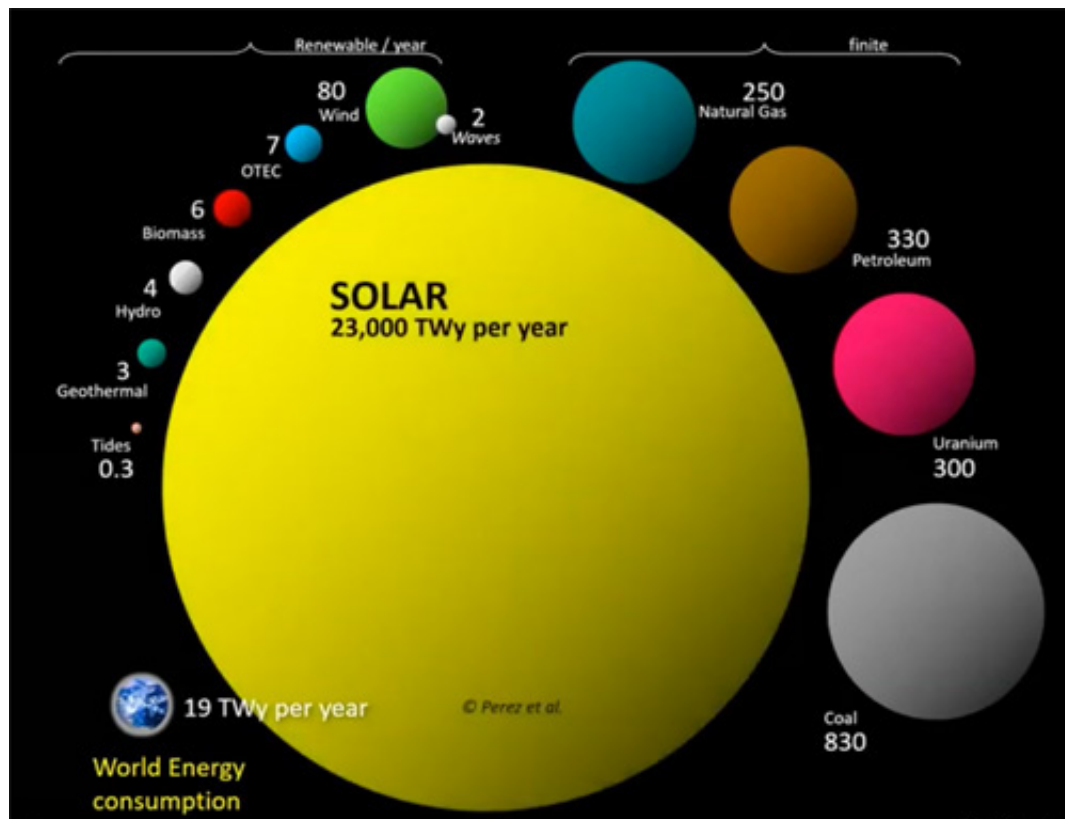
Can Solar Really Power NYS, and the Whole USA?

A group called [United Solar Supporters USA](https://usesusa.org) has some interesting webinars and short films at the Education section of their website. One of these does a scientific analysis of whether we can really provide all the power our state needs from solar. It is a webinar presented by Dr Richard Perez, a Senior Researcher at the Atmospheric Sciences Research Center at the University of Albany. He and his colleagues have investigated this question; first he looks at whether New York State could provide all the energy it would need to power the grid, the heating and cooling of homes and buildings, and electrify the transportation sector by solar (since these three sectors contribute the most to greenhouse gas in the atmosphere), and then expands this to check the potential to do this for every state. His analysis leads to the conclusion that the answer is that it can. It may be he is a bit optimistic or that he missed some factors involved in this complex situation, but his analysis is compelling and quite rigorous. You can view the webinar entitled “Big Solar in New York – Just the Facts” at <https://usesusa.org/education/webinars/>

The initial part of the talk compares the various energy sources in terms of energy they could provide. His chart conveys this using circle size, starting with the non-renewable, finite, extracted materials that are mainly in use (coal, petroleum, uranium, gas, here in decreasing order of available energy), and notes that these sources are projected to only last 80 to 100 more years.

He also notes what the impact is to our planet in continuing to employ them for energy — the devastation wrecked by climate change. The renewable energy sources occupy smaller circles, displaying their potential on a yearly basis: wind is appreciable, but biomass, hydro, geothermal, tidal are generally minuscule (although some of these sources may be significant in the context of the local regions where they are available).

Then comes the solar circle, which dwarfs them all: 28 times that of coal, 70 times petroleum, 77 times uranium, 92 times natural gas. (In case you were wondering, the sun’s energy supply is 280 times that of wind.)



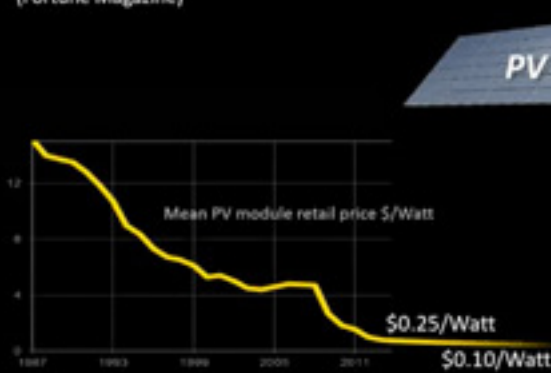
So the energy is there for the taking — renewable, clean, safe, less expensive.

HOW

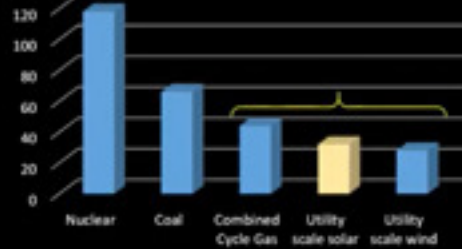
Is solar big enough?
Is it cheap enough?
What when the sun does not shine?

"Solar PV is rapidly becoming the least expensive technologies to generate electricity on a pure energy (kWh) basis"
(Fortune Magazine)

BIG SOLUTION CHEAP SOLUTION



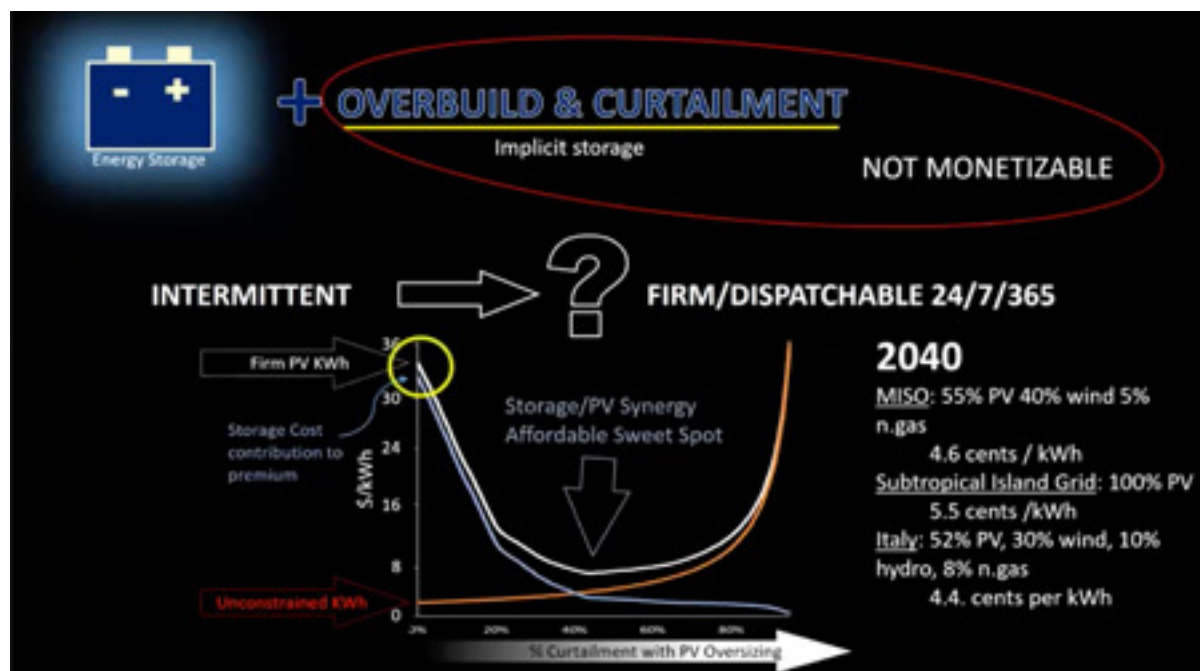
Lazard Bank 2019 – unsubsidized energy production cost (\$/MWh)



Yes, that last characteristic — less expensive — is demonstrated in the presentation when it looks at unsubsidized costs of the energy production: wind and solar are lower cost than nuclear, coal, and combined gas cycle generation. So we can add “cheaper” to the list of attributes. So what’s not to like?

The problem is intermittency: clouds come by or the sun sets, and the power generation stops. A solution is to have storage of the excess energy generated during the day, say in a battery system, to even out power availability. In this case, though, the cost is raised considerably. Although battery storage is getting less expensive, it is not projected to reach the low numbers needed to be competitive. Having wind be a complement source could help in some areas, say the coasts or the Midwest.

Dr Perez proposes a very counter-intuitive solution which reduces battery usage: overbuild the solar by some 50% and when there is energy over-production beyond that needed for charging some minimized storage, just throw it away — “curtail”, in energy sector parlance. Crazy? The analysis numbers back up this claim. We would still need some battery or other storage mechanism to get through the night, but it is minimized.



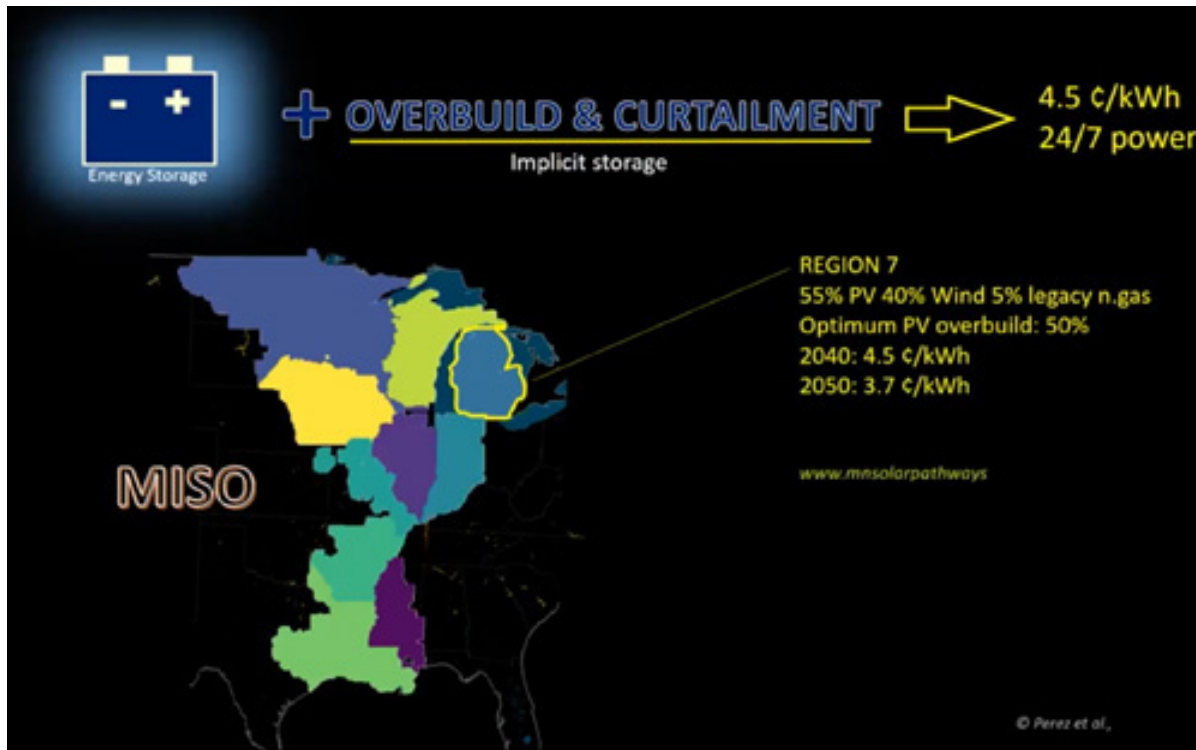
If you over-build, when a cloud comes by or there is snow falling, despite the generation overall being lower, there is still enough to meet demand.

In the chart, the horizontal axis is the percentage of solar over-build used in the analysis and the vertical axis is cost of the energy. The cost of the storage needed to eliminate the intermittency problem is the decreasing line left to right (as you build more PV panels, you need less storage to dampen the intermittency); the line rising to the right is the cost of the solar, showing the cost of setting up more panels; but the U-shaped line is the little miracle — combining the costs hits a minimum “sweet spot”. According to the analysis, therefore, the solar intermittency can be eliminated at a minimized cost with minimized storage by overbuilding the solar by about 50%.

I was scratching my head when I first saw this, and maybe you are as well. I am hoping that there is no error, no mistaken assumption or other glitch in the reasoning and analysis that brings it all crashing down. It was published in 2020 and has not been challenged that I am aware of. All of this work was published and is in public view.

Dr Perez and colleagues then applied the methodology to study a large existing grid network, the Midcontinent System Operator (MISO), which encompasses a large swath of several states in the Midwest, serving an area from Louisiana’s gulf up to Canada. Each region within the grid was studied and the webinar presents results from Region 7 of the MISO, which consists mostly of Michigan and was deemed typical (and having quite similar characteristics to NYS).

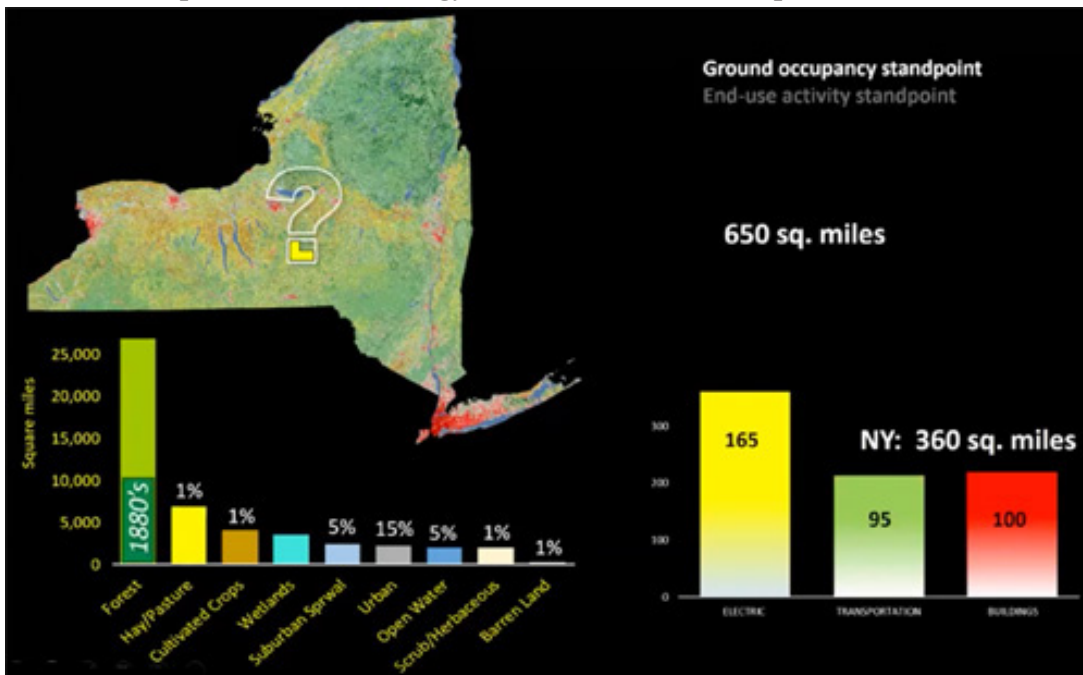
The analysis showed that the optimal result was achieved by sourcing the energy needs from a mix consisting of 55% solar, 40% wind, and keeping a scant 5% from gas; the optimum over-build of the solar turned out to be 50%. This would result by 2040 in a cost of 4.5 cents/KWhr and 3.7 by 2050.



That provides power 24/7/365, with very little fossil fuel use.

But perhaps one would say that the problem lies in how much land this overbuild would consume. Dr Perez and his colleagues looked into that as well. They applied that same mix and overbuild to New York State’s energy needs for the transportation/grid/buildings sectors. For New York State’s energy needs for those sectors (estimated at 330 TWhr, that’s trillion watt hours), the analysis indicated that 189GW of solar energy would be required. That comes out to 360 square miles. That sounds enormous, but to provide perspective,

corn for ethanol production in the US covers 50,000 square miles, with 100 in NYS (and it is unclear if corn ethanol even produces more energy than it consumes in its production). For actual area perspective, that



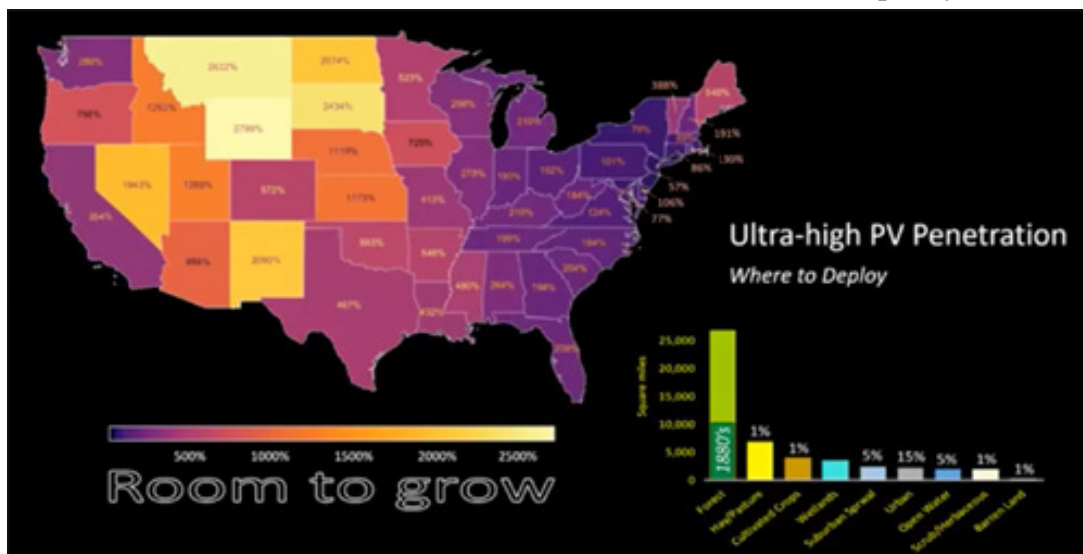
360 square mile area is the size of the yellow region in the figure, inside the question mark.

But where would the 360 square miles come from? Analysis of the “ground occupancy” (what portion of NY’s area is forest, wetland, farmland, urban, suburban, etc., as shown by the bar graph in the figure) was performed. If 15% of urban area (parking lots, roofs, etc.), 5% of suburban,

5% of open water (floating solar), 1% of pasture/hay land, 1% of cultivated cropland, 1% of barren land, 1% of scrub/herbaceous land were put to solar use, this scenario yields 650 square miles, much more than needed according to the analysis. The distribution of this more localized energy resource also placed less demand on long distance power transmission.

Roofs in urban and suburban areas (buildings, industrial sites, homes), power line, railroad, and gas line right-of-ways, and expressway medians, landfills/industrial and mining exclusion zones, and parking lots could all possibly be utilized as solar area.

Dr Perez feels that technology is not what is limiting our solution to the energy part of global warming. What is missing is political will to get the regulations and policies in place for an overall plan for the land usage to deploy the solar. With good communication and negotiation and planning, he feels such an agreed-to overall plan would ease tensions with utilities and communities in accepting solar projects. The team did the same exercise for each of the other states as was done for NYS and found plenty of “room to grow”.



If this analysis has piqued your interest, please view the webinar. Go to the [United Solar Energy Supporter's](#) website for other talks on related topics, such as agrovoltaics. And I welcome your feedback on this topic.

The Sum of Us: What Racism Costs Everyone And How We Can Prosper Together

Heather McGhee's *The Sum of Us: What Racism Costs Everyone And How We Can Prosper Together* came to my attention for this book review series when I was discussing Environmental Justice with a friend. He had just finished the book and felt it would provide a good basis to explore the subject.

McGhee's overall thesis is that we are all better off when policies are created which recognize everyone's humanity. Policies designed to benefit all people and improve society ultimately provide a better quality of life for everyone. This is in direct opposition to the zero-sum theory which purports that there is only one "pie". People who subscribe to this theory believe that when the people who have a smaller piece of this pie are afforded opportunities and make gains, everyone else will therefore have a smaller piece of the pie. In other words, when those in the margins are supported, others will somehow lose out. The zero-sum principles are racist in their origins, yet they affect many marginalized white people too.



By taking a good look at our history, so much of which we were not taught in school, McGhee shows how the zero-sum theory caused (and continues to cause) much harm. She looks at inequality of wealth, housing inequity, onerous student debt, poor working conditions, poorly performing public schools and lack of support for infrastructure as being tied to racism's role in forming our public policies.

Overall, the book explains how zero-sum policies contribute to many social ills. It includes personal stories told by people who opened up with McGhee while she wrote this book. Their contributions both keep this book grounded in reality and tend to provide reason for hope. Many of the stories involve people who are working across racial divides to great effect. They achieve what McGhee calls the Solidarity Dividend.



"We all live under the same sky" at Duck Lake in the Mohonk Preserve

on environmental racism, Dr. Benjamin Chavez Jr. found that "race was the most important predictor of proximity to hazardous waste facilities in America and that three out of five black and Latinx Americans lived in communities with toxic sites." In another study, it was found that communities that are more segregated had more known carcinogens in the air.

McGhee relates all of this to Environmental Justice in the chapter entitled "The Same Sky". She looked at various studies related to the climate crisis. Here are a few of the findings: "The Yale Project on Climate Change Communications found that of the six categories of American opinion about climate change, the 'Dismissive' were more likely to be white, male and have higher incomes." In Houston, "What we found were that one hundred percent of all the city-owned landfills were located in black neighborhoods...". In the first nationwide study

A key point is being made. When those in power do not care about everyone who lives in a community, air and water quality is not well regulated. This is due to the fact that the those in power are often more concerned about themselves and those who look like them. They believe they will not be harmed by pollution because they live elsewhere. In truth, even those living in parts of a city or town separated from the sources of pollution are actually exposed to more toxins than those living in an integrated community where regulations are in full effect:

Like the zero-sum story, it's all an illusion—white men aren't truly safe from climate risk and we can have a different but sustainable economy with a better quality of life for more people. But how powerful the zero-sum paradigm must be to knock out science and even a healthy sense of self-preservation. And how dangerous for us all.



“We all live under the same sky” at Whitehall, on the shores of Lake Michigan

The point is thus made that “segregation brings more pollution for white people too. It turns out that integrated communities are less polluted than segregated ones.”

Heather McGhee’s excellent book shares her discoveries and insights. To use this framework when thinking about an approach to environmental protection and advocacy is helpful.

The Sierra Club and other environmental movements are now engaging in issues related to Environmental Justice. The recent Supreme Court ruling that restricts the EPA’s ability to regulate air quality is of concern as it will add a burden to communities that are already in peril. It is incumbent upon all of us that we learn about and think about these issues as we cast our votes in the upcoming elections.

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Why Environmental Volunteering is Good for Your Health and Happiness

By Sandi Schwartz

As environmentalists fighting to improve our planet, we are attuned to the multiple crises we are facing, whether it be climate change, single-use plastics, species extinction, overdevelopment, and more. It can be quite the uphill battle to try to save the planet, and this can sometimes cause us to feel big emotions like stress, anxiety, anger, and even despair.

However, the good news is that by getting involved and volunteering, we can feel happier, healthier, and calmer. And there's science to prove this!

When we volunteer in our community, we can experience a physiological change called a “helper’s high”. This euphoric sensation happens when our brain releases endorphins, making us feel elated and excited. Giving back also stimulates the vagus nerve, which is linked to the production of oxytocin, a hormone that soothes us. As a result, we experience positive health changes including less stress and a boost in happiness.

Volunteering can also help us stay healthy and live longer, improving physical health such as lowering blood pressure. According to research, volunteers are happier and healthier than non-volunteers, and volunteering later in life can have a bigger impact on health than even exercising or eating well. Other benefits of volunteering include experiencing more compassion, feeling more connected to our community, gaining confidence and personal satisfaction, feeling empowered, having a purpose, being more grateful for what we have in life, and viewing the world from a broader perspective—all linked to greater joy and reduced stress.

Additionally, spending time in and around nature is beneficial to our health and well-being. The natural world offers solace and comfort, calming when we are stressed and uplifting our mood when we feel down. In fact, spending time outdoors volunteering enhances positive emotions and increases general health. Much of this is due to nature’s many healing attributes, such as vivid colors, invigorating scents, attractive patterns, soothing sounds, fresh air, and awe-inspiring scenes.

Sierra Club provides a positive outlet to make a difference and feel better at the same time. Whether you participate in a cleanup, planting, or trail maintenance locally as a group or create your own [Team Sierra](#) initiative to raise funds to support Sierra Club’s work for climate, wildlife, and wild places, there are endless opportunities for environmental volunteering through our organization. You might also have a local [Inspiring Connections Outdoors](#) (ICO) program to get involved with, which empowers youth from communities with limited access to connect and reconnect to the outdoors. ICO helps create the next generation of environmental justice and social justice leaders through building community and increasing exposure to outdoor recreation, advocacy, and leadership training.

What other ways can you and your group get involved with environmental volunteering to feel happier and calmer? To discover additional ideas and to learn more about why nature is so healing, check out the book [Finding Ecohappiness](#).

Sandi Schwartz is an author, journalist, and editor of her Sierra Club Group newsletter. As the founder and director of the Ecohappiness Project, her mission is to inspire and educate families to build a nature habit to feel happier and calmer. Her book, *Finding Ecohappiness*, is available now. Learn more at www.ecohappinessproject.com.



Your Sierra Club Group Needs You!

You can help us protect our local environment.

Your Mid-Hudson Group is led by its nine member Executive Committee (ExCom). Like you, they are Mid-Hudson citizens concerned about our local, national and global environment. With so much at stake, we are asking our members for help.

We truly appreciate you being a Sierra Club member — thank you for your support — but have you ever thought about getting more involved to help the environment? We are seeking volunteers to assist our ExCom members or to take a more active role and join the ExCom. It only takes a few hours a month to make a difference.

Here are some ways you can participate:

- Join our Executive Committee and add your voice for the environment. We are holding ExCom elections this Fall. If you are a member of our Mid-Hudson Group you are eligible to join the ExCom.
- Do you have particular areas of expertise or interest? Consider helping ExCom members whose focus is one of these areas: Conservation, Legislation, Energy, Political, Outings, Fundraising. Most communication is via phone and email. Each one of these areas offers opportunities for you to contribute to our mission of environmental protection.
- We are seeking Sierra Club members who want to share their love of the outdoors by becoming an Outings Leader. An outing can be a day of photography, bird watching, hiking, biking, or walking an estate — whatever you like to do and would want to share. If you think you would enjoy helping others get outside this is a great chance for you to share your enthusiasm of the natural world.
- We are currently seeking someone to improve our online presence with programs to educate our members about actions they can take in their personal life and neighborhood to combat climate change and reduce the use of fossil fuels. The Legislative Committee does an excellent job of affecting Legislation, but we need to change individual behavior as well. If you are good at using Zoom for organizing education sessions, spreading the word through social media, (Instagram, Twitter) and have organization skills, you can help. All work will be remote via computer — no travel required. You are only needed a few hours per month — but it would help us a lot.
- Want to volunteer but the choices listed above don't quite fit your interests or skills? Contact us and we will work with you to find a role that suits you.

If you can spare a few hours a month you will be rewarded with the knowledge that you are making a difference. Join other like-minded Sierra Club members and enjoy the comraderie and satisfaction that comes with taking positive action to protect the environment.

Please contact us and we will be happy to answer any questions you may have. Send an email to midhudsonsierra@twc.com. This is our Group's general mailbox so please be sure to specify what you are interested in. Don't forget to include a phone number so we can contact you. Thank you in advance for your help.

Make A Gift - Make A Difference

Our local group depends on the support of volunteers and the generosity of our membership. The work of the group takes Sierra Club volunteer effort, and of course funds. We hope that you will consider making a gift to the Mid-Hudson group of the Sierra Club. In these turbulent times it's vital that we all do what we can to speak out and work for the protection of our environment and the future of our world. We welcome and appreciate your support, and encourage you to consider providing financial support for our efforts. Our mailing address is at the bottom of this newsletter.

To speak about specific opportunities, or with any questions, please contact David Friedman, [Friedman David@msn.com](mailto:FriedmanDavid@msn.com) or our Treasurer, George Treutle, georgetreutle06@gmail.com.

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Contact Us

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You can find the names of our Executive Committee members on our website:

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