SB931-HB1036_CPSR_FAV_EEE-ECM_28Feb2025 (1).pdf Uploaded by: Alfred Bartlett, MD



Committee: Education, Energy and the Environment / Economic Matters

Testimony on: SB931 / HB1036 "Public Utilities - Generating Stations - Generation and Siting

(Renewable Energy Certainty Act)"

Position: Favorable

Hearing Date: February 28, 2025

The Chesapeake Chapter of Physicians for Social Responsibility (CPSR) submits this testimony in support of SB931 and HB1036, which provide important provisions and requirements regarding solar and battery development in the state, as well as requirements and protections related to residential solar. These forms of "Distributed Energy Resource" are among the lowest cost forms of energy now available – they are readily buildable, affordable, and essential to the clean energy transition the state is committed to. They can be built across the state, adding low-cost energy and stability to the electricity system in all utility territories.

This category of distributed resource includes the state's Community Solar Energy Generating System (CSEGS) program, which the legislature made a permanent part of our energy system in 2023. As a permanent program, Community Solar creates the possibility for the estimated three-fourths of Maryland residents who can't have solar on their own roof to get power from low-cost locally generated truly clean renewable energy. Under the program, Community Solar projects are required to include at least 40 percent of their customers from households with low- or moderate income (LMI). They are also required to provide their electricity at a discount from standard utility service, with deeper discounts for those LMI households.

However, the ability to develop these distributed energy resources is extremely uneven, with a wide array of local approaches even within a given utility area, creating an uncertain development process. From 2015 until the passage of the Community Solar permanent program, CPSR participated in the Public Service Commission's Work Group that developed the regulations and monitored and managed the CSEGS pilot program. During the PSC Work Group's work on the CSEGS pilot program, it became clear that this variability and uneven restrictions were a rate-limiting step on Community Solar development.

Since that time, experience has confirmed that basic provisions and requirements governing these essential Distributed Energy Resources are overdue. Their passage will establish needed order that will enhance the appropriate development of the clean renewable energy that we need to meet our clean energy and Greenhouse Gas Reduction goals.

Among this bill's provisions are:

- For ground-based projects including Community Solar Energy Generating Systems (CSEGS) that are larger than 2 megawatts (MW) size and therefore require approval under a Certificate of Public Convenience and Necessity (CPCN), or that otherwise require approval by the state's Public Service Commission (PSC), the bill provides standard requirements including
 - When applying for approval, full notification of the state and local government representatives of the site location and other potentially affected nearby area;
 - Also, full notification of local residents and property owners, with extra attention to residents and property owners if a project is located in an overburdened or underserved community;
 - Substantial but not excessively burdensome experience-based siting requirements, including setbacks, visual and spatial buffers, fencing, preservation of topsoil, and runoff control using native plantings.
 - A decommissioning agreement secured with a fully funded surety bond;

- Relief from personal and real property taxes, while allowing the establishment with the local jurisdiction of a Payment in Lieu of Taxes (P.I.L.O.T.) agreement.
- In appropriately adapted form, these requirements and conditions also are established for energy storage devices, *i.e.*, batteries.
- Local jurisdictions are empowered to establish by ownership, operation, or management through a
 contracted subscriber organization one or more CSEGSs that will provide Automatic Enrollment for
 persons living within a designated area.
 - This enrollment will automatically provide local customers and ratepayers with access to low-cost locally produced clean renewable energy, at a cost that is mandated to be discounted from utility Standard Offer Service.
 - Customer choice is ensured by including a no-fault opt-out option for all customers.
 - Participation is limited to residential customers, but includes eligible households living in multifamily housing, who otherwise often cannot participate in Community Solar.
 - Importantly, at least 51 percent of participating households in such an Automatic Enrollment Project must be LMI households.
 - For those LMI households, the Act maintains the possibility of participation in energy assistance programs.
- Finally, for residential rooftop solar development, the Act provides for critical standardized customer protections that have been missing, including:
 - Five-year warranty of installation and equipment;
 - Certification that installation and equipment comply with all established standards;
 - Appropriate safety standards for installation and maintenance of residential rooftop solar systems and minimum required qualifications for residential solar installers and maintenance, to be developed by the PSC.

Despite the Automatic Enrollment component, one area the bill does not completely address is the limited ability of families living in some multi-family housing to participate in Community Solar. Although exact figures aren't available, it's estimated that about one of every three Maryland households live in multi-family housing. A large proportion of such housing is "master-metered," meaning that individual households don't have their own separate account and billing... and therefore can't sign up for Community Solar. The PSC has been charged with developing a solution to this problem, but so far has not. Since we don't have the answer, we cannot propose an amendment; but we would encourage the legislature and the Administration not to forget these families, many of whom are renters and would greatly benefit from the dependably low-cost electricity that Community Solar provides.

Overall, however, establishing the straightforward, experience-based requirements in SB931/HB1036 will provide essential clarity and certainty that has been lacking from the state's Distributed Energy Resource development environment. These straightforward, essentially cost-free requirements will substantially improve that development, resulting in greater access to locally produced clean renewable energy for our citizens and accelerated progress toward our climate and clean energy goals.

We therefore respectfully request a favorable report on SB931/HB1036.

Alfred Bartlett, M.D., F.A.A.P. Board Member and Energy Policy Lead Chesapeake Physicians for Social Responsibility alfredbartlett@msn.com 240-383-9109

HB1036_CCAN_Baker_FAV.pdf Uploaded by: Brittany Baker



HB1036/SB931- Public Utilities- Generation Stations- Generation and Siting (Renewable Energy Certainty Act)

Testimony of Brittany Baker, Maryland Director Chesapeake Climate Action Network (CCAN) Action Fund FAVORABLE February 28, 2025

Chair Feldman, Vice Chair Kagan, Chair Wilson, Vice Chair Crosby, and Members of the Education, Energy, and Environment and Economic Matters Committees,

This bill is the most important piece of energy equity legislation this year. The central premise is two-fold. First, this bill ensures the red tape that has prevented the full deployment of solar and battery storage is lifted. It is not fair to say that wealthy, bucolic communities can ban clean energy infrastructure and that overburdened, underserved communities should continue to suffer the harms of polluting fossil fuels because of "not in my backyard" attitudes. This bill rights that wrong.

Secondly, this bill codifies the fact that all communities are equally important by advancing reasonable, community friendly guidelines for the siting of large solar and battery projects. These guidelines include vegetation screenings and setbacks. These are common sense siting practices that all communities deserve.¹

In addition to providing much needed clarity on solar and battery siting, the Renewable Energy Certainty Act supports homeowners' ability to confidently choose to have solar on their roofs. When someone signs a contract to have solar installed on their homes, they deserve to feel certain their contractor will do good work and keep their word.

Solar² and batteries ³ are the fastest and most affordable way to add new energy to the grid. Ensuring these technologies can be deployed at scale is key to meeting Maryland's projected increases in electricity demand. This bill protects Maryland homeowners and communities, codifies equity in solar and battery deployment, and will support our ability to be energy independent and have lower utility bills.

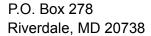
I urge a favorable report on HB1036/SB931.

¹ https://www.nlc.org/article/2023/06/09/the-power-of-community-beauty-transforming-small-cities-for-success/

² https://www.carbonbrief.org/solar-is-now-cheapest-electricity-in-history-confirms-iea/

³ https://www.brattle.com/insights-events/publications/real-reliability-the-value-of-virtual-power/

SB 931_HB 1036_MDSierraClub_fav_28February2025.pdf Uploaded by: Carlo Sanchez





Committee: Education, Energy, and the Environment/ Economic Matters

Testimony on: SB 931/HB 1036, Public Utilities - Generating Stations - Generation and

Siting (Renewable Energy Certainty Act)

Position: Favorable

Hearing Date: February 28, 2025

Introduction:

The Maryland Chapter commends General Assembly leadership for addressing our energy challenges head on. Marylanders are facing increasing electricity rates and growing energy demand, and bringing energy generation online is not currently keeping pace. We commend MGA leadership in working hard to find solutions to expand energy generation, improve regulatory oversight, and reduce rates for Maryland ratepayers. Sierra Club supports many provisions proposed in the leadership energy package and appreciates the opportunity to be part of this important conversation.

This testimony provides a summary of our position on the leadership package as a whole, followed by specific comments on SB 937 / HB 1035.

SB 931/ HB 1036 – Renewable Energy Certainty Act

Sierra Club supports SB 931/ HB 1036, which will create statewide siting standards for solar and battery storage projects and establish consumer protections by setting standards for installers.

SB 909/ HB 1037 – Energy Resource Adequacy and Planning Act

Sierra Club supports SB 909/ HB 1037, which will build much-needed staff capacity within the Maryland government to engage in assessing resource adequacy and to facilitate long-term scenario planning. Combined with improved utility planning via the Affordable Grid Act (SB 908/ HB 1225), this bill will ensure Maryland is planning for the energy future it wants and has everything it needs to reach that future.

SB 937 / HB 1035 – Next Generation Energy Act.

Sierra Club appreciates the intent of SB 937/ HB 1035 – to create new incentives and remove regulatory barriers to deploying new energy technologies. We support provisions to restrict out-of-market deals between data centers and energy generators, which could harm Maryland ratepayers. While we commend the broad definition of "dispatchable energy" used in the bill, we believe that the procurement mechanism proposed would not be effective in increasing battery storage deployment in the State. Moreover, we cannot support legislation that would incentivize or accelerate fracked-gas generation or new nuclear power.

Remarks on SB 931/ HB 1036 – Renewable Energy Certainty Act:

Sierra Club supports SB 931/ HB 1036, which will create statewide siting standards for solar and battery storage projects and establish consumer protections by setting standards for installers.

Solar energy is an essential component of our clean energy future. The lower cost of solar energy generation as compared to fossil fuel generation and the huge increase in solar energy manufacturing capacity in the U.S. – surpassing 50 GW – is proof that with the right policies and investments, solar can be a win not just for the environment, but also for the hardworking families who will see lower energy bills and more stable jobs in the green economy.

Through the Clean Energy Jobs Act (2019), Maryland set the statutory target of achieving 14.5% of the state's electricity consumption from solar generation by 2030, and has reaffirmed its commitment to this goal through the 2023 Climate Pollution Reduction Plan.

Maryland has made progress in increasing solar deployment. Solar energy is an essential component of Maryland's strategy in transitioning the state to clean renewable energy. Solar currently provides almost 7% of Maryland's in-state generation, enough to power 282,645 homes. The solar industry supports 4,973 jobs. Solar comes in all shapes and sizes, from large utility-scale solar projects that can provide several hundred megawatts of power, similar to a small power plant, to community systems that may power a hundred homes, to small residential rooftop systems.

Solar can grow more rapidly in the near term than any other energy source. There are thousands of megawatts of solar projects slated for Maryland in the PJM Queue, which are waiting to be deployed. Further, residential and community solar have the advantage of not requiring interconnection through the PJM Queue, a complicated process required for large power plants that can delay new power for four or more years.

However, several factors have impeded solar from reaching its full potential, and Maryland is falling far short of achieving its annual solar energy targets. Maryland must ensure that PJM clears the projects in its Queue so they can be built expeditiously. But even if this is addressed, progress may be slow because of onerous and arbitrary local zoning rules and permitting processes.

Maryland needs statewide standards for solar

SB 931/ HB 1036 seeks to address the specific challenge of overly onerous local zoning ordinances and provide certainty to the growing clean energy technology industry. Establishing

¹ https://seia.org/state-solar-policy/maryland-solar/

certain requirements for the construction of a CPCN scale solar energy generating station or energy storage device will provide standardization and level expectations.

The legislation proposes standardized rules, including setbacks, height limitations, and bonding, as well as processes that require public notification and engagement. The legislation does not change current law that directs the Public Service Commission (PSC) to give consideration to concerns from local governments. Further, we want to reinforce that solar and storage projects will still be subject to environmental land use laws.

We recognize that communities have concerns about local control, and there are specific concerns about local environmental impacts, such as loss of farmland. We encourage legislators to engage with stakeholders and consider additions or changes to the bill that will still have the intended impact while also addressing specific local environmental or landscape impacts.

The Maryland Sierra Club strongly appreciates that during the 2025 legislative session, the General Assembly has prioritized discussing a variety of energy policies that focus on deploying clean energy and grid enhancing technologies in a way that is quicker, more affordable, and targeted to improve grid reliability. Particularly at a time when Americans are facing uncertainty and rising electricity costs, it is refreshing that Maryland's public officials are so thoroughly discussing potential solutions. We appreciate concerns raised by local government and conservation groups and look forward to reviewing amendments from different stakeholders that reflect an even broader consensus proposal.

Sierra Club supports the Renewable Energy Certainty Act and looks forward to taking part in this ongoing conversation. We encourage a favorable report on SB 931/ HB 1036.

Mariah Shriner Climate Campaign Representative Mariah.Shriner@MDSierra.org Josh Tulkin Chapter Director Josh Tulkin@MDSierra.org

CCSA testimony_SB 931 and HB 1036_2-28-2025.pdf Uploaded by: Charlie Coggeshall



1380 Monroe Street NW, #721 Washington, DC 20010 720.334.8045

info@communitysolaraccess.org www.communitysolaraccess.org

RE: SB 931 and HB 1036 - Renewable Energy Certainty Act

Favorable

Chair Feldman, Chair Wilson, and members of the Senate Education, Energy, and Environment Committee and the House Economic Matters Committee,

The Coalition for Community Solar Access (CCSA) provides this written testimony regarding Senate Bill (SB) 931 and House Bill (HB) 1036. CCSA's position on this legislation is Favorable.

CCSA is a national, business-led trade organization, composed of over 100 member companies, that works to expand access to clean, local, affordable energy nationwide through the development of robust community solar programs. Community solar projects involve medium-scale solar facilities that are shared by multiple community subscribers who receive credit on their electricity bills for their share of the power produced.

CCSA has been an active participant in the development and implementation of Maryland's community solar pilot program, and we are grateful to this Committee for supporting the passage of SB 613 and HB 908 in 2023, which made community solar a permanent solution in Maryland. As a result, community solar will play a critical role in helping the state meet its energy requirements while also ensuring electricity cost savings for those that need it most, ensuring at least 40% of all capacity benefits low-and-moderate income customers.

SB 931 / HB 1036 would establish siting standards for ground-mounted solar systems and for storage systems, while preventing local jurisdictions from denying projects that meet those standards. It would also enable an option for local governments to establish a "community solar automatic enrollment program" whereby customers could be automatically enrolled as subscribers to an automatic enrollment community solar project.

CCSA appreciates the Senate and House Leadership on SB 931 / HB 1036, and particularly its emphasis on reducing barriers to siting solar systems in Maryland. Siting remains the greatest challenge to community solar development and is CCSA's top priority among market issues that need to be addressed. CCSA supports the SB 931 standards, in addition to the recommended edits (redlines) submitted in testimony by the Chesapeake Solar & Storage Association and Solar Energy Industries Association.

Further, CCSA supports related legislation that reduces siting barriers, via Senator Brook's SB 983 and Chair Clippinger's HB 827, which complement SB 931 / HB 1036 and would create a more efficient and right-sized permitting process for qualifying community solar projects that require a Certificate of Public Convenience and Necessity. Combined, these parallel legislative efforts will result in making Maryland a national model on solar siting while accelerating the deployment of much-needed clean energy in the state.

CCSA also supports the creation of an automatic enrollment option for local governments engaged in community solar, while acknowledging it as a relatively significant market change that merits discussion.



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CCSA appreciates the Senate and House Leadership's dedication to solving the complex challenges associated with Maryland's energy needs and we endorse the direction taken in SB 931 / HB 1036. We also look forward to continuing to work with the Chairs and respective Committees on this important legislation.

CCSA urges a favorable report on SB 931 and HB 1036.

Sincerely,

Charlie Coggeshall
Mid-Atlantic Director, CCSA
charlie@communitysolaraccess.org

Testimony of Douglas H Boucher -SB0931 -MD General Uploaded by: Doug Boucher

Testimony of Douglas H. Boucher

in support of the Renewable Energy Certainty Act

(S.B. 0931/H.B. 1036)

Maryland General Assembly, February 28, 2025

Chair Feldman, Chair Wilson and members of the Committees:

Thank you for the opportunity to testify today in support of S.B. 0931. I speak to you as a retired climate scientist and as a long-time District 15 constituent; my wife Charlotte and I have lived for 28 years on the family farm in Montgomery County's Agricultural Reserve.

For more than five years, working with Chaberton Energy, we have tried to lease some of our farmland for a community solar project that would provide clean energy to hundreds of families. But we have faced a major obstacle --- Montgomery County's zoning, which makes it extremely difficult to build solar projects in the Ag Reserve. Since this zoning was adopted in February of 2021, there have only been two applications for

solar projects. At this rate, the goal of the zoning – 1800 acres, or less than 2% of the Ag Reserve – will not be reached till **296 years from now**.

This effective ban on solar in the Ag Reserve is related to a misunderstanding of its land use. The USDA's Census of Agriculture shows that only 1.2% of Montgomery County farmland is used to produce fruits and vegetables for human consumption. Overwhelmingly, county farmland produces livestock feed (corn, soy, hay and pasture), which makes up 70.2% of the area harvested.

	% of farmland harvested	
	2017	2022
	<u>(%)</u>	<u>(%)</u>
Corn	21%	19%
Soybeans	22%	26%
Hay and other forages	14%	11%
Pastureland	14%	14%
TOTAL	70.7%	70.2%
Vegetables	0.7%	0.6%
Orchards	0.5%	0.5%
Berries	0.1%	0.1%
TOTAL	1.3%	1.2%
Total Farmland (acres)	65,537	69,759

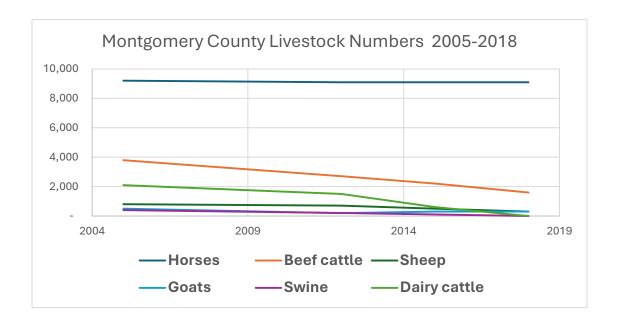
Source: USDA-NASS, 2022 Census of

Agriculture

County Data section

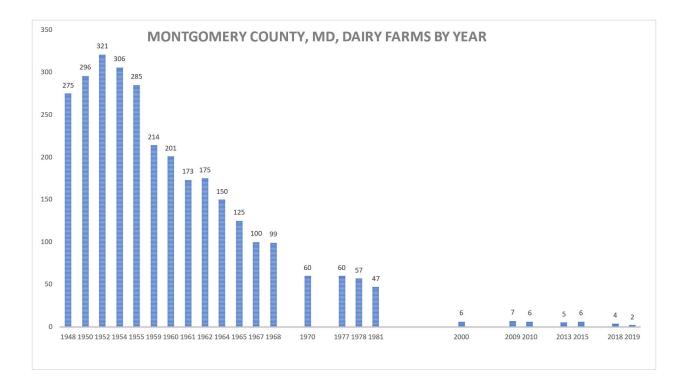
Tables 1, 25, 26, 28, 31, 32

But doesn't livestock feed go to produce the meat and milk we eat? Not in Montgomery County. The large majority of the county's livestock consists of **horses for recreation** – 9,100 head, versus 1,600 beef cattle and less than 500 each of dairy cattle, sheep, goats and swine.



Source: Montgomery County, MD (2020) Community Greenhouse Gas Inventory, Inventory Inputs tab

When I was born in 1950, the county had 296 dairy farms; today only 2 are left.

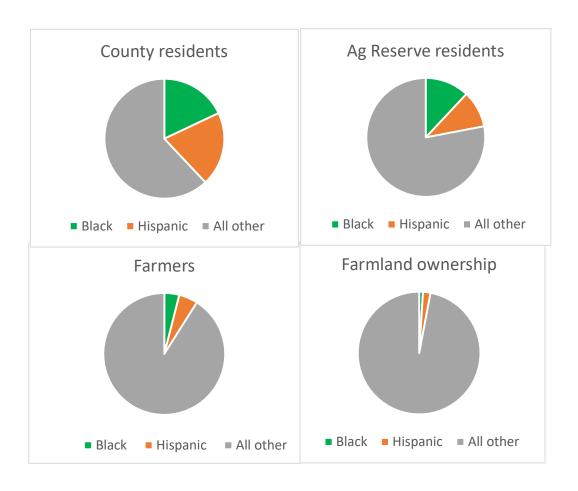


Source: King Barn Dairy MOOseum, Germantown, MD (2022)

I'd like to make one last point, relating to the issue of climate justice.

38% of county residents are Black and/or Hispanic, but they make up only 22% of Ag Reserve residents and just 9% of the county's farmers.

And their farms are much smaller than those of White farmers, so they own just 3% of county farmland.



Source: USDA-NASS 2019. Census of Agriculture, 2017.

Maryland, State and County Data.

Volume 1, Geographic Area Series, Part 20, Report AC-17-A-

20

Tables 48 though 54

This inequity is important to take into consideration when deciding whether to continue excluding community solar from the Ag Reserve, in order to benefit farms that produce feed for horses.

In conclusion, I urge you to favorably report S.B. 0931, to support both clean energy and the cause of climate justice.

FAV.James Lewis.Farmer

Uploaded by: James Lewis

I am in favor of SB0931. There are a small group of farmers that are paying cheap land rent and don't like any competition for that land. So, they are not in favor of solar being a competitor. Most landowners are in favor of this bill. Most landowners are not members of Farm Bureau. And in fact Farm Bureau members are split on the issue. It waffles back and forth from 49:51 to 51:49 depending on who shows up to vote. Landowners should not face eminent domain to take land for solar, but they should have the option to use their land for solar. County governments aren't trained in land use and don't look at the big picture and benefits to the citizens of the state. As a farmer, I want the citizens of the state to purchase/consume the food I produce for them. I am ok using my land to help provide energy to them also. I don't want to be mandated to do it, but want the option. It is my land. As long as I am not causing harm to the environment or preventing my neighbors from using their property, I should be allowed to use my property as I want. SB 0931 allows everyone to give comment and be part of the process.

Renewable Energy Certainty Act Joint Testimony .pd Uploaded by: Jamie DeMarco















Favorable Testimony for The Renewable Energy Certainty Act

SB0931/HB1036

Joint Senate Education, Energy Environment and House Economic Matters Committees 2/28/2025

On behalf of the organizations listed above, I urge a favorable amendments report on SB0931/HB1036. The Renewable Energy Certainty Act will protect Marylalnd consumers and allow more people to reap the benefits of affordable solar and battery power.

Solar and batteries are now the fastest and most affordable way to generate new, dispatchable energy generation, and ensuring these technologies can be deployed at scale is key to meeting Maryland's projected increase in electricity demand. As <u>a recent Brattle study</u> found, batteries on the distribution or utility grid can meet new energy demand for less than building a new gas plant in Maryland.

One of the tremendous benefits of solar and storage energy is that they are distributed and allow thousands of people to benefit from electricity generation, rather than only a few. The flip side of this distributed benefit is that every region in Maryland must play their part.

Unfortunately, today there are people who want to install solar and/or batteries on their land, but are prohibited from doing so by their local municipality. As we are working to tackle the climate crisis and generate more electricity in-state, we cannot afford to prohibit residents from participating in the clean energy economy.

The Renewable Energy Certainty Act provides Maryland residents with the certainty that if they want to deploy solar or batteries they will be able to. Removing these self-inflicted, arbitrary bans on clean energy will unlock additional clean energy deployment, allow more Marylanders to generate revenue from electricity, and improve air quality for everyone. The bill also codifies

best practices for solar siting including setbacks and vegetative screens to ensure every solar and batteries.

In addition to providing much needed state guidance on permits for solar and battery construction, the Renewable Energy Certainty Act also provides certainty for people installing solar on their homes by codifying more regulations to reduce the chance of a homeowner being harmed by a fly-by-night solar installer. When someone signs a contract to have solar installed on their homes, they deserve to feel certain their contractor will good work and keep their word. That's what the Renewable Energy Act helps provide.

We urge a favorable report on SB0931/HB1036.

HB1036_Chaberton_Miller_FAV.pdf.pdf Uploaded by: John Miller



February 28, 2025

To: House Economic Matters Committee

Senate Education, Energy, and the Environment Committee

Re: **HB 1036 / SB 0931**: Public Utilities- Generating Stations- Generation and Siting-Renewable Energy Certainty Act - **FAVORABLE**

Chairs and members of the House Economic Matters Committee and the Senate Education, Energy, and the Environment Committee:

My name is John Miller. I live in Woodstock, Maryland located in Howard County. I represent Chaberton Energy ("Chaberton"). We are a Maryland based renewable energy company headquartered in Rockville, Maryland located in Montgomery County. We are a leading developer in the state's Community Energy Generating Systems ("CSEGS") Program. Just last year, Chaberton was named to the Inc. 5000 list as both the 34th fastest-growing private company and the 1st fastest-growing community solar company in the United States.

Chaberton's foundation was constructed around the framework that this body set up with the original Community Solar Pilot Program. In nearly five years, we have grown from just a company of just a few to one which now has over 50 employees. We have multiple solar projects operating in Maryland, as well as a robust pipeline of projects in construction and development. These projects are located in the very districts many of you represent.

The projects we develop deliver real and tangible benefits to your constituents. We save Marylanders an average of \$150 per household annually on their utility costs. Each Community Solar project supports well over \$2.5M in savings for subscribers, all of whom reside in Maryland and many of whom are Low-to-Moderate Income (LMI) subscribers. As an industry, we support ensuring the benefits of solar energy flow to those who need it most. The energy bill savings we can offer to LMI subscribers are often even greater than these average cost savings and provide a necessary lifeline to those struggling to meet basic needs, including increased energy costs.

These projects also support Maryland by delivering additional tax revenue to the state and its counties. Each project delivers hundreds of thousands of dollars in tax revenue while not requiring any local services or costs. Additionally, they support local job creation and retention. While delivering tangible financial benefits, these projects also provide significant environmental benefits to support Maryland's efforts of being a leader on climate change. Based on the EPA's Greenhouse Gas Equivalencies Calculator, a typical 2-megawatt ac project offsets carbon emissions by ~3,700 tons of CO2 per year compared with electricity generated from traditional sources. This saves equal to the emissions of over 3.7M pounds of coal burned and over 3.8M miles driven by gasoline-powered cars. It is also equal to the



same amount of carbon captured by nearly 4,000 acres of local forests. Those numbers are all for a single project!

Maryland offers a unique challenge in terms of permitting projects. Navigating the process can be both arduous and complex. As you may know, just over half of Maryland's local iurisdictions are primarily served by a utility that participates in programs like the Community Solar Program. This greatly restricts the amount of area available on which to develop distributed generation solar projects. Since the inception of the Community Solar Program, the area available for development has been severely restricted. Several local jurisdictions have imposed zoning ordinances that have either directly prohibited development, or enacted severe restrictions which have made development unviable. This has included temporary moratoriums, permanent and outright bans, and highly restrictive constraints on solar development as compared to other similar types of land uses. Chaberton has also experienced our projects meeting all local guidelines and ordinances, only to be denied by that same local jurisdiction. Complicating the picture further, most new projects in those Counties with a more practical approach to siting and permitting are facing highly expensive grid upgrades and limited available capacities given the existing solar generation already in place. This has led to an inequitable distribution of certain counties shouldering a much larger portion of the State's goals while others continue to fall further behind. Furthermore, the State of Maryland has one of the most aggressive clean energy goals in the country, and the State is being hindered at meeting these goals due to permitting challenges.

The most recent report on the Renewable Portfolio Standard (RPS) shows that the State is well behind in meeting its energy goals. Specifically, per the latest report for 2023, the State only met ~65% of its obligations of the solar-carve-out, which led to over \$55M in penalty payments levied on the utilities. The solar carve-out is scheduled to increase significantly from 6.5% for 2024 to 14.5% by 2030, and based on current projections the State will continue to fall further behind on meeting these goals. As a Maryland developer, it's clear that a primary reason for this deficit is local permitting prohibitions and restraints. We simply are not going to be able to keep up with the increasing RPS goals, and most likely are going to continue to fall further behind unless we are able to get these projects permitted.

We commend the leadership of Chairs Feldman and Wilson on this important and deeply impactful issue. These bills seek to identify solutions to this growing energy crisis Maryland faces. Setting reasonable and regular standards for local jurisdictions to follow will encourage more solar development in the State, which is among the cheapest and is the fastest form of any energy type to develop. These bills will further enhance the speed and efficiency of development. Importantly, these policies will tangibly lead to increased deployment of renewable energy projects in the State while not increasing any burden on tax or rate payers. Too often, when targets are not met it leads to altering and increasing compensation or incentive levels without identifying the actual impediments to development. Rather, the Renewable Energy Certainty Act works to address these roadblocks while providing certainty to both the private development community and the local jurisdictions when it comes to the project standards. Furthermore, by enacting a standardized Payment-in-lieu-of-Taxes approach, this ensures that projects will provide tangible local financial



benefits, over \$650,000 during the typical term of a project for a standard 5MWac project, while providing transparency to all on the financial structure of the tax benefits these projects provide.

For the State to meet its various clean energy and climate change goals, battery storage will be an important aspect of the state's energy profile. The Energy Storage- Targets and Maryland Energy Storage Program (HB 910) passed in 2023 set tangible targets for energy storage deployment of 3,000MW by the end of delivery year 2033. A successful energy storage market includes three key aspects: 1) a clear financial structure for battery storage systems that recognizes the full stack of value delivered by storage to the grid, 2) the ability to interconnect battery storage systems to the transmission and distribution grids, and 3) the ability to permit and construct battery storage systems. The Maryland Public Service Commission, and the Energy Storage Working Group, are working to address items one and two. However, it is necessary that the State address the ability to safely and properly permit and construct battery storage systems, as the entire industry expects significant roadblocks at the local level in this regard. By addressing these roadblocks proactively, the Renewable Energy Certainty Act is enabling Maryland to have a robust energy storage market, and to meet the goals set in HB 910.

Community Solar is about more than the financial and environmental benefits. It is also about land preservation, landowner rights, free market competition for electricity, and energy choice for all Marylanders. We are seeing utility bills increase at significant rates, which is not expected to slow. To combat these rising pressures, supporting clean energy generation in state that does not rely on fossil fuels or other commodities will help shield energy bills from the historic increases we are seeing, while increasing the health of our air and our population.

In order to keep building on the successes of Maryland, to keep fostering jobs for a strong local economy, stimulating tax revenue, saving the people of Maryland money on their energy bills, supporting energy equity to LMI residents, and providing energy choice to all residents, it is imperative that there is a path to get local solar projects permitted and approved. We respectfully request a favorable report on SB 931 and HB 1036.

Respectfully Submitted,

John Miller Chaberton Energy Vice President of Development

LOS SB 931 HB 1036 RECA - Cl.pdf Uploaded by: Joshua Feldmark



SB 931/HB1036: Public Utilities – Generating Stations – Generation and Siting (Renewable Energy Certainty Act)

Position: SUPPORT

Dear Chairs, Vice Chairs, and Members of the Committees,

CI Renewables is a Maryland based commercial and industrial solar developer specializing in projects with municipalities, universities, schools, and hospitals. Our projects include standard ground mount, projects on brownfields, as well as rooftops, parking garages, and parking canopies. While we have developed projects in 20 states, we call Maryland home to our headquarters.

I would like to focus my testimony on the core intent and purpose of this bill. After last session stakeholders, including representatives from the solar industry, environmentalists, preservationists, the agricultural community, Maryland Association of Counties, and relevant state agency. Collectively, we were all tired of the Sisyphean chore that was fighting about solar siting.that after

On one "side" we were facing reasonably sized and located projects that were being stonewalled by jurisdictions that either did not want solar within their borders or jurisdictions that proclaimed they wanted solar but put up enough arbitrary and capricious roadblocks to make it impossible to actually build. On the other, there were jurisdictions dealing with or witnessing projects that truly decimated several contiguous properties (usually farmland) in a way that likely precluded them from being farms ever again.

During this workgroup, the conversation went from individual solar projects to conversations around developing a policy that encouraged the kind of solar projects that worked with the land, that were appropriate in the communities they were located, and provided the protections communities needed. Contrary to what you may hear from the extremes on each sides, a middle ground is possible and we think this legislation moves the parties here.

Let me give some examples of what I mean. In Howard County, CI Renewables has two solar projects on farms that have turned on and five more in process. Each project is on an

owner operated farm and in each case the solar project is on unfarmable or low yield fields, on land where the owner needs the revenue to keep the farm a farm, and if on farmable land (and even in some cases when not), the field will remain farmable after the solar project is removed. Additionally, EVERY SINGLE PROJECT is on a farm that will continue to be an active farm for the duration of the solar lease. While in some cases we are grazing sheep or other agrovoltaic practices, that is not what I mean when I say active farm. In all cases they use a maximum of 34% of the parcel and the rest will continue to be actively farmed. None of our projects, so far, have gone through CPCN, the County held the entire approval process.

These should be the kind of projects that are acceptable to all jurisdictions and the type of projects that should be encouraged through zoning and permitting but sadly, except for Howard County, nearly every jurisdiction in the state has standards or laws that make these kinds of projects impossible to build. In fact, as it stands now, in every jurisdiction it is EASIER for us to build a big utility scale project than it is to build a direct generation project such as a community solar or net metered project for a government or nonprofit. It is because of these restrictions that we are being pushed into projects sized specifically so we can go to the PSC to pre-empt the County.

This bill, despite the scary stories you will hear, makes these types of projects possible and it will require them to be done in a way that respects the land and the communities.

While it may not appear so after the hearing, I am also very optimistic that with continued discussions between many of the individuals/organizations involved in the original work group that we are extremely close to an agreement that will work for everyone.

One final point about another section of this bill, CI favors the auto enrollment proposal assuming the technical fixes come through. As a company that works very closely with counties across the state, this project enables counties and municipalities to provide their communities locally generated solar power at a rate guaranteed to be less than what they pay retail.

We respectfully urge the Committees to provide a favorable report on SB 931/HB 1036. Should you have any questions, please feel free to contact me.

Sincerely,

Joshua Feldmark Senior Vice President joshua.feldmark@cirenew.com

2025.02.28_HB1036_SB931_Renewable Energy Certainty Uploaded by: Katie Mettle



February 28, 2025

Economic Matters Committee Maryland House of Delegates

Education, Energy, and the Environment Committee

Maryland Senate

HB 1036 & SB 931
Renewable Energy Certainty Act

Katie Mettle
Policy Principal, Advanced Energy United

FAVORABLE

Dear Chair Wilson, Chair Feldman, and esteemed members of the Economic Matters and Education, Energy, and the Environment Committees:

Advanced Energy United is an industry association that represents companies operating in the clean energy space. Our mission is to accelerate the transition to a 100% clean energy economy that is free from fossil fuels. Our members represent the full suite of technologies that are powering this transition. They include, but are not limited to, companies which manufacture, install, and maintain batteries and solar panels, as well as wind turbines, geothermal systems, EVs, EV chargers, and smart grid technologies.

We support this bill. It will make it easier for our member companies to build new energy generation in Maryland. We respectfully request the Committee issue a favorable report.

Thank you for your time and consideration.

Best Regards,

Katie Mettle, Policy Principal Advanced Energy United kmettle@advancedenergyunited.org 202.380.1950 x3197

HB1036 - Maryland LCV SUPPORT_ Renewable Energy Ce Uploaded by: Kristen Harbeson



Kim Coble Executive Director

2025 Board of Directors

Patrick Miller, Chair The Hon. Nancy Kopp, Treasurer Kimberly Armstrong Caroline Baker Joe Gill Lynn Heller Charles Hernick The Hon. Steve Lafferty Bonnie L. Norman February 28, 2025

SUPPORT: HB1036 - Public Utilities-Generating Stations-Generation and Siting (Renewable Energy Certainty Act)

Chair Wilson and Members of the Committee:

Maryland LCV supports SB931: Renewable Energy Certainty Act, and we thank Chair Wilson for his continued leadership in advancing the goals of renewable energy development in Maryland.

In 2019, the Maryland General Assembly passed the Clean Energy Jobs Act, sponsored by Senator Feldman, which set a target of 50% renewable energy by the year 2030, with 14.5% of that energy coming from in-state solar generation. Over the past six years, we have not reached the benchmark goals that would lead to the achievement of that 2030 goal, due in part to disagreements between solar developers and local governments over solar siting considerations. Additionally, while projects over 2MW are overseen by the Public Service Commission, with preemption of local ordinances and zoning through the CPCN process, these approvals were lengthy and costly, due to additional legal challenges along the way.

Over the last two years, Maryland LCV has been actively participating in stakeholder conversations to find a balanced path forward. During the most recent effort, in summer/fall of 2024, a consensus proposal was reached that had buy-in from environmental groups, land preservation and agricultural advocates, county planners, and solar developers. In October, stakeholders engaged in robust outreach for additional feedback from interested parties, with the intent of introducing legislation in the 2025 session. These efforts halted in early November due to the uncertainty surrounding federal incentives and support for renewable energy development created by the results of the presidential election.

Many of the provisions from the compromise language achieved in fall 2024 have been incorporated into the Renewable Energy Certainty Act (SB 931). Maryland LCV strongly supports actions that encourage and facilitate solar energy development both for its potential for jobs and economic investment in the state, and to expedite the transition to in-state renewable energy and away from unpredictable fossil fuels. We also, however, believe that solar energy siting and development must be respectful of local communities and be minimally invasive to the environment. The compromise language in SB 931 creates a balanced approach to addressing environmental impacts, solar industry concerns, and local input. Many of the proposed amendments by partners seek to further advance this balance and restore some of the provisions that had been agreed upon during stakeholder negotiations but are omitted in the proposed legislation. These amendments should be considered. Maryland LCV supports this legislation and urges a favorable report.

SB931 - Maryland LCV SUPPORT_ Renewable Energy Cer Uploaded by: Kristen Harbeson



Kim Coble Executive Director

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2025.02.26 Solar Landscape HB1036 Testimony FINAL. Uploaded by: Mark Schottinger

Position: FAV



0.844.765.2769



Delegate C.T. Wilson,

Chair, House Economic Matters Committee 6 Bladen St, Taylor House Office Building Annapolis, Maryland 21401

HB1036

Dear Chair Wilson,

Solar Landscape supports HB1036, sponsored by the Chair. The bill furthers Maryland's clean energy goals by encouraging solar development across all market segments and by increasing savings for residents—especially low- and moderate-income households. We urge a favorable report.

Founded in 2012, Solar Landscape has delivered solar energy benefits to more low- and moderateincome households than any other community solar developer in the nation. We specialize in commercial and industrial rooftop solar, partnering with real estate owners in Maryland, New Jersey, Illinois, and beyond. We have leased or hold exclusive rights to over 150 million square feet of rooftops, including space for more than 50 community solar projects in Maryland. We remain committed to helping Maryland meet its renewable energy targets and advance energy equity.

Community solar adds clean energy to the grid while saving Marylanders money. HB1036 includes an automatic enrollment option that allows local governments to partner with community solar projects to enroll residents for guaranteed savings on their electricity bills, making the financial benefits of solar energy more accessible and effective. This is particularly beneficial for low- and moderate-income households.

Automatic enrollment addresses time, resource, and knowledge barriers, promoting equity for low-income households and renters. By simplifying enrollment, automatic enrollment would lower costs for community solar projects, thereby incentivizing more community solar projects (which is good for Maryland's grid and environment) and increasing community solar savings (which is good for Maryland households).

Participation in community solar does not hinder residential rooftop solar use. The program permits dual enrollment in both community solar and residential solar. For example, an automatically enrolled community solar household receiving a 10% reduction in their utility bills through community solar would still be able to achieve substantial savings from installing residential rooftop solar. In short, an opt-out community solar program would have no negative impact on the residential solar industry. Instead, opt-out community solar would bring additional savings to Marylanders who are able to participate in residential rooftop solar while also providing savings to Marylanders who cannot participate in residential rooftop solar (e.g., homeowners with incompatible roofs and renters, including many lowincome households). Both options complement each other by expanding access to clean energy while preserving customer choice.

Automatic enrollment also leaves a role for community solar subscriber brokers (i.e., companies that currently earn a commission by acquiring and selling customers for community solar projects). Brokers can continue their traditional customer acquisition methods (e.g., door-knocking campaigns) for projects and localities that do not participate in automatic enrollment; and brokers are well suited to partner with

local governments to identify, enroll, and manage community solar customers more efficiently in opt-out programs. Additionally, Solar Landscape supports an amendment that protects current community solar subscribers from being enrolled in automatic enrollment projects, such that automatic enrollment would have no negative impact on transactions already closed by brokers. In sum, automatic enrollment would reduce project costs and thereby increase savings for low- and moderate-income households by removing traditional, costly barriers to entry, while simultaneously enabling brokers to expand their operations to higher value tasks.

Finally, automatic enrollment is <u>not</u> community choice aggregation. Community solar offers a fixed, guaranteed discount on electricity, with no temporary teaser rates (i.e., community solar participants by law must save on electricity compared to if they did not participate). Additionally, utility customers can join community solar while participating in community choice aggregation where it exists, or buying from a retail electricity supplier, as credits help offset supply costs. And because these projects are in Maryland, subscribers also support local clean energy generation.

Automatic enrollment will increase savings for residents, reduce project costs, and drive more community solar development. Our internal studies show that building and activating 500 MW of community solar within a year would generate approximately 4 million work hours—equivalent to 2,100 full-time jobs. Passing HB1036 demonstrates Maryland's commitment to sustainability, job creation, and economic relief for its most vulnerable residents. We commend the Chair and the committee for their leadership on clean energy and look forward to working together to secure energy access and savings for all Marylanders.

For questions, please contact Jason Weintraub at (410) 963-3674 or jweintraub@gfrlaw.com.

Testimony in support of HB1036 - Public UtilitiesUploaded by: Richard KAP Kaplowitz

Position: FAV

HB1036_RichardKaplowitz_FAV 02/28/2025

Richard Keith Kaplowitz Frederick, MD 21703

TESTIMONY ON HB#/1036 – FAVORABLE

Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

TO: Chair Wilson, Vice Chair Crosby and members of the Economic Matters Committee

FROM: Richard Keith Kaplowitz

My name is Richard K. Kaplowitz. I am a resident of District 3, Frederick County. I am submitting this testimony in support of HB#1036, Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

This bill seeks to ensure that solar power is part of the energy generation portfolio in Maryland and creates guidelines to apply for that inclusion. Solar power can and should be part of the goals Maryland has established to meet the climate change crisis. It will do modeling and force electric companies to provide to Maryland integrated resource plans that can guide the Public Service Commission decision making through reference to those plans.

Solar energy technology combats climate change by reducing our dependence on fossil fuels and providing a clean and renewable alternative.

Solar energy has the potential to help reduce carbon dioxide and other greenhouse emissions by replacing traditional sources of electricity — like fossil fuels — with <u>clean</u>, renewable energy.

A significant decrease in emissions is essential to positively affect climate change and improving air quality worldwide. ¹

Maryland is a leader in the nation working to mitigate climate change in our nation and state. ²

On April 8, 2022, the Climate Solutions Now Act, <u>HB 528</u>, became law. The bill, sponsored by Senator Paul Pinsky, set the nation's leading interim goal of a 60% reduction below 2006 emissions by 2031, with a requirement to reach net-zero by 2045.

¹ https://blog.ecoflow.com/us/can-solar-energy-stop-climate-change/#:~:text=By%20decreasing%20the%20use%20of,change%20in%20a%20meaningful%20way.

² https://ncelenviro.org/articles/maryland-passes-the-climate-solutions-now-act/#:~:text=On%20April%208%2C%20the%20Climate,reach%20net%2Dzero%20by%202045.

HB1036 RichardKaplowitz FAV

[Among the ways] to accomplish this, the bill:

- incorporates long-term and ongoing electric distribution planning to facilitate decarbonization
- requires state agencies to consider the long-term climate and equity impacts of their policies

This bill works to meet the Climate Solutions Now Act points of emphasis by altering the factors the Public Service Commission must consider before taking final action on a certificate of public convenience and necessity. This occurs by establishing certain requirements for the construction of a certain solar energy generating station or energy storage device. It forces better planning through requiring the Commission to conduct a certain study to establish a process by which the Commission may establish partnerships between electric companies and electricity suppliers for electricity generation projects.

I respectfully urge this committee to return a favorable report on HB#1036.

CleanChoice Energy Testimony HB1036.pdf Uploaded by: Richard Tabuteau

Position: FAV





The Honorable CT Wilson, Chairman Economic Matters Committee January 28, 2025

CleanChoice Energy is a renewable energy company founded in 2011 with a mission to make it easy for residential customers to switch to clean, renewable energy. We provide exclusively 100% renewable energy to customers across our footprint and never charge an early termination fee.

CleanChoice Energy is pleased to offer its support for Senate Bill 931 and House Bill 1036.

These bills will drive significant advancements in renewable energy projects across the state of Maryland. They aim to achieve this by expediting the approval process for such projects, while also implementing stringent guidelines to ensure that projects are developed and operated in a responsible and sustainable manner. This streamlined approach will not only encourage greater investment in renewable energy sources, but it will also lead to a substantial reduction in greenhouse gas emissions, thereby helping to mitigate the harmful effects of climate change and enhance the state's overall climate resilience.

Furthermore, Senate Bill 931 and House Bill 1036 contain provisions that mandate community engagement and input throughout the development process. This includes requirements for public hearings and meetings, particularly in areas that have historically been overburdened by pollution or underserved in terms of access to clean energy resources. By fostering transparency and actively involving local communities in the decision-making process, these bills seek to ensure that the benefits of renewable energy are shared equitably and that the concerns of all stakeholders are considered.

In addition to streamlining the approval process and mandating community input, these bills also address a wide range of other issues related to the development and operation of renewable energy projects. This includes provisions related to environmental protection, grid integration, and consumer protection. By taking a comprehensive approach to advancing renewable energy, these bills will help to ensure that Maryland's transition to a clean energy future is both sustainable and equitable.

Overall, Senate Bill 931 and House Bill 1036 represent a significant step forward in Maryland's efforts to promote renewable energy and combat climate change. By passing these bills, the Maryland legislature will send a clear message that the state is committed to a clean energy future and that it is taking concrete steps to achieve its ambitious renewable energy and climate goals. This will not only benefit the environment and public health, but it will also create jobs, stimulate economic growth, and protect consumers from the rising costs of fossil fuels.

Respectfully Submitted,

Shaun Chapman Vice President, Government Relations CleanChoice Energy

HB1036_ SB931 Renewable Energy Certainty Act_Form Uploaded by: Rosa Hance

Position: FAV



Committees: House Economic Matters & Senate Education, Energy & Environment

Testimony on: HB1036/SB931

Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Position: Favorable

Hearing Date: February 28, 2025

Form Energy respectfully requests a Favorable report from the committee on Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act).

The Renewable Energy Certainty Act would provide much needed clarity about the process for siting energy storage projects in Maryland. We appreciate the intent of this legislation and respectfully request continued consideration of the innovative and multifaceted nature of the energy storage industry. Long-duration and multi-day energy storage devices would meet a number of needs: enabling the transition to a clean grid with diversified energy resources; bolstering grid reliability and resilience; improving system capabilities to withstand shocks and stressors; and promoting economic development and job creation in Maryland communities.

Form Energy is a U.S. energy storage technology and manufacturing company that is commercializing a new class of multi-day energy storage system to enable a clean and reliable electric grid. Form Energy's first commercial product is an iron air battery system that can cost-effectively store and discharge energy for up to 100 hours at its rated capacity. Unlike lithium-ion batteries, which can only cost-effectively provide grid-scale energy for a few hours at a time, iron-air batteries can deliver energy for multiple days at a time. Made from some of the safest, cheapest, and most abundant materials on the planet — low-cost iron, water, and air — our battery system provides a sustainable and safe solution to meeting the growing demand for grid security and resiliency. Form Energy has more than 13 GWh of announced projects under contract and development throughout the U.S., the first expected to be deployed in 2025, all of which will be manufactured at Form Factory 1 in West Virginia.

Form Energy's batteries operate on the principle of reversibly rusting iron, which was first invented in the 1960s. Form Energy's batteries, while discharging, use air bubbles to convert iron metal to rust; while charging, the application of an electrical current converts the rust back to iron and the battery releases oxygen. Form Energy's battery system is composed of modules that are grouped together with auxiliary systems in weatherized, factory-assembled enclosures the size of shipping containers. Hundreds of these enclosures make up a modular, megawatt-scale power block that can be sited anywhere and used in a variety of applications including on either the transmission or distribution side of the grid. In December 2024, Form Energy announced that its iron-air battery technology achieved a key benchmark for safety

by completing UL9540A safety testing, demonstrating no potential for thermal runaway and no fire risk under extreme abuse conditions, underscoring the safety of iron-air battery systems.

Form Energy's technology pairs well with a variety of energy resources and other types of short and long duration energy storage to optimize energy system configurations and does not need to be co-located with renewable energy for its benefits to be achieved. With rising energy demand, extreme weather, grid outages and other prolonged stressors, technology capable of storing energy for multiple days will be critical to ensure grid reliability and lower electric system costs. Duration and reliability should be a strong component of any energy storage procurement program designed to meet the needs of today and tomorrow.

Due to the nature of this technology and the multi-day storage resource class being fundamentally different from other existing battery storage devices common today, we wish to request that in the amendment process that the committees continue to recognize that the energy storage industry is not a monolith.

Form Energy stands ready to be of service to Maryland during its transition to clean energy. For these reasons we humbly request a favorable report from the relevant committees.

Sincerely,

Sarah Jackson Senior Policy Manager Form Energy, Inc. sjackson@formenergy.com

HB1036_WGL_Todd_FWA.pdf Uploaded by: Brandon Todd

Position: FWA



1000 Maine Avenue, SW | Suite 700 | Washington, DC 20024 | www.washingtongas.com

COMMITTEE: ECONOMICS MATTER

TESTIMONY ON: HB1036 PUBLIC UTILITIES – GENERATING STATIONS – GENERATION AND SITING

(RENEWABLE ENERGY CERTAINTY ACT)

POSITION: SUPPORT WITH AMENDMENTS

HEARING DATE: FEBRUARY 28, AT 1:30PM

WASHINGTON GAS RESPECTFULLY SUBMITS THIS STATEMENT IN **SUPPORT with amendments** to

HB1036 – Renewable Energy Certainty Act ("HB1036").

Background

The Maryland General Assembly is considering HB1036, the Renewable Energy Certainty Act, to streamline processes for the development and siting of solar energy generating stations and energy storage devices, thereby enhancing Maryland's renewable energy capacity.

Position

The Company supports the goals of HB1036 on the basis that there is no direct impact to the ability to continually invest in natural gas infrastructure. This bill is squarely focused on reducing the burdens associated with siting solar generation, and several of the provisions concerning siting, interconnection, and coordination with state agencies may also be applicable to biogas facilities as well.

Biogas facilities process organic waste materials to produce biogas, which can be used as a renewable energy source. Investing in ready-now solutions like renewable natural gas (RNG) can accelerate the State's efforts to reduce greenhouse gas (GHG) emissions.

• RNG is a fully interchangeable lower-carbon alternative to conventional natural gas. According to the United States Department of Energy, RNG is a pipeline-quality gas that is fully interchangeable with conventional natural gas. RNG is essentially biogas (the gaseous product of the decomposition of organic matter) that has been processed to pipeline standards. Capturing, treating, and upgrading RNG from sources of organic matter, including landfills, wastewater treatment facilities, organic food waste, and agricultural operations, to pipeline-quality gas can significantly reduce GHG emissions from the State's

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¹ DOE Alternative Fuels Data Center

waste and agriculture sectors.² The waste sector accounts for a significant portion of the State's GHG emissions; landfills and wastewater treatment plants accounted for approximately 7 million metric tonnes of CO2e, or approximately 8% of the State's gross GHG emissions, as of 2020.³ The Maryland Department of the Environment (MDE) recently found that landfills were the single largest source of methane emissions in Maryland, and that these emissions have been historically underestimated and are approximately four times higher than previously thought.⁴ MDE recently published a final regulation for control of landfill gas emissions from municipal solid waste (MSW) landfills in 2023⁵ establishing support for specific, predictable, and achievable reduction in GHG targets for waste products which can unlock private/public investment and preserve customer energy affordability for alternate fuels. The agriculture sector accounted for 4% of the State's GHG emissions in 2020, and MDE projects these emissions to be relatively constant through 2050 with few abatement options identified.⁶

- Supporting utility investment in RNG projects can help environmental justice areas. According to the Rocky Mountain Institute, "many landfills and incinerators directly impact disadvantaged communities and an analysis utilizing United States Environmental Protection Agency's Environmental Justice Screening and Mapping Tool (EJScreen) found that 54 percent of landfills reporting to the Greenhouse Gas Reporting Program have communities within one mile of the landfill that exceed the national average for either people of color or those with low incomes." Procuring RNG and building RNG projects in Maryland can achieve GHG emission reductions, divert negative impacts from disadvantaged communities, and support the development of lower-carbon fuels for a variety of end uses.
- RNG can support energy security and energy system resiliency. Maryland procures the vast majority of its natural gas from out-of-state sources. RNG can provide an additional source of local supply, potentially creating resiliency benefits in the case of system disruption.
- RNG can be used as a lower-carbon transportation fuel. Natural gas vehicle fuel can help to reduce GHG emissions by ~27% relative to diesel and using RNG can help fleets reach negative GHG emission levels. Using RNG can provide a cost-effective solution to decarbonizing heavy transport. For heavy-duty vehicles, natural gas vehicles fueling with RNG can be a more cost-effective option than battery-electric technology at reducing GHG emissions.
- RNG can create significant economic opportunities for the State. Capturing otherwise lost methane can provide an additional source of revenue to municipal facilities, including

² EPA. Renewable Natural Gas (Aug. 3, 2023).

³ MDE. 2020 Greenhouse Gas Inventory (Sep. 24, 2022). In the 'Summary' tab, emissions from "Landfills" and

[&]quot;Wastewater Management" add to 7.21748 million metric tonnes of CO2e, which corresponds to 8.4856% of Gross Emissions, which was 85.05523 million metric tonnes of CO2e. All numbers use a 20-year GWP.

⁴ MDE. <u>Climate Pollution Reduction Plan</u> (Dec. 28, 2023). Page 52

⁵ Maryland Code. <u>Section 26.11.42.04 - Requirements for Municipal Solid Waste (MSW) Landfills</u> (Feb. 9, 2024).

⁶ MDE. Climate Pollution Reduction Plan (Dec. 28, 2023). Pages 58-59

⁷ Rocky Mountain Institute. <u>Priority Climate Action Plan Guide: Organic Waste & Landfill Methane Strategies</u> (2022).

⁸ Cummins. Natural Gas Engines vs Diesel Engines (May 4, 2022)

landfills and wastewater treatment, as well as agricultural operations. It can also create useful co- and by-products, such as high-quality fertilizers.⁹

Conclusion

At Washington Gas Light, our core values are safety, collaboration, integrity, inclusion, and learning. The Company supports Maryland's goals to meet its greenhouse gas reduction targets while enhancing energy reliability and minimizing ratepayer impacts and is committed to working with stakeholders to help achieve Maryland's GHG emissions reduction targets. RNG can be used to help reduce GHG emissions from current uses for natural gas while it remains an important part of the State's energy system. Natural gas is currently used to provide energy to the residential, commercial, industrial, and transportation sectors and most analyses today indicate this will continue to be the case for decades to come.

HB1036 supports the accelerating of solar energy generating stations and energy devices development to enhance Maryland's renewable energy capacity. The State's existing natural gas infrastructure can and should be leveraged to preserve affordability, reliability, safety, and security of energy delivery. Washington Gas is an innovative company and is supportive of leveraging its unique talent and expertise to provide alternative energy sources and believes the inclusion of biogas facilities has the potential to offer several benefits to its Maryland customers.

Thank you for your consideration of this information.

ADDENDUM: PROPOSED AMENDMENTS

- Add a definition for "biogas facility" to ensure clarity and inclusion in the bill
 - "(X) "Biogas Facility" means a facility that processes organic waste materials to produce biogas, which can be used as a renewable energy source."
- Amend Section 7-207(e)(1) detailing generating stations to explicitly include biogas facilities:
 - "the recommendation of the governing body of each county or municipal corporation in which any portion of the construction of the generating station, biogas facility, overhead transmission line, or qualified generator lead line is proposed to be located;"
- Amend Section 7-207(d)(1)(i) to include biogas facilities in the public hearing requirements to ensure community involvement and transparency:

⁹ CleanBay Renewables. <u>Home</u> (2023). CleanBay's poultry litter RNG facilities can create tons of **natural**, **controlled-release fertilizer** with humic acid for farmers in our watershed to better **meet the region's agricultural needs** and **reduce phosphorous runoff**.

"The Commission shall provide an opportunity for public comment and hold a public hearing on the application for a certificate of public convenience and necessity in each county and municipal corporation in which any portion of the construction of a generating station, biogas facility, an overhead transmission line designed to carry a voltage in excess of 69,000 volts, or a qualified generator lead line is proposed to be located."

- Amend Section 7-218(H)(1) to ensure biogas facilities are considered in local jurisdiction planning and coordination efforts:
 - "A local jurisdiction may not adopt zoning laws or other laws or regulations that prohibit the construction or operation of solar energy generating stations or biogas facilities;"
- Amend Section 2(b)(2) to include biogas facilities in the partnerships and interconnection processes to promote their development:
 - "require that a generating station or biogas facility constructed by a partnership be connected to the electric distribution system in the State;"
- Amend Section 7-207(e)(2)(vi) to ensure biogas facilities are included in environmental impact assessments and regulatory considerations:

"when applicable, air quality and water pollution impacts from generating stations, biogas facilities, or qualified generator lead lines;"

About Washington Gas Light

Washington Gas Light Company ("the Company") provides safe, reliable natural gas service to more than 1.2 million customers in Maryland, Virginia, and the District of Columbia. Washington Gas has been providing energy to residential, commercial, government, and industrial customers for more than 176 years, and currently serves more than 500,000 Maryland customers in Montgomery, Prince George's, Charles, St. Mary's, Frederick, and Calvert Counties. The Company employs over 400 people within Maryland, including contractors, plumbers, union workers, and other skilled tradespeople. We strive to improve the quality of life in our communities by maintaining a diverse workforce, working with suppliers that represent and reflect the communities we serve, and giving back through our charitable contributions and employee volunteer activities. The Company, together with other natural gas distribution utilities, are responsible for delivering the primary source of heat to Maryland residential energy consumers, serving approximately one half of all Maryland households while providing critical energy

services to residential, commercial, and industrial customers at one-third the cost of electricity on a per unit basis. ¹⁰
Contact: Brandon Todd, Vice President, Government Affairs, Policy & Advocacy, Washington Gas M 202-744-0816 brandon.todd@washgas.com

¹⁰ DOE. <u>Energy Conservation Program for Consumer Products: Representative Average Unit Costs of Energy</u> (Aug. 28, 2023).

Renewable Energy Certainty Act - CPR comments.pdf Uploaded by: Bryan Dunning

Position: FWA



February 26, 2025

Testimony of Bryan Dunning Senior Policy Analyst Center for Progressive Reform

Before the Maryland House of Delegates, Economic Matters Committee Regarding House Bill 1036: Renewable Energy Certainty Act

Dear Chair Wilson, Vice Chair Crosby, and Members of the House Economic Matters Committee:

Thank you for the opportunity to testify today on behalf of the Center for Progressive Reform (the Center) in support of HB1036. The Center is a nonprofit research and advocacy organization that is focused on addressing our most pressing societal challenges, including advancing the concerns of historically marginalized communities by centering racial and economic justice in climate policy. For the reasons discussed in the testimony below, the Center requests that this committee issue a **favorable with Amendments** report on HB 1036.

The Renewable Energy Certainty Act provides a vehicle to streamline permitting concerns for solar and storage in Maryland, particularly providing a pathway to advance bringing online new community solar projects in the state. It is important to consider the balance between state and local jurisdiction in the permitting process, and HB 1036 provides for significant community engagement – particularly in the instance of proposed siting in an overburdened or underserved community -, set back requirements, and other requirements to protect community preferences as a balance against the requirement that localities do not adopt prohibitions to construction or operation of solar energy generating stations or energy storage devices.

This bill represents a meaningful step to addressing Maryland's energy resource adequacy issues by providing a pathway to bring critical renewable generation and storage online to serve the state's demand load. Solar and storage represent low-cost sources of energy generation to serve both general and peak demand and do so in a manner that allows the state to meet its generation goals while also achieving its climate goals set forth in law under the Climate Solutions Now Act of 2022.

This said, the Center requests that the Committee consider adopting amendment language into the Renewable Energy Certainty Act to maximize the rate of clean energy and storage construction in Maryland. Currently under consideration by both the House Economic Matters Committee and the Senate Education, Energy, and the Environment Committee is HB0398/SB0316 – the Abundant Affordable Energy Act (AACE), which would supplement the

clean energy goals of the Renewable Energy Certainty Act, and as such the Center asks that the committee amend language from AACE into this bill.

Provisions of AACE which most supplement the impact of this bill relate to creating competitive procurement for storage or renewable generation, as well as administratively determined incentives for distribution scale solar and the REC-II, SREC-II programs. By incorporating this language (broadly included in proposed sections 7-709.2 and .3, 7-1201,7-1202, and 7-1206-11 of the public utilities code) the amended Renewable Energy Certainty Act will provide both a method for addressing permitting issues for solar and storage projects, and create a viable, reliable, and least-cost pathway to ensure the economic viability of them. The administratively determined incentive, including its market segment capacity blocks, will additionally strengthen the impact of the Renewable Energy Certainty Act in bringing community solar projects online to benefit Marylanders.

Finally, the labor protections included within the competitive procurements for storage and utility-scale renewable generation facilities, namely, community benefits, will ensure that these projects financially benefit the communities where they are constructed, strengthening local protections already enumerated within the Renewable Energy Certainty Act.

For these reasons, the Center requests that this committee adopt the above discussed portions of AACE as amendments to this bill, and issues a **favorable report upon the amended bill**.

FWA.David Murray.Turning Point Energy Uploaded by: David Murray Position: FWA



February 26, 2025

Honorable C. T. Wilson, Chair Honorable Brian Crosby, Vice Chair Economic Matters Committee Room 231 House Office Building Annapolis, Maryland 21401 Honorable Brian Feldman, Chair Education, Energy, and the Environment 2 West Miller Senate Office Building Annapolis, Maryland 21401

SB 931 | HB 1036 - FAVORABLE WITH AMENDMENT

Dear Members of the Economic Matters and Education, Energy and Environment Committees,

TurningPoint Energy ("TPE") is a solar and battery storage development company, with over 240 megawatts in development or operation in Maryland. We are proud to have been participating in Maryland's community solar pilot program since its inception in 2015 and continue to invest heavily in the state's clean energy future.

TPE commends Senator Feldman, Chair Wilson and Vice Chair Crosby for their leadership on clean energy permitting and siting. We strongly favor SB 931 | HB 1036 for the following reasons:

Robust and practical siting standards, as proposed in SB 931 | HB 1036, represent a sensible and thoughtful approach to solar energy siting.

In general, the requirements related to site design, construction and operation, are both reasonable and thorough from the perspective of TurningPoint Energy. As our company aims to maximize community and ecosystem service benefits associated with our solar projects, SB 931 | HB 1036 set an appropriately high bar for the statewide industry – and balance various stakeholder concerns related to solar development.

Developing a statewide permitting regime for energy storage underpins Maryland's opportunity to benefit from this technology.

Despite the ambitious statewide target of 3,300 MW of energy storage deployment, there is no process by which standalone energy storage may be permitted via Certificate of Public Convenience and Necessity (CPCN.) SB 931 | HB 1036 makes this important change, offering clarity to developers like TPE as we explore where energy storage can best deliver financial benefits and grid resiliency to Marylanders.

TPE respectfully proposes an amendment to support additional market certainty to clean energy development.

Based off SB1022 (Senator C. Jackson), implementation of cross utility crediting for low to moderate income (LMI) households would ensure community solar development will continue in Maryland's best sites for solar deployment. As the current community solar program requires



subscribers live in the same utility territory as the solar facility, there is a looming mismatch between potential beneficiaries of community solar – particularly low to moderate income households – and the location of facilities. Based on an analysis of proposed development in the public interconnection queue, future community solar deployment will quickly exceed likely demand from low to moderate income customers in DPL territory – while barely reaching greater than 3% of customers in Pepco or 7% of customers in BGE. Thus, by 2030, community solar deployment may cease in the region while other territories maintain substantial demand for subscribers. Limiting cross utility crediting to LMI households maintains the program's core intent to maximize equity outcomes from solar development, while growing the state's clean energy resources.

Thank you for your time and consideration. I have included proposed language below. TPE also supports the proposed amendments submitted by the solar trade associations.

/s/
David Murray
dmurray[at]tpoint-e.com

Article - Public Utilities

7-306.2.

- (d) (3) (I) Subscribers served by electric standard offer service, community choice aggregators, and electricity suppliers may hold subscriptions to the same community solar energy generating system.
- (II) 1. EXCEPT AS PROVIDED IN SUBSUBPARAGRAPH 2 OF THIS SUBPARAGRAPH, A SUBSCRIBER MUST RESIDE IN THE SAME ELECTRIC SERVICE TERRITORY AS THE COMMUNITY SOLAR ENERGY GENERATING SYSTEM TO WHICH THE SUBSCRIBER HOLDS A SUBSCRIPTION.
- 2. AN LMI SUBSCRIBER MAY HOLD A SUBSCRIPTION TO A COMMUNITY SOLAR ENERGY GENERATING SYSTEM LOCATED IN A DIFFERENT ELECTRIC SERVICE TERRITORY THAN THE ONE IN WHICH THE LMI SUBSCRIBER RESIDES.
- (j) (2) (i) This paragraph applies to electric companies, electric cooperatives, and municipal utilities that participate in the Program.
- (ii) A subscriber who has a change in the service address associated with the subscriber's subscription may maintain the subscription for the new address if the new address is within the same electric territory as the old address.



- (iii) An electric company or a subscriber organization may not terminate a subscriber's subscription due to a change of address for the service address associated with the subscription if the requirements under subparagraph (ii) of this paragraph are met.
- (iv) An electric company shall make any changes necessary to accommodate a subscriber's change of address on notification by a subscriber organization.
- (O) (1) AN LMI SUBSCRIBER THAT RESIDES IN A DIFFERENT ELECTRIC 8 SERVICE TERRITORY THAN THE COMMUNITY SOLAR ENERGY GENERATING SYSTEM SHALL RECEIVE THE SAME BILL CREDIT VALUE AS AN LMI SUBSCRIBER THAT RESIDES IN THE SAME ELECTRIC SERVICE TERRITORY AS THE COMMUNITY SOLAR ENERGY GENERATING SYSTEM.
- (2) ON OR BEFORE JANUARY 1, 2026, BY ORDER OR REGULATION, THE COMMISSION SHALL ESTABLISH A PROCESS FOR THE APPLICATION OF COMMUNITY SOLAR BILL CREDITS TO THE BILL OF A LMI SUBSCRIBER REGARDLESS OF WHETHER THE COMMUNITY SOLAR ENERGY GENERATING SYSTEM IS LOCATED IN THE SAME ELECTRIC SERVICE TERRITORY AS THE LMI SUBSCRIBER.
- (3) ON OR BEFORE JANUARY 1, 2026, THE COMMISSION SHALL APPROVE OR AMEND AND APPROVE THE TARIFFS AND PROTOCOLS REQUIRED UNDER PARAGRAPH (1) OF THIS SUBSECTION.

Testimony DAC HB1036 ECM Renewable Energy Certain Uploaded by: Debbie Cohn

Position: FWA

Committee: Economic Matters

Testimony on: HB1036 – Public Utilities - Generating Stations - Generation and

Siting (Renewable Energy Certainty Act)

Submitting: Deborah A. Cohn

Position: Favorable with Amendments

Hearing Date: February 26, 2025

Dear Chair Wilson and members of the Committee:

Thank you for your consideration of my testimony in support of HB1036 with amendments.

The Renewable Portfolio Standard (RPS) calls for 14.5% of Maryland's clean electricity to be contributed by solar energy by 2030. The State has consistently fallen short of adding the annual amount of new solar energy generation needed to attain this goal even after the annual targets for earlier years were reduced, requiring significantly larger increases in solar capacity in the outer years. As a result, in FY2023 Maryland utilities paid \$262m in Tier 1 alternative compliance payments (ACP) to the Strategic Energy Investment Fund (SEIF) in FY 2023. Paying ACPs is not the desired goal; we need installation of new solar energy generation systems. According to the 2023 Maryland Climate Pathways Report, solar generation must increase fivefold by 2031, with solar accounting for 33% of in-state energy generation.

According to the International Energy Agency (IEA) the rapid expansion of ever cheaper solar PV is expected to account for roughly half of global electricity demand growth in 2027, up from five percent in 2023. This growth rate results from the decreasing costs and ease of installing solar energy generating systems. Utility scale solar generating plants are the least expensive and fastest to deploy energy source in the world today. Costs for smaller scale distributed solar projects, such as community solar, have fallen as well. When combined with utility scale storage, their levelized cost of energy is lower than combined-cycle natural gas. The combination also provides dispatchable generation that is needed to stabilize the grid. As longer term thermal storage technologies, particularly molten salt storage which is the thermal storage most frequently paired with solar generating systems, become increasingly competitive, utility scale solar and storage can address the energy and reliability needs of Maryland without the long term economic and environmental risks posed by fossil fuel technologies.

4 https://www.utilitydive.com/news/solar-storage-projects-to-drive-utility-scale-deployment-of-batteries-na/551724/#:~:text=Storage%2Dplus%20PPAs%20are%20already%20less%20expensive%20than,in%2 0the%20United%20States%2C%20the%20report%20found.&text=This%20significant%20reduction%20in%20cost%20means%20that,even%20in%20markets%20without%20subsidies%2C%20BNEF%20said

¹ https://www.iea.org/reports/electricity-2025/executive-summary

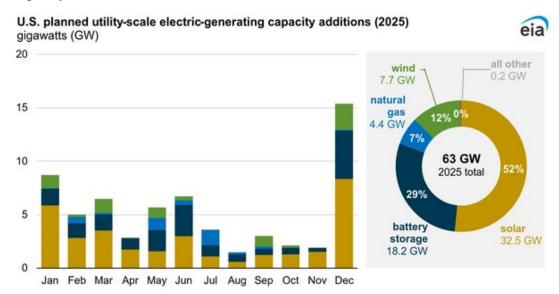
² https://pv-magazine-usa.com/2024/06/11/cheapest-source-of-fossil-fuel-generation-is-double-the-cost-of-utility-scale-solar/

³ Ibid.

⁵ https://www.sciencedirect.com/science/article/abs/pii/S2352152X21011257

⁶ https://www.energy.gov/eere/solar/solar-integration-solar-energy-and-storage-basics

According to the U.S. Energy Information Administration, solar and battery storage account for 81 percent of expected total capacity additions, with solar making up over 50 percent of the increase. In 2024, generators added 30GW of utility-scale solar on the grid, accounting for 61 percent of capacity additions.⁷



(2025). Retrieved from Energy Information Administration.

Maryland, however, has been slow to participate in this global trend, due to dysfunctional policies in the RPS, excessive interconnection delays at PJM, and some local prohibitions of solar energy plants. HB1036 addresses some of these issues with rules related to the siting of critical large-scale solar infrastructure throughout the state.

HB1036 would provide reasonable setbacks on the property, landscaping and visual barriers, prohibition of night lighting, fencing restrictions, and soil conservation at the site. These I support.

While I strongly support rapid increases in solar and storage projects in Maryland, I am deeply troubled, however, by the bad precedent set by a complete preemption of local review and regulation of solar projects. One day preemption of local review accelerates a goal one supports; the next day it comes back to bite one when it is used to accelerate a deeply troubling goal. One needs to be prepared to accept the compromises the political process produces, even when that stymies one's policy preferences.

The bill also does not address certain issues which a few amendments could address:

2

⁷ https://www.eia.gov/todayinenergy/detail.php?id=64586

- Currently, four hour LI batteries are the industry standard for battery energy storage systems (BESS). The recently-adopted NFPA855 makes these systems vastly safer. The bill should require that any new LI BESS systems incorporate that or a safer standard.
- Inadequate incentives in the RPS are often cited as key roadblocks to widespread adoption of utility scale solar. Adding SREC II incentives as currently proposed in HB398 ("Affordable Abundant Clean Energy Act") are preferable to precluding further decline in the ACP cost. As previously noted, the current ACP is already too low to incentivize installation of adequate amounts of new solar generating systems.
- The blanket prohibition on county zoning and regulations pertaining to solar siting is a legitimate concern for local governments and residents and sets a dangerous precedent. The bill should provide an exemption to the prohibitions on county regulation or a specific PSC review process in instances where a county holds an agricultural preservation or conservation easement on a property proposed for solar development. Easements represent county ownership of one or more property rights that should not be rendered meaningless by state law.

While some are concerned that utility scale solar would irreparably harm the agricultural industry and the rural way of life in the state, the number of acres needed for solar generation are small as a percent of the total state acreage. The likely acreage needed is in the range of 12,000 acres statewide or less than 6/10 of 1 percent of all Maryland farmland. Moreover, smaller projects, such as community solar, may be just what is needed to help a farming family continue using their smaller acreage for farming, relying on the set aside of a small portion of the property for more lucrative solar generating stations to reduce overall risk. Providing the landowner that option recognizes a landowner's general right to determine the highest and best use of his or her land. Having a rational and effective process to incentivize and site solar is a way to address these competing, legitimate concerns.

For these reasons, I support HB1036 as amended and urge a FAVORABLE WITH AMENDMENTS report in Committee.

ECA testimony HB1036 Renewable.pdfUploaded by: Frances Stewart

Position: FWA



HB1036 – FAVORABLE WITH AMENDMENT Frances Stewart, MD Elders Climate Action Maryland frances.stewart6@gmail.com 301-718-0446

HB1036, Renewable Energy Certainty Act

Meeting of the Economic Matters Committee

February 28, 2025

Dear Chair Wilson, Vice Chair Crosby, and Members of the Committee, on behalf of Elders Climate Action Maryland, I urge a favorable report on HB1036, the Renewable Energy Certainty Act.

Elders Climate Action is a nationwide organization devoted to ensuring that our children, grandchildren, and future generations have a world in which they can thrive. The Maryland Chapter has members across the state.

Each day, we see the climate crisis more clearly. We know that Maryland is at risk for sea level rise, flooding from intense rainfall, heat waves, and other extreme weather events. Maryland can also be a leader in moving us to a safer, cleaner future where we all can thrive. The clean energy transition is an essential part of that future.

Marylanders are also concerned about the rising cost of living, and particularly, about rising energy costs. In 2023, approximately 400,000 Maryland households¹ were paying more than six percent of their income for energy bills. Energy costs are particularly a problem for low-income households and people with fixed incomes, many of whom are elders.

Increasing solar generation and battery storage in Maryland is a key strategy for addressing both of these pressing concerns. Solar generation and battery storage are the least expensive ways to add to our grid's capacity and can be built quickly. In contrast, Dominion Power in Virginia in 2023 began converting a coal-fired plan to natural gas. That has taken much longer than expected and now should be ready in 2030 at the earliest.

We appreciate and support the provisions in this bill that reduce the barriers to the building of new solar and battery storage systems in Maryland, but we have some concerns that could be addressed by amendments.

The recent fire at a battery energy storage facility in California has increased concerns about the safety of battery storage. That facility was only a few years old, but there have been rapid advances in battery safety since it was built. A facility built in accordance with the recently-adopted National Fire Protection Association Standard for the Installation of Stationary Energy Storage Systems, NFPA855, would not have suffered that fate. We believe that standard should be added to this bill for all new energy storage facilities in Maryland and that as new standards emerge from NFPA, they should be adopted promptly.

In addition to the problems this bill addresses, inadequate incentives in the Renewable Portfolio Standard need to be changed. We recommend adding the SREC II incentives proposed in HB0398, the Abundant, Affordable, Clean Energy Act.

There is also a concern about building solar projects on agricultural land. Putting solar panels on rooftops, parking lots, and brownfields is great, but there is not enough space in those places to meet Maryland's solar needs. Most of the other available space is forest or agricultural land. We need to do all we can to preserve forests, so they are not suitable sites for solar projects. Agricultural land, on the other hand, can host solar projects while continuing to be used for agriculture through agrivoltaics. This is a burgeoning area worldwide, including in Maryland. Agrivoltaic projects can include grazing and growing a variety of fruits, vegetables, and other crops under solar panels. In addition to making highly efficient use of land and adding to farmers' incomes, in many cases that improves agricultural production by reducing heat stress and water requirements.

Only a small percentage of Maryland's agricultural land is needed for solar projects, but we believe it is important that it be used optimally. We recommend that any project built on land that is zoned for agriculture or that has an agricultural easement be required to incorporate agrivoltaics. That should not be primarily or only pollinator-friendly plants. Those are an excellent alternative in non-agricultural areas, but are not a good use of farm land. This bill would allow projects to avoid county zoning. That is important for building projects with the needed speed and scale, but communities should not be left out of the process. The Public Service Commission should require developers to do meaningful community engagement so that each community benefits from the project and their concerns are addressed as fully as is practicable.

We urge a favorable report with amendment on HB1036.

Thank you.

1 https://www.psehealthyenergy.org/over-18-percent-of-maryland-households-are-burdened-by-high-energy-bills/

ECA testimony HB1036 Renewable.pdfUploaded by: Frances Stewart

Position: FWA



HB1036 – FAVORABLE WITH AMENDMENT Frances Stewart, MD Elders Climate Action Maryland frances.stewart6@gmail.com 301-718-0446

HB1036, Renewable Energy Certainty Act

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HB1037 – FAVORABLE WITH AMENDMENT Frances Stewart, MD Elders Climate Action Maryland frances.stewart6@gmail.com 301-718-0446

HB1037, Renewable Energy Certainty Act

Meeting of the Economic Matters Committee

February 28, 2025

Dear Chair Wilson, Vice Chair Crosby, and Members of the Committee, on behalf of Elders Climate Action Maryland, I urge a favorable report on HB1037, the Renewable Energy Certainty Act.

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We urge a favorable report with amendment on HB1037.

Thank you.

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HB1036_ FAV WAMEND_PSC.pdf Uploaded by: Frederick Hoover

COMMISSIONERS

STATE OF MARYLAND

FREDERICK H. HOOVER, JR. CHAIR

MICHAEL T. RICHARD KUMAR P. BARVE BONNIE A. SUCHMAN



Chair C.T. Wilson Economic Matters Committee 230 House Office Building Annapolis, MD 21401

RE: HB1036 – Favorable with Amendments – Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Dear Chair Wilson and Committee Members:

The Public Service Commission (the Commission) requests a favorable report for House Bill 1036 (HB 1036) with the amendments detailed in this testimony.

HB 1036 makes changes to various processes and procedures that the Commission either oversees or interacts with closely, including but not limited to: Certificates of Public Convenience and Necessity (CPCN) and siting requirements for solar energy generating stations and energy storage devices, restrictions on local jurisdictions' oversight on solar energy generating stations and energy storage devices, the banking of unsubscribed community solar bill credits, the creation of a local jurisdiction community solar automatic-enrollment program, and the development of technical and safety standards for residential solar energy generating systems. This legislation has the potential to increase the rate of deployment for solar energy systems and energy storage devices while reducing existing barriers that hinder the deployment of these technologies within the State. For this reason, the Commission is supportive of the proposed legislation. The following are areas of focus to provide highlights for the legislature's consideration.

Solar Siting and Technical Considerations:

Section 7-207(e)(5) of the bill, as proposed, requires the Commission, when approving a CPCN for certain solar energy generating stations to ensure that the applicant complies with siting requirements proposed under § 7-218(f). These explicit siting requirements may alleviate project delays through the standardization of project designs and by preempting any conflicting requirements that exist in local ordinances, as § 7-218 (h)(2) states that a local jurisdiction may not deny approval of a solar system that complies with these requirements. The Commission has concerns that codification of these requirements in statute, as opposed to case-by-case adjudication or multi-stakeholder rulemaking, may result in rigid and inflexible outcomes for unique siting issues that might arise before the Commission. It may be advantageous to rely on the expertise of the Power Plant Research Program (PPRP) to develop these requirements within a multi-stakeholder group and propose them to the Commission for adoption as regulations. This process would provide for greater public and community involvement with the development of these requirements, as well as the ability to consider additional requirements that may not have been envisioned within this bill.

Section 7-218(g) of the bill requires an owner of a solar energy generating station to post a surety bond with the Commission, up to 100 percent of the cost of decommissioning the solar energy generating station and its related infrastructure, less any salvage value. The Commission currently requires CPCN applicants to post a

surety bond that includes 100 percent of the *future* estimated cost of decommissioning and for the financial mechanism to be developed by a third-party consultant. The Commission recommends that § 7-218(g) be amended to align with current CPCN surety bond requirements to take into account future costs and changes in costs.

Finally, §7-320 requires the Commission and the Maryland Energy Administration to develop technical safety standards and minimum installer qualifications for the installation and maintenance of residential rooftop solar systems. The Commission notes that crafting manufacturing and safety standards for solar systems is not in the Commission's area of expertise. The current regulations recognize IEEE, NEC, NESC and UL standards for solar equipment, as these national organizations have the experience to establish appropriate safety and reliability standards. Additionally, the jurisdiction of local electrical codes governs electrical installations.

Energy Storage Siting and Technical Considerations:

§ 7-218(b) of the bill stipulates that a person may not begin construction of an energy storage device unless the construction has been approved by the Commission. Since the bill does not require adherence to § 7-207(e) CPCN requirements, the Commission interprets the bill to require a Commission approval process, but not to require a certificate of public convenience and necessity process for an energy storage device, except for the 7-207(d) CPCN public comment and public hearing requirements as specified in § 7-218(d) of the bill.

The legislature may want to consider an amendment to give the Commission the ability to waive requirements in § 7–219 for good cause. Waivers may be warranted in situations where developers are installing small energy storage projects at commercial sites zoned for commercial or industrial purposes or where developers are installing energy storage systems of different technologies that do not present similar safety concerns to lithium-ion based energy storage systems.

As a general comment, the Commission has approved regulations for energy storage stakeholder engagement and participation and Commission review in the RM85 rulemaking process that overlap and conflict with HB 1036 requirements. These regulations are scheduled to take effect July 1, 2025, to implement the Maryland Energy Storage Program required by § 7-216.1. This RM85 process includes stakeholder engagement and participation and safety requirements for all front-of-the meter energy storage devices, unless a waiver is granted by the Commission. In addition, the RM85 regulations require a detailed state agency review coordinated by the PPRP that applies to energy storage projects 20 MWh or greater, unless exempted by the Commission. As this process has already been vetted through a stakeholder process, the Commission suggests it may be more expedient to adopt the RM85 standards.

Finally, the 7-207(d) CPCN notification and hearing requirements apply to certain energy storage devices greater than 100 kW. However, the size of an energy storage device is typically based on the energy stored in kilowatt-hours, not the capacity in kilowatts. Therefore, the Commission requests clarification if this criteria should be in kilowatt-hours, as opposed to kilowatts.

Community Solar:

§ 7-316.2 (o) of the bill provides that a local government can establish a community solar automatic enrollment program by submitting to the Commission a local law, contract, or administrative approval that creates the program. A prospective community solar automatic enrollment program will automatically enroll residents within the local government's jurisdiction as subscribers in a community solar project that is operated by or operated in close coordination with the local government.

The Commission notes that the creation of automatic enrollment programs by local jurisdictions may increase customer participation in the Maryland community solar program while increasing the development of solar

projects within the state. The Commission does have concerns related to the implementation of these types of programs and customer protections. The bill allows for a local government to establish an automatic enrollment program by submitting a local law to the Commission. However, the Commission will likely require regulations to be adopted outlining additional requirements for automatic enrollment programs, and the Commission should be the ultimate entity approving whether a program is allowed to be established. The bill requires that electric companies provide local government data including but not limited to individual customer participation in energy assistance programs, and historic billing usage of individual customers. Individual customers may not want to share this information with other entities, and there is no requirement for the consent of the customer to be given to share this information. Furthermore, the bill allows for an automatic enrollment program to not be subject to COMAR 20.62.05 on consumer protection, which will greatly reduce the protections that customers are typically afforded under traditional community solar projects, especially if a local government uses a designee to oversee subscriptions. Customer education is also a major concern for the Commission, because under traditional "opt-in" community solar projects, projects have an incentive to strongly educate their subscribers on community solar as much as possible to receive subscribers. The approach of automatic enrollment may also prevent price competition among community solar projects seeking customers by offering better discounts.

§ 7-306.2(d) is amended within the bill to allow for the banking of unsubscribed bill credits generated by a community solar energy generating system which may then be allocated, within 1 year, to one or more subscribers by the subscriber organization or subscription coordinator. The Commission has concerns regarding the timeliness of cost recovery associated with this mechanism because utilities will have the ability to apply solar credits to customer accounts up to a year after the credit is generated. Furthermore, this provision removes the financial incentive for community solar systems to market subscriptions in a timely manner because a community solar system may time the allocation of unsubscribed bill credits in an attempt to increase their revenue depending on the current dynamic in the energy market.

The Public Service Commission appreciates the opportunity to provide testimony for your consideration for bill HB 1036. We request a favorable report with support for the amendments detailed above. Please contact Christina Ochoa, Director of Legislative Affairs at christina.ochoa1@maryland.gov if you have any questions.

Sincerely,

Frederick H. Hoover, Chair

Maryland Public Service Commission

Frederich H House

SB 931-CBF-FWA

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CHESAPEAKE BAY FOUNDATION

Environmental Protection and Restoration
Environmental Education

Senate Bill 931

Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Date: February 28, 2025 Position: FAVORABLE W/ AMENDMENT

To: Education, Energy, and the Environment Committee From: Gussie Maguire,
MD Staff Scientist

Chesapeake Bay Foundation (CBF) **SUPPORTS WITH AMENDMENT** Senate Bill 931, which adds regulations for solar and energy storage installation. CBF generally supports the state's adoption of solar and other renewable energy, but these projects cannot come at the expense of the Maryland's other natural resources. CBF supports in concept amendments to be brought forth by the Maryland Association of Counties (MACo). MACo's amendments largely capture CBF's concerns regarding fast-tracking and siting and we encourage their adoption.

While solar energy and energy storage installations undeniably help the state reduce its carbon emissions, in alignment with state climate goals, they are not without environmental impact. Ideal sites for solar installations include rooftops, parking lots, brownfields, landfills, and other areas of disturbed or degraded land¹. Solar farms should not be constructed at the expense of forests, which provide crucial ecosystem services including water infiltration: impervious solar panels, in contrast, contribute significant stormwater runoff and subsequent erosion. Despite restoration efforts, the state has had a net loss of forest over the years, as well as significant fragmentation of the forest stands that remain².

The bill as written forbids local jurisdictions from denying solar sites that meet landscaping requirements laid out in the bill text. Furthermore, it requires that jurisdictions expedite review processes for new solar projects, and that the solar generating stations themselves be exempt from real and property taxes. These provisions would incentivize applications by solar developers while reducing the timeframe for thoughtful review of potential negative impacts. MACo's suggested amendments more appropriately address siting.

CBF urges the Committee's FAVORABLE WITH AMENDMENT report on SB 931.

For more information, please contact Matt Stegman, Maryland Staff Attorney, at mstegman@cbf.org.

¹ https://www.cbf.org/document-library/cbf-guides-fact-sheets/principles-and-practices-for-solar-power.pdf

Maryland Office • Philip Merrill Environmental Center • 6 Herndon Avenue • Annapolis • Maryland • 21403

² https://www.bayjournal.com/news/growth_conservation/maryland-still-losing-forests-and-trees-though-at-a-slower-rate-study-finds/article_b1ddd3b0-675e-11ed-9ea9-072671365ff9.html

BGE_FWA_SB931_HB1036- Public Utilities - Generati

Uploaded by: Guy Andes



Position Statement

Favorable with Amendments
Senate Education, Energy, and the
Environment
House Economic Matters
2/21/2025

Senate Bill 931 / House Bill 1036 – Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Baltimore Gas and Electric Company (BGE) supports with amendments Senate Bill 931 / House Bill 1036 – Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act). Senate Bill 931 and House Bill 1036 propose changes to the factors the Public Service Commission (Commission) must consider before issuing a certificate of public convenience and necessity (CPCN). The bills set specific requirements for constructing solar energy generating stations and energy storage devices. The bills also include provisions to expedite local government review and approval of site development plans and permit the establishment of community solar energy generating system automatic enrollment programs. Additionally, the bills mandate the Commission to conduct a study to develop a process for establishing partnerships between electric companies and electricity suppliers for generation projects.

The deployment of new solar energy generating stations and battery storage facilities is critical to addressing Maryland's resource adequacy challenge. In alignment with its broader objectives to enhance grid reliability, integrate additional renewable energy sources, and achieve carbon neutrality by 2045, the State has established a target to install 3,000 MW of battery storage. The State is actively encouraging utilities and other entities to expedite the siting and development of storage projects to provide additional electricity during peak demand periods. Senate Bill 931 and House Bill 1036 will require a battery storage facility to obtain approval from the Commission before it can be constructed – akin to a CPCN process for battery storage facilities. These new requirements will add significant costs to storage projects, increase administrative burdens, and could act as a disincentive to constructing these facilities in Maryland, undermining the State's targeted goal.

To align with the bill's objectives, BGE suggests the following amendments that: clarify the language and avoid unintended financial impacts on non-participating jurisdictions; ensure customer awareness before program enrollment; provide protections for community solar subscribers; clarify the date for which utilities are required to implement consolidated billing protocols; and expedite the siting of storage projects:

- Utility territories cross jurisdictional boundaries. If a local government initiates a community solar program, the bill should explicitly state and dictate a structure to ensure that other jurisdictions will not incur costs related to stranded contracts or generation assets. The initiating jurisdiction should bear all financial responsibilities for these programs.
- While community solar programs offer expanded access to renewable energy, automatic enrollment
 without explicit customer consent raises concerns about consumer protection and informed choice.
 We recommend replacing automatic enrollment with an opt-in process to ensure customers fully
 understand the program's benefits, costs, and potential impacts prior to enrolling.

BGE, headquartered in Baltimore, is Maryland's largest gas and electric utility, delivering power to more than 1.3 million electric customers and more than 700,000 natural gas customers in central Maryland. The company's approximately 3,400 employees are committed to the safe and reliable delivery of gas and electricity, as well as enhanced energy management, conservation, environmental stewardship and community assistance. BGE is a subsidiary of Exelon Corporation (NYSE: EXC), the nation's largest energy delivery company.

- Remove the requirement to bank unsubscribed community solar energy as this will only benefit Subscriber Organizations and could hinder the growth of Maryland's community solar customer base. As drafted, Subscriber Organizations could bank kilowatt-hours valued at the locational marginal rate at the time it was produced, and later offer subscribers the same kilowatt-energy at a higher rate. Simply put, this provision creates an opportunity for developers to speculate on energy markets and cash out only at financially advantageous times. Since Maryland's ratepayers are on the other side of the "trade", developers have an opportunity to enrich themselves at the expense of Marylanders.
- Add language to clarify the timing for electric companies to implement consolidated billing protocols for purchase of receivables or net crediting for community solar energy generating systems by January 1, 2026, as prescribed under current law.
- Remove the Commission construction approval requirements for energy storage facilities as this will hinder timely deployment of storage projects and delay achievement of the State's storage goals.

BGE remains committed to supporting Maryland's energy transition and supports policies that keep affordably, resiliency, and reliability a priority. BGE requests the Committees accept our recommended amendments and issue a favorable report.

SUPPORT HB 1036 with Amendment - Public Utilities

Uploaded by: Jason Ascher

MID-ATLANTIC PIPE TRADES ASSOCIATION



7050 Oakland Mills Road Suite 180 Columbia, MD 21046

Phone: 410-290-3890

www.midatlanticpipetrades.org

Economic Matters Committee

To: Delegate CT Wilson, Char; Delegate Brian Crosby, Vice Chair; and Members of the Committee **From:** Jason Ascher, Political Director – Mid-Atlantic Pipe Trades Association

SUPPORT HB 1036 with Amendment - Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

On behalf of the Mid-Atlantic Pipe Trades Association and our five United Association of Plumbers and Steamfitters Locals, which represent over 10,000 Plumbers, Steamfitters, Welders, HVAC Techs, and Sprinkler Fitters across Maryland, I ask you to **SUPPORT HB 1036**.

Getting Maryland to a stronger energy future require a reliable grid powered by locally generated energy that is affordable to Maryland residents. We need an all the above energy approach to reach this goal. From Wind and Solar, to Natural Gas and Nuclear, everything needs to be on the table because otherwise we artificially inflate prices. A robust energy generation not only creates a reliable grid, but good job building and maintaining these systems.

We are in support of the approach advanced by Constellation Energy. A competitive, market-based energy solution that leverages private investment, technological innovation, and job growth. Maryland should expand proven competitive procurement models that have already delivered lower energy costs and greater efficiency instead of forcing utilities back into generation. Constellation's market-driven approach ensures that Maryland's energy cost-effective, competitive, and sustainable, and doesn't disrupt existing energy markets or placing unnecessary financial burdens on ratepayers. Any study conducted by the PSC should include this perspective rather than focusing solely on utility-controlled generation partnerships.

For the above reasons, we ask that you give HB 1036 a favorable with amendment Report.

Sincerely

Jason Ascher Political Director Mid-Atlantic Pipe Trades Association

MID-ATLANTIC PIPE TRADES ASSOCIATION



7050 Oakland Mills Road Suite 180 Columbia, MD 21046

Phone: 410-290-3890

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HB1036_Vistra_Favorable With Amendments_Vistra.doc Uploaded by: Katie Nash



HB1036: Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Maryland House Committee on Economic Matters

Vistra Submitted Testimony: Favorable With Amendments

February 28, 2025

Chairman Wilson, Vice Chair Crosby and members of the Economic Matters Committee,

Vistra appreciates the opportunity to submit these written comments based upon our perspective as the largest competitive power generator in the United States.¹ We are advocating for the removal of unnecessary study language that contemplates utility-owned generation. We advocate for the removal of this language that we believe is in conflict with Maryland's energy goals regarding affordability and we are happy to provide additional information on the detrimental impacts of utility-owned generation.

Our team also notes that this inclusion appears to conflict with the Energy Resource Adequacy and Planning Act (SB909/HB1037) that creates a new process to consider a wide range of solutions for Maryland. The study provisions in SB909/HB1037 have a wider scope that could lead to the most effective and cost-efficient mechanism to bring new resources online. The additional study of a more costly utility partnership for generation proposed in SB931/HB1036 is unnecessary and could yield conflicting results.

We applaud the sponsors' and their staff for their work to bring this legislation forward as well as the work of the Governor and his team, Maryland General Assembly leadership, and dedication of these Committees to address Maryland's energy future.

Submitted Respectfully,

Colin Fitzsimmons Director, Government Affairs Vistra Corp.

¹ Vistra is a leading Fortune 500 integrated retail electricity and power generation company. The company brings its products and services to market in 19 states and the District of Columbia, including all major competitive wholesale power markets in the U.S. Vistra retail brands serve approximately 5 million residential, commercial, and industrial retail customers with electricity and natural gas and is one of the largest competitive electricity providers in the country and offers over 50 renewable energy plans across the markets we serve. While Vistra does not own electric generation in Maryland, the company is also the largest competitive power generator in the U.S. with a capacity of approximately 41,000 megawatts powered by a diverse portfolio, including natural gas, nuclear, solar, and battery energy storage facilities. Over 7,500 MW of that generation serves the PJM region, of which Maryland is a part. The company also owns and operates the 750-MW/3,000-MWh battery energy storage system in Moss Landing, California, one of the largest of its kind in the world. Learn more about our environmental, social, and governance efforts and read the company's sustainability report at https://www.vistracorp.com/sustainability/.

SB931_Vistra_Favorable With Amendments_Vistra.docx Uploaded by: Katie Nash



SB931: Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Maryland Senate Committee on Education, Energy, and the Environment Vistra Submitted Testimony: Favorable With Amendments February 28, 2025

Chair Feldman, Vice Chair Kagan, and members of the Education, Energy, and the Environment Committee,

Vistra appreciates the opportunity to submit these written comments based upon our perspective as the largest competitive power generator in the United States.¹ We are advocating for the removal of unnecessary study language that contemplates utility-owned generation. We advocate for the removal of this language that we believe is in conflict with Maryland's energy goals regarding affordability and we are happy to provide additional information on the detrimental impacts of utility-owned generation.

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HB1036 MRSC Rever FWA.pdf Uploaded by: Katie Rever Position: FWA



February 26, 2025

The Honorable C.T. Wilson Chair, House Economic Matters Committee 6 Bladen St. Annapolis, Maryland 21401

RE: HB1036: Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)
FAVORABLE WITH AMENDMENTS

Dear Chairman Wilson and Members of the Committee,

On behalf of the Maryland Rooftop Solar Coalition (MRSC), we appreciate the opportunity to provide testimony in support with amendments of House Bill 1036 (cross-filed with Senate Bill 931). MRSC is a coalition of companies operating in Maryland with a shared commitment to advancing the State's clean energy goals through the installation and operation of customer-sited solar energy systems. We commend the bill's intent to establish essential consumer protections in the sale, lease, and installation of these systems and offer several recommendations to enhance its effectiveness.

With over 950MWs installed, residential solar accounts for over 40% of the deployed solar in our state. It is an integral part of our state's response to climate change, and particularly when paired with storage, can reduce strain on the grid from electrification. In other climate-leading states that have proper policy structures, residential rooftop solar also provides a cornerstone for building their clean energy economy, steadily deploying megawatts of solar each year. As with other home improvement industries, the jobs created by rooftop solar are inherently local, stable and family-sustaining.

Our testimony is focused narrowly on two items – the residential consumer protection provisions and the opt-out auto-enrollment program for community solar. We believe the consumer protection provisions in this bill will help to further consumer confidence in the market. Our proposed amendments are intended to clarify, and in some cases strengthen, certain provisions in the bill.

Regarding the opt-out auto-enrollment for community solar provisions, we believe it will create undue roadblocks and unintentionally raise the cost of customers adopting rooftop solar.

The original intent and promise of community solar was to create an option for renters and other Maryland residents who couldn't put a physical solar system on their rooftops to choose to support the development of solar in the state. We support this goal of broader access and also the goal of streamlined access for LMI renters to community solar projects. However, as drafted,



this program would also auto-enroll customers who might be good candidates for rooftop solar systems. Rooftop solar allows customers to fully own or directly benefit from their system's financial incentives, rather than subscribing to an offsite project where they could not expect to receive the same level of economic return.

Customer acquisition costs are already a substantial cost for residential solar. Allowing local governments to create an incumbent solar provider where one didn't exist increases these costs, creating an unlevel playing field. It's a well known business principle that it's expensive to get potential customers to make a buying decision - by defaulting potential rooftop solar customers into an opt-out enrollment community solar program, a potential rooftop solar customer now has to make two decisions - the first one to unenroll from a solar option that has been blessed by their local government and the second to install a solar system on their home.

By prioritizing community solar for those without rooftop access and ensuring homeowners remain incentivized to install their own systems, Maryland can strike a balance between expanding solar adoption and maintaining the integrity of both rooftop and community markets.

Discussion of Proposed Consumer Protection Edits

1. Page 19, Line 21: Remove "Rooftop"

- The bill currently states: "This section applies only to residential rooftop solar energy generating systems."
- We recommend striking the word "rooftop" to ensure that the consumer protections extend to all residential solar energy systems, including ground-mounted solar installations. This amendment will provide uniform protections for all residential solar consumers, ensuring equitable access to safeguards regardless of system type.

2. Page 19, Line 23 and Page 20, Line 16: Add 'Installer' between "A Seller' and "or Lessor"

- The current language limits responsibility to a "seller or lessor", which does not adequately capture the full range of entities involved in solar transactions.
- By adding the word 'installer', the bill more accurately assigns accountability to the entity responsible for the warranties and installation quality. Since the seller or lessor may not always be the same entity that installs or services the system, broadening this term ensures that the appropriate party is held responsible.

3. Page 20, Lines 1-3: Amend Language on Weather-Adjusted Production Estimates

- The bill currently requires sellers or lessors to provide an estimate of "the minimum level" of weather-adjusted energy production.
- We propose revising this to ensure greater accuracy and clarity: "Inform the buyer or lessee of a reasonable estimate of weather-adjusted energy



- production based on historical data and system performance characteristics that the buyer or lessee may expect from the system."
- This revision more accurately reflects the industry standard for energy production estimates, which are based on historical data and system characteristics rather than an absolute minimum value.

4. Page 20, Lines 4-7: Strike Section (4) in its Entirety

- This section introduces requirements that are already addressed through existing federal and state licensing and safety standards. Specifically:
 - o The **Maryland Home Improvement Contractors License**, issued by the Maryland Home Improvement Commission (MHIC), ensures that contractors are qualified to install solar systems.
 - Occupational Safety and Health Administration (OSHA) standards provide comprehensive safety training, covering critical areas such as fall protection and electrical safety.
- These regulations already ensure that installers meet rigorous safety and craftsmanship standards, rendering this section redundant. Striking this clause prevents unnecessary duplication of existing legal requirements.

5. Page 20, Line 8: Assign Oversight to the Maryland Home Improvement Commission (MHIC) Under Purview of The Department of Labor

- To ensure proper oversight of contractor compliance with federal and state safety standards, we recommend designating The Department of Labor as the responsible entity.
- The Maryland Home Improvement Commission (MHIC) is a subdivision of the Maryland Department of Labor that licenses home improvement contractors and salespersons. As MHIC already regulates home improvement contractors, this Department is best positioned to oversee compliance with safety and certification requirements.

6. Page 20, Lines 9-15: Focus on Certification Compliance Rather than Creating New Standards

- Rather than developing additional certification requirements, we suggest that the Maryland Home Improvement Commission conduct bi-annual compliance verification to confirm that all installers adhere to OSHA and MHIC licensing standards.
- Additionally, we propose the creation of a **new certification for individuals engaged in the sale or marketing of solar energy systems** to ensure ethical marketing and sales practices. This would provide an additional layer of consumer protection while leveraging existing regulatory frameworks for installer compliance.

Discussion of Proposed Auto-Enrollment Edits



1. Page 17, Lines 11 - 13: Restrict automatic enrollment subscribers to LMI utility customers who are not the owner of record of their dwelling.

- The bill currently allows all residential customers to be included on an opt-out basis even customers who could be good candidates to install rooftop solar, thereby allowing a government entity to establish an incumbent provider where none was before.
- We recommend restricting the universe of eligible customers to LMI renters, thereby meeting the twin goals of streamlining access to LMI renters while also not adding additional costs and friction in the residential rooftop solar market.

We appreciate the Committee's commitment to strengthening consumer protections in Maryland's growing solar industry. We thank Chair Wilson for his leadership on these important issues and urge the adoption of these amendments to ensure the bill effectively balances consumer protection with regulatory efficiency as well as maintaining the integrity of both the community solar and rooftop markets. We look forward to supporting the passage of House Bill 1036.

Thank you for your time and consideration.

Respectfully submitted,

Katie Rever, IGS Maryland Rooftop Solar Coalition

Cc: Rick Abbruzzese



Proposed Amendments

7-306.2

(O)(4)(1) AUTOMATIC ENROLLMENT SUBSCRIBERS MUST BE **LOW TO MODERATE INCOME** (**LMI**) RESIDENTIAL CUSTOMERS **WHO ARE NOT THE OWNER OF RECORD OF THEIR DWELLING**, INCLUDING CUSTOMERS RESIDING IN MULTIFAMILY DWELLING UNITS:

7-320.

- (A) THIS SECTION APPLIES ONLY TO RESIDENTIAL ROOFTOP SOLAR ENERGY GENERATING SYSTEMS.
- (B) A SELLER, **INSTALLER**, OR LESSOR OF RESIDENTIAL ROOFTOP SOLAR ENERGY GENERATING SYSTEMS SHALL:
 - (1) PROVIDE TO THE BUYER OR LESSEE A 5-YEAR FULL WARRANTY ON THE INSTALLATION AND COMPONENT PARTS OF THE SYSTEM:
 - (2) INCLUDE ANY MANUFACTURER'S WARRANTIES FOR ANY OF THE PRODUCTS OR COMPONENTS OF THE SYSTEM:
 - (3) INFORM THE BUYER OR LESSEE OF THE MINIMUM LEVEL A REASONABLE ESTIMATE OF WEATHER-ADJUSTED ENERGY PRODUCTION BASED ON HISTORICAL DATA AND SYSTEM PERFORMANCE CHARACTERISTICS THAT THE BUYER OR LESSEE MAY EXPECT FROM THE SYSTEM.; AND
- (4) CERTIFY, IN WRITING, THAT INSTALLATION OF THE SYSTEM IS COMPLIANT WITH ALL FEDERAL, STATE, AND LOCAL LAWS REGARDING WORKMANSHIP AND THAT THE SOLAR PANELS, INVERTERS, RACKING SYSTEMS, AND ALL OTHER COMPONENTS MEET THE MINIMUM STANDARDS FOR PRODUCT DESIGN.
- (C) THE MARYLAND HOME IMPROVEMENT COMMISSION AND THE MARYLAND ENERGY ADMINISTRATION SHALL:



- (1) DEVELOP TECHNICAL SAFETY STANDARDS FOR THE INSTALLATION AND MAINTENANCE OF RESIDENTIAL ROOFTOP SOLAR ENERGY GENERATING SYSTEMS-REQUIRE CONTRACTORS TO COMPLY WITH ALL APPLICABLE FEDERAL AND STATE SAFETY STANDARDS AND CERTIFICATION REQUIREMENTS, INCLUDING OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS AND HOME IMPROVEMENT CONTRACTORS LICENSES CERTIFY IN WRITING COMPLIANCE WITH LICENSES AND CERTIFICATIONS LISTED ABOVE IN (7-320 (C)(1)) ON A BIANNUAL BASIS; AND
- (2) ESTABLISH MINIMUM QUALIFICATIONS FOR INDIVIDUALS INSTALLING AND MAINTAINING RESIDENTIAL ROOFTOP SOLAR ENERGY GENERATING SYSTEMS. CREATE A CERTIFICATE, BASED ON STANDARDS APPROVED BY A NATIONAL SOLAR INDUSTRY OR ACCREDITING ORGANIZATION, THAT IS REQUIRED FOR ANY PERSON ENGAGED IN THE SALE OR MARKETING OF SOLAR ENERGY GENERATING SYSTEMS.
- (D) A SELLER, **INSTALLER**, OR LESSOR WHO VIOLATES THE REQUIREMENTS OF THIS SECTION SHALL PAY A FINE NOT EXCEEDING \$1,000 FOR EACH VIOLATION.

HB1036_SB931 Renewable Energy Certainty Act_ECM_EE Uploaded by: Laurie McGilvray



Committee: Education, Energy, and the Environment

Testimony on: SB931 – Public Utilities - Generating Stations - Generation and

Siting (Renewable Energy Certainty Act)

Organization: Maryland Legislative Coalition Climate Justice Wing

Submitting: Richard Deutschmann Position: Favorable with Amendments Hearing Date: February 28, 2025

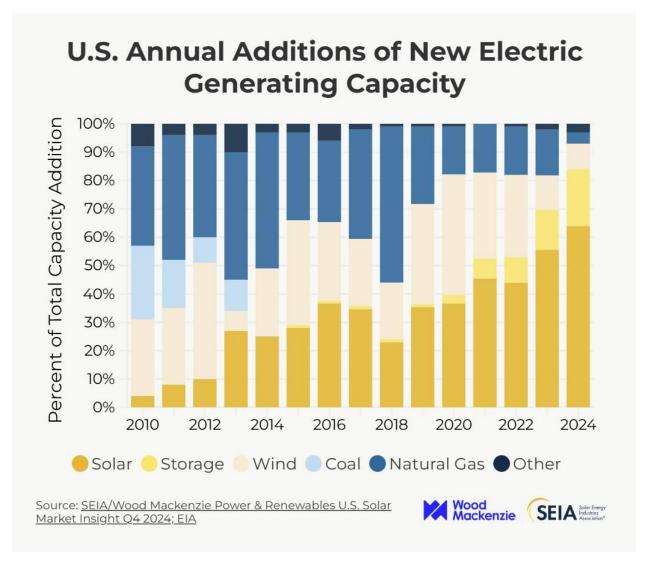
Dear Chair Feldman and members of the Committee:

Thank you for your consideration of our testimony today in support of SB931. The Maryland Legislative Coalition Climate Justice Wing, a statewide coalition of nearly 30 grassroots and professional organizations, urges you to vote favorably on SB931, with suggested amendments.

The Renewable Portfolio Standard (RPS) calls for 14.5% of Maryland's clean electricity to be contributed by solar energy by 2030, but the State has repeatedly fallen significantly short of this goal. In fact, because Maryland utilities have failed to meet this solar energy target, they paid a record \$262m in Tier 1 alternative compliance payments to the Strategic Energy Investment Fund (SEIF) in FY 2023. According to the 2023 Maryland Climate Pathways Report, both wind and solar generation must increase fivefold by 2031, with solar accounting for 33% of in-state energy generation.

Recent events such as the PJM capacity auction and recent news regarding data centers have created a sense of urgency in our state to address reliability, new sources of electricity, and affordability. Fortunately, modern utility scale and community solar generating plants are the least expensive and fastest to deploy energy source in the world today. Combining solar with utility scale battery storage can be developed and built, at costs that are competitive with combined-cycle gas generation, and at a lower long-term risk to Maryland ratepayers. This can provide the dispatchable generation that is needed to stabilize the grid, and address the energy needs of Maryland homes and businesses for decades to come.

According to the Solar Energy Industry Association, solar energy deployment has become the clear choice of new energy generation throughout the United States, and along with storage, is now nearly 85% of new additions to the grid.



This is bringing new sources of clean energy generation, lower cost and greater reliability to numerous states across the U.S. However, Maryland has been slow to participate in this global trend, due to dysfunctional policies in the RPS, excessive interconnection delays at PJM, as well as some local prohibitions of solar energy plants. SB931 aims to address some of these issues with rules related to the siting of critical large-scale solar infrastructure throughout the state.

We agree with the provisions provided in the bill for reasonable setbacks on the property, landscaping and visual barriers, prohibition of night lighting, fencing restrictions, and soil conservation at the site.

We nevertheless are concerned about the blanket preemption of local review and regulation of solar projects, because it sets a worrisome precedent for state preemption of local regulation of not only solar but other projects as well. The MLC Climate Justice Wing is also concerned that the bill does not address the following issues and we offer suggested amendments for how to mitigate these concerns.

- The safety and reliability of Battery Energy Storage Systems is a concern, and the bill should reference the recently-adopted National Fire Protection Association NFPA855 Standard for the Installation of Stationary Energy Storage Systems, which is making these systems vastly safer than previous generations of projects.
- Inadequate incentives in the RPS are often cited as key roadblocks to widespread adoption of utility scale solar, and we recommend adding SREC II incentives as currently proposed in SB316 ("Affordable Abundant Clean EnergyAct").
- Finally, the blanket prohibition on county zoning and regulation, coupled with the need for additional siting considerations and requirements (e.g., agrivoltaics, pollinator habitat) are a legitimate concern for local governments and residents. At a minimum, the bill should provide an exemption to the prohibition on county regulation or a specific PSC review process in instances where a county holds an agricultural preservation or forest or other conservation easement on a property proposed for solar development. Easements represent county ownership of a right or rights in the bundle of property rights that should not be rendered meaningless by this bill.

Maryland remains one of the most vulnerable states to the effects of global climate change. The National Oceanic & Atmospheric Administration (NOAA) projects sea levels in the Chesapeake Bay region to increase by nearly 1.5 feet in the next century at current projections, and these are accelerating. This would put vast swaths of the Eastern Shore underwater, and render large amounts of our agricultural sector unusable. Renewable energy is an important part of the climate changes solutions in the state. While there are concerns that utility scale solar would irreparably harm the agricultural industry and the rural way of life in the state, the number of acres needed for solar generation are small as a percent of the total number of acres in the state. Having a rational and effective process to incentivize and site solar is a way to address these concerns. Given the case for 3,000 MW of new solar deployed in the coming decades, at approximately 4 acres per MW of solar, this amounts to 12,000 acres statewide or less than 6/10 of 1% of all Maryland farmland.

In closing, SB931 is part of an "energy package" which dovetails with other policies needed for a 21st-century solution to our energy challenges. We believe other complementary bills must be supported. In particular, we also support the aforementioned SB361 (Abundant Affordable Clean Energy Act), as well as SB908 (Affordable Grid Act), and SB909 (Energy Resource Adequacy and Planning).

For all of these reasons, the undersigned Climate Justice Wing members support SB931 as amended and urge a FAVORABLE WITH AMENDMENTS report in Committee.

350MoCo Adat Shalom Climate Action Chesapeake Earth Holders Climate Parents of Prince George's Climate Reality Greater Maryland ClimateXChange – Rebuild Maryland Coalition

Coming Clean Network, Union of Concerned Scientists

DoTheMostGood Montgomery County

Echotopia

Elders Climate Action Maryland

Fix Maryland Rail

Glen Echo Heights Mobilization

Greenbelt Climate Action Network

HoCoClimateAction

IndivisibleHoCoMD

Maryland Legislative Coalition

Mobilize Frederick

Montgomery County Faith Alliance for Climate Solutions

Mountain Maryland Movement

Nuclear Information & Resource Service

Progressive Maryland

Safe & Healthy Playing Fields

The Climate Mobilization MoCo Chapter

Unitarian Universalist Legislative Ministry of Maryland

WISE

HB 1036 - CBF - FWA.pdfUploaded by: Matt Stegman Position: FWA



CHESAPEAKE BAY FOUNDATION

Environmental Protection and Restoration
Environmental Education

Senate Bill 931

Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Date: February 28, 2025 Position: FAVORABLE W/ AMENDMENT

To: Economic Matters Committee From: Gussie Maguire,
MD Staff Scientist

Chesapeake Bay Foundation (CBF) **SUPPORTS WITH AMENDMENT** Senate Bill 931, which adds regulations for solar and energy storage installation. CBF generally supports the state's adoption of solar and other renewable energy, but these projects cannot come at the expense of the Maryland's other natural resources. CBF supports in concept amendments to be brought forth by the Maryland Association of Counties (MACo). MACo's amendments largely capture CBF's concerns regarding fast-tracking and siting and we encourage their adoption.

While solar energy and energy storage installations undeniably help the state reduce its carbon emissions, in alignment with state climate goals, they are not without environmental impact. Ideal sites for solar installations include rooftops, parking lots, brownfields, landfills, and other areas of disturbed or degraded land¹. Solar farms should not be constructed at the expense of forests, which provide crucial ecosystem services including water infiltration: impervious solar panels, in contrast, contribute significant stormwater runoff and subsequent erosion. Despite restoration efforts, the state has had a net loss of forest over the years, as well as significant fragmentation of the forest stands that remain².

The bill as written forbids local jurisdictions from denying solar sites that meet landscaping requirements laid out in the bill text. Furthermore, it requires that jurisdictions expedite review processes for new solar projects, and that the solar generating stations themselves be exempt from real and property taxes. These provisions would incentivize applications by solar developers while reducing the timeframe for thoughtful review of potential negative impacts. MACo's suggested amendments more appropriately address siting.

CBF urges the Committee's FAVORABLE WITH AMENDMENT report on SB 931.

For more information, please contact Matt Stegman, Maryland Staff Attorney, at mstegman@cbf.org.

¹ https://www.cbf.org/document-library/cbf-guides-fact-sheets/principles-and-practices-for-solar-power.pdf

Maryland Office • Philip Merrill Environmental Center • 6 Herndon Avenue • Annapolis • Maryland • 21403

² https://www.bayjournal.com/news/growth_conservation/maryland-still-losing-forests-and-trees-though-at-a-slower-rate-study-finds/article b1ddd3b0-675e-11ed-9ea9-072671365ff9.html

HB1036_Renewable Energy Certainity Act_SupportTest Uploaded by: Megan D'Arcy



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Email: rmc.mda@maryland.gov Website: rural.maryland.gov

Susan O'Neill, Chair

Charlotte Davis, Executive Director

Testimony in Support with Amendments

House Bill 1036 – Public Utilities – Generating Stations – Generating and Siting
(Renewable Energy Certainty Act)

Economic Matters Committee
February 28, 20205

The Rural Maryland Council supports House Bill 1036 with Amendments - Public Utilities Generating Stations – Generating and Siting (Renewable Energy Certainty Act). This bill aims to streamline the Public Service Commission's (PSC) approval process for solar and energy storage projects by modifying the required considerations for certificates of public convenience and necessity. It also prohibits local jurisdictions from restricting these projects under certain conditions and requires expedited site development approvals. The bill enables automatic enrollment in community solar programs, sets guidelines for residential rooftop solar installations, and mandates a PSC study to establish renewable energy partnerships. If enacted, the bill would take effect in October 2025.

With Maryland importing about 40% of its electricity and 75% of its renewable energy from outof-state sources, it is clear why the state is working to reduce this reliance by developing more local renewable energy projects. House Bill 1036 supports this goal by streamlining the approval process, allowing the state to grant approval for projects that meet specific criteria and bypass the often complex and delayed local procedures. While the Council supports the overall objectives of HB1036, it also recognizes the importance of ensuring that the needs and concerns of rural Maryland are not overlooked. To protect rural communities and land use, the bill requires some amendments.

Rural areas are ideal for renewable energy projects due to factors such as abundant open land, lower population density, and cheaper land costs. These areas often have favorable natural resources, including strong winds and ample sunlight, necessary for energy generation. Additionally, rural regions can accommodate the infrastructure needed, like transmission lines and substations, to connect renewable energy projects to the grid. This combination of resources and space makes rural areas a prime location for large-scale solar and wind energy developments (climatechangewriters.com).

The Council requests amendments to the bill to ensure that local governance is included in the decision-making process. Additionally, the bill should prohibit the construction of renewable energy projects on prime agricultural soils and require that mitigation fees be directed toward restoring the land to its pre-solar development condition once renewable energy use ceases.

The Rural Maryland Council respectfully requests your favorable support with amendments of House Bill 1036.

On page 5, on line 8, INSERT

- (3) (1) OR LOCATED ON PRIME AGRICULTURAL SOILS CLASS I AND II
- (2) IF LOCATED ON NON-PRIME AGRICULTURAL SOILS CLASS I AND II, THE COMMISSION SHALL MANDATE DEVELOPERS TO PAY A MITIGATION FEE FOR LAND RESTORATION AS A CONDITION FOR CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY APPROVAL. FUNDS ARE ALLOCATED FOR RETURNING THE LAND TO ITS ORIGINAL STATE AFTER THE DECOMMISSIONING OF RENEWABLE ENERGY PROJECTS.

On page 5, after line 17, INSERT,

(3) THE PROJECT HAS ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL APPROVALS.

SB931_Renewable Energy Certainity Act_SupportTesti Uploaded by: Megan D'Arcy



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Testimony in <u>Support with Amendments</u>
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(Renewable Energy Certainty Act)
Education, Energy, and the Environment
February 28, 20205

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HB 1036 Frederick County Testimony .pdf Uploaded by: Michael Wilkins

FREDERICK COUNTY GOVERNMENT

DIVISION OF PLANNING & PERMITTING

Department of Development Review & Planning

Deborah A. Carpenter, AICP, Division Director Michael L. Wilkins, Director

HB 1036 - Public Utilities - Generating Stations-Generation and Siting (Renewable Energy Certainty Act)

DATE: February 26, 2025

COMMITTEE: House Economic Matters Committee

POSITION: Favorable with Amendments

FROM: Michael Wilkins, Director, Department of Development Review

& Planning, Frederick County Government

As the Director of Development Review and Planning for Frederick County, I urge the committee to give HB 1036 - Public Utilities - Generating Stations-Generation and Siting (Renewable **Energy Certainty Act**) a favorable with amendments report.

As drafted, this bill will establish inadequate siting requirements for solar generating stations and energy storage devises and prohibit a local jurisdiction from applying a fair and equitable tax on solar developments. While the intent of this legislation is to streamline the approval process for ground-mounted solar facilities and energy storage devises, it fails to incorporate necessary protections for the health, safety, and welfare of our citizens.

Throughout the interim, I participated in meetings with solar industry representatives, state agencies, conservation organizations, and MACo to discuss and negotiate a predictable path forward for solar deployment that addressed all parties' concerns. By October, this group of stakeholders had developed a set of modest livability standards that promoted solar development, provided predictability to local jurisdictions and the solar industry, balanced solar deployment and land preservation goals, and safeguarded our rural communities and public processes. As a result of many stakeholder meetings and input from state agencies and industry experts, this ad hoc workgroup had reached a policy consensus.

The language in HB 1036 falls short of the compromises we agreed to a few months ago. The bill significantly reduces setback requirements from property lines, provides insufficient landscape buffering and screening requirements that are instrumental to prevent negative impacts to scenic areas, parks, and historic sites, lacks comprehensive decommissioning standards, ignores a compromise to hold a community meeting prior to application, and excludes a preservation fee that was accepted by the solar representatives as a means to balance the development of preservation areas with supporting Maryland's land preservation goals.

This bill also includes the same inadequate solar siting standards for siting energy storage systems. Maryland currently offers little guidance on appropriate siting and safety standards for energy storage systems. These facilities raise significant public safety concerns and questions, including:

- What is a safe distance between an energy storage facility and a residential structure?
- What building, electrical, and fire codes should be applied to ensure these facilities are safely constructed and maintained?
- Are our emergency service facilities properly equipped, and our personnel adequately trained to handle an emergency situation at an energy storage facility?
- Is a single siting standard, especially one modeled after ground-mounted solar, an appropriate approach for all types (thermal, electrochemical, hydrogen-based, etc.) and scales of energy storage systems?

This bill also reduces the PSC application notification period. COMAR 20.79.01.05 currently requires an applicant to notify the local jurisdiction at least 90 days prior to applying to the PSC. This advance notice provides the local jurisdiction time to review the application and work with the applicant to address concerns before a formal application is submitted. This bill proposes to eliminate this advanced review opportunity and replace it with a notification at the time the application is filed with the PSC. This proposed language provides less transparency than the current requirement and will lead to additional, and often unnecessary, testimony and appeals by the local jurisdictions and community members to resolve concerns that could otherwise be addressed prior to the submission of the application.

Finally, this bill proposes to preempt local tax authority by prohibiting personal and real property taxes unless a jurisdiction agrees to a maximum \$5,000/KW payment in lieu of taxes agreement. Frederick County estimates that this provision will cost \$750,500 annually just on the currently approved solar projects. This loss of revenue would increase as more solar projects receive approval. The reduction in tax revenue proposed by this bill could not come at a worse time for local jurisdictions.

Frederick County is proud to continue working towards meeting Maryland's renewable energy goals and has invested significant time and resources towards increasing the development of renewable energy throughout our community. We have relaxed our Zoning regulations to streamline the approval process for utility-scale solar and process solar facilities below 5MW as permitted uses with a Staff-level approval process. Our Division of Energy and Environment is currently working with consultants on a Solar Blueprint siting study to expand the County's renewable solar energy capabilities while safeguarding other land use priorities and mitigating the unintended impacts that these facilities can sometimes have. Frederick County Government is a committed partner in the effort to meet the State's renewable energy commitments. However, we must ensure that renewable energy development is done in a measured way, protecting our livability standards and ensuring the safety of our citizens.

While we are disappointed that the compromise legislation developed during the interim has been abandon, the amendments proposed by MACo help to alleviate county concerns with HB 1036 by establishing common sense siting standards, providing appropriate public engagement standards, pausing preemptive siting regulations on energy storage systems until the PSC establishes safe development standards, and recognizes the importance of studying the impacts of solar development on prime farmlands.

Thank you for your consideration of HB 1036. Frederick County supports renewable energy, and we want to be a partner in achieving the State's clean energy goals. Therefore, I urge you to advance this bill with the amendments proposed by MACo.

HB 1036, SB 931 Renewable Energy Certainty Act (Fa Uploaded by: Michelle Dietz



The Nature Conservancy Maryland/DC Chapter 425 Barlow Pl., Ste 100 Bethesda, MD 20814 tel (301) 897-8570 fax (301) 897-0858 nature.org

Friday, February 28, 2025

TO: Brian Feldman, Chair of the Senate Education, Energy and Environment Committee; C. T. Wilson, Chair of the House Economic Matters Committee; and Committee Members

FROM: Michelle Dietz, The Nature Conservancy, Director of Government Relations; Cait Kerr, The Nature Conservancy, State Policy Manager

POSITION: Support with Amendments SB 931/HB 1036 Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

The Nature Conservancy (TNC) supports with amendments SB 931/HB 1036 offered by Senator Feldman and Delegates Wilson and Crosby. The Renewable Energy Certainty Act seeks to define regulations around solar energy generating facilities and energy storage devices to be consistent with the other energy generating facilities as set by the Maryland Public Service Commission (PSC). It also defines a community solar crediting program to provide direct benefits to consumers of solar energy in the state and creates consumer and safety standards for rooftop solar installation. SB931/HB 1036 aims to advance solar energy generation expansion in the state and bring Maryland closer to our economy-wide clean energy generation goals.

The Renewable Energy Certainty Act establishes compliance requirements for new solar energy generation facilities that create more than 2 megawatts of electricity and energy storage devices of 100 kilowatts of storage. In line with other energy facilities, construction of new solar facilities and energy storage devices will require approval from the PSC and must receive certificates of public convenience and necessity. The legislation defines pathways for working with local governments, landowners and state representatives as well as defining additional requirements if facilities are in overburdened and underserved communities. SB 931/HB 1036 will also prevent local jurisdictions from passing zoning laws that would prohibit constructing facilities that meet all requirements set forth in law. In order to meet our state's ambitious clean energy goals, we will need to see increased investments in clean energy infrastructure. SB 931/HB 1036 sets reasonable and consistent standards for constructing new solar and storage devices, ensuring that both producers and consumers' interests are considered.

SB 931/HB 1036 will also allow for community solar programs to establish automatic enrollment that will permit residential customers to use credits from these programs to reduce their monthly electricity bills. For every unit of unsubscribed energy produced by a community solar installation, SB 931/HB 1036 allows this energy to be turned into banked bill credits and used by electric companies to reduce residential electricity bills. The automatic enrollment program process allows local governments to identify residents that may qualify for these programs and calls for at least 51% of these subscribers to be low to moderate income. With energy prices rising for consumers across the state, granting local customers the ability to receive electricity bill credits from community solar will alleviate financial burdens for those who need it most, while also incentivizing additional investments in these programs.

The Renewable Energy Certainty Act also ensures that buyers and lessees of rooftop solar installations are protected through installation and manufacturers' warranties for 5 years and instructs the PSC and the Maryland Energy Administration to develop technical safety and qualification standards for installing and maintaining these rooftop energy systems. By establishing these regulations, consumers have more protections when making the decision to buy or lease rooftop solar systems and can expect standardized service across the industry.

TNC recommends amendment language to include provisions from the Abundant Affordable Clean Energy (AACE) Act (SB 316/HB 398) within this legislation. The AACE Act's proposed pathway brings on new energy projects that will serve Maryland's load requirements within this decade on a least-cost basis, while allowing flexibility to respond to potential shifts in future energy markets through rapid, low-cost, and flexible solutions. Specifically concerning Maryland's historic REC and SREC incentives, which have been a powerful tool to jumpstart renewable generation in the state, but the "one-size-fits-all" approach often results in incentives that are mismatched to specific projects' needs. Within SB 931/HB 1036, TNC requests including the SREC-II and REC-II provisions of the AACE Act. These provisions will ensure that individual clean energy projects can receive the incentives they need to come online, while also preventing unneeded incentives from being passed through to ratepayers. TNC also requests that SB 931/HB 1036 be amended to maximize the inclusion of all clean energy pathways available to our state and include battery storage in the legislation. Energy storage can be built faster to address our supply and demand challenges within a shorter time frame.

Our state must move swiftly to meet growing energy demands, as well as our climate commitments and public health obligations. SB 931/HB 1036 is one step, in a series of actions toward a secure and clean energy future for Maryland. The Nature Conservancy commends Senator Feldman and Delegates Wilson and Crosby for introducing this legislation.

Therefore, we urge a favorable report on SB 931/HB 1036.

HB1036-ECM-FWA.pdfUploaded by: Nina Themelis Position: FWA



Office of Government Relations 88 State Circle Annapolis, Maryland 21401

HB1036

February 28, 2025

TO: Members of the House Economic Matters Committee

FROM: Nina Themelis, Director of Mayor's Office of Government Relations

RE: House Bill 1036 - Public Utilities - Generating Stations - Generation and Siting

(Renewable Energy Certainty Act)

POSITION: Support With Amendments

Chair Wilson, Vice Chair Crosby, and Members of the Committee, please be advised that the Baltimore City Administration (BCA) <u>supports with amendments</u> House Bill (HB) 1036.

HB1036 aims to change what the Public Service Commission must consider before acting on a certificate of public convenience and necessity. It sets requirements for building certain solar energy stations, prevents local laws from blocking site plans, urges local governments to expedite plan reviews, and allows for community solar enrollment programs. It also addresses rooftop solar systems and mandates a study on partnerships related to generating stations.

The BCA supports the intent of this bill. In support of the Baltimore City Fire Department and the City's Office of Emergency Management, we respectfully request an amendment to allow local jurisdictions to have the ability to evaluate plans for compliance with various codes.

The Site Plan and Construction Plans for a new Solar Generating Station shall be submitted to the Local Jurisdiction's Office of Emergency Management for Emergency Response Planning as well as to the applicable <u>Plans Review and Permitting Office</u> for evaluation of compliance with various codes such as NFPA 70 (National Electrical Code)ⁱ; International Fire Code, Chapter 12 (Energy Systems) and NFPA 850, Chapter 14 (Fire Protection for Electric Generation Plants – Solar Generation).

For the above stated reasons, the BCA respectfully request a **favorable with amendments** report on HB1036.

ⁱ The National Electrical Code, or NFPA 70, is a regionally adoptable standard for the safe installation of electrical wiring and equipment in the United States, and it part of the National Fire Code series published by the National Fire Protection Association. https://www.nfpa.org/codes-and-standards/nfpa-70-standard-development/70

Senate Bill 931 House Bill 1036 -Public Utilities

Uploaded by: Poetri Deal





February 28, 2025

112 West Street Annapolis, MD 21401

Support with Amendments – Senate Bill 931/House Bill 1036 – Public Utilities – Generating Stations – Generation and Siting (Renewable Energy Certainty Act)

Potomac Electric Power Company (Pepco) and Delmarva Power & Light Company (Delmarva Power) Support with Amendments Senate Bill 931/ House Bill 1036 – Public Utilities – Generating Stations – Generation and Siting (Renewable Energy Certainty Act). Senate Bill 931 and House Bill 1036 proposes changes to how the Public Service Commission (PSC) considers applications for new solar energy generating stations and energy devices. The legislation also orders the PSC to conduct a study to establish a process by which the Commission may establish partnerships between electric companies and electricity suppliers for electricity generation purposes.

Senate Bill 931 and House Bill 1036 proposes to accelerate the deployment of community solar by updating the certification process for new solar energy generating stations and clarifying the regulatory framework for storage devices. Battery storage and community solar are critical components to Maryland's strategy to address resource adequacy challenges. Energy storage enhances grid reliability by enabling the integration of intermittent renewable energy sources, providing backup power during peak demand, and reducing strain on the grid. While Pepco and Delmarva Power support the overall goal of the bill, we recommend clarifying language via amendments to prevent unintended financial burdens on non-participating jurisdictions, ensure customers are educated about programs before they are signed up, and enable the swift siting of storage projects. Suggested amendments for consideration:

- If a local government elects to establish a community solar program, explicitly state that other jurisdictions should not bear any costs associated with stranded contracts or generation assets. The financial responsibility should be solely on the jurisdiction initiating the project.
- While community solar provides an excellent opportunity for expanded access to renewable energy, automatic enrollment without explicit customer consent raises concerns about consumer protection and informed choice. We propose removing the automatic enrollment provision and instead implementing an opt-in process that ensures customers fully understand the program benefits, costs, and potential impacts before enrollment.
- The Committee should consider that imposing Certificate Public Convenience and Necessity (CPCN) requirements for siting battery storage facilities may create unintended delays to siting battery storage, further delaying deployment of storage.
- We recommend delaying the implementation of these projects until after January 1, 2026, to coincide with the effective date of consolidated billing in Maryland.

Senate Bill 931 and HB1036 takes important steps to resolve the resource adequacy challenges. We urge a favorable vote with the proposed amendments and will continue to work with all stakeholders.

Valencia McClure | Anne Klase | Allyson Black-Woodson | Poetri Deal | 410 980 5347

CHESSA - MD - ECM EEE Fav with Amend SB931 HB1036

Uploaded by: Robin Dutta



28 February 2025

Delegate C.T. Wilson, Chair Senator Brian Feldman, Chair

Economic Matters Committee Education, Energy, and the Environment Committee

Room 231 2 West

Taylor House Office Building Miller Senate Office Building Annapolis, Maryland 21401 Annapolis, Maryland 21401

Oral and Written Testimony

HB1036 / SB931: Public Utilities - Generating Stations - Generation and Siting (Renewable

Energy Certainty Act)

Position: Favorable with Amendments

Chair Wilson, Chair Feldman, Members of the Economic Matters Committee and the Education, Energy, and the Environment Committee, thank you for the opportunity to testify on House Bill 1036 / Senate Bill 931, Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act).

I am Robin Dutta, the Executive Director of the Chesapeake Solar and Storage Association (CHESSA). Our association advocates for our over 100 member companies in all market segments across the solar and energy storage industries. Many members are Maryland-based. Others are regional and national companies with an interest and/or business footprint in the state. Our purpose is to promote the mainstream adoption of local solar, large-scale solar, and battery storage throughout the electric grid to realize a stable and affordable grid for all consumers.

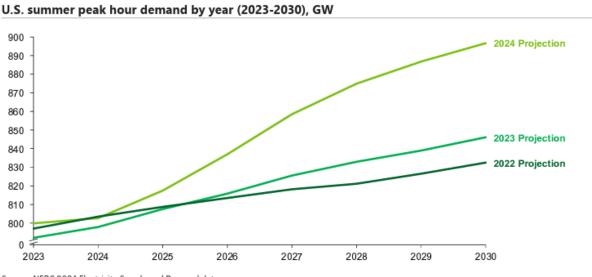
I am here to provide testimony on HB1036/SB931 Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act) that is favorable with suggested amendments that align with the bill's goals. This bill will streamline the ability to build new solar generation in Maryland and strengthen consumer protections in the residential solar sales and installation process. Statewide solar permitting processes will be aligned with local government ordinances that govern how solar can be built. And the

The Problem: Maryland's Widening Energy Gap

Marylanders are becoming much more sensitive to grid disruptions and electric price spikes. The state is on the path to seeing increasing electric demand over the long term. And there is already straining in its electric system. Maryland only generates about 60 percent of the electric

generation it demands¹. But importing electricity isn't an automatic solution. Nine of the 13 states in the PJM Interconnection (where Maryland resides) also must import electricity to serve their electric demand. And the Maryland Energy Administration (MEA) is projecting load growth, potentially as much as 2 percent per year². There's growing demand and competition for an energy supply that needs to increase.

Contributing Problem: Higher Electric Demand Across the County



Source: NERC 2024 Electricity Supply and Demand data

The grid of the not-so-distant future will have the combined roles that today's electricity, natural gas system, and gas stations have. For the grid to serve those roles, it will need to look and act differently. It will have higher statewide electric loads, and greater electric demand in peak periods. And, the higher peak demand gets, the more expensive the electric grid becomes, due to expensive infrastructure expansion and higher peak energy pricing. By lowering peak demand, clean energy can lower the cost of the grid.

A January 2025 report from the U.S. Department of Energy shows that projected peak demand growth is only increasing, with electricity supply and demand data from the North American Energy Reliability Council showing the estimates being revised upwards each year since 2022.³ If Maryland's electric future follows the projected national trend, it needs to step up the clean energy build-out throughout the state at the same time as handling fossil fuel retirements. That means scaling up statewide solar adoption of all kinds, as soon as possible.

Layering on the problem are the faults within the PJM Interconnection, both with their capacity markets and their interconnection processes. The recent PJM capacity auction could cause

¹ https://www.eia.gov/state/analysis.php?sid=MD

² Maryland Energy Administration. "Reaching 100 Percent Net Carbon-Free Electricity in Maryland". January 2025. p.19

³ U.S. Department of Energy. "Pathways to Commercial Liftoff: Virtual Power Plants 2025 Update". January 2025. p.7

electric bill in Maryland to increase as much as 24 percent, according to an August 2024 report from the Maryland Office of People's Counsel. The MEA describes the Baltimore Gas & Electric service area as a "congested territory". There are then certain generating units that must run and can drive up capacity prices, as it happened in the most recent PJM capacity auction. The way to relieve congestion and grid strain is to lower peak demand, offset consumer electric load, and build a lot of new Maryland generating capacity.

The Benefits of the Renewable Energy Certainty Act

CHESSA believes that this is a well-crafted bill, designed to address multiple issues impacting clean energy, and the solar industry in particular.

Solar and Storage Siting. One of the biggest benefits of this bill is the creation of statewide siting rules for groundmount solar projects. This creates much greater clarity for developers looking to work with landowners and invest in Maryland to build new solar capacity. And by aligning local government solar ordinances with the same criteria that has to be considered in the Certificate for Public Convenience and Necessity (CPCN) statewide process, the actual installation phase of approved projects will move faster. Local government inspections, and any additional local government processes, would not work counter to the CPCN approval.

Local Government/Community Solar Automatic Enrollment. As a matter of principle, CHESSA supports policies that lowers barriers to solar adoption and allows a broader participation in the clean energy economy.

Residential Solar Consumer Protection. CHESSA supports consumer protection policies that ensure ethical business practices. Residential solar companies selling and installing systems in Maryland are already subject to a number of consumer protection, technical safety, and business practice standards. We welcome the opportunity to make those protections more explicit and to continue to support responsible solar adoption for all energy consumers in Maryland.

Further Considerations for the Legislation

CHESSA respectfully offers amendment on HB1036/SB931 that we believe are aligned with the bill's intended outcomes and are meant to clarify application of the law on project development and remove unintended complications in the regulatory implementation phase.

Solar and Storage Siting. CHESSA recommends making some clarifications in this section, which are included in the attached redline document. CHESSA also recommends incorporating HB1338 into HB1036/SB931, clearly defining that front-of-meter energy storage systems over 2 MW would be required to receive CPCN approval. We also suggest that HB827/SB983 be included in this section. For projects that have less physical impact than the large systems CPCN was designed to review, that bill would create a "right-sized" process for certain community solar

⁴ Maryland Energy Administration. "Reaching 100 Percent Net Carbon-Free Electricity in Maryland". January 2025. p.22

projects between 2-5 MW. If combined, both bills could create a new and holistic set of solar siting review and approval criteria aligned with Maryland's need for more in-state generation.

Local Government/Community Solar Automatic Enrollment. While CHESSA supports the principle behind automatic enrollment for those community solar systems associated with local governments, our membership has had a robust set of discussions around this specific section, how it could be implemented, and how it could avoid unintended consequences. The bill language does not take into account how residential consumers would be treated if they already have a community solar subscription or have rooftop solar on their home. Members have brought up the open question of how automatic enrollment would handle relevant household and energy data (including information in utility billing), and the unintended consequences of raising barriers for residential solar adoption for single-family homeowners in an automatic enrollment territory. CHESSA believes that this section of the bill merits further discussion.

Residential Solar Consumer Protection. CHESSA believes that the Department of Labor is the most appropriate state agency to promulgate regulations on technical safety standards for installation and maintenance of residential solar projects. If the Commission and/or Maryland Energy Administration are tasked with implementing this section, we suggest redlines that provide those entities with greater direction to guide their deliberations and regulatory processes, and include the Maryland Home Improvement Commission in the process.

Conclusion

HB1036/SB931 includes a number of good policies all designed to lower barriers to responsible solar adoption in Maryland. We hope that our suggested amendments will strengthen the bills, and look forward to working with the sponsors. We ask for a favorable report.

Please reach out with any questions on solar and storage policy. CHESSA is here to be a resource to the committee.

Sincerely,

Robin K. Dutta

Executive Director

Robin K. Dutta

Chesapeake Solar and Storage Association

robin@chessa.org

SB931 HB1036 Consolidated Redlines_CHESSA_SEIA.pdf Uploaded by: Robin Dutta

Offered redlines for Senate Bill 931 – Chesapeake Solar and Storage Association and Solar Energy Industries Association

SENATE BILL 931

C5, M5 5lr1535 CF 5lr1948

By: Senator Feldman

Introduced and read first time: January 28, 2025 Assigned to: Education, Energy, and the Environment

A BILL ENTITLED

1 AN ACT concerning

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3

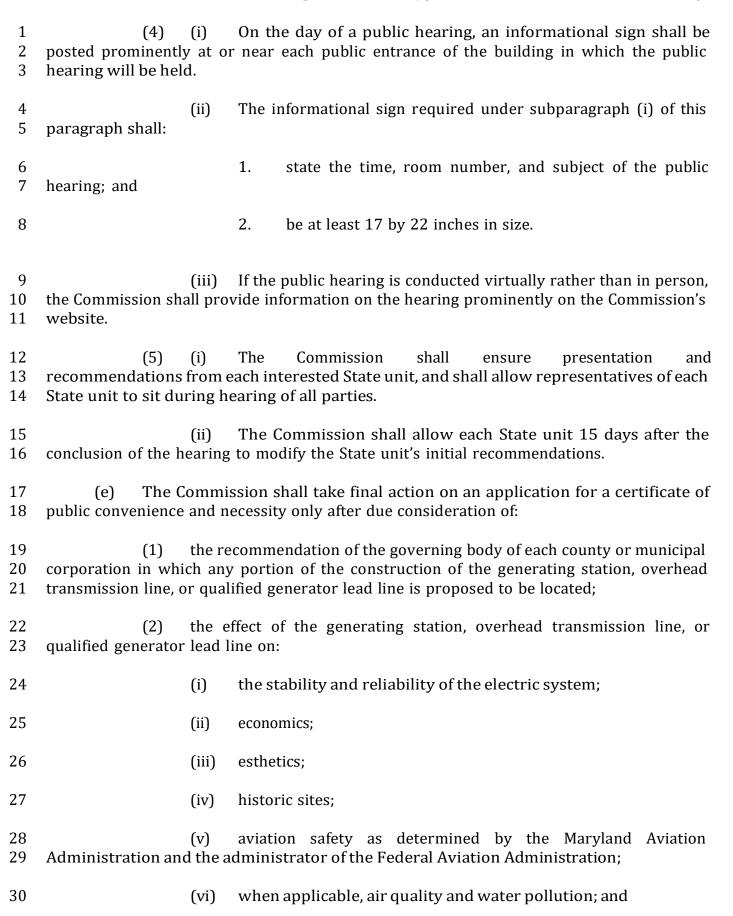
Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

4 FOR the purpose of altering the factors the Public Service Commission must consider before taking final action on a certificate of public convenience and necessity; establishing 5 certain requirements for the construction of a certain solar energy generating station 6 7 or energy storage device; prohibiting a local jurisdiction from adopting certain laws or denying certain site development plans under certain 8 or regulations 9 circumstances; requiring a local government to expedite the review and approval of 10 certain site development plans under certain circumstances; authorizing a local 11 government to establish a certain community solar energy generating system 12 automatic enrollment program under certain circumstances; establishing certain 13 requirements for the sale, lease, and installation of certain residential rooftop solar energy generating systems; requiring the Commission to conduct a certain study to 14 15 establish a process by which the Commission may establish certain partnerships; 16 and generally relating to generating stations.

- 17 BY repealing and reenacting, without amendments,
- 18 Article Public Utilities
- 19 Section 7–207(d)
- 20 Annotated Code of Maryland
- 21 (2020 Replacement Volume and 2024 Supplement)
- 22 BY repealing and reenacting, with amendments,
- 23 Article Public Utilities
- Section 7–207(e) and 7–306.2(a), (c), and (d)(7)
- 25 Annotated Code of Maryland
- 26 (2020 Replacement Volume and 2024 Supplement)
- 27 BY adding to
- 28 Article Public Utilities



1 2 3	Section 7–218, 7–219, 7–306.2(o), and 7–320 Annotated Code of Maryland (2020 Replacement Volume and 2024 Supplement)				
4 5	SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:				
6	Article - Public Utilities				
7	7–207.				
8 9 10 11 12	(d) (1) (i) The Commission shall provide an opportunity for public comment and hold a public hearing on the application for a certificate of public convenience and necessity in each county and municipal corporation in which any portion of the construction of a generating station, an overhead transmission line designed to carry a voltage in excess of 69,000 volts, or a qualified generator lead line is proposed to be located.				
13 14 15	(ii) The Commission may hold the public hearing virtually rather than in person if the Commission provides a comparable opportunity for public comment and participation in the hearing.				
16 17 18 19 20	(2) The Commission shall hold the public hearing jointly with the governing body of the county or municipal corporation in which any portion of the construction of the generating station, overhead transmission line, or qualified generator lead line is proposed to be located, unless the governing body declines to participate in the hearing.				
21 22 23	(3) (i) Once in each of the 4 successive weeks immediately before the hearing date, the Commission shall provide weekly notice of the public hearing and an opportunity for public comment:				
24 25	1. by advertisement in a newspaper of general circulation in the county or municipal corporation affected by the application;				
26	2. on two types of social media; and				
27	3. on the Commission's website.				
28 29 30 31 32 33	(ii) Before a public hearing, the Commission shall coordinate with the governing body of the county or municipal corporation in which any portion of the construction of the generating station, overhead transmission line, or qualified generator lead line is proposed to be located to identify additional options for providing, in an efficient and cost–effective manner, notice of the public hearing through other types of media that are familiar to the residents of the county or municipal corporation.				



- 4 **SENATE BILL 931** 1 (vii) the availability of means for the required timely disposal of 2 wastes produced by any generating station; 3 the effect of climate change on the generating station, overhead 4 transmission line, or qualified generator lead line based on the best available scientific information recognized by the Intergovernmental Panel on Climate Change; [and] 5 6 (4) for a generating station: 7 the consistency of the application with the comprehensive plan and zoning of each county or municipal corporation where any portion of the generating 8 9 station is proposed to be located; 10 the efforts to resolve any issues presented by a county or (ii) municipal corporation where any portion of the generating station is proposed to be located; 11 12 the impact of the generating station on the quantity of annual 13 and long-term statewide greenhouse gas emissions, measured in the manner specified in § 14 2–1202 of the Environment Article and based on the best available scientific information 15 recognized by the Intergovernmental Panel on Climate Change; and 16 the consistency of the application with the State's climate (iv) 17 commitments for reducing statewide greenhouse gas emissions, including those specified in Title 2, Subtitle 12 of the Environment Article; AND 18 19 FOR A SOLAR ENERGY GENERATING STATION SPECIFIED UNDER § 20 7-218 OF THIS SUBTITLE, WHETHER THE OWNER OF A PROPOSED SOLAR ENERGY GENERATING STATION COMPLIES WITH THE REQUIREMENTS OF § 7-218(F) OF THIS 21 22 SUBTITLE. 7-218. 23 IN THIS SECTION THE FOLLOWING WORDS HAVE THE MEANINGS 24 (A) (1)25 INDICATED. "Brownfields site" has the meaning stated in § 7-207 of 26 **(2)**
- 28 **(3) "Local jurisdiction" includes counties, municipal** 29 **corporations, and other forms of local government.**

27

THIS SUBTITLE.

30 **(B)** THIS SECTION APPLIES ONLY TO A SOLAR ENERGY GENERATING 31 STATION THAT:

- 1 (1) HAS THE CAPACITY TO PRODUCE MORE THAN 2 MEGAWATTS OF 2 ELECTRICITY AS MEASURED BY THE ALTERNATING CURRENT RATING OF THE 3 SYSTEM'S INVERTER;
- 4 **(2)** (I) IS DESIGNED TO PRODUCE ELECTRICITY FOR SALE ON THE 5 WHOLESALE MARKET; OR
- 6 (II) IS A COMMUNITY SOLAR ENERGY GENERATING SYSTEM
 7 UNDER § 7-306.2 OF THIS TITLE; AND
- 8 (3) IS NOT LOCATED ON A ROOFTOP, CARPORT, OR BROWNFIELDS
 9 SITE OR BEHIND THE METER OF A RETAIL ELECTRIC CUSTOMER.
- 10 **(c)** A PERSON MAY NOT BEGIN CONSTRUCTION OF A SOLAR ENERGY 11 GENERATING STATION UNLESS:
- 12 **(1)** THE CONSTRUCTION HAS BEEN APPROVED BY THE COMMISSION 13 IN ACCORDANCE WITH THIS SECTION; AND
- 14 (2) (I) A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY 15 HAS BEEN ISSUED IN ACCORDANCE WITH § 7–207 OF THIS SUBTITLE; OR
- (II) THE CONSTRUCTION HAS BEEN APPROVED BY THE COMMISSION IN ACCORDANCE WITH § 7–207.1 OF THIS SUBTITLE.
- 18 **(D)** ON RECEIPT OF AN APPLICATION FOR APPROVAL UNDER THIS SECTION,
 19 THE COMMISSION SHALL PROVIDE IMMEDIATE NOTICE OR REQUIRE THE
 20 APPLICANT TO PROVIDE IMMEDIATE NOTICE OF THE APPLICATION TO:
- 21 **(1)** THE GOVERNING BODY OF EACH COUNTY OR MUNICIPAL 22 CORPORATION IN WHICH ANY PORTION OF THE SOLAR ENERGY GENERATING 23 STATION IS PROPOSED TO BE CONSTRUCTED;
- 24 **(2)** THE GOVERNING BODY OF EACH COUNTY OR MUNICIPAL 25 CORPORATION WITHIN 1 MILE OF THE PROPOSED LOCATION OF THE SOLAR ENERGY 26 GENERATING STATION;
- 27 (3) EACH MEMBER OF THE GENERAL ASSEMBLY REPRESENTING ANY PART OF A COUNTY IN WHICH ANY PORTION OF THE SOLAR ENERGY GENERATING STATION IS PROPOSED TO BE CONSTRUCTED;

31

INFRASTRUCTURE; AND

1 2 3	(4) EACH MEMBER OF THE GENERAL ASSEMBLY REPRESENTING ANY PART OF A COUNTY WITHIN 1 MILE OF THE PROPOSED LOCATION OF THE SOLAR ENERGY GENERATING STATION; AND
4 5 6	(5) THE RESIDENTS AND PROPERTY OWNERS WITHIN ONE QUARTER OF 1 MILE OF THE PROPOSED LOCATION OF THE SOLAR ENERGY GENERATING STATION.
7 8	(E) WHEN REVIEWING AN APPLICATION FOR APPROVAL UNDER THIS SECTION, THE COMMISSION SHALL:
9 10 1	(1) COMPLY WITH AND REQUIRE THE OWNER OF THE PROPOSED SOLAR ENERGY GENERATING STATION TO COMPLY WITH § 7-207(D) OF THIS SUBTITLE; AND
12 13 14 15 16	(2) IF THE PROPOSED LOCATION OF THE SOLAR ENERGY GENERATING STATION IS IN AN AREA CONSIDERED TO BE OVERBURDENED AND UNDERSERVED, AS DEFINED IN § 1–701 OF THE ENVIRONMENT ARTICLE, REQUIRE THE PERSON CONSTRUCTING THE SOLAR ENERGY GENERATING STATION TO HOLD AT LEAST TWO PUBLIC MEETINGS IN THE COMMUNITY WHERE THE SOLAR ENERGY GENERATING STATION IS TO BE LOCATED.
L8 L9	(F) (1) AN OWNER OF A PROPOSED SOLAR ENERGY GENERATING STATION:
20 21 22 23	(I) SHALL PROVIDE A BOUNDARY OF 150 FEET BETWEEN THE SOLAR ENERGY GENERATING STATION AND ANY OCCUPIED BUILDINGS OR DWELLINGS NOT AFFILIATED WITH THE SOLAR ENERGY GENERATING STATION UNLESS WAIVED BY THE PARCEL OWNER;
24 25 26	(II) SHALL PROVIDE A BOUNDARY OF 50 FEET BETWEEN THE SOLAR ENERGY GENERATING STATION AND ANY PARCELS OF LAND NOT AFFILIATED WITH THE SOLAR ENERGY GENERATING STATION;
25	(III) 1. SHALL PROVIDE NONBARBED WIRE FENCING:
26 27	A. AROUND THE SOLAR ENERGY GENERATING STATION;
28	B. THAT IS NOT MORE THAN 20 FEET IN HEIGHT; AND
29	2. MAY USE BARBED WIRE FENCING AROUND THE
RΛ	SUBSTATIONS OF OTHER CRITICAL INEDASTRICTURE FOR PROTECTION OF THAT

1 2 3 4	(IV) SHALL PROVIDE FOR A LANDSCAPING BUFFER OR VEGETATIVE SCREENING IF REQUIRED BY THE LOCAL JURISDICTION OR WHEN ADJACENT TO AN OCCUPPIED DWELLING, UNLESS WAIVED BY THE PROPERTY OWNER.
5 6	(2) A LOCAL JURISDICTION MAY NOT REQUIRE THE USE OF A BERM FOR A SOLAR ENERGY GENERATING STATION APPROVED UNDER THIS SECTION.
7 8	(3) THE BUFFER REQUIRED IN PARAGRAPH (1)(IV) OF THIS SUBSECTION SHALL:
9	(I) BE NOT MORE THAN 25 FEET IN DEPTH;
10 11 12	(II) PROVIDE FOR FOUR-SEASON VISUAL SCREENING BY THE END OF THE FIFTH YEAR OF OPERATION OF THE SOLAR ENERGY GENERATING SYSTEM;
13 14	(III) INCLUDE MULTILAYERED, STAGGERED ROWS OF OVERSTORY AND UNDERSTORY TREES; AND
15 16	(IV) BE PLANTED WITH NOT MORE THAN 10 TREES PER 100 LINEAR FEET, WITH A MAXIMUM HEIGHT AT PLANTING OF 6 FEET.
17 18 19	(4) WITH RESPECT TO THE SITE ON WHICH A SOLAR ENERGY GENERATING STATION IS PROPOSED FOR CONSTRUCTION, THE OWNER OF THE SOLAR ENERGY GENERATING STATION:
17 18	(I) SHALL MINIMIZE GRADING TO THE MAXIMUM EXTENT POSSIBLE;
19 20	(II) MAY NOT REMOVE TOPSOIL FROM THE PARCEL, BUT MAY MOVE OR TEMPORARILY STOCKPILE TOPSOIL FOR GRADING;
21	(III) TO MAINTAIN SOIL INTEGRITY, SHALL:
22	1. PLANT NATIVE VEGETATION AND OTHER NATURALIZED, APPROPRIATE VEGETATIVE PROTECTIONS; AND
23 24	2. REPLANT THE VEGETATION IF THE SURVIVAL THRESHOLD IS BELOW 90% FOR THE FIRST 3 YEARS OF THE LIFE OF THE SOLAR FACILITY; THAT HAVE A 90% SURVIVAL THRESHOLD FOR THE FIRST 3 YEARS OF THE LIFE OF THE SOLAR ENERGY GENERATING STATION;

(IV) SHALL LIMIT MOWING AND OTHER UNNECESSARY

LANDSCAPING EXCEPT TO PROMOTE POLLINATOR HABITAT OR OTHER DUAL LAND USES:

26

25

26 **(v)** MAY NOT USE HERBICIDES EXCEPT TO CONTROL INVASIVE 27 SPECIES IN COMPLIANCE WITH THE DEPARTMENT OF AGRICULTURE'S WEED 28 CONTROL PROGRAM; AND

- 1 (VI) SHALL POST FOR THE FIRST 3 YEARS OF THE LIFE OF THE
 2 SOLAR ENERGY GENERATING STATION A LANDSCAPING BOND EQUAL TO 50% OF THE
 3 TOTAL LANDSCAPING COST WITH THE COUNTY IN WHICH THE SOLAR ENERGY
- 5 **(5)** EXCEPT AS REQUIRED BY LAW, OR FOR SAFETY OR EMERGENCY,
 6 THE SOLAR ENERGY GENERATING STATION MAY NOT EMIT VISIBLE LIGHT DURING
 7 DUSK TO DAWN OPERATIONS.
- 8 (G) AN OWNER OF A SOLAR ENERGY GENERATING STATION:
- 9 **(1)** SHALL ENTER INTO A DECOMMISSIONING AGREEMENT WITH THE 10 COMMISSION ON A FORM THAT THE COMMISSION PROVIDES;
- 11 **(2)** SHALL POST A SURETY BOND WITH THE COMMISSION FOR NOT 12 MORE THAN **100%** OF THE COST OF DECOMMISSIONING THE SOLAR ENERGY
- 13 GENERATING STATION AND ITS RELATED INFRASTRUCTURE, LESS ANY
- 14 ESTIMATE OF SALVAGE VALUE AS DETERMINED BY A LICENSED, THIRD-PARTY
- 15 **ENGINEER**; AND
- 15 (3) SHALL EXECUTE A SECURITIZATION BOND TRUE-UP EVERY 5 16 YEARS.
- 17 (H) (1) A LOCAL JURISDICTION MAY NOT:

GENERATING STATION IS LOCATED.

- 18 (I) ADOPT ZONING LAWS OR OTHER LAWS OR REGULATIONS
 19 THAT PROHIBIT THE CONSTRUCTION OR OPERATION OF SOLAR ENERGY
 20 GENERATING STATIONS; OR
- 21 (II) DENY SITE DEVELOPMENT PLANS FOR SOLAR ENERGY 22 GENERATING STATIONS THAT MEET THE REQUIREMENTS OF SUBSECTION (F) OF 23 THIS SECTION.
- 24 **(2) A** LOCAL JURISDICTION SHALL EXPEDITE THE REVIEW AND 25 APPROVAL OF SITE DEVELOPMENT PLANS FOR SOLAR ENERGY GENERATING STATIONS IF THOSE PLANS MEET THE REQUIREMENTS OF THIS SECTION.
- 27 **(I) (1) E**XCEPT AS PROVIDED IN PARAGRAPH **(2)** OF THIS SUBSECTION, A SOLAR ENERGY GENERATING STATION IS EXEMPT FROM PERSONAL AND REAL PROPERTY TAXES.
- 30 **(2)** A SOLAR ENERGY GENERATING STATION MAY BE REQUIRED BY A 11 LOCAL JURISDICTION TO MAKE A PAYMENT IN LIEU OF TAXES UP TO \$5,000 PER

- 1 MEGAWATT OF ENERGY GENERATED NAMEPLACE CAPACITY, AS MEASURED IN ALTERNATING CURRENT, FROM THE SOLAR ENERGY GENERATING
- 2 STATION.
- 3 (J) NOTHING IN THIS SECTION MAY BE CONSTRUED TO ADD ANY
- 4 ADDITIONAL LIMITATIONS TO THE AUTHORITY OF THE COMMISSION IN THE
- 5 APPROVAL PROCESS FOR AN APPLICATION FOR A CERTIFICATE OF PUBLIC
- 6 **CONVENIENCE AND NECESSITY.**
- 7 **7-219.**
- 8 (A) (1) IN THIS SECTION THE FOLLOWING WORDS HAVE THE MEANINGS
- 9 **INDICATED.**
- 10 (2) "ENERGY STORAGE DEVICE" HAS THE MEANING STATED IN §
- 11 **7–216** OF THIS SUBTITLE.
- 12 (3) "LOCAL JURISDICTION" INCLUDES COUNTIES, MUNICIPAL
- 13 CORPORATIONS, AND OTHER FORMS OF LOCAL GOVERNMENT.
- 14 (B) A PERSON MAY NOT BEGIN CONSTRUCTION OF AN ENERGY STORAGE
- 15 DEVICE UNLESS THE CONSTRUCTION HAS BEEN APPROVED BY THE COMMISSION IN
- 16 ACCORDANCE WITH THIS SECTION.
- 17 (C) ON RECEIPT OF AN APPLICATION FOR APPROVAL OF THE
- 18 CONSTRUCTION OF ENERGY STORAGE DEVICES UNDER THIS SECTION, THE
- 19 COMMISSION SHALL PROVIDE IMMEDIATE NOTICE OR REQUIRE THE APPLICANT TO
- 20 PROVIDE IMMEDIATE NOTICE OF THE APPLICATION TO:
- 21 (1) THE GOVERNING BODY OF EACH COUNTY OR MUNICIPAL
- 22 CORPORATION IN WHICH ANY PORTION OF THE ENERGY STORAGE DEVICE IS
- 23 **PROPOSED TO BE CONSTRUCTED**;
- 24 (2) THE GOVERNING BODY OF EACH COUNTY OR MUNICIPAL
- 25 CORPORATION WITHIN 1 MILE OF THE PROPOSED LOCATION OF THE ENERGY
- 26 **STORAGE DEVICE**;
- 27 (3) EACH MEMBER OF THE GENERAL ASSEMBLY REPRESENTING ANY
- 28 PART OF A COUNTY IN WHICH ANY PORTION OF THE ENERGY STORAGE DEVICE IS
- 29 **PROPOSED TO BE CONSTRUCTED**;
- 30 (4) EACH MEMBER OF THE GENERAL ASSEMBLY REPRESENTING ANY
- 31 PART OF A COUNTY WITHIN 1 MILE OF THE PROPOSED LOCATION OF THE ENERGY
- 32 STORAGE DEVICE; AND

1	(5) THE RESIDENTS AND OWNERS OF PROPERTY THAT IS WITHIN
2	ONE QUARTER OF 1 MILE OF THE PROPOSED LOCATION OF THE ENERGY STORAGE DEVICE.
_	
3	(D) WHEN REVIEWING AN APPLICATION FOR APPROVAL UNDER THIS
4	SECTION, THE COMMISSION SHALL:
_	
5	(1) IF THE PROJECT WILL STORE MORE THAN 2 MEGAWATTS OF NAMEPLATE CAPACITY,
6	COMPLY WITH AND REQUIRE THE APPLICANT TO COMPLY WITH REQUIRE THE
	APPLICANT TO APPLY FOR AND RECEIVE A CERTICATE OF PUBLIC CONVENIENCE AND
_	NECESSITY AS A GENERATING STATION UNDER § 7–207(D) OF THIS
7	SUBTITLE;
8	(2) IF THE PROPOSED LOCATION OF THE ENERGY STORAGE DEVICE IS
9	IN AN AREA CONSIDERED TO BE OVERBURDENED AND UNDERSERVED, AS DEFINED
0	IN § 1-701 OF THE ENVIRONMENT ARTICLE, REQUIRE THE APPLICANT TO HOLD AT
1	LEAST TWO PUBLIC MEETINGS IN THE COMMUNITY WHERE THE ENERGY STORAGE
2	DEVICE IS TO BE LOCATED; AND
13	(3) EXEMPT AN ENERGY STORAGE DEVICE THAT IS LOCATED WITHIN
l4 l5	THE BOUNDARIES OF AN EXISTING ELECTRICITY GENERATING STATION FROM THE MEETING REQUIREMENTS OF THIS SUBSECTION, INCLUDING A DEVICE LOCATED ON
	A ROOFTOP, CARPORT, OR BROWNFIELDS SITE OR BEHIND THE METER OF A RETAIL
	ELECTRIC CUSTOMER.
	(-) (4) Av even - e - e - e - e - e - e - e - e - e -
16	(E) (1) AN OWNER OF A PROPOSED ENERGY STORAGE DEVICE:
L7	(I) 1. SHALL PROVIDE NONBARBED WIRE FENCING:
.,	(i) II SIME THOUSE WORDING TENGING
18	A. AROUND THE ENERGY STORAGE DEVICE; AND
[9	B. THAT IS NOT MORE THAN 20 FEET IN HEIGHT; AND
20	2. MAY USE BARBED WIRE FENCING AROUND THE
20	2. MAY USE BARBED WIRE FENCING AROUND THE SUBSTATIONS OR OTHER CRITICAL INFRASTRUCTURE FOR PROTECTION OF THAT
22	INFRASTRUCTURE; AND
_	,
23	(II) SHALL PROVIDE FOR A LANDSCAPING BUFFER OR
24	VEGETATIVE SCREENING IF REQUIRED BY THE LOCAL JURISDICTION, UNLESS IN AN
	INDUSTRIAL OR COMMERCIALLY ZONED JURISDICTION.

(2) A LOCAL JURISDICTION MAY NOT REQUIRE THE USE OF A BERM FOR AN ENERGY STORAGE DEVICE APPROVED UNDER THIS SECTION.

- 27 **(3)** THE BUFFER REQUIRED IN PARAGRAPH **(1)**(II) OF THIS 28 SUBSECTION SHALL:
- 29 (I) BE NOT MORE THAN 25 FEET IN DEPTH; AND

- 1 (II) PROVIDE FOR FOUR-SEASON VISUAL SCREENING OF THE 2 **ENERGY STORAGE DEVICE.** 3 (4) WITH RESPECT TO THE SITE ON WHICH AN ENERGY STORAGE 4 DEVICE IS PROPOSED FOR CONSTRUCTION, THE OWNER OF THE ENERGY STORAGE 5 **DEVICE:** 6 **(I)** SHALL MINIMIZE GRADING TO THE MAXIMUM EXTENT 7 **POSSIBLE**; (II) MAY NOT REMOVE TOPSOIL FROM THE PARCEL, BUT MAY 8 9 MOVE OR TEMPORARILY STOCKPILE TOPSOIL FOR GRADING; AND 10 (III) MAY NOT USE HERBICIDES EXCEPT TO CONTROL INVASIVE SPECIES IN COMPLIANCE WITH THE DEPARTMENT OF AGRICULTURE'S WEED 11 12 CONTROL PROGRAM. 13 (F) (1) A LOCAL JURISDICTION MAY NOT: 14 ADOPT ZONING LAWS OR OTHER LAWS OR REGULATIONS (I)15 THAT PROHIBIT THE CONSTRUCTION OR OPERATION OF ENERGY STORAGE DEVICES; 16 OR 17 (II) DENY SITE DEVELOPMENT PLANS FOR ENERGY STORAGE 18 DEVICES THAT MEET THE REQUIREMENTS OF SUBSECTION (E) OF THIS SECTION. 19 **(2)** A LOCAL JURISDICTION SHALL: 20 EXPEDITE THE REVIEW AND APPROVAL OF SITE 21 DEVELOPMENT PLANS FOR ENERGY STORAGE DEVICES IF THOSE PLANS MEET THE 22 REQUIREMENTS OF THIS SECTION; AND 23 (II) ADOPT STANDARD PROCESSES FOR THE REVIEW AND 24 APPROVAL OF SITE DEVELOPMENT PLANS FOR THE CONSTRUCTION OF ENERGY 25 STORAGE DEVICES. 26 7-306.2.
- 28 (2) "Agrivoltaics" means the simultaneous use of areas of land for both 29 solar power generation and:

In this section the following words have the meanings indicated.

27

(1)

(a)

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1 2	tobacco, or vegetab	(i) les;	raising grains, fruits, herbs, melons, mushrooms, nuts, seeds,
3 4	production;	(ii)	raising poultry, including chickens and turkeys, for meat or egg
5		(iii)	dairy production, such as the raising of milking cows;
6		(iv)	raising livestock, including cattle, sheep, goats, or pigs;
7		(v)	horse boarding, breeding, or training;
8		(vi)	turf farming;
9 L0	plants;	(vii)	raising ornamental shrubs, plants, or flowers, including aquatic
1		(viii)	aquaculture;
2		(ix)	silviculture; or
13 14	as an agricultural	(x) activity	any other activity recognized by the Department of Agriculture y.
15 16	(3) SOLAR ENERGY G		COMATIC ENROLLMENT PROJECT" MEANS A COMMUNITY ATING SYSTEM:
17 18	AUTOMATICALLY	(I) ENRO	IN WHICH ALL OR A PORTION OF THE SUBSCRIBERS ARE LLED; AND
19 20	GOVERNMENT; OI	(II) R	1. THAT IS OWNED AND OPERATED BY A LOCAL
21 22	SERVES AS THE S	UBSCR	2. FOR WHICH A LOCAL GOVERNMENT OR ITS DESIGNEE RIPTION COORDINATOR.
23	(4)	"Base	line annual usage" means:
24 25	the 12 months befo	(i) ore the	a subscriber's accumulated electricity use in kilowatt-hours for subscriber's most recent subscription; or
26 27 28 29	•	nulated	for a subscriber that does not have a record of 12 months of e of the subscriber's most recent subscription, an estimate of the 12 months of electricity use in kilowatt-hours, determined in a approves.

1 2	[(4)] (5) energy system that:	"Community solar energy generating system" means a solar
3 4	(i) the State;	is connected to the electric distribution [grid] SYSTEM serving
5	(ii)	is located in the same electric service territory as its subscribers;
6 7	(iii) facility with its own elect	is attached to the electric meter of a subscriber or is a separate ric meter;
8 9 10	(iv) electricity, to the bills metering;	credits its generated electricity, or the value of its generated of the subscribers to that system through virtual net energy
11 12	(v) of subscribers;	has at least two subscribers but no limit to the maximum number
13	(vi)	does not have subscriptions larger than 200 kilowatts
14	constituting more than 60	0% of its kilowatt-hour output;
15 16	(vii) measured by the alternat	has a generating capacity that does not exceed 5 megawatts as sing current rating of the system's inverter;
17	(viii)	may be owned by any person; and
18 19 20 21		with respect to community solar energy generating systems rogram, serves at least 40% of its kilowatt-hour output to LMI lar energy system is wholly owned by the subscribers to the solar
22 23 24	[(5)] (6) requires an electric comp coordinator:	"Consolidated billing" means a payment mechanism that any to, at the request of a subscriber organization or subscription
25 26 27		include the monthly subscription charge of a subscriber tion coordinator on the monthly bills rendered by the electric ice and supply to subscribers; and
28 29	(ii) or subscription coordinat	remit payment for those charges to the subscriber organization or.
30 31	[(6)] (7) Resources Article.	"Critical area" has the meaning stated in § 8–1802 of the Natural $$

[(7)] **(8)** "LMI subscriber" means a subscriber that:

32

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1		(i)	is low-income;
2		(ii)	is moderate-income; or
3		(iii)	resides in a census tract that is [an]:
4			1. AN overburdened community; and
5			2. AN underserved community.
6	(9)	"Loc	AL GOVERNMENT" MEANS:
7		(I)	A COUNTY; OR
8		(II)	A MUNICIPAL CORPORATION.
9	[(8)]	[10]	"Low-income" means:
10 11	the federal poverty	(i) level;	having an annual household income that is at or below 200% of or $% \left\{ 1,2,\ldots,n\right\}$
12 13 14	assistance program 200% of the federal		being certified as eligible for any federal, State, or local limits participation to households whose income is at or below ty level.
15 16		-	"Moderate-income" means having an annual household income f the median income for Maryland.
17 18	[(10)] of the Environmen		"Overburdened community" has the meaning stated in § 1–701 le.
19 20 21		1, 20	"Pilot program" means the program established under this 23, and effective until the start of the Program established under section.
22 23	[(12)] Systems Program.	(14)	"Program" means the Community Solar Energy Generating
24	[(13)]	(15)	"Queue" means:
25 26	maintain under CO	(i) MAR	the pilot program queue an electric company is required to 20.62.03.04; and
27 28	the Program.	(ii)	a queue an electric company may be required to maintain under

1	[(14)] (16)	"Subscriber" means a retail customer of an electric company that:
2 3	(i) system; and	holds a subscription to a community solar energy generating
4	(ii)	has identified one or more individual meters or accounts to which
5	the subscription shall be	attributed.
6	[(15)] (17)	"Subscriber organization" means:
7 8	(i) generating system; or	a person that owns or operates a community solar energy
9	(ii) generating system.	the collective group of subscribers of a community solar energy
12		"Subscription" means the portion of the electricity generated by generating system that is credited to a subscriber.
13	[(17)] (19)	"Subscription coordinator" means a person that:
14 15 16	(i) otherwise provides servi its own brand name;	markets community solar energy generating systems or ces related to community solar energy generating systems under
17 18 19	(ii) connect subscribers with in the Program; or	performs any administrative action to allocate subscriptions, community solar energy generating systems, or enroll customers
20 21		manages interactions between a subscriber organization and an ricity supplier relating to subscribers.
22 23	[(18)] (20) the Environment Article.	"Underserved community" has the meaning stated in § 1–701 of
24 25		"Unsubscribed energy" means any community solar energy at in kilowatt-hours that is not allocated to any subscriber.
26 27 28 29 30	difference between the k company and the kilowa community solar energy	"Virtual net energy metering" means measurement of the ilowatt-hours or value of electricity that is supplied by an electricity-hours or value of electricity attributable to a subscription to a generating system and fed back to the electric grid over the od, as calculated under the tariffs established under subsections this section

- 1 A community solar energy generating system, subscriber, subscriber 2 organization, or subscription coordinator is not: 3 (1) an electric company; 4 (2) an electricity supplier; or 5 (3) a generating station if: 6 (I)the generating capacity of the community solar energy 7 generating system does not exceed 2 megawatts; OR 8 (II)THE COMMUNITY SOLAR ENERGY GENERATING SYSTEM IS 9 LOCATED ON ATHE ROOFTOP OF A BUILDING OR CARPORT. 10 (d) (7) **(I)** Any unsubscribed energy generated by a community solar energy 11 generating system that is not owned by an electric company shall CREATE BANKED BILL CREDITS TRACKED BY THE ELECTRIC COMPANY THAT, WITHIN 1 YEAR AFTER THE 12 13 DATE THAT THE BANKED BILL CREDIT WAS CREATED, MAY BE ALLOCATED TO ONE 14 OR MORE SUBSCRIBERS BY THE SUBSCRIBER ORGANIZATION OR SUBSCRIPTION 15 COORDINATOR ASSOCIATED WITH THE COMMUNITY SOLAR ENERGY GENERATING 16 SYSTEM. 17 THE GENERATION ASSOCIATED WITH A BANKED BILL (II)18 CREDIT NOT ALLOCATED TO A SUBSCRIBER WITHIN 1 YEAR AFTER THE DATE THAT 19 THE BANKED BILL CREDIT WAS CREATED SHALL be purchased under the electric 20 company's process for purchasing the output from qualifying facilities at the amount it 21 would have cost the electric company to procure the energy. 22 (0)(1) A LOCAL GOVERNMENT MAY ESTABLISH A COMMUNITY SOLAR 23 AUTOMATIC ENROLLMENT PROGRAM BY SUBMITTING TO THE COMMISSION A LOCAL 24 LAW, A CONTRACT, OR AN ADMINISTRATIVE APPROVAL THAT: 25 (I)**STATES WHETHER:** 26 1. THE LOCAL GOVERNMENT WILL OWN AND OPERATE 27 ONE OR MORE AUTOMATIC ENROLLMENT PROJECTS; OR 28 2. THE LOCAL GOVERNMENT OR ITS DESIGNEE WILL 29 SERVE AS THE SUBSCRIPTION COORDINATOR FOR ONE OR MORE AUTOMATIC 30 **ENROLLMENT PROJECTS OWNED BY A THIRD PARTY; AND**
- 31 (II) DESCRIBES THE MECHANISM BY WHICH THE LOCAL 32 GOVERNMENT INTENDS TO ENROLL CUSTOMERS.

- 1 (2) AN AUTOMATIC ENROLLMENT PROJECT SHALL UTILIZE
 2 CONSOLIDATED BILLING AND PROVIDE A GUARANTEED BILL CREDIT DISCOUNT TO
 3 AUTOMATIC ENROLLMENT SUBSCRIBERS.
- 4 (3) A LOCAL GOVERNMENT MAY CONTRACT WITH A DESIGNEE TO 5 IDENTIFY AND MANAGE THE SUBSCRIPTIONS TO AN AUTOMATIC ENROLLMENT 6 PROJECT.
- 7 **(4)** A LOCAL GOVERNMENT OR ITS DESIGNEE SHALL BE RESPONSIBLE
 8 FOR IDENTIFYING THE CUSTOMERS THAT WILL BE AUTOMATICALLY ENROLLED FOR
 9 A SUBSCRIPTION TO THE AUTOMATIC ENROLLMENT PROJECT, SUBJECT TO THE
 10 FOLLOWING CONDITIONS:
- 11 (I) AUTOMATIC ENROLLMENT SUBSCRIBERS MUST BE 12 RESIDENTIAL CUSTOMERS, INCLUDING CUSTOMERS RESIDING IN MULTIFAMILY 13 DWELLING UNITS
- 14 (II) AT LEAST 51% OF AUTOMATIC ENROLLMENT SUBSCRIBERS 15 MUST BE LMI SUBSCRIBERS;
- (III) ALL CUSTOMERS SELECTED TO BE AUTOMATICALLY
 ENROLLED AS SUBSCRIBERS TO THE AUTOMATIC ENROLLMENT PROJECT MUST BE
 WITHIN THE SERVICE TERRITORY OF THE ELECTRIC COMPANY WHERE THE
 AUTOMATIC ENROLLMENT PROJECT IS LOCATED;
- 20 (IV) SUBSCRIBERS MAY DECLINE OR OPT OUT FROM A 21 SUBSCRIPTION TO THE AUTOMATIC ENROLLMENT PROJECT AT ANY TIME;
- 22 **(V)** AUTOMATIC ENROLLMENT SUBSCRIBERS MAY SUBMIT A
 23 REQUEST TO OPT OUT OF A SUBSCRIPTION BY PHONE, IN WRITING, OR ONLINE
 24 THROUGH A WEBSITE MAINTAINED BY THE LOCAL GOVERNMENT OR ITS DESIGNEE;
 25 AND
- 26 (VI) A LOCAL GOVERNMENT MAY NOT CHARGE A FEE OR PENALTY FOR ENROLLMENT IN OR EXITING FROM AN AUTOMATIC ENROLLMENT 28 PROJECT.
- 29 **(5)** A LOCAL GOVERNMENT OR ITS DESIGNEE MAY VERIFY THE 30 INCOME OF A PROSPECTIVE SUBSCRIBER FOR ELIGIBILITY AS AN LMI SUBSCRIBER 31 USING ONE OF THE FOLLOWING METHODS:

- 1 (I) THE LOCATION OF THE PROSPECTIVE SUBSCRIBER IN AN 2 OVERBURDENED COMMUNITY OR UNDERSERVED COMMUNITY;
- 3 (II) A FORM OF VERIFICATION AUTHORIZED UNDER 4 SUBSECTION (F)(1)(IV) OF THIS SECTION; OR
- 5 (III) ANY OTHER METHOD SELECTED BY THE LOCAL 6 GOVERNMENT.
- 7 (6) AT LEAST 90 DAYS BEFORE SUBSCRIBERS BEGIN RECEIVING
- 8 THEIR FIRST BILL CREDITS, A LOCAL GOVERNMENT OR ITS DESIGNEE SHALL
- 9 PROVIDE WRITTEN NOTICE OF THE AUTOMATIC ENROLLMENT TO ALL SELECTED
- 10 SUBSCRIBERS VIA DELIVERY BY THE U.S. POSTAL SERVICE.
- 11 (7) THE NOTICE REQUIRED IN PARAGRAPH (6) OF THIS SUBSECTION
- 12 **SHALL INCLUDE:**
- 13 (I) A STATEMENT THAT THE LOCAL GOVERNMENT HAS
- 14 ESTABLISHED AN AUTOMATIC ENROLLMENT PROJECT;
- 15 (II) A STATEMENT THAT THE PROSPECTIVE SUBSCRIBER HAS
- 16 THE RIGHT TO OPT OUT OF THE AUTOMATIC ENROLLMENT PROJECT AT ANY TIME,
- 17 BUT IF NO OPT-OUT REQUEST IS RECEIVED, THE PROSPECTIVE SUBSCRIBER WILL
- 18 BE AUTOMATICALLY ENROLLED IN THE AUTOMATIC ENROLLMENT PROJECT;
- 19 (III) AN EXPLANATION OF THE CONSOLIDATED BILLING
- 20 PROCEDURES OF THE AUTOMATIC ENROLLMENT PROJECT;
- 21 (IV) DETAILED INSTRUCTIONS ON HOW TO SUBMIT AN OPT-OUT
- 22 **REQUEST; AND**
- 23 (V) A CONTACT NAME, PHONE NUMBER, AND E-MAIL ADDRESS
- 24 FOR SUBSCRIBER INQUIRIES AND COMPLAINTS.
- 25 (8) AN ELECTRIC COMPANY SHALL FACILITATE THE ESTABLISHMENT
- 26 OF AN AUTOMATIC ENROLLMENT PROJECT FOR WHICH A LOCAL GOVERNMENT HAS
- 27 SUBMITTED THE INFORMATION REQUIRED UNDER PARAGRAPH (1) OF THIS
- 28 **SUBSECTION BY:**
- 29 (I) PROVIDING ACCESS TO:
- 30 1. THE HISTORIC BILLING USAGE OF CUSTOMERS THAT
- 31 MAY BE AUTOMATICALLY ENROLLED IN THE AUTOMATIC ENROLLMENT PROJECT;

1	2	POINT-OF-SERVICE	DELIVERY	FΩR	CHSTOMERS
1	4 .	PUINT-UT-SERVICE	DELIVERY	ruk	COSTOMERS

- 2 THAT MAY BE AUTOMATICALLY ENROLLED IN THE AUTOMATIC ENROLLMENT
- 3 **PROJECT**;
- 4 3. PARTICIPATION IN ENERGY ASSISTANCE PROGRAMS;
- 5 4. SUBSCRIPTIONS TO COMMUNITY SOLAR ENERGY
- 6 **GENERATING SYSTEMS**;
- 7 5. ACCOUNT NUMBERS FOR CUSTOMERS THAT MAY BE
- 8 AUTOMATICALLY ENROLLED IN THE AUTOMATIC ENROLLMENT PROJECT, IF
- 9 APPLICABLE; AND
- 10 6. ANY OTHER REASONABLE INFORMATION REQUIRED
- 11 BY THE LOCAL GOVERNMENT OF ITS DESIGNEE TO ENROLL CUSTOMERS IN AN
- 12 AUTOMATIC ENROLLMENT PROJECT; AND
- 13 (II) ENROLLING THE CUSTOMERS IDENTIFIED BY THE LOCAL
- 14 GOVERNMENT OR ITS DESIGNEE AS SUBSCRIBERS TO AN AUTOMATIC ENROLLMENT
- 15 PROJECT AT THE SUBSCRIPTION SIZE IDENTIFIED BY THE LOCAL GOVERNMENT OR
- 16 ITS DESIGNEE.
- 17 (9) THE ENROLLMENT AND MANAGEMENT OF AUTOMATIC
- 18 ENROLLMENT SUBSCRIBERS TO AN AUTOMATIC ENROLLMENT PROJECT IS NOT
- 19 **SUBJECT TO COMAR 20.62.05.**
- 20 **7-320.**
- 21 (A) THIS SECTION APPLIES ONLY TO RESIDENTIAL ROOFTOP SOLAR
- 22 ENERGY GENERATING SYSTEMS.
- 23 (B) A SELLER, INSTALLER, OR LESSOR OF RESIDENTIAL ROOFTOP
- 24 SOLAR ENERGY GENERATING SYSTEMS SHALL:
- 25 (1) PROVIDE TO THE BUYER OR LESSEE A 5-YEAR FULL WARRANTY
- 26 ON THE INSTALLATION AND COMPONENT PARTS OF THE SYSTEM;
- 27 (2) INCLUDE ANY MANUFACTURER'S WARRANTIES FOR ANY OF THE
- 28 PRODUCTS OR COMPONENTS OF THE SYSTEM;

33

34

(1)

1	(3) INFORM THE BUYER OR LESSEE OF THE MINIMUM LEVEL A		
2	REASONABLE ESTIMATE OF WEATHER-ADJUSTED ENERGY		
3	PRODUCTION BASED ON HISTORICAL DATA AND SYSTEM		
4	PERFORMANCE CHARACTERISTICS THAT THE BUYER OR LESSEE		
5	MAY EXPECT FROM THE SYSTEM; AND		
	· · · · · · · · · · · · · · · · · · ·		
	(4) CERTIFY, IN WRITING, THAT INSTALLATION OF THE SYSTEM IS		
	COMPLIANT WITH ALL FEDERAL, STATE, AND LOCAL LAWS REGARDING		
	WORKMANSHIP AND THAT THE SOLAR PANELS, INVERTERS, RACKING SYSTEMS, AND		
y —	ALL OTHER COMPONENTS MEET THE MINIMUM STANDARDS FOR PRODUCT DESIGN.		
10	(c) THE MARYLAND HOME IMPROVEMENT COMMISSION AND THE MARYLAND ENERGY ADMINISTRATION SHALL:		
11	(1) DEVELOP TECHNICAL SAFETY STANDARDS FOR THE		
12	INSTALLATION AND MAINTENANCE OF RESIDENTIAL ROOFTOP SOLAR ENERGY		
13	GENERATING SYSTEMS REQUIRE CONTRACTORS TO COMPLY WITH ALL APPLICABLE		
14	FEDERAL AND STATE SAFETY STANDARDS AND CERTIFICATION REQUIREMENTS,		
15	INCLUDING OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)		
16	STANDARDS AND HOME IMPROVEMENT CONTRACTORS LICENSES CERTIFY IN		
17	WRITING COMPLIANCE WITH LICENSES AND CERTIFICATIONS LISTED ABOVE IN (7-320		
18	(C)(1)) ON A BI-ANNUAL BASIS; AND		
19	(2) ESTABLISH MINIMUM QUALIFICATIONS FOR INDIVIDUALS		
20 –	INSTALLING AND MAINTAINING RESIDENTIAL ROOFTOP SOLAR ENERGY		
21	GENERATING SYSTEMS. CREATE A CERTIFICATE, BASED ON STANDARDS		
22	APPROVED BY A NATIONAL SOLAR INDUSTRY OR ACCREDITING ORGANIZATION,		
23	THAT IS REQUIRED FOR ANY PERSON ENGAGED IN THE SALE OR MARKETING OF		
24	SOLAR ENERGY GENERATING SYSTEMS.		
25	(D) A SELLER, INSTALLER, OR LESSOR WHO VIOLATES THE		
26	REQUIREMENTS OF THIS SECTION SHALL PAY A FINE NOT EXCEEDING \$1,000		
27	FOR EACH VIOLATION.		
28	SECTION 2. AND BE IT FURTHER ENACTED, That:		
29 30 31	(a) The Public Service Commission shall conduct a study to establish a process by which the Commission may establish partnerships between electric companies and electricity suppliers for electricity generation projects.		
32	(b) The process established under subsection (a) of this section shall:		

include a method for determining whether a partnership for a

generating station will contribute to resource adequacy by increasing by $100\ \text{megawatts}$ or

more the electricity supply in the State that is accredited by PJM Interconnection, LLC;

36 (2) require that a generating station constructed by a partnership be 37 connected to the electric distribution system in the State;

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- 38 (3) require that the electricity supplier in a partnership construct the generating station;
- 40 (4) require that the electricity supplier and electric company in a 41 partnership jointly seek and receive a positive credit rating assessment from a credit rating 42 agency;

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- 1 (5) require that the Public Service Commission expedite all proceedings for 2 the review and approval of a certificate of public convenience and necessity for a generating 3 station proposed by a partnership and prioritize these proceedings, if necessary, over other 4 matters;
 - (6) require that the Public Service Commission take final action on a certificate of public convenience and necessity for a generating station proposed by a partnership not later than 180 days after the Public Service Commission determines that the generating station qualifies as a partnership to provide resource adequacy;
- 9 (7) require a State agency or other person to submit any filing to intervene 10 in an application for a certificate of public convenience and necessity for a generating 11 station proposed by a partnership no later than 90 days after the Public Service 12 Commission determines that the proposed generating station qualifies as a partnership to 13 provide resource adequacy;
- 14 (8) require the Public Service Commission, the Department of the 15 Environment, the Department of Natural Resources, and any other impacted State agency 16 to expedite any regulatory requirements or decisions;
- 17 (9) require an electric company to expedite any processes needed to connect 18 a generating station proposed by a partnership to the electric transmission system; and
- 19 (10) identify the potential rate impact and prioritize potential partnerships 20 that have little or no impact on customer rates.
- 21 (c) On or before December 1, 2026, the Public Service Commission shall report to 22 the Governor and, in accordance with § 2–1257 of the State Government Article, the 23 General Assembly on the results of the study.
- SECTION 3. AND BE IT FURTHER ENACTED, That a presently existing obligation or contract right may not be impaired in any way by this Act.
- SECTION 4. AND BE IT FURTHER ENACTED, That this Act shall take effect October 1, 2025.

M&A_Aaron Bast_Ironworkers Local 5_HB1036 SB931_FW

Uploaded by: Roger Manno

Position: FWA



TESTIMONY OF AARON BAST, BUSINESS MANAGER & FINANCIAL SECRETARY-TREASURER, IRON WORKERS LOCAL 5 BEFORE THE SENATE EDUCATION, ENERGY, AND ENVIRONMENT COMMITTEE AND THE HOUSE ECONOMIC MATTERS COMMITTEE

SB931 / HB1036 FAVORABLE WITH AMENDMENT

Chair Feldman, Chair Wilson, and Members of the Senate Education, Energy, and Environment Committee, and the House Economic Matters Committee:

Thank you for the opportunity to testify on SB931 / HB1036, which directs the Public Service Commission (PSC) to study the feasibility of partnerships between electric utilities and electricity suppliers for electricity generation projects. While I appreciate the intent behind this study, I urge a Favorable with Amendment position on this bill to ensure that all cost-effective and market-based solutions—rather than just utility ownership models—are properly considered.

Ensuring Cost-Effective Solutions for Ratepayers

The study proposed in SB931 / HB1036 places undue emphasis on utility-owned generation as a preferred solution to Maryland's energy needs. However, history has shown that utility-owned generation is among the most expensive options for consumers, often burdening ratepayers with excessive costs. A truly effective study must take a comprehensive approach, considering competitive procurement processes and market-driven solutions that have already proven to deliver lower costs, greater efficiency, and enhanced grid reliability.

Supporting the Broader Approach in SB909 / HB1037

Maryland already has a more thorough and well-structured study proposal in SB909 / HB1037, which directs the PSC to assess various generation procurement strategies, including competitive solicitations, merchant investment, and other private-sector solutions. This broader approach avoids duplicative efforts while ensuring that Maryland's energy strategy prioritizes reliability, affordability, sustainability, and competition.

Given that SB909 / HB1037 already mandates a comprehensive evaluation of energy procurement options, the study in SB931 / HB1036 is redundant and unnecessary unless amended to align with the broader framework. A limited study focused only on utility partnerships ignores more cost-effective and market-driven solutions that could better serve Maryland ratepayers.

9301 Peppercorn Place Largo, MD 20774 o: 301 599 0960 f: 301 599 0962



Avoiding Market Disruptions & Protecting Competition

Reintroducing local distribution utilities into the generation sector through mandated partnerships would disrupt Maryland's competitive energy market, deterring private investment and innovation. Maryland's existing competitive energy model has successfully driven down costs and encouraged job growth in the private sector, particularly in advanced nuclear, clean energy, and grid modernization efforts.

Forcing utilities back into the generation business could undermine competitive investments from independent power producers and merchant generators, ultimately increasing costs for consumers and distorting the market. The state should focus on fostering competitive procurement rather than giving an artificial advantage to utilities.

Supporting the Approach Advanced by Constellation

I support the approach outlined by Constellation, which prioritizes competitive, market-based energy solutions that allow for private-sector investment in Maryland's energy future. Rather than returning to utility-owned generation, Maryland should focus on expanding proven competitive procurement models, which attract private investment, promote innovation, and lower costs for consumers.

Constellation's position aligns with a market-based approach that ensures Maryland's energy future is reliable, cost-effective, and sustainable—without undermining competition or forcing ratepayers to bear unnecessary costs. This approach should be incorporated into any PSC study to ensure a fair and accurate evaluation of all options.

Amendments to Strengthen SB931 / HB1036

To ensure Maryland pursues the best and most cost-effective energy solutions, I urge the committee to amend SB931 / HB1036 to:

- Align with SB909 / HB1037, ensuring a comprehensive review of all energy procurement strategies, not just utility partnerships.
- Fully evaluate competitive procurement models and merchant investment as viable alternatives.
- Assess long-term consumer costs associated with utility-owned generation versus marketdriven energy solutions.
- Ensure Maryland's competitive energy market is not undermined by unnecessary regulatory interference.

Conclusion

Maryland's energy strategy must be built on competition, cost efficiency, and reliability. While I support efforts to explore new generation options, this study should not assume utility

9301 Peppercorn Place Largo, MD 20774 o: 301 599 0960 f: 301 599 0962



ownership as the default solution. Instead, it should fairly evaluate all market-based options, including those advanced by Constellation and other private-sector leaders. For these reasons, I urge the committee to adopt amendments to align SB931 / HB1036 with the broader study approach in SB909 / HB1037 and ensure that Maryland ratepayers receive the best possible energy service at the lowest cost.

Thank you for your time and consideration. I welcome any questions.

Aaron Bast

Business Manager & Financial Secretary-Treasurer

Iron Workers Local 5

M&A_MCAMW_testimony_SB931 HB1036_FWA.docx.pdf Uploaded by: Roger Manno

Position: FWA



BEFORE THE SENATE EDUCATION, ENERGY, AND ENVIRONMENT COMMITTEE & HOUSE ECONOMIC MATTERS COMMITTEE

FAVORABLE WITH AMENDMENT - SB931 / HB1036

Chair Feldman, Chair Wilson, and Members of the Committees,

I appreciate the opportunity to provide testimony on SB931 / HB1036, legislation directing the Public Service Commission (PSC) to study partnerships between utilities and electricity suppliers for new generation projects. On behalf of the Mechanical Contractors Association of Metropolitan Washington (MCAMW), which represents 200 construction contractors and a workforce of 10,000 skilled professionals and 1,000 apprentices across the DMV region, I submit this testimony in Favorable with Amendment.

While I understand the desire to explore solutions for Maryland's energy future, this bill takes too narrow of an approach by focusing solely on utility-led generation projects, rather than considering the broader competitive marketplace that has long benefited consumers, businesses, and workers alike.

Our Industry's Economic Impact

The MCAMW represents a critical sector of Maryland's economy, working in partnership with local unions, hiring halls, and apprenticeship programs within the Mid-Atlantic Pipe Trades Association, as well as our Building Trades affiliates that operate additional training programs throughout the state.

Our industry is not only a major employer but also a driving force in Maryland's economy, generating \$2 billion in annual revenue and contributing \$500 million in tax revenue at the local, state, and federal levels. The success of our contractors and workforce depends on a fair, competitive energy market that prioritizes cost-effectiveness, reliability, and efficiency.

Competitive Procurement Ensures Cost-Effective Energy Solutions

SB931 / HB1036, as currently written, emphasizes utility-controlled generation without fully considering competitive procurement models that have historically resulted in lower costs for ratepayers. Maryland's existing competitive energy market has fostered innovation, investment, and job creation while ensuring affordable and reliable electricity for businesses and residents.

Reintroducing utility ownership of generation risks undoing decades of market-driven progress by stifling competition and increasing long-term costs. Merchant generators and private-sector energy developers have demonstrated time and again that they can deliver cost-effective energy solutions without burdening ratepayers with higher utility-backed expenses.

A More Comprehensive Study is Already Underway

The issues raised in SB931 / HB1036 are already being thoroughly examined in SB909 / HB1037, which requires the PSC to evaluate a wide range of procurement strategies, including competitive bidding, merchant generation, and other private investment models.

Rather than creating a duplicate study that only explores utility partnerships, Maryland should expand SB931 / HB1036 to align with SB909 / HB1037, ensuring that all procurement pathways are analyzed with a focus on delivering the best long-term value for consumers and businesses.

Maintaining a Level Playing Field for Private Investment

The mechanical contracting industry, along with other construction trades, relies heavily on private-sector investment in infrastructure and energy projects. Competitive energy procurement ensures that our contractors and workforce have access to job opportunities driven by diverse market participants—not just a handful of utility-controlled projects.

If Maryland moves toward utility-led generation ownership, it could disincentivize private investment, reducing opportunities for skilled labor, apprenticeship programs, and unionized workforce participation in energy projects. Instead, maintaining a strong, open energy marketplace will promote continued investment in modern infrastructure while preserving job opportunities across the state.

Supporting the Market-Driven Approach Advanced by Constellation

The Constellation model, which supports market-based procurement rather than government-driven utility partnerships, is the right approach for Maryland's energy future. Market-driven investment fosters competition, attracts private capital, and results in a more efficient, resilient grid—all while creating stable, long-term jobs for the skilled workforce our contractors employ.

Any PSC study on new generation procurement must include Constellation's competitive framework, which has already delivered affordable, reliable, and job-creating energy solutions across Maryland and beyond.

Proposed Amendments to Strengthen SB931 / HB1036

To ensure SB931 / HB1036 delivers the most effective and equitable outcomes, I strongly urge the committee to amend the bill to:

- Expand the study's scope to align with SB909 / HB1037, which evaluates all available procurement models, not just utility partnerships.
- Include a comparative cost analysis to ensure ratepayers are not burdened with the higher costs typically associated with utility-controlled generation projects.
- Preserve Maryland's competitive energy market by preventing unnecessary regulatory interventions that could disrupt private-sector investment and job growth.



Conclusion

The mechanical contracting industry plays a vital role in Maryland's infrastructure and economic strength. To continue fostering a competitive, efficient, and job-creating energy market, Maryland must take a broad, comprehensive approach to energy procurement rather than narrowing its focus to utility-owned generation partnerships.

SB931 / HB1036 should be amended to align with SB909 / HB1037, ensuring a full evaluation of all options, including market-driven solutions that benefit ratepayers, businesses, and workers alike.

Thank you for your time and consideration. I am happy to answer any questions.

Thomas Bello

Executive Vice President

Mechanical Contractors Association of Metropolitan Washington (MCAMW)

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Position: FWA



PLUMBERS LOCAL UNION NO. 5

UNITED ASSOCIATION OF JOURNEYMEN AND APPRENTICES OF THE PLUMBING AND PIPE FITTING INDUSTRY OF THE UNITED STATES AND CANADA, AFL-CIO





SENATE EDUCATION, ENERGY, AND ENVIRONMENT COMMITTEE & HOUSE ECONOMIC MATTERS COMMITTEE

SB931 / HB1036 FAVORABLE WITH AMENDMENT

Chair Feldman, Chair Wilson, and Members of the Committees,

On behalf of UA Plumbers & Gasfitters Local 5, representing over 1,900 skilled members and 400 apprentices, I submit this testimony in Favorable with Amendment to SB931 / HB1036. While the effort to assess Maryland's future energy needs is appreciated, the bill's focus on utility-owned generation partnerships is too narrow. Instead, a broader, more competitive strategy is needed to ensure affordability, efficiency, and fairness for both ratepayers and workers.

A Comprehensive Approach for a Stronger Energy Future

SB931 / HB1036 assumes that reintegrating utilities into generation ownership is the best solution, but history suggests otherwise. Utility ownership has often led to higher costs without proportionate benefits. A truly reliable and cost-effective energy future must explore all procurement models—competitive bidding, merchant generation, and private investment.

A more inclusive, data-driven study has already been proposed in SB909 / HB1037, which evaluates competitive procurement strategies. Rather than duplicating efforts with a biased study favoring utility-owned generation, SB931 / HB1036 should be amended to align with SB909 / HB1037 for a more balanced assessment.

Market-Driven Solutions Are More Cost-Effective

Maryland's competitive energy market has successfully kept prices lower and fostered innovation. SB931 / HB1036, in its current form, risks shifting Maryland away from this model, potentially increasing costs and reducing competition. Instead, Maryland should emphasize market-driven procurement strategies that attract private investment, create jobs, and modernize infrastructure without burdening ratepayers. Competitive bidding and merchant generation have already demonstrated their ability to deliver affordable, sustainable, and reliable energy.

Supporting the Competitive Approach Advocated by Constellation

Constellation's market-based framework leverages private-sector investment, avoiding costly utility-backed projects that could inflate rates. A truly effective PSC study must prioritize competitive energy procurement strategies rather than disproportionately emphasizing utility-owned partnerships.

Necessary Amendments for SB931 / HB1036

To secure cost-effective and sustainable energy solutions, I strongly urge the committee to amend SB931 / HB1036 by:

- Expanding the study's scope to align with SB909 / HB1037, evaluating all procurement models fairly.
- Conducting a thorough cost analysis comparing utility ownership to competitive market-driven investments to protect ratepayers.
- Maintaining Maryland's strong energy market to encourage private-sector investment and innovation.

Conclusion

Maryland needs a practical, long-term energy strategy centered on affordability, competition, and sustainability. While SB931 / HB1036 initiates an important discussion, its focus on utility partnerships is too restrictive. To ensure the best energy solutions at the lowest cost, the bill must be amended to align with SB909 / HB1037 and incorporate proven competitive, market-based strategies.

Thank you for your time and consideration.

Michael Canales

Assistant Business Manager

UA Plumbers & Gasfitters Local #5

LightStar - SB931HB1036 - FWA.pdfUploaded by: Rory Murray

Position: FWA

LIGHTSTAR

February 28, 2025

Chairman Brian Feldman Senate Education, Energy and The Environment Committee 2 West Miller Senate Office Building Chairman CT Wilson House Economic Matters Committee 230 Taylor House Office Building

Chairs Feldman and Wilson, and members of the Senate Education, Energy, and the Environment Committee and the House Economic Matters Committee,

Thank you for the opportunity to testify on SB931/HB1036. We are respectfully favorable with amendments.

LightStar Renewables is a solar company that focuses on farmers. Our agrivoltaics (AGpV) projects allow landowners to double the productivity of their land through dual-use community solar projects. Farmers can continue to raise crops or graze livestock, and landowners can continue to offer farm leases while also receiving reliable, long-term income from a solar lease.

Lightstar designs each AGpV project to accommodate an individual farmer's equipment and the type of agricultural product they produce. As part of our design process, we engage an agricultural consultant to help coordinate across parties, including the landowner, tenant farmer, and developer, to ensure that the solar design and farming plan are compatible with agriculture. This also provides the farmer with the flexibility to respond to market signals or try something new and innovative on the land.

Based on peer-reviewed research, most crops with the exception of corn are successfully grown and harvested. Commodity crops, which are most important to Maryland such as grains, soy, and hay benefit from the microclimate of the arrays. Successful agrivoltaic specialty crops include fruits—especially berries—and fruiting vegetables such as squash, cucumbers, tomatoes, and peppers. Broccoli and leafy greens like kale have also shown success in agrivoltaic conditions. A large selection of Lightstar's projects plan to produce hay or soybeans, both of which are easy to accommodate in agrivoltaics. For grazing, sheep have proven to be successful, but Lightstar is excited about the opportunity to showcase cattle grazing, which we have come up with proprietary designs for.

We are favorable to this bill with three amendments, all related to ensuring that farming operations can continue and the intent of AGpV is protected.

1. Updating the Definition of Agrivoltaics

The existing definition in **Public Utilities Article 7–306.2** was a solid starting point. However, due to vague language, we understand that pollinator habitat projects are being classified as Agrivoltaics —a designation we believe was not the original intent, and only diminishes the definition overall due to the benefits that AGpV projects receive and provide to the rural farming communities they operate in. Pollinator habitat should not be considered active commercial agricultural operations.

While pollinator habitats play a valuable role in land conservation and habitat creation, they do not offer the same degree of agricultural land preservation, dual income benefit for farmers, or face the same compliance requirements as farms maintained under the **Agricultural Use Assessment** (detailed in **Appendix A**). We fully support the inclusion of commercial pollinators and encourage their development, but pollinators habitat should not be categorized as Agrivoltaics. Pollinator habitat solar projects do not incur the same Engineering,

LIGHTSTAR

Procurement, and Construction costs of an agrivoltaics project. Agrivoltaics projects require burying of cable, widening of rows, and individual motorized rows for single access trackers – none of these costs are required for pollinator habitat therefore, they don't need to be incentivized.

We've worked hard with Maryland Farm Bureau and the Maryland Association of Counties as well as other stakeholders to come up with a definition that protects farms and counties.

Proposed Definition Update:

- (a) (1) In this section, the following words have the meanings indicated.
- (2) "Agrivoltaics" means the simultaneous use of areas of land, which shall be maintained in Agricultural Use Assessment as determined under Title 18 and the Maryland Assessment Procedures Manual, in consultation with the Maryland Department of Agriculture, for both solar power generation and:
 - (i) raising grains, fruits, herbs, melons, mushrooms, nuts, seeds, tobacco, or vegetables;
 - (ii) raising poultry, including chickens and turkeys, for meat or egg production;
 - (iii) dairy production, such as the raising of milking cows;
 - (iv) raising livestock, including cattle, sheep, goats, or pigs;
 - (v) horse boarding, breeding, or training;
 - (vi) turf farming:
 - (vii) raising ornamental shrubs, plants, or flowers, including aquatic plants;
 - (viii) aquaculture;
 - (ix) silviculture; or
 - (x) any other activity as determined under Title 18 and the Maryland Assessment Procedures Manual in consultation with the Department of Agriculture as an agricultural activity, except pollinator habitat and apiaries.

2. Exempting Agrivoltaics from the PILOT Provision

Building on the General Assembly's decision to exempt **Agrivoltaics** (**AGpV**) **projects** from county and municipal personal property taxes throughout their lifecycle (**CH652 - 2023**), we request a similar exemption from the **PILOT provision**.

AGpV projects are costly to design and build, yet they offer significant land preservation benefits to government entities while providing a reliable long-term additional revenue stream for farmers. Maintaining this exemption is essential to ensuring the financial viability of these projects.

3. Fencing standards for these projects should be determined during the soil and water quality conservation plan design process in coordination with local jurisdictions.

Well-designed agrivoltaic arrays accommodate most tractors and combines, and we tailor planning to the specific implements and planters a farmer intends to use. Depending on the project, a 12-row planter is typically required to fit between rows, with adequate turning space at the row ends. This turning space is essential to the success of agrivoltaic projects. To ensure safe equipment maneuvering, fencing must be set back sufficiently—typically 50 to 90 feet from the end of the solar array rows.

We appreciate your willingness to hear our thoughts, and look forward to continued partnership.

Lucy Bullock-Sieger VP of Strategy

LIGHTSTAR

Appendix A

Penalties for Non-Compliance That a Pollinator Project Would Not Be Subject To:

- 1. If the owner/operator of the array fails to maintain the project in compliance with Agricultural Use Assessment, then Lightstar would be required to:
 - o Pay an agricultural land conversion tax penalty
 - o Pay a 25% surcharge plus 10% penalty
- 2. The land will then be assessed at its new fair market value, which for a 3-5MW project could be \$2 million over the project lifetime.
- 3. This would constitute a breach of contract with the landowner, leading to significant legal ramifications.
- 4. Lightstar would lose eligibility for any federal or state grants.
- 5. Any other grant or incentive programs used for the project would be breached.
- 6. If Lightstar's CPCN or county permit approval was for an AGpV project and it fell out of compliance, it would be subject to legal penalties as well.

Criteria for Land Qualification Under Agricultural Use Assessment

For a detailed understanding of Agricultural Use Assessment, refer to:

Maryland Department of Assessments & Taxation

To qualify for Agricultural Use Assessment, land must be:

- Actively used for farm or agricultural purposes, as defined under COMAR Title 18.
- Subject to approved agricultural activities, which include factors such as:
 - o The nature of the agricultural activity
 - Amount of land actively used for farming
 - o Ratio of associated land to actively used land
 - Type and quantity of livestock or poultry on-site
 - o Participation in government/private agricultural programs
 - o Gross income of (\$2,500 per year in farm revenue).
- Parcels under 20 acres may qualify if they meet the gross income test.
- Parcels may also qualify as a Family Farm Unit or be combined as an Agricultural Land Unit (ALU) under the same ownership.

HB1036 Letter of OppositionUploaded by: Adam Streight Position: UNF

Adam Streight County Executive

Dan Schneckenburger Director of Administration



Office: 410.996.8300 Fax: 800.863.0947

County Information 410.658.4041 410.996.5200

CECIL COUNTY, MARYLAND

Office of the County Executive 200 Chesapeake Boulevard, Suite 2100, Elkton, MD 21921

March 11, 2025

The Honorable Chair, Vice Chair, and Members of the Economic Matters Committee Maryland House of Delegates 230 Taylor House Office Building Annapolis, MD 21401

RE: Letter of Opposition for House Bill 1036 - Renewable Energy Certainty Act

Dear Chair Wilson, Vice-Chair Crosby, and Members of the Economic Matters Committee,

Cecil County Government stands united in opposition to HB 1036, which represents a significant blow to the autonomy and authority of local government regarding how solar projects are developed in Maryland. HB 1036 is a one-size-fits-all piece of legislation that never ends well. Good governance dictates that the specific needs of local jurisdictions must be considered by the independently elected officials our voters choose to represent them and their interests. What may be good for one county or region may not be good for Cecil County and it is imperative that we remain accountable to our voters as to the infrastructure being placed in their backyards, which could have a negative impact on the environment, land use, property values, and our rural character.

Thank you for your time and consideration. I urge you to look unfavorably on HB 1036.

Sincerely,

Adam Streight

County Executive

Al Miller

Council President

PGC_Oppose_HB 1036.pdf Uploaded by: Adriana Caldarelli

Position: UNF



THE PRINCE GEORGE'S COUNTY GOVERNMENT

OFFICE OF THE COUNTY EXECUTIVE

BILL: House Bill 1036: Public Utilities - Generating

Stations - Generation and Siting (Renewable Energy

Certainty Act)

SPONSORS: Delegates C.T. Wilson and Brian M. Crosby

HEARING DATE: February 28, 2025 at 1:30 PM

COMMITTEE: Economic Matters

CONTACT: Intergovernmental Affairs Office, 301-780-8411

POSITION: OPPOSE

The Office of the Acting Prince George's County Executive OPPOSES House Bill 1036: Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act). This proposal seeks to incentivize the siting and development of a certain solar energy generating stations or energy devices by altering the standards of consideration against which the public service commission informs its final action on an application for a certificate of public convenience or necessity. Further, the proposal also creates an exemption from personal and real property taxes for solar energy generating stations.

Through a seven-year process of engaging wide-ranging voices from across Prince George's County in a comprehensive zoning rewrite process, County residents stressed their desire for a more transparent local development process, resulting in the 2021 adoption its Countywide Sectional Map Amendment. By potentially taking steps to limit the public's input in this process by bypassing the possibility of local zoning, this proposal forces the county to step back from this important local responsibility, harming the public's trust in the overall development process. To sideline these voices as proposed in HB 1036 would run counter to the commitments made to our residents and current development partners.

Prince George's County stands in lock step with Maryland's clean energy goals as documented in its <u>Climate Action Plan (CAP)</u> priorities CO-4: Commit to clean and renewable energy; M-1: Power County operations with 100% renewables; M-2: Increase deployment of solar PV; and M-3: Accelerate deployment of resilient energy systems.

However, HB 1036/SB 931 conflicts with several CAP priorities including MIS-11: Maintain a climate-resilient equitable forest and tree canopy cover; AIS-5: Steer development to high growth areas, minimize impacts to natural resource areas, and reduce flood risks; and AIS-10: Promote a climate resilient food system.

Like the Countywide Sectional Map Amendment and the CAP, all Prince George's County initiatives are developed in partnership between community stakeholders and professional staff. Prince George's County has the lowest average income in the DC metro area and has both urban and rural census tracts with environmental justice and equity challenges. County residents have long been disproportionately impacted by high exposure to pollution, proximity to industrial facilities, and poor health outcomes. County leaders recognize the value of residents' lived experiences and rely on the collective knowledge of our community to serve as the foundation for all decisions, investments and priorities. HB 1036 undermines not only this commitment, but also its land use, equity and fiscal priorities, by effectively allowing energy project development on scarce agricultural and woodland conservation areas.

Prince George's County's designated economic development and affordable housing priority areas, essential to the County's livability, sustainability and economic future, will be at risk due to competition with energy development. In addition, agricultural areas, central to the County's history, culture and local food production, and among the last large, undeveloped tracts in the County, will be prime targets for energy development projects. Without adequate incentives necessary to improve project feasibility and benefit at a business level, local jurisdictions will need to retain the creative flexibility afforded through the local zoning and development process.

Each of Maryland's counties face their own individual challenges that may not easily translate across jurisdictional borders. This bill disregards local land use, the local community input process, comprehensive planning, and economic factors that would otherwise allow counties to partner with the State to achieve renewable energy portfolio goals. The overburdened and vulnerable residents of Prince George's County should not bear the brunt of fixing Maryland's energy crisis. Impacted communities should continue to benefit from fair representation at the table through a just development process, in collaboration with State regulators.

For the reasons stated above, the Office of the Prince George's County Executive **OPPOSES HB 1036** and asks for an **UNFAVORABLE** report.

Testimony Against Maryland Bill HB1036.pdf Uploaded by: Allison Bullock

Position: UNF

Good afternoon, Madam Speaker and honorable members of the committee. My name is Allison Bullock, and I am the Vice President of the Anne Arundel Dairy Leasing 4-H Club, proudly representing the youth of our community in Anne Arundel County, Maryland. I stand before you today to oppose bill HB1036, the "Renewable Energy Certainty Act." While we all support sustainable energy, this bill threatens not only our agricultural land but also the communities and programs—like my 4-H club—that rely on that land.

For those who may not be familiar, 4-H is a nationwide organization that empowers young people through hands-on learning in agriculture, STEM, and leadership. Our club, the Anne Arundel Dairy Leasing Club, leases the Navy Farm in Gambrills from the county to provide youth with the opportunity to raise and show dairy cattle. We also share our lease with other organizations, such as the Anne Arundel County 4-H Extension Office and De Novo Farm.

As I mentioned, my name is Allison Bullock. I come from a family of farmers, and agriculture has been a cornerstone of my life. I have been a member of Maryland 4-H since I was eight years old, participating at the local, county, and state levels. Now, at 17 years old and as a junior at Southern High School, I own and operate a business where I raise an average of at least 30-40 livestock animals, ranging from dairy goats to beef cattle.

This bill directly impacts me, my community, and the agricultural way of life in Maryland. It proposes that agricultural land, which is protected by our county, could be overruled by state-level decisions that prioritize solar development. The Navy Dairy Farm in Gambrills is just one example of agricultural land that could be targeted by solar companies. In fact, we have already had to advocate at the county level to prevent solar companies from taking over portions of our lease. As farmers, when we look at open fields, we don't just see unused space—we see vital land critical to pasture rotation, crop growth, and the long-term sustainability of our agricultural future, not land to be taken by solar companies.

Studies from the University of Maryland Extension indicate that the construction and maintenance of solar installations create noise that disrupts livestock, causing stress that negatively impacts their growth and behavior. This issue is not just a concern for large industrial farms—it's a problem for youth like me, who rely on these animals for our educational projects. It's a problem for small farmers who cannot afford to compete with solar companies for land leases. Our animals are more than just livestock; they are part of our education, and the stress caused by these projects directly impacts their health and our ability to succeed.

Additionally, the impact on soil health cannot be ignored. Solar farms compact soil, making it less viable for future agricultural use. A 2023 Maryland Department of Agriculture report on land conversion trends raised concerns that once soil is degraded, it cannot support crops or grazing animals. This is not just an issue for today—it's a threat to our future food security. As food prices rise and we become more reliant on imports, it is critical that we protect the land that sustains us.

This bill threatens not just our education and small farms, but the long-term viability of Maryland's agricultural industry. It jeopardizes our ability to produce food, and it undermines the experiences and opportunities that youth in our community gain from programs like 4-H.

I urge you to listen to the voices of Maryland's farmers and young people. Renewable energy is important, but so is the future of our food, our education, and our communities. This issue is not just about solar panels; it's about the loss of vital agricultural land and the impact on our lives and future generations.

Please vote NO on HB1036.

Thank you for your time and consideration.

Sources:

University of Maryland Extension on Solar Energy and Agriculture

The University of Maryland Extension has conducted studies on the impact of solar installations on agricultural land, including issues like noise and soil health.

Link: University of Maryland Extension

Maryland Department of Agriculture - Land Conversion and Solar Development

This 2023 report from the Maryland Department of Agriculture discusses land conversion trends and the impact of solar farms on agricultural soil and farming practices.

Link: Maryland Department of Agriculture - Land Conversion Trends

American Farmland Trust - Solar Energy and Agriculture

The American Farmland Trust provides insight into the challenges of balancing renewable energy development with the protection of farmland. They emphasize the importance of preserving agricultural land for future food security.

Link: American Farmland Trust - Solar and Agriculture

National Agricultural Law Center - The Impact of Solar Development on Farmland

This article examines the legal and economic impacts of converting farmland into solar energy sites, including the potential disruption to farming practices and land viability.

Link: National Agricultural Law Center - Solar Development

Maryland Farm Bureau - Solar Energy on Farmland

The Maryland Farm Bureau has expressed concerns about the conversion of agricultural land to solar farms, particularly for small family farms that may struggle to compete for land.

Link: Maryland Farm Bureau - Solar Energy

Letter of Opposition HB1036 Revised.pdf Uploaded by: Amanda Brooks

Position: UNF



BOARD OF COUNTY COMMISSIONERS OF WASHINGTON COUNTY, MARYLAND

February 26, 2025

Delegate C.T. Wilson, Chair Economic Matters Committee 230 & 231 Taylor House Office Building Annapolis, Maryland 21401

RE: Opposition for House Bill 1036 – Public Utilities – Generating Stations – Generation and Siting (Renewable Energy Certainty Act)

Dear Delegate Wilson,

The Board of County Commissioners of Washington County, Maryland (the "Board") writes to express its strong opposition to House Bill 1036 the Renewable Energy Certainty Act, which is currently under consideration in the Economic Matters Committee. As an elected body the Board is invested in the well-being of our community and state and believe that this legislation undermines the Board's ability to analyze and determine appropriate land use policies for the county. These attempts to apply one-size-fits-all mandates usurp the Board's ability to provide reasonable and responsible local governance.

Allowing Solar Energy Generating Systems (SEGS) and Energy Storage Devices (ESDs) to locate anywhere in the rural areas of our community will have long term detrimental effects as outlined below:

- 1. Renewable energy projects should pay their fair share of taxes rather than shifting costs to homeowners and businesses. Exemption of SEGS from personal and real property tax provides an unfair advantage to one industry. No singular industry should receive special treatment at the expense of local taxpayers.
- 2. This bill sets forth unfunded mandates thereby shifting financial burdens onto taxpayers while energy companies profit. This bill pushes more responsibility onto counties to enforce and monitor state mandated regulations with costs falling to local taxpayers.
- 3. This bill does not provide a balanced approach between the siting of renewable energy projects and local land use policies related to agriculture, preservation and economic development.
 - a. SEGS encumber significant amounts of prime farmland that are lost to active production for decades. Loss of productive agricultural land will have negative local and regional impacts on this economic sector. Reductions in crops and animal products will cause higher prices due to lack of supply.
 - b. We urge the members to take into account the contradicting policies of the State as they relate to land preservation efforts. The Agricultural Stewardship Act of 2006 required counties to adopt priority preservation areas (PPAs) to further support and enhance profitable agricultural and forestry enterprises. This bill will undermine the efforts for land preservation in these state-mandated areas and land preservation efforts in general.
- 4. This bill does not address the larger issues related to distribution of power generated by these uses into the national grid. Without proper planning to effectively and efficiently locate renewable energy projects where they can use existing infrastructure to connect to the national grid, further disruptions to rural and suburban communities will occur. Additional infrastructure such as high energy power lines will need to be built, thereby exacerbating impacts on our community.

100 West Washington Street, Suite 1101 | Hagerstown, MD 21740 | P: 240.313.2200 | F: 240.313.2201 | TDD: 711

- 5. Public safety is an important concern that has not been addressed by this bill. Utility scale battery storage and transmission projects bring serious risks, including fires and grid instability. Counties must have a say in the location of these facilities to ensure appropriate emergency response efforts to protect our citizens.
- 6. This bill subverts the intent of developing a Comprehensive Plan. By allowing these uses to occur anywhere in a local jurisdiction, it overrides the comprehensive visions of long-term growth plans. It allows one particular land use to supersede the thoughtful and analytical efforts of a community to plan for preservation, agriculture and economic development through best management practices.
- 7. We are concerned that these amendments will open the door to permitting these facilities on already permanently preserved land. There have been other cases where commercial uses that are not directly related to the conservation of agricultural practices have been permitted on preserved land that was intended to protect and enhance the agriculture industry.

In addition to these specific comments, the Board notes its disappointment in the dismissal of significant efforts by Maryland Association of Counties and other stakeholders in their attempt to draft a compromise bill that acknowledged the need for renewable energy projects while still allowing local governments to integrate those future demands into a well-rounded and comprehensive land use solution. Several months of discussion and exchange of ideas appear to be abandoned for a more favorable outcome for the renewable energy industry.

It is the Board's consensus that this bill is overreaching and severely influenced by one specific industry without consideration to local expertise and input. It usurps local zoning and land use policies while producing unfunded mandates that will unfairly affect local budgets and impacts on local citizens. For these reasons, and others that may be brought to light during the testimony period for this bill, the Board strongly recommends that the committee provide an unfavorable report for this bill.

Thank you for your time and consideration of our concerns. If you have any questions or concerns, we are open and willing to have further discussion.

Sincerely,

Board of County Commissioners of Washington County, Maryland

John F. Barr, President

Chesapeake Gold Farms Testimony in Opposition to S Uploaded by: Amanda Heilman

Position: UNF

Testimony in Opposition to SB0931/HB1036

Senator Feldman, Delegates Wilson and Crosby,

My name is Amanda Miller, and I farm with my husband and his family at Chesapeake Gold Farms. Our daughter is a seventh-generation dairy farmer. Living in Maryland is already a challenge for farmers. This state was built on agriculture, yet as more and more people move in, development constantly threatens our way of life.

We cannot compete with the large dairy farms in the Midwest—they have more land and resources than we do. In Maryland, we have to be creative to survive and preserve the small family dairy tradition. That's why, in 2018, we started producing and selling our own dairy products directly to consumers. From cheese, milk, and butter to yogurt, farm-raised beef, and cut flowers, everything we sell is 100% produced by our Maryland farm family.

This bill threatens not only our livelihood but also the opportunity we are creating for rural Marylanders to learn where their food comes from. I am not opposed to alternative energy, but I am opposed to developing prime farmland for that purpose. Maryland is already filled with massive warehouses—from Amazon to Walmart to Lidl—many of which span multiple acres. Why aren't we prioritizing solar installations on those rooftops? Why aren't we building solar shade structures in parking lots across the state?

Why would you choose to undermine the very people who provide food for this state and this country? Farmers may be a minority in Maryland, but we represent a way of life that people from all walks of life appreciate. One of the best parts of driving to the beach is passing through Maryland's farmland—stopping at roadside stands to buy fresh sweet corn, enjoying steamed crabs with locally grown produce, and attending firehouse dinners where the chicken was raised by a farmer down the road, even if it carries a big-name brand like Perdue.

Agriculture is Maryland's number one industry and a cornerstone of our heritage. But once farmland is gone, it's gone forever. I urge you to oppose SB0931/HB1036 and protect the future of Maryland farming.

Thank you.

Amanda Miller

Chesapeake Gold Farms

UNF.Amy Moredock.Queen Anne's Co. Govt Uploaded by: Amy Moredock

Position: UNF

Queen Anne's County

DEPARTMENT OF PLANNING & ZONING

110 Vincit St., Suite 104 Centreville, MD 21617

Telephone Planning: (410) 758-1255 Fax Planning: (410) 758-2905

Telephone Permits: (410) 758-4088 Fax Permits: (410) 758-3972

County Commissioners:

James J. Moran, At Large Jack N. Wilson, Jr., District 1 J. Patrick McLaughlin, District 2 Philip L. Dumenil, District 3 Christopher M. Corchiarino, District 4

To: The Honorable Brian J. Feldman

Chair, Education, Energy, and the Environment Committee

From: Amy G. Moredock, Planning Director

Date: 28 February 2025

Subject: OPPOSITION – SB 931/CF HB1036

Consideration of Queen Anne's County, MD Solar Provisions and the

2024 Solar Solutions Workgroup as relates provisions outlined in HB1036/CF SB 931

Ordinance No. 17-16 – Utility and Small Scale Solar Arrays

Queen Anne's County has been dedicated to supporting the State of Maryland's Renewable Energy Portfolio Goals as indicated by the enacting of Ordinance No. 17-16 as described below. Queen Anne's County, as well as many Maryland Counties, has been an active partner in ensuring the success of utility scale solar array projects as indicated in the statistics below. Queen Anne's County is a major contributor to the implementation of the REP Goals.

- In December 2017, the Queen Anne's County Commissioners enacted utility and small scale solar provisions creating a Utility Scale Solar Array Overlap (USSA) District Map within a two-mile radius on either side of the electric transmission lines with a capacity equal to or greater than 69 kV. This District permits utility scale solar arrays as a conditional use.
- Small scale solar arrays are limited in size to 2 megawatts and permitted as by-right accessory uses defined as a private use facility or net metering system generating solar energy for a single residential home or community neighborhood, a private entity, business, or institutional use. The system may be ground mounted or roof mounted.
- In 2022, the USSA District provisions were amended to expand the siting of a utility scale solar array that is *partially* located with the USSA.
- These provisions enable the County Zoning Administrator to issue building permits for large and small scale solar array projects.

Utility Scale Solar Array District (see attached map):

- A two-mile radius on either side of the electric transmission lines with a capacity equal to or greater than 69 kV. In total, this district encompasses 106,519 acres.
- After GIS analysis of the USSA, there are approximately <u>30,958 acres</u> of tillable land within the overlay area available for solar development.

Operating Community & Utility Solar Development in QAC:

• Bluegrass approx. 80 megawatts (Pilot program – 408.8 acres)

Lowin Farms approx. 10 megawatts
 Patchett/Cedar Lane approx. 6 megawatts

Garcia approx. 2 megawatts (Pilot Program – 18.5 acres)
 Jones Farm approx. 64 megawatts (Pilot Program – 326 acres)
 TOTAL approx. 162 megawatts (Pilot Program – 753.3 acres)

Approved Community & Utility Solar Development in QAC:

Centreville White approx. 2 megawatts
 Red Lion approx. 2 megawatts
 Cedar Lane Solar approx. 2 megawatts
 TOTAL approx. 6 megawatts

Pending Community & Utility Solar Development in QAC:

• Ruthsburg Solar 1 approx. 5 megawatts

Maryland's Renewable Energy Goal (Renewable Portfolio Standard):

- By 2030: (mandated by law)
 - o 50% of the total energy sold in MD shall come from renewable resources.
 - Solar carve-out out of the above requirement, at least 14.5% of the energy shall come from solar facilities.
- By 2035: (Governor's goal, but not law yet)
 - o 100% of the total energy production in MD shall come from renewable resources.
- Acreage of land and megawatts required throughout the State to meet the solar goal of 14.5% by 2030.
 - o Approximately anywhere from 11,000 acres to 18,000 acres of Utility-Scale Solar needed to meet the Maryland 2030 standard.
 - There are currently 1,914.44 acres under lease/PILOT/or otherwise dedicated to Utility Scale Solar projects in Queen Anne's County that are operating, under construction, or approved.
 - This represents 13.2% of the acreage needed required from Utility-Scale Solar to meet the Maryland 2030 standard (based on the average projected average needed: 14,500 acres).
 - Approximately 2,274 megawatts required from Utility-Scale Solar to meet the Maryland 2030 standard (per information from the presentation of Bob Sadzinski Director, Power Plant Research Program, at the 2023 MDA Solar Summit).
 - There are currently 168 megawatts of Utility Scale Solar projects in Queen Anne's County that are operating, under construction, or approved.
 - This represents 7.4% of the megawatts required from Utility-Scale Solar to meet the Maryland 2030 standard.

2024 Solar Solutions Workgroup

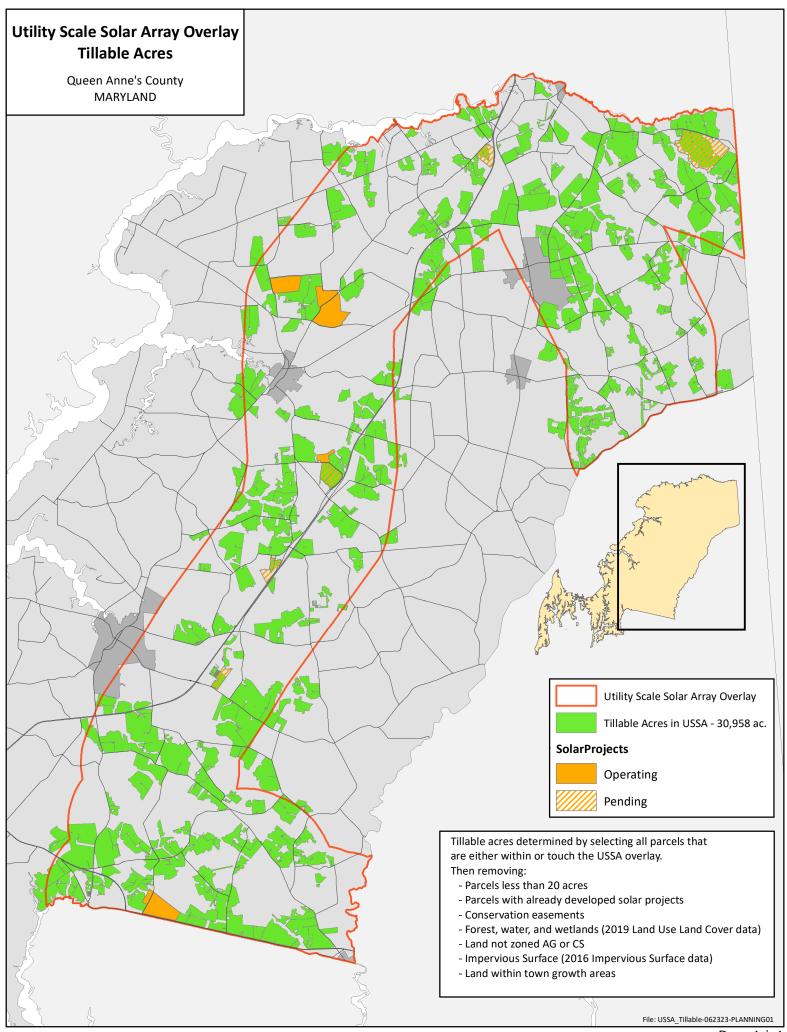
Queen Anne's County was vested in the 2024 Solar Solutions Workgroup (and in the 2023 Solar Workgroup).

Directly below is a list of the stakeholders who were at the table and/or invited to come to the table. These participants were engaged to varying degrees but with sufficient consistency from the initial 14 June 2024 meeting to the very last meeting on 22 October 2024. We met 6 times, and each meeting was a full-day session. We absolutely worked together and individually in preparation for those work sessions and dedicated at least 100 hours to the Final Draft Bill which was completed in October 2024.

- Administration: Gov's Office, DNR/PPRP, MDA, MDP, MEA, PSC
- Counties: MACo, QAC, FredCo
- Environmental Community: LCV, Forever Maryland
- Industry: CI Renewables, Chaberton, LightStar, REV Renewables, Urban Grid [CHESSA was invited but declined to participate]

Our mission was to put forward a bill in which all parties achieved reasonable transparency, predictability, and compromise and could collectively support a successful piece of solar legislation in the 2025 Session (unlike the same exercise which occurred in 2024 from which the solar industry walked from the table much more quickly and resulted in HB1045/SB1025).

Despite this setback, Queen Anne's County remains committed to continued partnership with a focus on key siting standards agreed upon in October 2024.



SGCPC Letter of Support - HB 1036.pdf Uploaded by: Angelo Otterbein

Position: UNF



February 26, 2025

Angelo Otterbein President Sparks-Glencoe Community Planning Council PO Box 937 Sparks, MD 21152

Re: HB1036: Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

The Sparks Glencoe Community Planning Council (SGCPC) is a non-profit, volunteer organization dedicated to preserving and protecting the rural character of northern Baltimore County by encouraging land preservation, and by protecting the reservoir watershed system that lies within the organization's boundaries. Through newsletters, public meetings, and hearings, the SGCPC has over 400 members and seeks to inform and educate both the public and the government about the necessity of:

- conserving farmland and green infrastructure,
- preserving clean drinking water in our reservoirs,
- and keeping growth in accord with the level of public services available in the area.

We strongly oppose HB1036: Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act), as it allows the Public Service Commission (PSC) to pre-empt local governments' laws and regulations when approving construction of solar and energy storage device installations. Counties would not be able to prohibit the construction or operation of solar installations or energy storage devices and could not deny development plans. Solar installations would be exempt from personal and real property taxes. Aside from the significant problem of using prime and productive farmland for the wrong purpose, it sets a terrible precedent.

We appreciate you taking our input into consideration.

Sincerely,

Angelo Otterbein

President

Sparks-Glencoe Community Planning Council

TestimonyAnnapolisHB1036 SB9312.26.25.pdf Uploaded by: Annette Fleishell

Position: UNF

Testimony Opposing HB2036/SB931

My name is Annette Fleishell. I live in a pre-civil war farmhouse on a 50 acre farm on Fannie Dorsey Road. It is a quiet 2 acre road in a Carroll County agricultural zone. The State of Maryland, using the Public Services Commission wants to construct not one, but two Community Solar projects, .6 miles apart from each other.

I am adamantly opposed to the placement of solar energy facilities on our treasured agricultural land in Carroll County. Solar panels belong in industrial or commercial zones, NOT anywhere near residential homes, and NOT on prime farmland.

Carroll County is no stranger to the energetic and aggressive attempts of Big Solar Energy Companies, to construct "solar farms" on our cherished and valuable agricultural land. Carroll's citizens and residents fought the placement of Community Solar Energy for over two grueling years. On July 13,2023 at a public hearing, the Carroll County Commissioners enacted Ordinance No.2023-04, which clearly states "Community solar energy generating systems (CSEGS), in agricultural zones", is hereby repealed and deleted in its entirety."

The residents of Carroll County have spoken clearly and loudly, It was unanimous across all Carroll County communities, KEEP SOLAR OFF OUR FARMLAND!

Currently the MD Public Services Commission has proposed 8 (eight) submissions for "Application for a Certificate of Public Convenience and Necessity (CPCN)" from energy companies. One of those CPCN applications has been approved as of 1/31/25.

None of the PSC proposed solar fields are farmed by the landowners. Local farmers do the planting and harvesting of the crops on them. These landowners do not care about the land and preserving its' integrity, only the money it realizes. Using prime agland for solar will hurt our farmers, their families and livelihood.

Carroll County has a proud heritage and tradition in agriculture. We will not allow Community Solar to destroy this heritage. If allowed in one project, it will effectively chip away our agland, 20 acres at a time.

Carroll County honors its' commitment to Farmland Preservation since 1970, with 80,000 acres preserved; and a goal of 100,00 acres. The county is #1 in MD for numbers of acres preserved, and #5 in the nation. 50% of Carroll County land mass is in agriculture, containing approximately 708 farms.

Carroll County is <u>serious</u> about protecting its' agricultural land. Solar has been proven to damage and destroy prime farmland. It will destroy the land for future generations.

The State of Maryland, using The Public Service Commission (PSC), SHOULD NOT HAVE THE RIGHT TO SUPERCEDE CARROLL COUNTY LAW!!!

Carroll County residents and Commissioners will continue making our voices heard! Do not underestimate Carroll County's farming communities. WE WILL NOT exchange our beautiful farmland for solar energy.

Thank you for your attention.

Annette Fleishell
1401 Fannie Dorsey Road
Sykesville, MD 21784
fleishellfarm@aol,com

HB 1036 testimony.pdfUploaded by: Brenda Myers Position: UNF

Food prices have been in the news everyday since 2020 unfortunately most of the media coverage misses the forests for the trees because a major driver of food prices is often ignored. Climate change! Helene affected more than <u>6 million acres</u> of agricultural land, property that collectively produces an estimated \$8.7 billion in agricultural products. In early 2024 TX experienced a horrific wildfire, Texas A&M AgriLife Extension Service economists reported that more than <u>12,000 cattle deaths occurred</u>, contributing to an estimated \$123 million in agricultural losses. These are the type of losses that happen over a weekend due to climate change and they are just the tip of the iceberg but media coverage of this issue is almost nonexistent.

How does this relate to solar farms? Approximately 1.25 million acres of agricultural land in the United States have been converted for use in *solar energy production*. This figure is based on data from the USDA and American Farmland Trust, which found that 83% of solar installations are on agricultural land, including cropland and pasture or rangeland. This highlights a strong tendency to develop solar projects on land that is typically used for agricultural purposes due to its favorable characteristics—flat, sunny, and relatively inexpensive to lease. We're losing crops and livestock due to climate change, which decreases supply and increases cost and now the offered solution is causing more losses which will further decrease supply and increase cost. Fortunately, this isn't the way it has to be. We can easily start land management practices that promote policies and incentives to encourage solar development on less fertile land, brownfields, industrial rooftops, parking lots, and agrivoltaics to reduce the impact on agricultural productivity, food security, and inflation.

Appropriate land use and food security considerations are often underrepresented in the climate activism discourse, particularly when it comes to renewable energy development like solar and wind farms. While renewable energy expansion is critical for reducing carbon emissions, the broader impacts on agricultural productivity, rural communities, and land use should be given more weight in the conversation. More coordinated planning and policy interventions are needed to ensure that solar installations <u>do not compromise agricultural productivity</u>, especially given the increasing threat of climate change to food security. Supporting and expanding incentives for agrivoltaics, along with stricter regulations regarding the use of prime farmland, will help balance renewable energy goals with the need to protect valuable agricultural resources.

We need regulation to ensure that the solutions to climate change aren't adding to inflating food prices. The current approach of simply acquiring farmland for solar farms and transmission lines needs to be rethought in the context of food security and climate resilience. Instead of a "one-or-the-other" mindset, we should focus on multi-use strategies like agrivoltaics, prioritize non-arable or marginal lands, and promote solar development in urban and industrial areas. With climate change threatening both energy and food systems, a more integrated, strategic approach is essential. Allowing the Public Service Commission to overstep local regulations is not a solution, it's a policy that widens the rural/urban divide. Rural areas are experiencing most if not all impacts for solar and transmission lines, and the urban areas seem to be promoting renewables the most without putting any skin in the game. There are easily 100 acres of flat warehouse rooftops in one area of Sparrows Point, without solar panels. This is a missed opportunity and unfortunately the strategy of "go get some farmland" needs to be rethought. Respectfully,

Jeremy and Brenda Myers

HB1036.OPPOSE.ESLC.pdfUploaded by: Carol Bean Position: UNF



Committee: House - Economic Matters

Bill: HB1036 - Renewable Energy Certainty Act

Position: UNFAVORABLE

Hearing Date: February 28, 2025

Chair Wilson and Committee Members,

Thank you for considering the testimony of Eastern Shore Land Conservancy (ESLC) on HB1036, the Renewable Energy Certainty Act. We understand the need for consistent and predictable siting standards to expedite renewable energy projects. However, we oppose HB1036 believing it casts too broad of a net, treating projects that vary considerably in their size and impact the same. HB1036 negates the important role of local government in land-use planning and taxing authority and overlooks meaningful mitigation fees and the role they play in directing solar to the most appropriate places.

It is essential to separate the climate benefits of solar energy from the land-use consequences of large scale solar infrastructure. Right now, prime farmland is the most at risk for conversion to utility scale solar, as developers seek economies of scale on flat, cleared agricultural land. The ongoing land-use conflicts surrounding solar projects in Maryland often overlook a crucial reality: our agricultural industry also relies on economies of scale. Many of you are from districts where once-thriving agricultural economies have eroded over time. But the Eastern Shore of Maryland has held on to this industry.

The Eastern Shore of Maryland, with large tracts of highly productive prime farmland and a circular farm economy, currently provides 74% of the state's agricultural sales. This is the very same land highly sought after by solar investors that can earn a better return on their investment by siting large projects on the regions flat, cleared farmland. The increasingly high rates offered by developers to lease land for solar do not appear to be an impediment to development but they do have implications for farmers who are dependent on leasing acreage to make their enterprises profitable and could have serious consequences for future generations seeking to enter into farming.

A primary reason the Eastern Shore remains an agricultural powerhouse is the protection afforded farmland in rural counties through their Comprehensive Plans and zoning regulations. Leaders in rural counties are often intimately connected to farming and have deep generational knowledge of the land and familiarity with its contributions to the local economy. Removing their ability to guide solar siting decisions risks placing projects in inappropriate locations and will further undermine the statewide, cooperative effort that is needed to transition our energy economy to a more renewable one. It also sets a troublesome precedent as the state actively seeks ways to meet surging energy demand whether it be through solar, nuclear or transmission upgrades.

As the Covid pandemic hopefully taught us, food production is absolutely essential. Accelerating conversion of farmland without regard to the impacts to the wider agricultural sector could push food production to marginal lands that are more susceptible to climate change impacts. Maryland farmers are highly regarded as leaders in the implementation of conservation practices on their lands, providing climate benefits such as carbon sequestration, wildlife habitats, flood mitigation and other ecosystem services in addition to growing food.

We urge you to reject HB1036 in its current form and instead pursue a more balanced, strategic approach – one that acknowledges the vital role of local input in land-use decisions and the importance of maintaining the viability of our agricultural industry. Conservation of precious natural resources like our prime farm soils should be perceived as aligned with state climate goals and treated accordingly.

Respectfully submitted,

Eastern Shore Land Conservancy

sb931 sign on letter final.pdfUploaded by: Caroline Taylor Position: UNF

Protecting the Land that Sustains Us

February 26,2025

Dear Members of the Education, Energy and Environment and Economic Matters Committees,

We, the undersigned organizations **strongly oppose SB931/ HB1036** because the bill disregards the imperative for establishing and maintaining guard rails for the siting of commercial scale solar and battery storage facilities. Maryland's forests, farmland, and water quality are all at risk. The legislation as written will undermine decades of taxpayer funded protections for critical natural resources at both the state and local level. The result is a radical upending of rural economies and loss of finite resources. The bill does not make use of available tools for siting large scale industrial solar and battery storage that would balance with these important priorities. These well-established best practices include incentivizing solar on less-fertile, already disturbed lands, and prohibiting installations on steep slopes among many other sound provisions.

Increasing the state's renewable energy generation is critical. We need a responsible and good faith measure promoting solar. Such a proposal would include guardrails to avoid broadly undermining the decades of conservation gains achieved by state and local agencies in partnership with our organizations. Balance is key.

Throughout the state, examples of efforts to carefully balance solar industry with resource protection exist. Montgomery County, for example, through well considered zoning update has opened their Agricultural Reserve to three square miles of solar installations on sub-prime soils. In fact, over 5 thousand commercial and residential solar projects have been constructed throughout the county over just the last 4 years. Some arguing for overly permissive legislation such as this bill, declare that zoning that conditions solar deployment, such as in Montgomery County's Reserve, results in untenable barriers to expansion of solar. Yet the Montgomery County Planning Department's two year study of the status of the effect of solar zoning provision the Ag Reserve concluded that the true hurdle is not the County's zoning that protects prime soils but rather PJM's well documented interconnection backlog for large renewable energy projects and local utility company capacity.

Montgomery County is one of a number of Maryland counties that, over decades, have implemented balanced protections for finite farmland and natural resources- gains that would be erased when this bill allows the State unilateral override of local master planning and zoning authority.

Without the addition of language that upholds and respects local jurisdictions' efforts to balance solar deployment with long standing conservation goals, we strongly oppose this bill as introduced.

Respectfully,

ACQ (Ask the Climate Question)

Asset Strategies, LLC

Alliance for Regional Cooperation BannerBee Company LLC

Amber Blue Galleries Beauty Blooms Farm

Bethesda-Chevy Chase Chapter of the Izaak Walton League of Americas (B-CC IWLA)	Friends of Ten Mile Creek & Little Seneca Reservoir
Biodiversity for a Livable Climate	Historic Medley District, Inc.
Boyds Civic Association	Lewis Orchards
Cedar Lane Unitarian Universalist Environmental Justice Ministry	Little Falls Watershed Alliance
Chestnut Ridge Farm	Montgomery Agricultural Producers (MAP)
Citizens Coordinating Committee on Friendship Heights	Montgomery Countryside Alliance
Clean Water Action	Montgomery County Civic Federation Inc
Coalition for Transit Alternatives to Midcounty Highway Extended (TAME)	Montgomery County Farm Bureau
Coalition to Stop Stream Destruction	Montgomery Preservation, Inc.
Community FarmShare	Nick's Organic Farm
Comus Sky Farm	ParkView Farms
Conservation Montgomery	Savage Acres Farm
Core Yoga, Kensington	Shepherd's Hey Farm
Dickerson Community Association	Stelo Nursery Garden
DRDs GotYourSix Farms	Sugarloaf Citizens Association
Ecosystems Study Group	Sugarloaf Regional Trails
Equestrian Partners in Conservation (EPIC)	The Farm at Our House
Friends of St Clements Bay	Tiewyan Farms

West Montgomery County Citizens Association

HB 1036 Opposition (1)-1.pdf Uploaded by: Cheryl Bosse Position: UNF

2/26/2025

To Whom it May Concern,

I am in opposition of HB 1036 for the following reasons.

It was only a short time ago that large numbers of Carroll County citizens voiced their opposition to solar energy generating systems being proposed on Agricultural zoned land, and worked along with the Commissioners to remove the code allowing such projects.

I continue to be in opposition of commercial solar projects and feel they should not be permitted take up the valuable resources of productive agricultural farmland. If there were no farms, there would be no food. No food for farm animals, no food for us.

Carroll County is a farming county. Chances are you have driven through Carroll County and witnessed our rolling hills and beautiful farms. I am proud to be a resident of this county and proud to be someone who cares and believes in preservation of our farmlands.

I pray that instead we are not barraged with an eyesore of hundreds of acres of metal and glass commercial solar panels taking up our precious farming resources.

There is a place for commercial solar – on commercial zoned land. NOT agricultural zoned land. Carroll County is doing our part to comply with green energy by housing one of the largest commercial solar projects in the country, the Summit Ridge Energy project in Hampstead (Carroll County) built on the roof tops of commercial buildings.

I do not agree with the State of Maryland ignoring Carroll County local ordinances and attempting to supersede our county law. The people of this county have spoken and we do NOT want commercial solar on our productive agricultural zoned land.

Respectfully submitted,

Cheryl Bosse 4148 Nora Drive Finksburg, MD 21048

HB 1036 written testimony.pdf Uploaded by: Chip Bertino Position: UNF



House Bill 1036

Public Utilities – Generating Stations – Generation and Siting

Position: OPPOSE To: Economic Matters Committee

Date: Feb. 26, 2025 From: Chip Bertino, Worcester County Commissioner

I am Worcester County Commissioner Chip Bertino and I am writing to oppose House Bill 1036, a bill that eliminates the role of local government in key land use decisions and fails to consider the serious public safety risks of battery storage.

Local governments are best suited to determine land use policies in their communities. This bill is a one-size fits all mandate that benefits energy companies at the expense of taxpayers. It removes the little local control counties had and undermines the state's assertions that we're working to address Maryland's housing shortage. In fact, a project in my county that's currently under review by the Public Service Commission is just outside municipal limits, in a town and county growth area that's zoned residential AND in the water and sewer planning area. How is 35 acres of solar panels there smart growth?

Clean energy should be a smart fit, not a forced one that hurts our ability to meet housing needs and protect our communities' livability.

As local elected officials, we want to partner with the state to find a way to meet clean energy goals without harming our jurisdictions. This bill is not the way to do it. I urge you to provide House Bill 1036 with an unfavorable report. Thank you for your consideration.

Testimony HB 1036.pdfUploaded by: David Sutherland Position: UNF

I am writing to provide written **Unfavorable** testimony to HB-1036.

Right now, Maryland House and Senate leaders are under pressure from Senate President Bill Ferguson (a solar company insider and legal counsel for CI Renewables), to lay out a campaign to replace the State's largest economic sector — agriculture — with a new industry: solar power. The collateral damage to Maryland's counties, small-town economies, its rural communities, and most importantly, its farming lands, will be enormous.

This Bill will set our State's enormous Conservation history and investment into a tail spin. And become your Legacy if approved as written.

SB-0931 is simply a bill aimed at bringing solar sprawl to Maryland's agricultural lands. As written, "solar" bills like SB-0931 are part of a Wall Street-backed scheme to give solar developers a free pass to bulldoze forests, take over farmland, and nullify local decision making. Make no mistake: These greenwashing solar companies are not about helping the environment, they are land speculators out for profit and control. This Bill makes an end run on the Public Trust to the benefit of these private solar developers.

The Maryland Energy Crisis is a result of these same poorly planned and idealistic efforts. This Crisis requires the use of existing/readily available technology that produces more economical and environmentally friendly power on a fraction of the acreage required by Utility Grade Solar dependent upon PSC eminent Domain.

The State merely needs to take off the shackles of wind and solar.

David M Sutherland

703-79504051

HB1036-SB931_Unfavorable_Deb Jung_Howard County Co

Uploaded by: Deb Jung

Position: UNF



Howard County Council

Deb JungCouncilmember

District 4

George Howard Building 3430 Court House Drive Ellicott City, Maryland 21043-4392

February 26, 2025

HB1036/SB931 Deb Jung, Howard County Council UNFAVORABLE

Dear Senate Chair Feldman; Delegate Chair Wilson; and Members of the Senate Education, Energy, and the Environment Committee and the House Economic Matters Committee:

Please accept this letter as a position of UNFAVORABLE for HB1036 and SB931, the Renewable Energy Certainty Act. I express this opposition in solidarity with Maryland Association of Counties' (MACo) position on these bills. I represent District 4 on the Howard County Council and am the MACo delegate for the Howard County Council.

During my two terms on the Howard County Council, I have voted for multiple pieces of legislation to enable solar projects in the County. Howard County leads the State in its solar-friendly zoning laws, tax incentives, and power purchase agreements. HB1036 and SB931 would adversely affect our successful framework for managing solar facilities in our County and our deliberate policies to meet our ambitious climate goals.

Howard County's most significant bill supporting solar generation was CB17-2021. This bill changed the zoning regulations to allow solar generation throughout the County. The bill allows rooftop arrays in nearly all zoning districts by right and ground mount arrays as an accessory use in rural residential districts. It also defines thoughtful regulations for the siting and oversight of commercial solar facilities on agricultural land.

HB1036 and SB931 would override our current regulations that were determined through our own public and legislative processes. Howard County created a citizen Taskforce to review agricultural concerns and tasked our Department of Planning and Zoning to determine compatibility of existing zoning designations with the new uses of ground mount and rooftop solar arrays. The bill that was presented to the Howard County Council went through a public hearing and received 10 amendments and five amendments to amendments during the legislative process. The resulting law is a product of our local authority as granted by the State and our governing Charter.

Howard County's solar siting law allows commercial solar facilities as a conditional use on rural land with set acreage maximums and exceptions can be granted by the Hearing Authority. For

agricultural preservation parcels, the Agricultural Preservation Board reviews these conditional use petitions and considers the placement of the facility on the property and the preservation of arable land. HB1036 and SB931 would eliminate our County's self-determined protection of productive farmland in favor of solar installations.

Furthermore, the Howard County Council has approved at least six Payments in Lieu of Taxes (known as PILOTs) for solar projects that provide tax reductions on real and personal property. Each of these tax incentive packages were vetted through the public legislative process and received fiscal and legislative analyses. While I support tax incentives for this emerging technology, I am concerned that HB1036 and SB931's requirement to forego all revenues is an untenable preemption of local revenue control.

My colleague, Councilmember David Yungmann, represents numerous farms and agricultural interests in the County and provided the following insights. The Howard County solar siting law seeks placement of commercial arrays portions of the property that are the least productive for farming. HB1036 and SB931 would override Howard County's goal of keeping farmland, especially forever farmland that has received public dollars to remain so, in the business of food production. The agriculture industry, the fifth largest in both the State and Howard County, provides the security of local food sources to all of our residents. Putting these resources at risk should not be the unintended consequence of promoting solar generation in the State. Additionally, commercial solar projects do pose certain environmental risks (including impacts from panel installations and disposal of decommissioned panels) that should be regulated and monitored by the local jurisdiction.

I appreciate the bill sponsors' attempts to grow solar generation in the State but the bill contains too much overreach into local zoning and taxation authority. I hope that these committees will consider alternatives to promote and support solar through future legislation that provides local jurisdictions with legislative tools that currently are not available to them.

Thank you for your time and consideration.

Sincerely,

Deb Jung

Howard County Council

District 4

HB1036-ECM_MACo_OPP.pdf Uploaded by: Dominic Butchko

Position: UNF



House Bill 1036

Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

MACo Position: **OPPOSE**To: Economic Matters Committee

Date: February 28, 2025 From: Dominic J. Butchko

The Maryland Association of Counties (MACo) respectfully **OPPOSES** HB 1036. This bill, among other things, effectively removes county authority to establish and enforce livability and safety requirements for solar energy generating systems and energy storage projects. For well over a year, county elected officials and professionals, with MACo, have engaged in good faith collaboration with the administration, advocacy groups, and industry leaders to advance Maryland's renewable energy goals through clear, effective, and balanced policies. Counties remain steadfast in their commitment to solutions that serve our shared constituents and address the collective challenges.

While the Renewable Energy Certainty Act (RECA) reflects some themes from those discussions, its current form severely undermines local input, equitable tax policy, and essential community protections. Counties urge a more balanced approach that ensures progress without sacrificing the voices and interests of our shared constituents.

Counties oppose RECA on five core principles:

Safety

Unchecked energy storage projects should not put residents at risk.

The wide use of utility scale battery storage raises serious public safety concerns, including fires, hazardous waste, and toxic fumes. Adequate oversight and fire suppression regulations are needed to ensure projects don't endanger nearby homes, schools, and businesses.

Livability

Clean energy projects should complement communities, not compromise them.

Meaningful community input ensures renewable energy projects enhance livability rather than imposing changes without regard. Residents deserve a seat at the table in shaping the future of their communities.

Local Taxpayers

Big Energy shouldn't get a tax break while residents foot the bill.

Renewable projects must pay their fair share—not drain funding from schools, public safety, and essential services. A balanced approach protects taxpayers and ensures lasting community benefits.

Affordable Housing

Renewable goals must not compromise housing affordability.

Allowing solar projects to occupy land intended for housing development undermines public investments and prices out residents. Policies must balance energy and housing needs.

Efficiency

Renewable energy should be a smart fit, not a forced one.

Fast-tracked and poorly planned policies waste resources, strain infrastructure, and disrupt communities. Smart siting policies ensure efficiency while balancing economic growth and environmental stewardship.

While MACo opposes the legislation as drafted, Maryland's counties remain unwaveringly committed to being the State's partner in government, working alongside the General Assembly to achieve better outcomes for our shared constituents. Below, please find a set of amendments which MACo believes to be a good faith effort to that end.

If enacted, HB 1036 would represent a detrimental blow to Maryland's communities, her agricultural economy, and her commitment toward advancing multiple environmental priorities. MACo stands ready to work with the sponsors, committees, and stakeholders to craft solutions which advance all of Maryland's communities forward. For this reason, MACo urges the Committee to give HB 1036 an **UNFAVORABLE** report as drafted.

MACo-Supported Amendments to HB 1036 / SB 931

Amendment #1:

On page 2, after line 7, insert,

"A PERSON MAY NOT EXERCISE A RIGHT OF CONDEMNATION IN CONNECTION WITH THE CONSTRUCTION OF A SOLAR ENERGY GENERATING STATION.".

Amendment #2:

On page 4, after line 29, insert,

"(4) "PROJECT AREA" MEANS THE LIMIT OF DISTURBANCE. A PROJECT AREA MAY BE ONE OR MORE CONTIGUOUS PARCELS OR PROPERTIES UNDER THE SAME OWNERSHIP OR LEASE AGREEMENT.

(5) "SOLAR ENERGY GENERATING SYSTEM" MEANS A GROUND-MOUNTED SOLAR ARRAY AND ANCILLARY EQUIPMENT, AND ACCESSORY BUILDINGS OR FACILITIES THAT GENERATE, MAINTAIN, OPERATE, MANAGE, DISTRIBUTE, AND TRANSMIT POWER. A SOLAR ENERGY GENERATING SYSTEM DOES NOT INCLUDE PROJECTS WHICH ARE BUILT OVER ROADS, PARKING LOTS, OR ROADWAY MEDIANS. THE SIZE OF A SOLAR ENERGY GENERATING SYSTEM IS DETERMINED BY THE PROJECT'S INTERCONNECTION AGREEMENT.".

Amendment #3:

On page 5, after line 17, insert,

"(3) THE PROJECT HAS ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL APPROVALS.".

Amendment #4:

On page 5 strike lines 18 to 20, inclusive, in their entirety and substitute

"(D) IN ACCORDANCE WITH COMAR 20.79.01.05, 90 DAYS BEFORE SUBMITTING AN APPLICATION FOR APPROVAL UNDER THIS SECTION, THE APPLICANT SHALL PROVIDE IMMEDIATE NOTICE OF THE APPLICATION TO: "

Amendment #5:

On page 6 through 8, strike in their entirety the lines beginning with page 6, line 17 down through page 8, and substitute,

- (F) NOTHING IN SECTION SHALL BE INTERPRETED TO PREVENT OR PROHIBIT THE PUBLIC SERVICE COMMISSION FROM APPLYING ADDITIONAL CONDITIONS ON AN APPLICATION.
- (F-1) FOR SOLAR ENERGY GENERATING SYSTEM APPLICATIONS SUBJECT TO THE CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY (CPCN) PROCESS, THE FOLLOWING STANDARDS WILL APPLY:
 - (1) ALL SOLAR ENERGY GENERATING SYSTEMS SHALL BE SUBJECT TO THE SOLAR ENERGY GENERATING SYSTEM SITING STANDARDS.
 - (2) GROUND MOUNTED SOLAR ENERGY SYSTEMS 5 MEGAWATTS AND ABOVE SHALL NOT BE PERMITTED ON ANY LOT, PARCEL, OR TRACT OF LAND THAT;
 - (I) IS LOCATED WITHIN A PLANNED GROWTH AREA AS IDENTIFIED IN A LOCAL JURISDICTION'S ADOPTED COMPREHENSIVE PLAN, OR;
 - (II) IS ZONED FOR MEDIUM DENSITY RESIDENTIAL, HIGH DENSITY RESIDENTIAL, OR MIXED-USE WITH A RESIDENTIAL COMPONENT, OR;
 - (III) IS LOCATED WITHIN AN AREA DESIGNATED FOR HOUSING IN;
 A. MD. CODE ANN., TITLE 05, HOUSING AND COMMUNITY
 DEVELOPMENT, OR;
 - B. MD. CODE ANN., TITLE 34, SUBTITLE 03, LAND USE.
 - (3) GROUND MOUNTED SOLAR ENERGY SYSTEMS BELOW 5 MEGAWATTS MAY BE PERMITTED ON A LOT, PARCEL, OR TRACT OF LAND WITHIN A PLANNED GROWTH AREA AS IDENTIFIED IN A LOCAL JURISDICTION'S ADOPTED COMPREHENSIVE PLAN IF;
 - (I) THE SITING OF THE FACILITY DOES NOT OBSTRUCT OR HINDER EXISTING, PLANNED, OR ANTICIPATED INFRASTRUCTURE THAT IS NECESSARY TO SERVE FUTURE HOUSING OR MIXED-USE PROJECTS, INCLUDING WATER, SEWER, AND COMPREHENSIVELY PLANNED ROADWAYS.
 - (II) THE SITING OF THE FACILITY DOES NOT OBSTRUCT OR HINDER THE DESIGN AND DENSITY OF A FUTURE HOUSING OR MIXED-USE PROJECT.

- (III) DOES NOT OCCUPY MORE THAN 10% OF THE LOT, PARCEL, OR TRACT OF LAND.
- (4) THE APPLICANT SHALL PROVIDE NOTIFICATION OF ALL SOLAR ENERGY GENERATING SYSTEMS WITH THE LOCAL GOVERNMENT EMERGENCY RESPONSE SERVICES. THE REGISTRATION SHALL INCLUDE A MAP OF THE SOLAR FACILITY NOTING THE LOCATION OF THE SOLAR COLLECTORS AND THE PANEL DISCONNECT. FACILITIES MUST PROVIDE SITE ACCESS AND CIRCULATION FOR EMERGENCY VEHICLES.
- (5) A LOCAL GOVERNMENT SHALL APPLY A STANDARD PROCESS FOR THE REVIEW AND APPROVAL OF SITE DEVELOPMENT PLANS FOR SOLAR ENERGY GENERATING SYSTEMS OVER 5MW, INCLUDING THE REVIEW AND APPROVAL OF THE SITE PLAN BY THE PLANNING COMMISSION.
- (6) A LOCAL GOVERNMENT SHALL REQUIRE A STANDARD PROCESS FOR THE ADMINISTRATIVE REVIEW AND APPROVAL OF SOLAR ENERGY GENERATING SYSTEMS THAT ARE 5MW OR LESS.
- (7) SETBACKS FOR SOLAR ENERGY GENERATING SYSTEMS WILL BE MEASURED FROM THE NEAREST SOLAR ARRAY OR ACCESSORY EQUIPMENT, BUILDINGS OR FACILITIES THAT GENERATE, MAINTAIN, OPERATE, MANAGE, DISTRIBUTE, AND TRANSMIT POWER TO THE PROPERTY BOUNDARY. A LOCAL GOVERNMENT MAY ESTABLISH LESS RESTRICTIVE SETBACKS, BUT SETBACKS FOR SOLAR ENERGY GENERATING SYSTEMS MAY NOT EXCEED:
 - (I) 100 FEET FROM ALL PROPERTY LINES, EXCLUDING PROPERTY LINES THAT BISECT THE INTERIOR OF A PROJECT AREA;
 - (II) 150 FEET FROM NEAREST WALL OF RESIDENTIAL DWELLING;
 - (III) FENCING SHALL NOT BE PLACED CLOSER THAN 50 FEET FROM THE EDGE OF A DEDICATED, PRESCRIPTIVE, OR COMPREHENSIVELY PLANNED PUBLIC ROAD RIGHT OF WAY; OR
 - (IV) WITH THE EXCEPTION OF EQUIPMENT REQUIRED BY THE LOCAL UTILITY FOR INTERCONNECTION INTO GRID INFRASTRUCTURE, NO SOLAR ARRAY OR ACCESSORY EQUIPMENT, BUILDINGS, OR FACILITIES SHALL BE LOCATED WITHIN A DEDICATED, PRESCRIPTIVE, OR COMPREHENSIVELY PLANNED PUBLIC ROAD RIGHT OF WAY.
- (8) VISUAL IMPACTS OF SOLAR FACILITIES ON PRESERVATION AREAS, SUCH AS RURAL LEGACY AREAS, AGRICULTURAL PRESERVATION AREAS, PUBLIC PARKS, SCENIC RIVERS AND BYWAYS, DESIGNATED HERITAGE AREAS, HISTORIC STRUCTURES OR SITES LISTED ON OR ELIGIBLE FOR THE NATIONAL REGISTER OF HISTORIC PLACES OR A COUNTY REGISTER OF HISTORIC PLACES, MUST BE

MITIGATED. A VIEWSHED ANALYSIS MUST BE SUBMITTED AS PART OF THE LOCAL GOVERNMENT APPLICATION TO ASSURE THAT VISUAL IMPACTS ARE MINIMIZED THROUGH SOLAR PANEL PLACEMENT, HEIGHT, LANDSCAPING, AND SCREENING.

- (9) LANDSCAPE BUFFER A LOCAL GOVERNMENT MAY REMOVE OR RELAX ANY OF THE FOLLOWING STANDARDS IN AREAS WHERE THE APPLICANT CAN REASONABLY DEMONSTRATE THAT SUCH REQUIREMENTS WOULD HAVE LESSER OR NO VISUAL BUFFER VALUE.
 - **(I)** A LANDSCAPE BUFFER THAT IS A MINIMUM OF 35 FEET WIDE MUST BE PROVIDED ALONG ALL PROPERTY LINES OR ALONG THE EXTERIOR BOUNDARY OF THE SOLAR ENERGY GENERATING SYSTEM. ALTERNATIVE LANDSCAPE BUFFER LOCATIONS MAY BE PROPOSED WITHIN THE BOUNDARY OF THE PROJECT SITE WHERE THE ALTERNATIVE BUFFER LOCATION MAXIMIZES THE EFFECTIVENESS OF THE SCREENING EFFORT. THE BUFFER MUST BE DESIGNED TO PROVIDE FOUR-SEASON VISUAL SCREENING OF THE SOLAR ENERGY GENERATING SYSTEMS AND INCLUDE MULTI-LAYERED, STAGGERED ROWS OF OVERSTORY AND UNDERSTORY TREES AND SHRUBS THAT ARE A MIX OF EVERGREEN AND DECIDUOUS VEGETATION, WITH AN EMPHASIS ON SPECIES THAT ARE NATIVE TO THE AREA. ALL PLANT MATERIAL SHALL CONFORM TO THE PLANT SIZE SPECIFICATIONS AS ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1 AND SHALL BE PLANTED TO THOSE STANDARDS. A LOCAL GOVERNMENT MAY REQUIRE A LANDSCAPE BUFFER OF UP TO 50 FEET WHERE DEEMED NECESSARY TO MEET THE REQUIREMENTS OF (F)(8) ABOVE.
 - (II) THE LANDSCAPE BUFFER MUST BE INSTALLED AS EARLY IN THE CONSTRUCTION PROCESS AS PRACTICABLE AND PRIOR TO ACTIVATION OF THE SOLAR ENERGY GENERATING SYSTEMS.
 - (III) THE SIZE OF TREES AND SHRUBS AT THE TIME OF PLANTING MUST ACCOMMODATE ADEQUATE SCREENING OR BUFFERING BY THE END OF 5 YEARS OF PLANTING. VEGETATION USED TO ESTABLISH A VISUAL SCREEN MUST NOT BE TRIMMED TO STUNT UPWARD AND OUTWARD GROWTH OR TO OTHERWISE LIMIT THE EFFECTIVENESS OF THE VISUAL SCREEN.
 - (IV) IF FENCING IS PROPOSED, A LANDSCAPE BUFFER MUST BE PLACED BETWEEN THE FENCE AND THE PUBLIC VIEW. IF WIRE MESH IS USED, IT SHALL BE BLACK OR GREEN VINYL. NO BARBED OR RAZOR WIRE MAY BE USED ON FENCING AROUND THE SOLAR ENERGY GENERATING SYSTEM. FENCING SHALL BE INSTALLED AT THE INTERIOR EDGE OF THE LANDSCAPE BUFFER OR IMMEDIATELY ADJACENT TO THE SOLAR ENERGY GENERATING SYSTEM.
 - (V) IF FOREST OR HEDGEROWS EXIST WHERE SCREENING OR BUFFERING IS REQUIRED, IT MUST BE PRESERVED TO THE MAXIMUM EXTENT

PRACTICABLE AND SUPPLEMENTED WITH NEW PLANTINGS WHERE NECESSARY TO PROVIDE THE DESIRED SCREENING OR BUFFERING. EXISTING NONINVASIVE VEGETATION MAY BE USED FOR MEETING THE LANDSCAPE BUFFER REQUIREMENT, SUBJECT TO MEETING THE REQUIREMENTS UNDER (F)(9) I-IV) AND (F)(8).

(VI) ALL LANDSCAPING, SCREENING, AND BUFFERING MUST BE MAINTAINED WITH A 90 PERCENT SURVIVAL THRESHOLD FOR THE LIFE OF THE SOLAR ENERGY GENERATING SYSTEMS VIA A MAINTENANCE AGREEMENT THAT INCLUDES A WATERING PLAN. A LOCAL GOVERNMENT MAY ELECT TO REQUIRE A COST ESTIMATE AND LANDSCAPE SURETY. SUCH A SURETY WILL BE APPROVED AND HELD BY THE LOCAL GOVERNMENT FOR UP TO THREE YEARS AND UPON INSPECTION, MAY RELEASE UP TO 50% AND THEN BE HELD FOR TWO ADDITIONAL YEARS TO DETERMINE THE PLANT MATERIAL HAS BEEN MAINTAINED IN GOOD HEALTH. THE LOCAL GOVERNMENT RESERVES THE RIGHT TO INSPECT AND REQUIRE REPLACEMENT OF PLANT MATERIAL.

(10) GRADING

- (I) GRADING SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE TO PRESERVE AGRICULTURAL SOILS AND PREVENT SOIL EROSION.
- (II) TOPSOIL SHALL NOT BE REMOVED FROM PARCEL.
- (III) TOPSOIL MAY BE TEMPORARILY STOCKPILED TO ACHIEVE GRADE BUT SHALL BE WHOLLY REPLACED TO ACHIEVE VEGETATIVE STABILIZATION.
- (11) AFTER THE SEEDING OR PLANTING OF VEGETATION, THE USE OF HERBICIDES TO CONTROL VEGETATION IS STRONGLY DISCOURAGED AND MAY ONLY BE USED FOR THE PURPOSE OF CONTROLLING INVASIVE SPECIES IN COMPLIANCE WITH DEPT OF AGRICULTURE'S WEED CONTROL PROGRAM.
- (12) FOR PROJECTS OR PORTIONS OF PROJECTS NOT USED FOR AGRIVOLTAICS, NATIVE POLLINATOR PLANT SPECIES OR NATIVE MEADOW SPECIES SHALL BE PLANTED AND MAINTAINED THROUGHOUT THE SOLAR PROJECT'S LIFE. THE SEED MIX SHALL INCLUDE A DIVERSITY OF SPECIES WITH VARIED BLOOM TIMES. MOWING SHALL BE LIMITED AND PERFORMED ON A SCHEDULE THAT PROMOTES THE ESTABLISHMENT OF THE NATIVE PLANTINGS, CONTROLS INVASIVE SPECIES, AND AVOIDS IMPACTS TO WILDLIFE (POLLINATING, NESTING, ETC.).
- (13) EXCEPT AS REQUIRED FOR SAFETY, EMERGENCY, OR BY APPLICABLE FEDERAL, STATE, OR LOCAL AUTHORITY, NO VISIBLE LIGHT SHALL EMANATE FROM THE SOLAR ENERGY GENERATING SYSTEMS FROM DUSK TO DAWN DURING OPERATIONS.

- (14) LOCAL GOVERNMENTS SHALL APPLY ENVIRONMENTAL SETBACKS AND BUFFERS CONSISTENT WITH THE REQUIREMENTS APPLIED TO COMMERCIAL OR INDUSTRIAL LAND USES.
- (15) HEIGHT- MAXIMUM HEIGHT OF 15 FEET FOR ALL SOLAR ENERGY GENERATING SYSTEMS AND ACCESSORY STRUCTURES, UNLESS PROVIDING AGRIVOLTAICS WITH FARMING OPERATIONS BENEATH SOLAR PANELS. THIS DOES NOT APPLY TO THE EQUIPMENT NECESSARY FOR UTILITY INTERCONNECTION.

(16) DECOMMISSIONING AND RESTORATION OF THE PROPERTY

(I) THE PROPERTY OWNER OR APPLICANT MUST PROVIDE A COPY OF THE DECOMMISSIONING AND RESTORATION PLAN TO THE LOCAL GOVERNMENT PRIOR TO LOCAL GOVERNMENT APPROVAL. A LOCAL GOVERNMENT MAY ELECT TO ADOPT DECOMMISSIONING AND RESTORATION REQUIREMENTS CONSISTENT WITH THOSE ESTABLISHED BY THE PSC.

A BOND OR OTHER FINANCIAL ASSURANCE SHALL BE REQUIRED TO ASSURE COMPLETE REMOVAL OF A SOLAR ENERGY GENERATING SYSTEM IN AN AMOUNT EQUAL TO AN ESTIMATE OF THE COSTS ASSOCIATED WITH THE REMOVAL OF THE SOLAR ARRAY. THE FINANCIAL ASSURANCE SHALL BE AUTOMATICALLY RENEWABLE. A FINANCIAL ASSURANCE PROVIDED TO SATISFY THE CONDITIONS OF THE MARYLAND PUBLIC SERVICE COMMISSION'S CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY MAY SATISFY A LOCAL GOVERNMENT FINANCIAL ASSURANCE REQUIREMENT PROVIDED IT COMPLIES WITH THE FOREGOING AND IS ENFORCEABLE BY THE LOCAL GOVERNMENT.

THE FINANCIAL GUARANTEE MUST BE PROVIDED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT OR GRADING PERMIT, WHICHEVER IS APPLIED FOR FIRST. NOTICE MUST BE PROVIDED TO THE PSC AND THE LOCAL GOVERNMENT WITHIN 30 DAYS OF THE SALE OR TRANSFER OF THE LEASE OR PROPERTY AND A NEW FINANCIAL GUARANTEE MUST BE PROVIDED BY THE NEW LEASE HOLDER OR PROPERTY OWNER.

WHEN THE SOLAR ENERGY GENERATING SYSTEM CEASES TO GENERATE ELECTRICITY FOR SALE, DOES NOT INPUT ELECTRICITY INTO THE ELECTRIC GRID FOR 12 CONSECUTIVE MONTHS (UNLESS NOTICE FOR REPOWERING IS FILED WITH THE PSC,) OR THE LEASE FOR THE SITE EXPIRES, ALL LOCAL APPROVALS WILL TERMINATE AUTOMATICALLY. THE PROPERTY OWNER OR APPLICANT SHALL UPDATE THE DECOMMISSIONING PLAN COST ESTIMATE AND CORRESPONDING APPROVED FINANCIAL INSTRUMENT EVERY FIVE YEARS AFTER THE PSC'S APPROVAL OF THE FIRST DECOMMISSIONING PLAN TO ADJUST FOR INFLATION AND ANY OTHER NECESSARY CHANGES.

REMOVAL OF THE SOLAR ENERGY GENERATING SYSTEM WILL BEGIN WITHIN 90 DAYS AFTER TERMINATION OF THE APPROVAL, AND RESTORATION OF THE PROPERTY TO THE CONDITION THAT EXISTED PRIOR TO THE INSTALLATION OF THE SOLAR ENERGY GENERATING PANELS AND ACCESSORIES WILL BE COMPLETED WITHIN TWELVE MONTHS OF THE START OF SOLAR PANEL REMOVAL. RESTORATION WILL INCLUDE THE REMOVAL FROM THE PROPERTY OF ALL ABOVE-GROUND FACILITIES, AS WELL AS ALL UNDERGROUND FOOTINGS, SUPPORTS, WIRES, MATERIALS, FENCES, ROADS, AND BERMS. ONLY LIKE-KIND TOPSOIL MAY BE USED FOR RESTORATION.

(II) THE PROPERTY OWNER OR OWNER OF THE SOLAR ENERGY GENERATING SYSTEM MUST PROVIDE NOTICE TO THE LOCAL GOVERNMENT AND THE PSC WHEN THE LEASE FOR THE SITE EXPIRES, WHEN THE SOLAR FACILITY CEASES TO GENERATE ELECTRICITY FOR SALE, OR DOES NOT INPUT ELECTRICITY INTO THE GRID FOR 60 DAYS OR LONGER, UNLESS DUE TO ROUTINE MAINTENANCE ACTIVITY.

(17) COMMUNITY MEETINGS

- (I) SOLAR DEVELOPERS SHALL HOLD AT LEAST ONE PUBLICLY ADVERTISED COMMUNITY MEETING WITHIN 10 MILES OF THE PROPOSED SOLAR ENERGY GENERATING SYSTEM AND WITHIN THE SAME COUNTY PRIOR TO APPLYING FOR A CPCN TO COLLECT COMMUNITY FEEDBACK AND PROVIDE OPPORTUNITIES FOR THE SOLAR DEVELOPER TO ADDRESS CONCERNS PRIOR TO FILING FOR A CPCN OR LOCAL APPROVAL.
- (II) IN UNDERSERVED OR OVERBURDENED COMMUNITIES AS DEFINED BY MDE, SOLAR DEVELOPERS SHALL HOLD AT LEAST ONE PUBLICLY ADVERTISED COMMUNITY MEETING WITHIN 10 MILES OF THE PROPOSED SOLAR ENERGY GENERATING SYSTEM AND WITHIN THE SAME COUNTY, AND ONE VIRTUAL MEETING, PRIOR TO APPLYING FOR A CPCN TO COLLECT COMMUNITY FEEDBACK AND PROVIDE OPPORTUNITIES FOR THE SOLAR DEVELOPER TO ADDRESS CONCERNS PRIOR TO FILING FOR A CPCN OR LOCAL APPROVAL.
- (III) PUBLIC NOTICE OF THESE COMMUNITY MEETINGS SHALL BE POSTED AT LEAST 14 DAYS PRIOR TO THE MEETING DATE. IT SHALL BE THE RESPONSIBILITY OF THE APPLICANT TO PLACE A PUBLIC NOTICE SIGN WITHIN 10 FEET OF EACH PROPERTY LINE WHICH ABUTS A PUBLIC ROAD. IF THE PROPERTY DOES NOT ABUT A PUBLIC ROAD, A SIGN SHALL BE PLACED IN SUCH A MANNER SO THAT IT MAY BE MOST READILY SEEN AND READ BY THE PUBLIC. THE SIGN(S) SHALL BE AFFIXED TO A RIGID BOARD AND MAINTAINED AT ALL TIMES BY THE APPLICANT UNTIL THE MEETING IS HELD. THE DATE, TIME, LOCATION, AND DESCRIPTION OF THE PROPOSED SOLAR DEVELOPMENT SHALL BE INCLUDED ON THE SIGN OF THE MEETING SHALL BE INDICATED ON THE SIGN(S).

(IV) THE SOLAR DEVELOPER SHALL DOCUMENT THE PUBLIC COMMENTS AND INCLUDE THE COMMENTS IN THEIR APPLICATIONS FOR LOCAL GOVERNMENT AND CPCN APPROVAL.

Amendment #6:

On page 8, STRIKE lines 17 through 26 in their entirety and INSERT,

- (G) (1) FOR SOLAR ENERGY GENERATING SYSTEM APPLICATIONS ABOVE 2 MEGAWATTS, LOCAL JURISDICTIONS MAY NOT ESTABLISH SOLAR ENERGY GENERATING SYSTEM SITING POLICIES MORE RESTRICTIVE THAN THOSE ENUMERATED IN SECTION (F).
- (2) LOCAL GOVERNMENTS SHALL PROCESS THE APPLICATION FOR SOLAR ENERGY GENERATING SYSTEM APPLICATIONS BELOW 5MW AS PERMITTED USES SUBJECT TO ADMINISTRATIVE PROJECT REVIEW STANDARDS.
- (3) ACCESSORY USE ON SITE NET METERING SOLAR ENERGY GENERATING SYSTEMS SHALL NOT BE SUBJECT TO THESE ENUMERATED PROVISIONS BUT MUST COMPLY WITH LOCAL LAND USE AND BUILDING CODE REQUIREMENTS.

Amendment #7:

On pages 8 and 9, strike in their entirely the lines beginning with page 8, line 27 down through page 9, line 2.

Amendment #8:

On page 9 through 11, strike in their entirety the lines beginning with page 9, line 7 down through page 11, line 25.

Explanation: The Public Service Commission is in the process of establishing a permitting and regulatory framework for expediting the safe development of utility scale battery storage in Maryland. This language conflicts with this effort and will further delay the rollout of energy storage infrastructure.

Amendment #9

On pages 11 and 12, strike in their entirety the lines beginning with page 11, line 28 down through page 12, line 14 and substitute:

"AGRIVOLTAICS MEANS THE SIMULTANEOUS USE OF AREAS OF LAND, WHICH SHALL BE MAINTAINED IN AGRICULTURAL USE ASSESSMENT AS DETERMINED UNDER TITLE 18 AND MARYLAND ASSESSMENT PROCEDURES MANUAL IN CONSULTATION WITH THE MARYLAND DEPARTMENT OF AGRICULTURE, FOR BOTH SOLAR POWER GENERATION AND:

- (I) RAISING GRAINS, FRUITS, HERBS, MELONS, MUSHROOMS, NUTS, SEEDS, TOBACCO, OR VEGETABLES;
- (II) RAISING POULTRY, INCLUDING CHICKENS AND TURKEYS, FOR MEAT OR EGG PRODUCTION
- (III) DAIRY PRODUCTION, SUCH AS THE RAISING OF MILKING COWS;
- (IV) RAISING LIVESTOCK, INCLUDING CATTLE, SHEEP, GOATS, OR PIGS;
- (V) HORSE BOARDING, BREEDING, OR TRAINING;
- (VI) <u>TURF FARMING;</u>
- (VII) RAISING ORNAMENTAL SHRUBS, PLANTS, OR FLOWERS, INCLUDING AQUATIC PLANTS;
- (VIII) AOUACULTURE,
- (IX) SILVICULTURE; OR
- (X) ANY OTHER ACTIVITY AS DETERMINED UNDER TITLE 18 AND MARYLAND ASSESSMENT PROCEDURES MANUAL IN CONSULTATION WITH THE MARYLAND DEPARTMENT OF AGRICULTURE, EXCEPT POLLINATOR HABITAT AND APIARIES.".

Amendment #10:

On page 21, in line 26, after "SECTION 4." insert

"AND BE IT FURTHER ENACTED, That the Public Service Commission, in consultation with the Power Plant Research Program and county governments, shall explore the feasibility of establishing a limit on the total amount of prime agricultural lands occupied by solar development in each county. The Public Service Commission shall deliver an interim report with statutory and regulatory recommendations by December 1, 2025, and a final report by December 1, 2026.

SECTION 5.".

UNF.Donna Landis-Smith.Queen Anne's Co. Soil Conse

Uploaded by: Donna Landis-Smith

Position: UNF

This email is being sent to you because of Senate Bill 931 and House Bill 1036, they are both very important to any and all counties in the State of Maryland.

They are both BAD bills, there are no circumstances in which the State of Maryland including the Public Service Commission should be able to make local County decisions without the County's input in reference to placement of renewable energy projects.

I am a Queen Anne's County citizen and fourth generation farmer along with my son and grandson being the fifth and sixth generation. We grow corn and soybeans and have seven (7) poultry houses. We grow one (1) million chickens per year.

The farmland in Queen Anne's County is critical to the production of grain to feed the poultry industry which in turn feeds the one million plus citizens in Montgomery County plus the other 5.1 million Marylanders.

Keeping our farmland as agricultural land is key to the success of the poultry industry on the Del Mar Va (Delaware, Maryland, Virginia) it takes 19 pounds of feed to feed one chicken in its 60-day life cycle. There are 212 poultry houses located Queen Anne's County which equals to 6,360,000 birds on the ground at one time. It takes 71,232,000 pounds of feed to feed the 6 + million chickens.

Queen Anne's County has been proactive in their renewable energy project efforts by strategically placing solar panels on farmland that is not of statewide importance, or the project is a smaller scale project so the impact on the overall farm operation is minimal. The placement of those solar projects is all based on reviews of Queen Anne's County Planning Commission, Board of Appeals and County Commissioners, all of which work with local landowners to fulfill everyone's needs.

Taking the decision making out of the County's hands and knowing what is best for each county and giving it to State officials that know little about how each County is dangerous and irrational. As Montgomery County is drastically different than Queen Anne's County, a sweeping decision as far as renewable energy project placement is irresponsible.

The Del Mar Va is a corn and soybean deficit area to feed the poultry industry and there is a large amount of corn and soybeans imported every day from the west in order to feed the chickens. We cannot afford to take **ANY** productive farmland out of grain production.

Let each County decide how they want and where they want renewable energy projects to be placed. There is a large inventory of State owned properties that are currently vacant, start with those properties and place the renewable energy projects there before touching one acre of Maryland's most valuable resource, **FARMLAND**.

Respectfully

Donna K. Landis-Smith

Solar Preemption Letter.pdf Uploaded by: Francis Hickman Position: UNF

Francis J. Hickman

10057 Perkins Hill Road

Chestertown, MD 21620

Senator Brian Feldman, Chair

Delegate C.T. Wilson, Chair

Members of the Senate Education, Energy, and the Environment Committee &

House Economic Matters Committee

Dear Senators and Delegates,

Our family farms and manages farms for others on the Upper Eastern Shore. We are fortunate to be working on some of the most productive soils in the country. For the last 4-5 years we have been inundated with letters, visits, and phone calls from solar acquisition companies. Their aggressive requests offer income numbers that cannot compete with production agriculture. They can offer these because of the already generous state and federal subsidies.

SB0931 and HB1036 will not only increase the incentive but give these private companies an advantage over any other use- preemption from local county planning review, no buffer/landscape requirements, and even more galling to exempt these projects from personal property or state and local real estate taxes.

Our county has spent the last 3 years updating our county Land Use Ordinance (LUO). Our professional planning staff, hired consultants, state of Maryland planning staff and hundreds of citizens have spent hours crafting a LUO that allows for residential growth, commercial/ industrial uses (including solar), and agriculture in specific zoning districts while respecting our rich cultural heritage as specified in our Comprehensive Plan.

Preempting local zoning, imposing a one-size-fits-all landscaping plan, and eliminating the local authority to tax for these sprawling projects—despite their immense cultural and historical impacts on farming communities—is unfair and unacceptable.

Please reject SB0931 and HB1036, crafted by the lobbying interests and legislators that have no regard for our precious and irreplaceable farmland.

I urge you to give an unfavorable recommendation to these bills.

Sincerely,

Kent County, Maryland

UNF.Frank Lewis

Uploaded by: Frank Lewis

Position: UNF

Renewable Energy and the Maryland Renewable Energy Portfolio Standards – A Critique

Frank R. Lewis, MD

Introduction

Senate Bill 0931 is an effort to assume total zoning control of Maryland land by the Public Service Commission when considering renewable energy generating facilities, rather than continuing to allow the governmental apparatus of each county to do so. It would also prohibit counties from taxing renewable power facilities and would establish maximal landscaping requirements which could be placed on them. The PSC already has the ability to force counties to accept generating facilities and power lines, but the counties retain the ability to tax them and ensure compliance with Comprehensive Zoning Plans. SB0931 would remove those powers.

This represents an unprecedented transfer of power over land use from the citizens of a county to a five member governmental board, but its presumed beneficial intent is to promote more rapid implementation of renewable energy and energy storage with the ultimate goal of increasing in-state energy generation and reducing CO2 emissions, and meeting the goals of the Maryland Renewable Energy Portfolio Standards, or RPS.

My testimony will therefore be directed to the question of whether renewable energy is an effective way to provide energy and reduce CO2 emissions, and whether the RPS, as currently defined, is an achievable goal. I would like to clearly state that my arguments apply only to industrial scale solar and renewable energy, not small solar installations by individuals or farmers, which have completely different issues.

<u>Current Status of Maryland Energy Generation and RPS Mandates</u>

In Maryland currently in-state electricity generation is provided from 7 sources: 41% from nuclear, 41% from natural gas, 6.5% from coal, 5.2% from hydroelectric, 3.2% from solar, 1.5% from wind and 0.9% from biomass (Fig 1). The last four---hydro, solar, wind, and biomass are all considered renewable, so the renewable total is just over 10%. (Fig 2) Of these four, two are stable year to year---hydro, because you can't make more rivers, and biomass, because the amount of waste, wood chips, and switchgrass are not likely to increase. Both of these have been unchanged for the last 15 years.

That leaves wind and solar, but wind is currently only 1.5% and not likely to increase much because in most of Maryland wind is too weak and inconsistent to be useful. The RPS recognizes this and does not have any requirements for onshore wind but does assume that offshore wind can meet a substantial fraction of the renewable energy requirements by 2030---specifically 13.2%---but the current amount available is zero and President Trump just mandated by edict that no new offshore wind leases will be issued during his term in office, which will extend to 2029. (Fig 3)

In addition, offshore wind is dying on its own merits. Shell, BP, and Equinor---all large energy companies which have offshore leases and have planned to build major offshore wind installations, have announced that they are discontinuing their efforts. Gov. Phil Murphy of New Jersey, who has been a strong proponent of offshore wind, has recently discontinued all state financial support for it, which will effectively stop all implementation. Orstead, one of the two largest wind turbine makers in the world, recently announced that they are cancelling the leases they already hold for Ocean Wind 1 and Ocean Wind 2, two large projects off the East Coast, even though it meant they incurred a multimillion dollar penalty for doing so.

Offshore wind is a victim of its own prohibitive cost, and seems destined to disappear soon. It's unlikely to be available to meet any part of the RPS requirements. That means that when the RPS requirements say "renewable" the only source left that can increase is solar—there is nothing else. How likely is that to happen?

Solar Power---Realistic Issues

As already noted, solar currently accounts for 3.2% of Maryland's in-state energy, but has taken 15 years to get to that point from zero, and during the last four years is increasing at a rate of only 0.4% per year. The RPS mandate for solar in 2030 is 14.5%. At the recent rate of increase it would take 28 years to go from 3.2% to 14.5%, not five..

What's more significant is the unfilled gap between the state's mandate of 50% renewable energy by 2030 and current reality. As we've already said, offshore wind is likely to remain at zero, and none of the other in-state sources of renewable energy can be increased significantly except for solar. But at its present rate of increase solar would only reach 5.2% by 2030. The total renewable energy available in-state from hydro, onshore wind, solar, and biomass would then be only 12.8%, one quarter of the RPS mandate, leaving a gap of 37.2%, or about 13,000,000 megawatt hours per year, to reach the 50% mandate. If solar can't do that, then the RPS is unachievable except by buying renewable energy from out of state, which the legislators profess to want to eliminate. Their policies are therefore internally contradictory.

The intent of SB0931 is to accelerate the rate of solar energy generation to help fill this gap and meet RPS goals. How realistic is it that SB0931 could accomplish this?

The amount of electricity generated from a solar installation today is estimated by the National Renewable Energy Laboratory (NREL) at 300 MwH per acre per year. To meet the gap stated above for reaching 50% renewable energy, we would therefore need 13,000,000/300 = 43,300 acres of land. Solar farms require large expanses of fairly flat land, and in Maryland that's mostly on the Eastern Shore, so the impact of SB0931 would disproportionally fall there. There are 900,000 acres of agriculturally zoned land on the Shore, so 43,300 acres would represent 5% of all farmland on the Shore. That would severely disrupt the agricultural economy.

What about the characteristics of solar itself – how useful is it as a source of power?

The most essential characteristic of solar is that it has a capacity factor of 20%. Capacity factor is the amount of power you get in actual use in a year divided by the nameplate capacity of the solar panel. The nameplate capacity is the amount of power the panel would generate if placed at the equator at high noon on a sunny day. That's not the real world. There are six factors which reduce the efficiency of solar panels in actual use:

- 1. It's dark half the time, so that reduces the power by 50%.
- 2. Even when it's daylight the power for two hours after sunrise and two hours before sunset is low-that reduces it another 33%.
- 3. The power decreases as you move north or south of the equator. Maryland, at 39 degrees latitude, has an average sun angle of 39 degrees from the vertical, which reduces power 18%.
- 4. The sun also moves 23.5 degrees north and south of the equator with the seasons. On December 21, the angle of the sun from the vertical in Maryland is 62 degrees, not 39, and the energy available is reduced by another 30%. That also means the capacity factor in December is only about 10%, not 20%, so it's hard to generate electricity in the winter months, when you need it most for heating.
- 5. In the middle of December the hours of daylight are only about 9.5, not 12, reducing it another 20%.
- 6. About 1/3 of the days in Maryland are cloudy, and output will be only 30-60% of sunny weather.

Put all of these together and you get a maximum of 20% as a yearly average - you can't improve on that, because it depends primarily on the motions of the sun.

That makes solar the least efficient method of energy generation there is. By comparison nuclear has a capacity factor of 93%, 4.6 times as great.

There are three other consequences of the 20% capacity factor. Because solar panels don't generate electricity 80% of the time, you have to have a complete backup system to substitute for it during the time it's not producing electricity. The only alternative available is natural gas or coal. But the 80% of the time you use natural gas or coal, you're producing CO2, so the entire thesis on which solar energy is based is false. Whenever you make solar power a substantial part of your system, you have to provide reliable power 80% of the time from fossil fuels, and the maximal reduction of CO2 emissions that can ever be achieved is 20% of the nameplate capacity—you could build a million acres of solar panels, and the system would still be generating CO2 80% of the time. No solar installation ever built can lower emissions more than 20% from the amount a fossil fuel plant would generate.

The second effect of the 20% efficiency is that you must pay for two complete systems to produce one stream of reliable power. The grid has to meet 100% of demand 100% of the time, otherwise you get blackouts and brownouts. Traditional sources of energy generation – coal, natural gas, nuclear, and hydro, all can stand on their own and and do that---you need only one system. Wind and solar always require two. The obvious question which arises is that if you need a fully competent system to backup solar, then why not use that all the time. Why do you need solar? The answer is you don't; it exists only because of the promise of lowering CO2 emissions and the mandates of legislatures that it has to exist and receive financial benefits to incentivize it.

Since you have to provide two systems, the cost of a system that includes solar power will always be at least twice as expensive as standalone systems. Proponents of solar power advertise that it's the cheapest, but that's a lie, and it's quite easy to prove with real world experience. The retail cost of electric power in Maryland today is about 16 cents per kilowatt hour, which is typical for most of the US. The current price of electricity in California, which gets 22% of its power from solar averages 35 cents per kilowatt hour. In Germany, which gets 50% of its power from renewable sources, the price is 40 cents per kilowatt hour and it's the highest in the world---that's two and a half times what we pay in Maryland.

In summary, the 20% capacity factor means that you only reduce emissions by 20% from a fully fossil fuel system, you need 2 complete systems to provide one energy stream, and the price of electricity generated is 2-2.5 times as great as fossil fuel or nuclear systems.

CO2 Emissions

Finally, you have to look at the global impact of CO2 emissions reduction in the entire US, not just Maryland, to judge the effectiveness of renewable energy. The emissions from a single country don't matter much in lowering CO2 emissions; it's only the total emissions of the world which is relevant, because the emissions from all countries constantly mix in the atmosphere----it's only the total which can affect global warming, so you have to examine how much the efforts in all of the US have affected the world.

If you examine the total impact of renewable energy in the United States during the last 23 years to determine its impact on global CO2 emissions and global warming, it's negligible (Fig 4). From 2000 to 2023, the CO2 emissions of the United States decreased from 6000 million metric tons of CO2 per year (MMT) to 4800 MMTs. That's a 22% reduction in 23 years, or 1% per year. Of that total the majority was due to the substitution of natural gas for coal in energy generation, which has been ongoing for 20 years; the actual reduction due to renewable energy is only about 22 MMT per year, or 0.4% of the total per year (Fig 5). During that same

period, China and India alone were increasing their CO2 emissions by 220 MMT per year, and the world totally was increasing at 650 MMT per year. The total world CO2 emissions in 2024 was 37,000 MMT, so the percentage effect that the US reductions had was 22/37,000 = 0.073%, less than one-tenth of one percent. That cannot possibly have had any impact on global warming. Maryland is only 0.6% of the US total, so it's contribution to CO2 reduction was what accountants refer to as "decimal dust", meaning it's completely insignificant. All the money we are spending on renewable energy ---both in Maryland and nationally---has had no meaningful impact on global CO2 production or global warming; what is even more important--it cannot possibly have any meaningful impact going forward. It represents nothing more than virtue signalling. The urgency which the Maryland legislature seems to feel to do something quickly to reduce CO2 emissions is misplaced. Nothing we are going to do will have any meaningful impact worldwide now or in the foreseeable future.

Battery Storage

Storage of renewable energy is also one of the objectives of this bill – building large battery facilities to store energy during peak production periods for solar, and then drawing on it when its dark. Unfortunately battery storage can't solve the problem, because it has inadequate capacity to store the large amounts of energy needed to sustain the grid for very long and it's prohibitively expensive. Battery backup is essential to smooth out short term fluctuations in wind and solar energy - the minutes to hours fluctuations, but it has nowhere near the capacity to provide sufficient power to make wind and solar single-source systems which can supply total power for a week or two. The capacity of the largest storage systems in the world can provide full grid power for only a few hours, and no system ever built can get you through one night, let alone a week or two of cloudy weather.

Some examples will suffice to prove this: The largest storage facility in the world is at Moss Landing, California. It has a capacity of 3000 MwH and a power rate of 750 Mw. Divide those two numbers and you see that it can supply full power for only 4 hours. The Hornsdale Power Reserve, built by Tesla a few years ago in Australia, and touted for its size, has a capacity of 193 MwH and can supply power at 150 Mw, lasting only 1.3 hours. There are several more examples, but all are the same, and none can come close to providing power for a sufficient time to make solar panels work as a sole system.

The second problem is that battery storage is prohibitively expensive and in practice unaffordable. The cost of storage is estimated at \$300,000- \$400,000 per MwH. Moss Landing, the largest, with a capacity Of 3000 MwH, cost between \$900,000,000 and \$1,500,000,000. Using a low estimate of \$1 billion, that calculates to \$333,333 per KwH. Maryland, which consumes about 4,000 KwH per hour on average, would therefore incur a cost of $4,000 \times 333,333 = 1,333,000,000$ to provide full grid power for one hour from batteries. If you only needed to backup renewable power, at 50% of the total, it would cost \$666,666,000 per hour, and roughly \$4 billion per night. Battery backup is a pipe dream.

Summary

- 1. Solar energy is the most inefficient form of energy there is, with a capacity factor of only 20%, compared to nuclear at 93%
- 2. It requires an entire second system to back it up, since it's unavailable for full power 80% of the time
- 3. It's the most expensive of all power sources, and costs 2 to 2.5 times as much as energy from fossil fuel or nuclear sources. The myth that it is cheap is based on the levelized cost of energy (LCOE) calculations. But LCOE is an artificial construct looking at solar power in isolation, not in a real system which has to provide power 100% of the time. It has no relevance to the real world.

- 4. Both solar and wind energy require huge tracts of land. We have already examined this in detail for solar the requirements for wind are even greater.
- 5. Both wind and solar are intermittent, variable, and unpredictable and tend to destabilize the grid as they approach 50% of total power because of their variability. Achieving total renewable energy power has never been possible in any demonstration system in the world the maximum that can be achieved is about 50%, and then only with gas turbines, which can be ramped up and down quickly.
- 6. Finally, and most importantly, the only rationale for utilizing solar power, with all its disadvantages, is to lower CO2 emissions and their impact on global warming. If renewable energy does not do this, and it does not, then it has no reason to exist. Germany since 2011 has expended more than \$500 billion on implementing Energiewende, and provides 50% of its power from renewable energy. The total reduction in emissions which that has provided is a decrease of 8.7 MMT per year. By comparison, the increase in emissions from the rest of the world is 650 MMT per year. The German yearly reduction is even smaller than the US reduction, and therefore completely insignificant.

Implications for Maryland's RPS and Conclusions

The goals stated in the RPS for 2030 – 50% renewable energy, a substantial contribution from offshore wind, and net zero by 2045---are not remotely possible, and these goals are misleading the public regarding the minimal amount of wind and solar energy actually delivered in Maryland despite 20 years of RECs, the ineffectiveness of solar energy in reducing CO2 emissions, and the true costs on their electricity rates of pursuing this course of action. Solar RECs are one of the principal reasons electricity costs are going up, because they require energy producers to generate 35% of their electricity from renewable sources in 2025. Most producers can't do this, so they purchase RECs to meet the requirement. The price of a REC is about the same as the wholesale price of a megawatt hour of electricity, so this requirement essentially doubles the wholesale price of electricity for the 35% of electricity that is required to be renewable. These costs are paid by the non-renewa, ble energy producers, but they are immediately passed on to ratepayers, raising their cost of electricity. In reality it is a hidden tax on ratepayers which is paid to those who generate renewable energy, doubling the income they get per megawatt hour of electricity.

Renewable energy in its entirety in the United States since 2000 has had a negligible effect on global CO2 emissions, could not possibly have had any effect on global warming or climate change, nor could it possibly have any effect in the foreseeable future. The principal rationale for the existence of renewable energy-reducing CO2 emissions---is a fraudulent promise.

The only reason renewable energy still exists is because of subsidies provided by states in the form of renewable energy certificates (RECS) and by tax credits and accelerated income tax depreciation at the Federal level. These subsidies provide developers of renewable energy with 2 to 3 times the income per kilowatt hour that conventional energy producers receive. This results in massive profits which continue to fuel the industry, and the lobbying and PR that sustain it. If the subsidies and tax benefits were to disappear, renewable energy would also disappear fairly quickly, because it cannot stand alone on its merits.

This is already happening with offshore wind, even before the subsidies are withdrawn.

The legislature is trying currently to deal with a two pronged crisis: scarce energy and higher prices. They don't realize that the policies they have implemented for the last decade in the RPS are the cause of the crisis, so they are trying to double down on the same plan. That is the sole purpose of SB0931. They should instead heed Albert Einstein's observation: "Insanity is doing the same thing over and over and expecting a different result."

Renewable energy began as an idealistic effort to counter CO2 emissions and their potential effect on climate change and has evolved into a fixed ideology that ignores reality. It long ago morphed into a massive scam that efficiently transfers money from taxpayers and ratepayers to renewable energy developers without providing a product that has any value. The Secretary of Energy of the United States, Chris Wright, who has been an energy executive all his life and knows the field exhaustively, recently commented that the pursuit of renewable energy was "lunacy" and is impoverishing our citizens. He is correct.

For those who think that CO2 emissions from energy generation should still be reduced, there are viable and affordable ways to do that, but renewable energy is not one of them. SB 0931 even if fully implemented, would do nothing to promote affordable or reliable energy, and in fact would do the opposite. What it also would do is inflict irreparable damage on agriculture, one of Maryland's most important industries.

Fig 1
MD Electricity Generation by Source
2008-2024

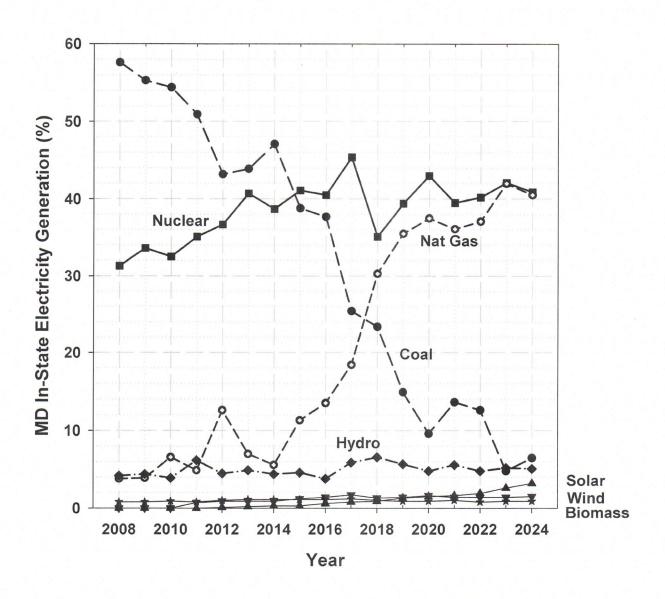


Fig 2
MD Renewable Electricity Generation
by Source
2008-2024

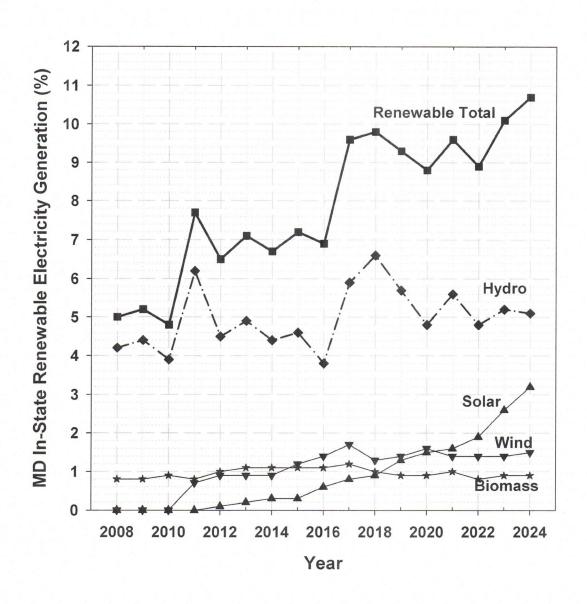
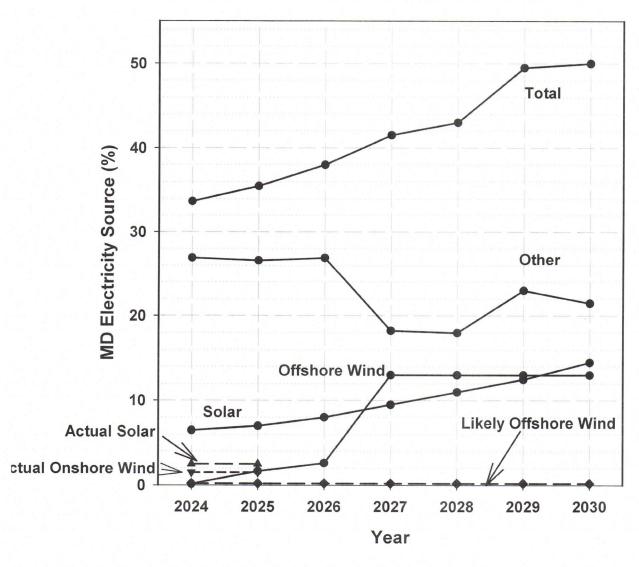


Fig 3 MD RPS Standards* 2024-2030



^{*} Biomass and Geothermal are each less than 1% and have little chance of increase, so are not shown.

Fig 4 CO² Emissions Yearly US, China, and India

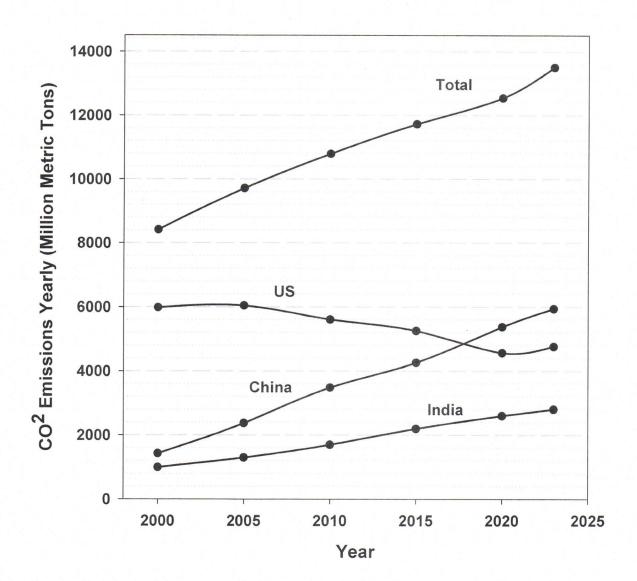
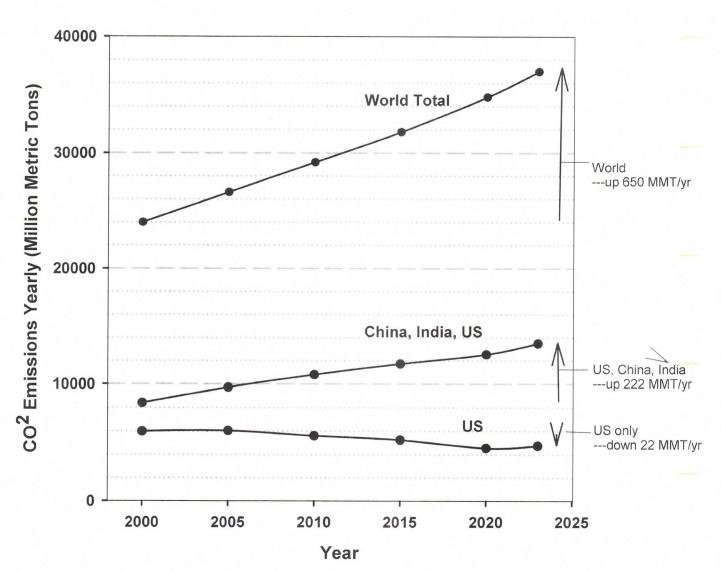


Fig 5
CO² Emissions Yearly
World Total



Conclusion - For whole world, CO² emissions 2000-2023 go up 30x more each year than US emissions come down from renewable energy use

House Bill - 1036.pdf Uploaded by: Gail Owings Position: UNF



Testimony to the Economic Subcommittee

Name: Gail Webb Owings, Executive Director

Organization: Eastern Shore Heritage, Inc. - Stories of the Chesapeake: The Heritage

Area of Caroline, Kent, Queen Anne's, and Talbot Counties

Issue: Public Utilities - Generating Stations - Generation and Siting (Renewable

Energy Certainty Act)

Position: Opposed

The Stories of the Chesapeake Heritage Area (SOCHA) occupies one of our country's most significant cultural landscapes and one of the oldest and largest intact working landscapes in North America. These landscapes provide context and siting for nationally and internationally significant stories of religious development, early American settling, agriculture and maritime industries, abolition, and the Underground Railroad. SOCHA is home to two All- American Road, the most prestigious designation in the national scenic byway program. These byways: Chesapeake Country and the Harriett Tubman Underground Railroad – weave throughout the heritage area and serve as an introduction to the intrinsic qualities of the Eastern Shore.

The proliferation of large scale utility solar with minimal standardized buffering threatens the integrity of these important landscapes, scenic byways, and nationally significant heritage resources. The safeguarding of these resources, including our strong agricultural and maritime industries, is essential to maintaining the economy of our region. These resources attract tourists from across the world, which help support our historic towns and small businesses. Local review and approval of buffering and landscaping is essential to assure that impacts to these resources are minimized. Landscaping tailored to location is essential to preserving our most important and vulnerable resources.

Please oppose HB1036. Let's keep our important landscapes intact and ensure that our heritage area continues to benefit our citizens by stimulating economic growth through heritage tourism and preservation. Thank you!

HB 1036 & SB 931 - MoCo_Fitzgerald_OPP (GA 25).pdf Uploaded by: Garrett Fitzgerald

Position: UNF

ROCKVILLE: 240-777-6550 ANNAPOLIS: 240-777-8270

HB 1036 / SB 931 DATE: February 28, 2025

HB 1036 SPONSORS: Delegates Wilson and Crosby

SB 931 SPONSOR: Senator Feldman

JOINTLY ASSIGNED TO: House Economic Matters Committee and

Senate Education, Energy, and the Environment Committee

CONTACT PERSON: Garrett Fitzgerald (garrett.fitzgerald@montgomerycountymd.gov)

COUNTY POSITION: Oppose

Public Utilities – Generating Stations – Generation and Siting (Renewable Energy Certainty Act)

Montgomery County is supportive of the State's efforts to reduce greenhouse gas emissions 60 percent by 2031, including through a shift to solar and other clean energy resources. Having adopted similar local climate goals, the County appreciates that it is important for every jurisdiction to do its part. As a leader with the second-most total installed solar capacity among Maryland counties, Montgomery County has demonstrated its commitment to increasing access to renewable energy.

However, while the intention to accelerate solar and energy storage projects is laudable, this legislation fails to honor the need to balance solar energy production with other land uses, primarily the preservation of agricultural land on which our society depends.

As introduced, *this bill strikes the wrong balance between competing public interests*. The bill takes a lopsided policy approach and would strip local governments of land use authority to balance these important priorities. Having carefully considered this balance in local policymaking, the County is concerned that the policy shift reflected in the bill will lead to unfortunate negative consequences for agricultural preservation, which could be avoided through the ongoing appropriate application of local land use authority.

Montgomery County has demonstrated through local policymaking that it is possible to better balance these important land use goals. For example, current County policy balances solar and agricultural preservation in the Montgomery County Agricultural Reserve (AR). Established in 1980, the AR protects and promotes farmland and agriculture, resulting in more than 500 farms that contribute nearly \$300 million to Montgomery County's annual economy. The County Council spent two years discussing and analyzing best practices for allowing solar collection systems in the AR zone which resulted in a policy that allows solar development with certain protections to ensure that large systems are not built on our most

societally valuable soils. These standards ensure that agriculture remains the primary use of the AR, minimize adverse environmental impacts, and protect neighboring properties. As introduced, this legislation would conflict with the County's carefully considered AR zoning policy.

The County has also for decades supported and encouraged solar development outside of the AR preservation area. With more than 188 megawatts of installed solar capacity countywide, the majority of which has been installed outside the AR, Montgomery County is demonstrating that it is possible to achieve significant solar deployment without requiring a trade-off of prime agricultural land. This approach supports achievement of important energy and climate goals in a manner that best meets other public interests.

Montgomery County followed efforts over the last year through which stakeholders representing interests related to solar, agriculture, environment, electricity regulation, State agencies, and local governments convened to develop policy recommendations to advance solar development in Maryland. The County suggests that those recommendations be revisited. The County also encourages the consideration of amendments to prohibit or limit the development of solar projects on Maryland's prime agricultural soils.

Montgomery County respectfully requests that the House Economic Matters Committee and the Senate Education, Energy, and the Environment Committee issue an unfavorable report on House Bill 1026 / Senate Bill 931, and partner with local governments in exploring new policy solutions. Together, we can strike a better balance in pursuing the competing goals of decreased greenhouse gas emissions, increased renewable energy, and agricultural protection.

Preserving Maryland ag land.pdf Uploaded by: Gary Dell Position: UNF

Preserving Maryland's Agricultural Land: A Stand Against Solar Development

Protecting Local Zoning Laws and Agricultural Heritage

Introduction

Maryland's agricultural land is a finite and invaluable resource that has sustained the state's economy and heritage for centuries. The push to override local and county zoning laws to facilitate solar development on these precious lands presents significant challenges and consequences that cannot be overlooked. This statement argues against the utilization of finite agricultural land for solar development, emphasizing the importance of preserving these lands for future generations and respecting local governance.

Economic Impact on Agriculture

Agriculture is a cornerstone of Maryland's economy, contributing billions of dollars annually and providing employment to thousands of residents. The conversion of agricultural land to solar farms threatens this economic stability by reducing the available land for farming activities. This potential loss of farmland undermines the agricultural sector, leading to decreased food production, loss of jobs, and weakened rural economies. The importance of retaining agricultural land for its intended purpose cannot be overstated, as it ensures food security and economic resilience.

Environmental Considerations

While solar energy is a crucial component of the transition to renewable energy, the environmental impacts of displacing agricultural land should be carefully considered. Agricultural land not only supports food production but also plays a vital role in carbon sequestration, water management, and maintaining biodiversity. The installation of solar panels on these lands can disrupt these ecological functions, thereby contributing to environmental degradation. Alternative locations for solar development, such as rooftops, brownfields, and other non-agricultural areas, should be prioritized to mitigate these adverse effects.

Preservation of Rural Character and Heritage

Maryland's rural landscapes are an integral part of its cultural and historical identity. The agricultural traditions and scenic beauty of these areas draw tourists, support local businesses, and foster a sense of community. Transforming farmland into solar farms risks eroding this rural character and heritage, leading to a loss of cultural value and community cohesion. Protecting agricultural land ensures the preservation of Maryland's rural legacy and maintains the quality of life for its residents.

Respect for Local and County Zoning Laws

Local and county zoning laws are established to reflect the needs and values of communities. These regulations are designed to balance development with the preservation of natural and agricultural resources. Overriding these laws to allow solar development undermines local governance and disregards the voices of community members who have a vested interest in maintaining the character and sustainability of their regions. Respecting these zoning laws is essential for upholding democratic principles and ensuring that development aligns with the community's long-term vision.

Alternative Solutions for Solar Development

The need for renewable energy development can be met through innovative solutions that do not compromise agricultural land. Policies that incentivize solar installations on rooftops, parking lots, and other built environments can provide substantial energy generation without encroaching on farmland. Additionally, the utilization of brownfields, abandoned industrial sites, and other underutilized lands offers a viable alternative for large-scale solar projects. These strategies enable the growth of renewable energy while preserving agricultural land for its essential purposes.

Conclusion

Maryland's finite agricultural land is a precious resource that must be protected from the encroachment of solar development. The economic, environmental, and cultural significance of these lands cannot be overstated. By respecting local and county zoning laws and pursuing alternative solutions for solar energy, Maryland can achieve a balance between renewable energy development and the preservation of its agricultural heritage. This approach ensures that the state's agricultural land remains a vital part of its economy, environment, and identity for generations to come.

SB931HB1036- Renewable Energy Certainty Act - Oppo Uploaded by: Grayson Middleton

Position: UNF



Educate. Advocate. Innovate.

Date: February 26, 2025

To: Members of the Senate Committee on Education, Energy, and the Environment and the House

Committee on Economic Matters

From: Grayson Middleton, Government Affairs Manager

SB931/HB1036 - Public Utilities - Generating Stations - Generation and Siting - (Renewable Re:

Energy Certainty Act) – Oppose

Delmarva Chicken Association (DCA) is the trade association representing the meat-chicken growers, companies, and allied business members on the Eastern Shore of Maryland, the Eastern Shore of Virginia, and Delaware. On behalf of our members, we oppose SB931/HB1036 and urge an unfavorable committee report.

Chicken growers were some of the first to widely adopt solar technology in Maryland, and DCA fully supports its use as a cost-effective and environmentally friendly energy source. We also support the thoughtful development of solar in our region that is congruent with the needs of the community and agricultural production, as determined by local planning and zoning authorities.

However, as an agricultural organization representing an overwhelmingly rural membership, we have serious concerns about the state abolishing (or even reducing) the local government's authority in the zoning of solar energy generating systems and storage devices. As many of you will recognize, the zoning of renewable energy facilities (particularly solar) is a contentious issue in rural areas. While we support its use and proliferation, we want to ensure that energy needs and environmental benefits are balanced with the economic and cultural interests of agrarian communities.

Because of their geography, prime agricultural lands on the Eastern Shore are some of the most attractive in the state for solar development. Modeling by the American Farmland Trust estimates that 83% of projected solar development will be on agricultural land, of which 43% will be on land ATF deems nationally significant due to high levels of productivity. Without the customary oversight by county governments who know the interests of their community best, this stimulus has the potential to greatly reduce agricultural outputs on the Eastern Shore and throughout the state.

This would pose a significant challenge for our industry. In 2024, our five companies purchased over \$1.3 billion in corn, soybeans, and wheat, comprising the vast majority of grain purchases on Delmarva. As the local output is reduced from the proliferation of solar and other development, the industry is required to import grain from other states and countries at higher prices. Aside from the economic harm to both our farmers and industry, this would also raise our net carbon emissions.

Furthermore, we have serious concerns about the potential of large-scale solar projects to reduce grid capacity and thus prohibit some of our members from getting small-scale on-farm solar. We have already heard from numerous members who have sought to install solar on their farms but were told they were unable to do so because of the lack of grid capacity in their area.







Educate. Advocate. Innovate.

We believe that county governments know the needs of their farmers and citizens best. They alone have the intimate knowledge of their localities that is required to responsibly site solar in a manner that prioritizes the preservation of agricultural lands while also supporting the proliferation of solar development.

For these reasons, we urge an unfavorable vote on SB 931 / HB 1036.

Should you have any additional questions, please feel free to contact me at Grayson Middleton at middleton@dcahicken.com or 410-490-3329.

Sincerely,

Grayson Middleton

Government Affairs Manager



LOO - HB1036-SB931 Public Utilities - Generating S Uploaded by: irene barnes

Position: UNF

COUNTY COUNCIL OF DORCHESTER COUNTY

COUNTY OFFICE BUILDING 501 Court Lane, P.O. Box 26 Cambridge, Maryland 21613 (410) 228-1700

GEORGE L. PFEFFER, JR., PRESIDENT

MIKE DETMER, VICE PRESIDENT

ROB KRAMER, JR.

WILLIAM V. NICHOLS

RICKY C. TRAVERS

February 21, 2025

The Honorable C. T. Wilson, Delegate Economic Matters Committee 231 Taylor House Office Building 6 Bladen Street Annapolis, MD 21401



JERRY JONES COUNTY MANAGER

MACLEOD LAW GROUP LLC COUNTY ATTORNEY

RE: **Letter of Opposition** – House Bill 1036, "Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)"

Dear Chairman Wilson and Committee Members:

On behalf of the Dorchester County Council, I respectfully offer its **opposition** for House Bill 1036 entitled, "Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)," for the purpose of altering the factors the Public Service Commission must consider before taking final action on a certificate of public convenience and necessity; establishing certain requirements for the construction of a certain solar energy generating station or energy storage device; requiring the Commission to conduct a certain study to establish a process by which the Commission may establish partnerships between electric companies and electricity suppliers for electricity generation projects; etc.

House Bill 1036 establishes a clear path for the preemption of local zoning authority by restricting and prohibiting local zoning laws that regulate the construction of certain solar energy generating station and energy storage devices. Further, this bill creates an exemption from personal and real property taxes for solar energy generating stations. The Renewable Energy Certainty Act undermines local taxing authority, local zoning authority, essential community input and protections. This bill does not contemplate essential safety measures affiliated with utility scale battery storage devices. In general, HB1036 disregards local land use, comprehensive planning, and economic factors that would otherwise allow counties to partner with the State to achieve renewable energy portfolio goals. This bill is in direct conflict with the County Comprehensive Plan and long-standing land use and property rights assurances provided by the Zoning Code which are consistent with the Comprehensive Plan. Therefore, we kindly request that you look unfavorably upon this bill.

Thank you for your time and consideration of this letter of **opposition**. If you have any questions, please contact the Council's Office at (410) 228-1700

Sincerely,

George L. Pfeffer, Jr.

President

cc: The Honorable Johnny Mautz, Senator

The Honorable Christopher T. Adams, Delegate

The Honorable Sheree Sample-Hughes, Delegate

The Honorable Tom Hutchinson, Delegate

COUNTY COUNCIL OF DORCHESTER COUNTY

COUNTY OFFICE BUILDING 501 Court Lane, P.O. Box 26 Cambridge, Maryland 21613 (410) 228-1700

GEORGE L. PFEFFER, JR., PRESIDENT

MIKE DETMER, VICE PRESIDENT

ROB KRAMER, JR.

WILLIAM V. NICHOLS

RICKY C. TRAVERS

February 21, 2025



JERRY JONES COUNTY MANAGER

MACLEOD LAW GROUP LLC COUNTY ATTORNEY

The Honorable Brian J. Feldman, Senator Education, Energy, and the Environment Committee 2 West Miller Senate Office Building 11 Bladen Street Annapolis, MD 21401

RE: **Letter of Opposition** – Senate Bill 931, "Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)"

Dear Chairman Feldman and Committee Members:

On behalf of the Dorchester County Council, I respectfully offer its **opposition** for Senate Bill 931 entitled, "Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)," for the purpose of altering the factors the Public Service Commission must consider before taking final action on a certificate of public convenience and necessity; establishing certain requirements for the construction of a certain solar energy generating station or energy storage device; requiring the Commission to conduct a certain study to establish a process by which the Commission may establish partnerships between electric companies and electricity suppliers for electricity generation projects; etc.

Senate Bill 931 establishes a clear path for the preemption of local zoning authority by restricting and prohibiting local zoning laws that regulate the construction of certain solar energy generating station and energy storage devices. Further, this bill creates an exemption from personal and real property taxes for solar energy generating stations. The Renewable Energy Certainty Act undermines local taxing authority, local zoning authority, essential community input and protections. This bill does not contemplate essential safety measures affiliated with utility scale battery storage devices. In general, SB931 disregards local land use, comprehensive planning, and economic factors that would otherwise allow counties to partner with the State to achieve renewable energy portfolio goals. This bill is in direct conflict with the County Comprehensive Plan and long-standing land use and property rights assurances provided by the Zoning Code which are consistent with the Comprehensive Plan. Therefore, we kindly request that you look <u>unfavorably</u> upon this bill.

Thank you for your time and consideration of this letter of **opposition**. If you have any questions, please contact the Council's Office at (410) 228-1700

Sincerely.

George L. Pfeffer. Jr.

President

cc: The Honorable Johnny Mautz, Senator

The Honorable Christopher T. Adams, Delegate

The Honorable Sheree Sample-Hughes, Delegate

The Honorable Tom Hutchinson, Delegate

oppose hb1036 farmland.pdfUploaded by: James Elbourn

Position: UNF

Hello, I am opposed to HB1036 because this farmland land is a very valuable resource in this county. It doesn't seem right that the land should be taken for solar projects, when likely not many people know about what is going on. If people knew, this would not be a popular plan.

Sincerely,

James Elbourn Severna Park

HB1036 Municipal opt-out Joint Comments.docx.pdf Uploaded by: James Feinstein

Position: UNF









February 26, 2025

C. T. Wilson, Chair Brian M. Crosby, Vice Chair **Economic Matters Committee** 231 Taylor House Office Building 6 Bladen Street Annapolis, MD 21401 Maryland General Assembly

Re: Joint Comments regarding HB1036 – Generating Stations – Generation and Siting (Renewable Energy Certainty Act)

Dear Chair Wilson and Vice Chair Crosby:

Arcadia Power, Inc., Solar Simplified, Solstice, and Perch Energy Inc (collectively, the "Companies")¹²³⁴ provide these comments in response to the introduction of the House Bill 1036 - Generation and Siting Renewable Energy Certainty Act) introduced on January 28, 2025. We sincerely thank the Economic Matters Committee (the "Committee") for considering our input and for facilitating public participation in this hearing.

The Companies submit these comments to address that critical issue, which emerged following the introduced bill HB1036. In these comments, the Companies emphasize that the potential community solar auto enrollment program (hereinafter, "municipal auto-enrollment program") is fraught with complications and detrimental unintended consequences. The Companies thank the Committee for the opportunity to comment on this important matter.

¹ Arcadia is the largest community solar subscriber manager in the United States, serving more than 200,000 subscribers across 1,800 MW in thirteen states and the District of Columbia. This includes 200 megawatts across 54

projects in Maryland.
² Solar Simplified is an all inclusive customer lifecycle solution for Community Solar projects. We manage over 500MW of Community Solar projects across the country, including dozens of projects in Maryland, in their entirety from marketing and customer acquisition to billing, collection and subscription management guaranteeing full subscription and full collection to our developers and asset owners.

³ Solstice was originally founded in 2014 as a nonprofit dedicated to expanding access to solar for underserved populations. In 2016, Solstice created a software to provide turnkey customer management services for community solar, with an acquisition strategy focused on community engagement and local partnerships. Solstice manages a portfolio of projects in Maryland, including several in the low-income carveout.

⁴ Perch Energy is the second largest community solar subscriber management provider in the nation. Perch manages over 700MWs of community solar capacity across multiple states including projects in Maryland.. s.

1. Opt-in community solar is the most cost-effective way for Maryland to reach both climate and environmental justice goals.

While the Companies understand the potential allure of including an auto-enrollment program, the policy ultimately falls short of the ambitions of Maryland's nation-leading community solar program due to the adverse impacts the program would have on the opt-in community solar market. At its core, community solar opportunities promote customer choice, education, and engagement with the clean energy economy, all while expanding clean energy access to the state's low income population. Indeed, a vital operating element of community solar is the ability to direct the benefits of clean, distributed generation to customers – particularly renters and others who are unable to access rooftop solar or who are otherwise excluded from the clean energy economy. Because almost any customer who pays their utility bill is eligible for community solar, the program creates equal access for any household to reap the benefits of clean energy.

Customer choice is a natural function of equal access to the clean energy economy. Unlike municipal automatic enrollment, opt-in community solar requires active customer education and action before enrolling into the program. An educated customer who affirmatively chooses to enroll in a community solar project knows that they are a part of the clean energy economy, and that customer is directly and affirmatively choosing to support the development of clean energy in the state. Thanks to Maryland's focus on creating a community solar program that simultaneously deploys clean energy and emphasizes equity with the inclusion of a special incentive for projects that deliver at least 40% of their energy output to low income customers, opt-in customers will see significant savings thanks to their subscriptions.

The focus on a customer taking an affirmative action to enroll in community solar is not just important for its own sake. Customer choice is a vital feature of community solar for two additional reasons:

- 1. First, opt-in customers recognize that they are benefitting from a state program that is taking action against climate change while also reducing their electricity costs. The relationship that subscriber organizations like the Companies facilitate between the project developer, the state's community solar program, and the customer helps build broader support for Maryland's state-wide clean energy goals.
- 2. Second, opt-in community solar has a halo effect and provides a gateway to the clean energy economy. Opt-in community solar is a seamless introduction to beneficial electrification interventions since all a customer needs to enroll in the program is a utility bill. The Companies find that customers who elect to participate in community solar are

then more likely to engage in other means of managing their energy usage than the average consumer and are more likely to layer on additional electrification interventions. Indeed, opt-in community solar may be one of the lowest-cost means of driving the long-term beneficial electrification that will be critical to meeting the state's climate goals.

Additionally, the existing community solar program rules position opt-in community solar to be more successful in attaining the state's goals than municipal auto-enrollment enrollment. Opt-in community solar avoids the central issues of the auto-enrollment model: cherry-picking who will receive the benefits of community solar in a given municipality or implementing a program that will result in de minimis savings to customers. More detail on this issue may be found below in Sub-section 3. Rather, opt-in community solar ensures that customers know they are participating in the program and are receiving material bill savings.

2. Allowing municipalities to automatically enroll customers will result in ratepayer-funded windfall profits for developers while resulting in lower value for the state.

The auto-enrollment model does not provide the same benefits and additional value to the customer or the state's energy goals as the opt-in structure currently in place, because automatically enrolled customers would be almost entirely unaware that they are enrolled in a community solar program. Moreover, auto-enrollment enrollment would not include the same investment in customer education associated with opt-in community solar.

Without these educational investments, the biggest beneficiary of municipal auto-enrollment enrollment are project developers. If the Committee were to allow automatic enrollment on a broad scale, that would reduce the cost to developers by eliminating the need to invest in educating and subscribing customers. The current structure of the community solar program would provide the same compensation in either case, creating an incentive to reduce or eliminate beneficial customer education and enrollment in favor of pursuing automatic enrollment opportunities that provide no similar benefit.

The unfortunate reality is that subscriber managers, and the customer engagement and education that the opt-in model creates, will be removed from the market should the Commission establish a municipal auto-enrollment program. The implementation of such a program would drive project developers en masse to partner with municipalities under an auto-enrollment mechanism, because the program requires no investment in customer education and subscription or the long-term management of these customers. Maryland would lose what opt-in community solar has provided to the market: the most efficient mechanism for expanding access to the clean

energy economy across underserved communities, a track record of significant progress towards meeting the state's climate goals.

3. Municipal auto-enrollment will result in either officials selecting winners and losers OR de minimis savings for all low income customers

If the Committee were to adopt an auto-enrollment program, it would effectively result in one of two negative outcomes. Either, to ensure that customers save the most money on their utility bill, municipalities would be forced to pick which customers benefit from solar projects — which will be winners and which will be losers. Or, if the municipalities do not select winner and loser customers, they will be forced to spread a finite amount of bill credits over a huge swath of customers, resulting in trivial bill savings for these customers. Neither of these options are desirable public policy outcomes.

If the municipality utilizes a customer selection process, they would create a process that is rife with potential for abuse. Municipal auto-enrollment puts the power to pick winners and losers (e.g., who is allowed to receive the benefits of community solar) entirely in the hands of a small group of government officials, who may be incentivized to favor specific constituencies. This opaque selection process would be subject to political gamesmanship with no accountability for how customers are selected.

If the municipality instead decides to socialize the bill credits among all low income customers, then these customers are likely to receive negligible utility bill savings. This means that municipalities could size subscriptions at minimal levels, resulting in a few cents in savings per month for each customer. This is not in the spirit of the Community Solar Energy Generating Systems (CSEGS) program, as limited savings to a large population is a less desirable policy outcome than targeted, impactful savings to customers who opt-in to the program.

4. Municipal auto-enrollment would lead to geographically discriminatory customer access and participation.

The all or nothing nature of auto-enrollment offerings would also create geographical disparities in customer access. Given the socioeconomic makeup of many existing municipalities, these programs will be unable to focus on serving overburdened communities with the same reach and rigor that opt-in customer acquisition and management companies can.

Moreover, municipalities that already have energy offices will be disproportionately well-positioned to take advantage of all the existing community solar capacity in a given utility territory since the set-up and administration of such a program.

Take Montgomery County, for example, which has more than 380,000 households. If the County were to design an auto-enrollment program they could automatically enroll all 380,000 households, consuming approximately 2GW of CSEGS capacity. Under these circumstances, it would be impossible for other customers, including low income customers and those residing in environmental justice communities outside of Montgomery County, to subscribe to community solar projects.

5. Other jurisdictions have grappled with similar issues and have refused to permit municipal auto-enrollment-style enrollment for community solar.

There are currently no operating large-scale municipal auto-enrollment programs in any of the third party community solar markets nationwide. The largest community solar market, New York, considered allowing Community Choice ("CCA") auto-enrollment, and instead declined to move forward. The New York PSC has determined that:

CCA programs may aggregate or otherwise integrate, *on an opt-in basis*, into their program, energy efficiency and distributed energy resources (DERs). In considering how to include a variety of products and energy planning and management activities within the CCA program, CCA Administrators should be open to contracting with different ESCO and DER providers for services.⁵ (Emphasis added).

The Committee should follow a similar path and not allocate critical Staff time and resources to considering an auto-enrollment process only to reach the same conclusion as New York. The simple way to do this would be by explicitly allowing municipalities to enroll households in projects on an opt-in basis.

6. Billing and crediting and broader consumer protections need to be fully addressed before any auto-enrollment program can be pursued, given that municipal auto-enrollment enrollment will largely remove subscriber organizations from the market.

Since the inception of Maryland's CSEGS program, the utilities have not delivered on their core responsibility to allocate community solar bill credits in a timely and accurate manner. Yet, the long-term success of the community solar program is contingent on the utilities performing their responsibilities of billing and crediting customers on a timely basis so that customers see the material impact of their community solar subscriptions.

5

⁵ New York Department of Public Service. Order Modifying Community Choice Aggregation Programs. May _____ 2023. Page 2. https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=14-m-0224

Municipal auto-enrollment enrollment would dramatically reduce the billing oversight role of project owners and subscriber management organizations that have built out competencies in managing subscriptions, validating credits, ensuring timeliness, and providing other vital services. Since municipal auto-enrollment enrollment would effectively remove subscriber management organizations from the market, along with the benefits that they bring to subscribers, additional consumer protections would need to be implemented before municipal auto-enrollment enrollment is implemented to ensure utility accountability and retain high value for the customer

To ensure this accountability, the Committee should not permit municipal auto-enrollment enrollment until they have implemented utility reporting standards on community solar performance metrics, Negative Revenue Adjustments ("NRAs"), and customer remedial bill credits for when utilities do not meet baseline performance metrics. Facing similar challenges, the New York Public Service Commission has directed Staff and stakeholders to develop, "billing and crediting performance metrics related to distribution utility billing and crediting of Community Distributed Generation (CDG); and (2) a negative revenue adjustment (NRA) mechanism tied directly to the utilities' CDG crediting and billing performances."

A set of metrics, NRAs, and customer remediation solutions, have been proposed by Arcadia in tandem with the Coalition for Community Solar Access ("CCSA") and the New York Solar Energy Industry Association ("NYSEIA") in that market. New York DPS Staff is expected to file a White Paper recommending the development of such metrics by the end of 2023. These metrics are intended to more appropriately align utility incentives with customer protection and satisfaction around community solar participation by penalizing the utilities for not hitting baseline performance, such as applying community solar bill credits to customers on a timely basis.

This additional accountability is necessary even in opt-in markets like New York and Maryland with robust project owners and subscriber management organizations to review billing and crediting. Because the result of auto-enrollment enrollment is the elimination of community solar subscriber management organizations like Arcadia, Solar Simplified, Solstice and Perch Energy from the market, the adoption of these metrics should similarly be a prerequisite in Maryland before any auto-enrollment program is implemented.

7. Customers enrolled in CSEGS via auto-enrollment enrollment would be subjected to substantial administrative burden and confusion.

⁶ Case 19-M-0463, In the Matter of Consolidated Billing for Distributed Energy Resources, (October 14, 2022), at 1.

⁷ In New York, the community solar is called "Community Distributed Generation" or "CDG".

⁸ Community Distributed Generation Performance Metrics and Negative Revenue Adjustments Industry Proposal, NYSEIA/CCSA, April 2023. https://www.nyseia.org/policydocuments/utility-accountability-solar-crediting

Municipal auto-enrollment enrollment also has the potential to undermine existing community solar customers, which could erode faith in Maryland's growing community solar market. Municipalities using auto-enrollment for the entire customer base could end up enrolling customers who have already signed a contract with another community solar provider, creating customer confusion and frustration in the process. A significant number of community solar customers have executed subscription agreements with a project owner with the understanding that they will be assigned to the first available project, but are not yet allocated to an active project because those projects are still under development.

This is a common industry practice. Nearly all community solar projects acquire customers before the project is energized and generating credits, thereby ensuring a full revenue stream upon achieving commercial operation. Because subscriber acquisition can take months, projects often start acquiring customers before they are actually generating credits.

Additionally, commercial operation is sometimes delayed before the project is energized and delivers credits to customers, due to construction, interconnection, supply chain delays, or billing interruptions. Once a project reaches operation and is generating electricity, the community solar project typically will still maintain a small waitlist of customers ready to backfill for anticipated customer attrition. Throughout that waiting period a municipality – and even the utility – will be unable to identify whether a customer is on such a list and may erroneously enroll them in an auto-enrollment program, complicating both community solar providers' ability to tailor their subscription size to maximize customer savings and ensure a pleasant experience.

I. CONCLUSION

The Companies appreciate the Committee's efforts to advance customer access to clean energy and savings. The Companies are also supportive of the House Bill 1036. However, for the reasons described above, the Committee should not address, and certainly should not adopt, auto-enrollment mechanisms in this bill. The Companies look forward to participating in this process going forward.

Respectfully submitted on February 25, 2023,

/s/James Feinstein
James Feinstein
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/s/Alex Pasanen Alex Pasanen

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/s/Georgina Arreola

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UNF.Jane SeiglerUploaded by: Jane Seigler Position: UNF



P.O. Box 606 | Lisbon, Maryland 21797 www.mdhorsecouncil.org

One Common Bond: The Horse One Common Voice: The Horse Council

In the Senate Education, Energy & the Environment Committee, and the House Economic Matters Committee February 28, 2025

Testimony of the Maryland Horse Council on SB 931 and HB 1036

Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Unfavorable

The Maryland Horse Council (MHC) is a membership-based trade association that represents the state-wide horse industry in Maryland. Our members include horse farms; horse related businesses; equestrian competitors; trainers; individual enthusiasts; equine-assisted therapy programs; and breed, interest, and discipline associations. We represent over 30,000 Marylanders who make their living with horses, or who just own and love them.

Maryland is home to 16,000 horse properties occupying over 705,000 acres (almost 10% of Maryland"s total land area, and over 25% of Maryland"s agricultural land). There are horse properties in every county in the state. The retention of agricultural land is of the utmost importance to the members of the Horse Council. Additionally, well-maintained horse pastures are second only to forest in preventing excessive and harmful runoff into the Chesapeake Bay.

This proposed legislation puts equestrian agricultural land and its environmental benefits at risk, by removing utility siting decisions from local control, and effectively, from viable constituent input.

We urge an unfavorable report on SB 931/HB 1036.

Respectfully submitted,

THE MARYLAND HORSE COUNCIL (844) MDHORSE (844-634-6773) info@mdhorsecouncil.org

UNF.Janet Christensen-Lewis.Kent Consevation and P

Uploaded by: Janet Christensen-Lewis

Position: UNF

UNFAVORABLE

Senator Brian Feldman, Chair
Delegate C.T. Wilson, Chair
Members of the Senate Education, Energy and the Environment Committee &
House Economic Matters Committee

Dear Senators and Delegates,

My name is Janet Christensen-Lewis. I am here today in opposition to SB0931 and HB1036.

These bills directly contradict the mission of the Kent Conservation and Preservation Alliance (KCPA), the organization I represent as Chair of its Board of Directors. KCPA is dedicated to educating and advocating for the protection of agriculture, rural landscapes, and the historical and cultural significance of these landscapes to the well-being of communities in Kent County and throughout Maryland. I urge you to watch *Kent County's Storied Landscape: Place, Past, and Present*, a documentary produced in cooperation with Maryland Public Television that premiered on April 18, 2023, for context.

Maryland's legislators are failing to safeguard the well-being of the very residents they were elected to serve. While the complexities of energy policy may be lost on the average Marylander, the consequences are not—especially when they manifest as skyrocketing energy costs. In their rush to shape a future vision of sustainability, lawmakers have disregarded the present reality: these policies are eroding the standard of living for today's residents.

SB0931 and HB1036 are just the latest in a string of misguided energy policies. Maryland has propped up the solar and renewable energy markets since the introduction of the Renewable Portfolio Standard (RPS) in 2004. As part of this system, utilities are required to purchase Solar Renewable Energy Credits (SRECs) or pay Alternative Compliance Payments (ACPs), costs that are inevitably passed on to ratepayers. Additionally, as solar penetration increases, so does the need for expanded transmission infrastructure—another expense that falls on Maryland's residents and businesses through higher electricity bills. Market manipulation to favor one producer of energy over another inevitably leads to higher prices. This

legislation continues a troubling pattern of state overreach that disproportionately harms rural communities, where agriculture is not just an industry but a way of life, deeply rooted in Maryland's history and culture. Senator Feldman's and Delegate Wilson's legislation are yet another blow to these communities, furthering an agenda that prioritizes politically driven energy mandates over fundamental economic principles and the lives of citizens. The truth is, if solar energy were truly commercially viable, it would not require the crutch of federal subsidies and state mandates.

Senator Feldman and presumably Senate President Ferguson have chosen to side with the solar industry, disregarding the peoples' voices in rural counties and trampling on local land-use planning and taxation authority. These counties have spent years and money carefully drafting Comprehensive Plans and Land Use Ordinance, mandated by Maryland Law, to reflect the priorities of their residents—only to have those efforts overridden under the banner of climate change. The solar lobby insists that because the sun is abundant, solar energy is inherently cheap and affordable. This disregards real-world examples where regions with a high reliance on renewables—whether solar, wind, or both—face energy costs that are 2 to 2.5 times higher. Additionally, their rhetoric ignores reality: the solar industry's expansion depends on subsidies and mandates, allowing developers to offer lease payments that farmers cannot compete with, shutting them out of the land they need to sustain their livelihoods.

The consequences are clear. Solar development is consuming agricultural land—especially on the Eastern Shore, where some of the richest farmland in the nation exists. Year after year, legislators have stripped counties of their ability to protect these vital resources. Now, the Renewable Energy Certainty Act adds another layer of risk by fast-tracking unsafe and toxic battery storage projects in the same manner as solar energy generation. Let's not forget Moss Landing—the largest battery storage facility in California—was shut down twice in 2021 for overheating and, since catching fire on January 15, 2025, continues to release toxic fumes. Is this what the Maryland Legislature wants to foist onto rural communities?

The irony is that while the Legislature pushes bills that harm agriculture, it is simultaneously eliminating funding for land preservation.

SB0931 imposes a rigid, one-size-fits-all landscaping standard for solar projects, ignoring the unique character of each town and county. It treats the gateway to a historic town no differently than a remote back-road, disregarding the value of scenic landscapes and cultural heritage. Rural communities are not just empty spaces on a map; they are living, breathing histories—preserving traditions that define Maryland's identity. Yet, this bill sacrifices all of that for the sake of a flawed environmental agenda.

Adding insult to injury, Maryland's energy policies are not only ineffective but also financially reckless. SB0931 undermines local financial autonomy, stripping counties of revenue-generation authority while imposing unfunded mandates that force them to do more with less. And for what? The projected reduction in Maryland's contribution to global CO₂ emissions—between 0.16% and 0.2%—is so insignificant that it is statistically irrelevant. Worse yet, solar panels installed in Maryland are often manufactured in countries powered by coal, while the raw materials are extracted using fossil fuels. These policies are not reducing emissions; they are simply outsourcing them.

There is plenty of room to acknowledge that Maryland's current energy policies are failing without being a climate change denier. In fact, if Climate Change is high on your list of priorities, then Maryland's current energy policies should be of grave concern to you. If net-zero CO₂ emissions are truly the goal, then lawmakers should be asking hard questions about why billions invested worldwide have created little increase in the percent of the world's energy supplied by renewables and failed to produce measurable reductions in emissions. The lack of progress should give anyone pause.

Maryland's legislature, the solar lobby, and the NGOs that support them continue to celebrate each new solar mandate as a victory for "progressive" energy policy. But make no mistake—these policies are proving to be economically devastating.

Farmers and rural residents are being sacrificed in pursuit of an agenda that disregards the real-world consequences. In the end, unless the Legislature thoroughly evaluates current and future policies, Maryland will not only fail to achieve its net-zero targets but also risk destroying its farmland and agricultural economy, eroding the culture and historic character of local communities, losing the confidence of voters, stifling economic growth, and impoverishing its citizens.

SenateBill0931-HouseBill1036.pdf Uploaded by: John Falstad Position: UNF



P.O. BOX 157 CENTREVILLE, MARYLAND 21617 WWW.QACA.ORG

Re: Senate Bill 0931/House Bill 1036

Dear Senators and Delegates,

I write to you on behalf of Queen Anne's Conservation
Association (QACA) in opposition to Senate Bill 0931 and House Bill
1036. These bills are the further product of Maryland's ongoing,
disastrous mismanagement of the necessary transition from fossil fuels
to renewables. For the sake of conservation and agriculture in
Maryland, QACA urges their rejection.

SB 0931/HB1036 would require Counties to expedite approval of, and not impose taxes on, any solar energy generating station or energy storage device that meets (laughably minimal) *State* requirements, *regardless* of whether the station or device meets *County* requirements for acceptable uses of agricultural land. The bills thus (1) remove from Maryland Counties their long-established land use authority to require that industrial-scale facilities are sited and operated in reasonable conformity with County land use planning and zoning ordinances enacted for the preservation of agriculture and (2) nullify the long-established taxing authority of Counties to collect personal and real property taxes on industrial projects within their jurisdiction.

The Governor and Legislative leadership of the State of Maryland deliberately excluded Maryland's farming Counties and agricultural communities from the political process that generated SB 0931/HB1036, instead turning this process over to private solar companies and urban County interests having no appreciation of or concern for Maryland agriculture. The result of bad energy policy planning in the past, combined with a flawed political process for developing new solar-related legislation, is proposed legislation that:

- (1) makes no effort to achieve a practical accommodation of solar energy development and Maryland agriculture;
- (2) fails to learn from Maryland Counties, like Queen Anne's County, that have adopted reasonable regulatory regimes that both accommodate utility-scale solar projects and protect agriculture;



P.O. BOX 157 CENTREVILLE, MARYLAND 21617 WWW.QACA.ORG

- (3) fails to recognize the wide availability of non-farmland sites for solar energy projects, such as airport fields, brownfields, landfills, building rooftops, highway median strips, water bodies;
- (4) authorizes uncontrolled conversion of Maryland farmland to an industrial use, thereby unnecessarily sacrificing a vital sector of Maryland's economy;
- (5) sets in motion negative impacts, not only on farming, but also on woodlands, wildlife, hunting, fishing, recreation, tourism, and other activities economically important to Maryland's rural Counties, especially on the Eastern Shore and in Western Maryland; and
- (6) invites the cynical observation that SB 0931/HB1036 is nothing more than trying to put lipstick on the pig of the long-mismanaged State transition from fossil fuels to renewables.

QACA urges rejection of SB 0931/HB1036 and a fresh start on Maryland solar policy, with all stakeholders on board and without private solar companies steering the boat.

Respectfully submitted,

S. aulst.C

Jay Falstad

Executive Director, QACA

Cc: Sen. Stephen S. Hershey

Sen. Johnny Mautz

Del. Christopher T. Adams

Del. Stephen J. Arentz

Del. Jefferson L. Ghrist

Del. Thomas S. Hutchinson

solar panel letter.pdfUploaded by: John Saathoff Position: UNF

Senator Brian Feldman, Chair
Delegate C.T. Wilson, Chair
Members of the Senate Education, Energy and the Environment Committee &
House Economic Matters Committee

Dear Senators and Delegates,

I am a lifelong resident of Caroline County and am a fourth generation farmer. My family on my mother's and father's side have been farming here for over 100 years. We look forward to continuing that for many generations to come.

My family and I live in a community of farmers, friends, and neighbors who share a deep connection to agriculture. We are already witnessing our land being overtaken by solar panels, knowing that the likelihood of this farmland ever returning to productive use is nearly nonexistent. SB0931 and HB1036, which would accelerate this destruction, represent the greatest single threat to Maryland farmland and agriculture in the state's history.

Everyone involved in any aspect of the agriculture industry agrees that this will destroy agriculture in the state as we know it. When the land base used by agriculture is reduced to a breaking point below which it will not support the infrastructure supporting the ag industry, the whole system will collapse. Once the numerous industries supporting agriculture are gone, it will be almost impossible to bring them back. Using large amounts of land for energy production is not in the best interest of this region economically or environmentally.

If a solar project is discontinued on a property, it is not likely to be farmed ever again and may not be able to be developed with houses either. The negative impact of solar panels and battery storage on the land is irreversible. This is further reason that this is too big of a risk to take. The possible production of renewable energy will be far less positive to the state and the region than producing food and fiber on the land.

Furthermore, it is wrong to override local control of planning, land use decisions and taxation in favor of state control. Local elected officials inherently know what is best for their county and should be able to control what goes on there. Land use decisions are based on comprehensive plans that were developed over time with local public comment

and input. These solar panel projects that purchase and lease land put land use in the control of the state of Maryland through the Public Service Commission. This is an extreme and threatening overreach of government into private property rights, and will ultimately be exposed. The problem is that by the time this is exposed for what it is, you will have destroyed the agricultural industry in the in the process.

For decades, the state of Maryland has supported open space and wise growth policies, allowing counties to meet their changing needs in a timely manner. These bills would quickly and dramatically change the economy and nature of counties. Please reject SB0931 and HB1036, written by individuals that will not see the consequences of this legislation and have no regard for our precious and irreplaceable farmland. These lands should not be sacrificed for solar panels and risky, environmentally harmful battery storage units.

I urge you to give an unfavorable recommendation.

Sincerely, John Saathoff Ridgely, MD

Written Testimony.pdf Uploaded by: Judy Gifford Position: UNF

My name is Judy Gifford. My husband and I own and operate a grass based dairy farm in Kennedyville on Maryland's Eastern Shore. I am a come here not a from here. When I moved to Montgomery County in 1996, I knew nothing about the Eastern Shore until I met my husband who was from Chestertown. The first time I visited Kent County, I was smitten by the wide open spaces, charming towns and villages and thriving farms and businesses. My arrogance about the Western Shore (with its traffic and overdevelopment) versus the Eastern Shore with all its natural beauty was quickly debunked.

The Renewable Energy Certainty Act puts a bullseye on those beautiful and productive open spaces. SB-0931 was written by and for the solar industry under the guidance of Senate President Ferguson who works for CI Renewables. The people most impacted by the bill were excluded from discussions but perhaps it matters little. Farmer have been ignored and kicked to the curb every time we have been in discussions with Director Paul Pinsky, Director, Maryland Energy Administration.

Because the bill was drafted in a bubble, serious and irreparable consequences were not addressed. It is clear to me that the massive destruction of the most fertile, climate friendly land in the United States for unreliable solar energy miles away from the end user is mad.

As a result of a lack of common sense and ideological zeal, the Maryland legislature has enacted energy policies that are clearly not working. Maryland has implemented a string of misguided energy policies most notably the Renewable Portfolio Standard (RPS) in 2004. The RPS arbitrarily mandated that 14% of our energy production must come from solar, forcing us to sacrifice our economic prosperity, livelihoods an irreplaceable land for the sake of a negligible reduction in carbon emissions.

The mandate fails to take into account the fact that climate change policy is a collective action problem meaning any real success in lowering emissions depends on global cooperation. As the US and neighboring states delay meaningful reductions, Maryland's already minuscule contribution becomes even more irrelevant. Meanwhile real solutions remain sidelined while the solar industry and its allies reap the financial rewards.

Senate President Ferguson introduced SB-0931 with the promise to "spur immediate growth in renewable energy and storage deployment to strengthen our distribution grid... and lower electricity bills for low-income Marylanders." This is wishful thinking.

The massive land grab in this bill will not reduce rates for low-income Marylanders nor will it make energy more reliable. While the marginal costs of solar may be lower, solar production is intermittent and can only function in a system balanced by other providers which makes Maryland vulnerable to astonishingly high rates.

The claim that batteries are the solution to solar's intermittent production belies the fact that most long life batteries today have only enough storage capacity for 6-8 hours. The batteries are huge and their footprint will destroy even more land and add to the cost of energy.

The bill fails to address the huge costs and disruption associated with strengthening our distribution grid. Costs to upgrade transmission lines will be permanently built into rate payers utility bills. Higher energy costs will drive businesses out of the state while allowing hundreds of millions of solar panels on thousands of acres of land will destroy the \$82 billion dollar agricultural economy.

Giving wealthy out-of-state solar companies tax breaks while the state is experiencing a deficit of more than \$3 billion, much of which will be passed on to counties as well as residents, makes no sense and will further stagnate our struggling economy. Landowners are already deluged with offers from solar companies on a daily basis and yet this bill limits taxes on these massive projects when the state is eliminating countless programs such as Project Open Space which includes the Maryland Land Preservation Funds.

As they open the floodgates of unbridled development in rural Maryland, Senator Feldman and Delegate Wilson claim the Renewable Energy Certainty Act "will deploy solar generation and battery storage by removing unnecessary roadblocks." I guess they consider those of us testifying against this senseless bill roadblocks. I am not insulted, rather I am proud to stand up for our land, our communities, our way of life and against giving our resources away to out-of state solar companies.

I urge you to give an unfavorable recommendation

Judy Gifford St. Brigid's Farm 12246 Locust Grove Road Kennedyville, MD 21645

Position Unfavorable HB1036 & SB0931_JY+map 2.26.2 Uploaded by: Julie Young

Position: UNF

Position "UNFAVORABLE" to HB1036 / SB0931

OPPOSTION to: Proposed 22 Acre Solar Farm on Pfeffers Road - Kingsville, MD 21087

Hello Legislative Team; Delegates Kathy Szeliga & Ryan Nawrocki, Senator J.B. Jennings

I am sending an urgent plea for help from the concerned neighbors on Pfeffers Road in Kingsville, MD 21087 (Baltimore County - 7th district, Julie & John Young)

<u>I specifically included Delegates Terri Hill, Sheila Ruth & Jen Terrasa</u> as they are sponsoring House Bill - "MD HB878 - Dep't of Environment - <u>Protection of Vernal Pools</u>. Delegate Terri Hill also sponsored a similar bill in 2024 - HB729 that did not make it past the 1st Reading Stage.

We are battling a proposed 15-Acre Solar Farm that is to be built right up against our homes here on the west side of Pfeffers Road. One neighbor's home (Doug and Kalinda Hooper) will be surrounded on 3 sides by this proposed solar facility, with the fourth side fronted by an already existing solar farm across our narrow road in front of their house. The already existing large solar farm on the east side of Pfeffers Road was built about 8 years ago on a cleared, agricultural land tract - you can see this existing Solar Array between Raphel and Bradshaw Roads from I-95. We have also learned that they will be expanding this existing Solar Farm to double in size and take up the entire farm tract. Furthermore, there is already another solar farm slated to be built at the end of Dowell Lane, the street directly behind us, also on an already cleared, agricultural land tract.

This proposed solar array on Pfeffers Road will require the destruction of at least 15 acres of a 22 Acre plot of old-growth forested wetlands, complete with vernal pools & draining into a vibrant stream that directly feeds the Gunpowder River, only a couple miles away. It will completely box our neighborhood in by multiple solar farms in all directions. Why is this allowed to happen in such a beautiful, rural setting like Kingsville? I may understand placing Solar Farms on already cleared FARM land. But I can see no reason to clear and destroy 15 acres of old growth forest and wetlands to place one. Why do we have a "greenspace" initiative in the State if, on the backside, we are willing to destroy natural greenspace for these solar farms? Especially in a residential area where we pay very high property taxes?

This forested woodland is my favorite part of my home in Kingsville. I treasure all the woodland creatures, especially the frogs, toad, and salamander species that breed only in these vernal pools and wetlands in those woods every spring. The largest vernal pool is located next to me, between my and my neighbor's, Doug Hooper, homes and will be decimated as the design for the solar array goes directly over it. This large vernal pool, and other smaller vernal pools in the line of fire from this proposed solar array, literally teem with life and send up a chorus of sound every spring.

I cannot believe that Baltimore County will stand by and allow a neighborhood to be completely taken over by Solar Farms. We are hardworking, tax-paying people who deserve better than for our local Government to allow this to happen and completely disregard its citizens whose lives and homes will be severely and directly affected by these hulking solar farms. Pfeffers Road is very narrow, with one way in or out. To clear that 15 acres of forest will essentially require a logging operation, complete with massive excavators, large cutters, dump trucks, etc. How is our small, rural, residential road supposed to handle that type of disruption? We have families with small children that will be at risk from this industrial operation. Currently, the Kingsville Elementary school bus stop for the kids is at the intersection of Bradshaw Road, Dowell Lane and Pfeffers Road. This public-school bus stop is directly across from St. Stephen's Catholic Church and School, which

adds to the problematic traffic safety concerns for both the public and private school children at that intersection. This will be an extremely dangerous place for small, school-age children and motorists when huge, industrial scale excavating machines and trucks start to clear and destroy the forest and haul the trees away to make way for the solar farms proposed on both Pfeffers Road and Dowell Lane.

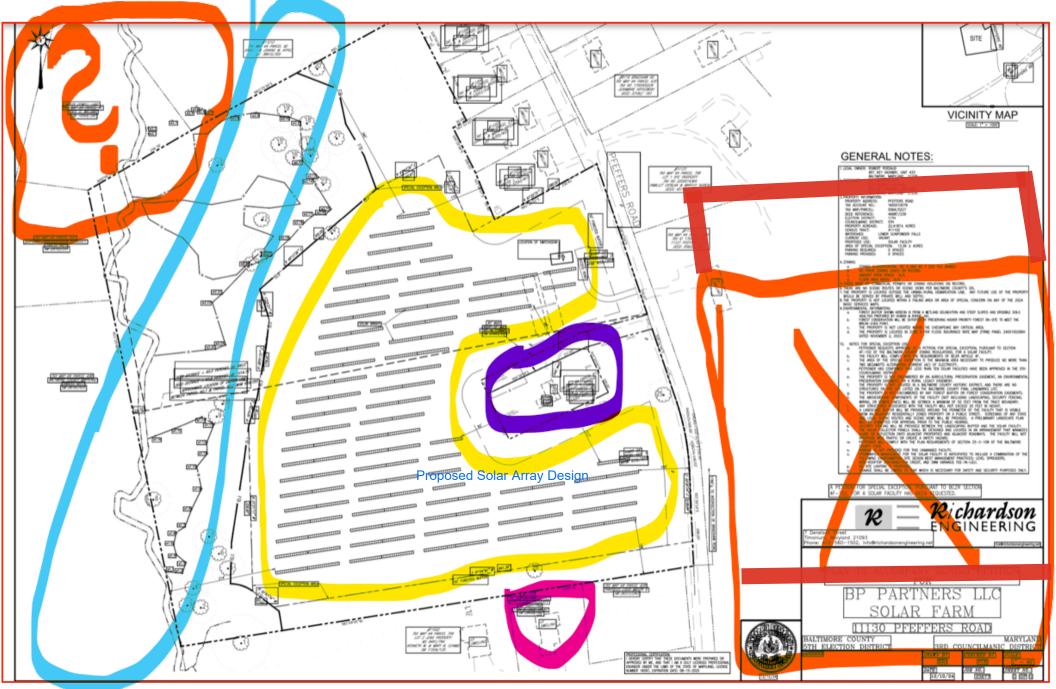
I am so sad that this is happening to myself and my neighbors' beautiful, forested neighborhood that backs up to Mt. Vista Park. Wouldn't it make more sense to erect this type of Solar Farm on the parking lot surrounding White Marsh Mall, similar to how CCBC Essex's campus has done? A large plot of pre-existing cleared land that would serve a double function as not only a solar farm, but would provide semi-covered parking for customers? Or below the existing power lines that run beside Mt. Vista Park, directly behind our homes at the end of Dowell Lane? There would be no need to destroy forested wetlands, if these solar arrays were erected on property already designated and structured with BGE power line installations? Either alternate location would be a win for Baltimore County and the homeowners on Pfeffers Road who are already over-burdened with these Solar Farms around us.

I understand that the owner of the property has rights to purposing his land. But where do his rights end, when his planned actions directly and negatively affect those neighbors bordering his land? The owner, Bob Persaud, does not live here and so he will not have to deal with any of the industrial logging disruption, construction havoc, or ugliness and destruction that the solar farm will cause. It appears that Persaud's motive for this solar farm is pure ROI for his purchase of this 22 acres that he could only build one house upon, if that, due to the clay base that fails to perk for septic. He intends to pursue the solar farm, regardless of the harm to the community or the forest wildlife fauna. How is this even remotely fair to all of us on Pfeffers Road who live here and oppose this? Why is it ok to allow us to be surrounded on all sides by these solar farms? It is the duty of our elected officials in the State and Federal legislature to stand up for us on issues like this, and not to simply bow down to the greed motives of one man and BGE.

It is not fair to try to solve Maryland's energy crisis on the backs of the residents of Pfeffers Road! The plan needs to fairly distribute these Solar Farm projects across the entire district, not cluster them all within one neighborhood. Baltimore County and Maryland also need to tread cautiously to preserve the existing forests we have within our suburbs and not destroy the vernal pools that the amphibian creatures need for survival. Are we willing to accept the possibility that future generations of children will have to travel to remote areas of Maryland or to another state entirely to hear the croak of a frog or to catch a toad or salamander? Extirpation, or local extinction, of these species is a real possibility if we continue to ruthlessly destroy critical habitat.

We have already reached out to our Baltimore County Councilman, David Marks, about this. He is helping us navigate this crisis. But we need our Maryland State representatives to get behind us too! We need you to support, advocate and show up for us - the people you represent - to block this solar farm plan by voting against HB1036 and SB0931!

Julie & John Young 11024 Pfeffers Road Kingsville, MD 21087 443-449-0255



Yellow outine - Proposed Solar Array Design

Red outline with a "X" - already existing Solar Farm across the Pfeffers Raod on agricutural tact - can see from I-95 - slated to double in size Red outline with a "?" - already approved Solar Farm on Dowell Lane - which is directly behind Pfeffers Road

Purple outline - our neighbor's house on Pfeffer's Road that will be completely surrounded by Solar Arrays if this is approved.

Blue outline - existing BGE "Iron Maiden" Power Lines that run directly behind Pfeffers Road - this may be a future location of Solar Array Farm Pink outline - my house - Julie Young - 11024 Pfeffers Road, Kingsville, MD 21087: Solar Farm to the left & diectly across the road from us.

HB1036-SB0931.pdfUploaded by: Kalindi Hooper Position: UNF

I am writing to express my strong opposition to HB1036 and SB9031.

While I fully support the development of renewable energies, I believe it is essential that the implementation of these projects includes full input from locally elected government officials and departments. Our local county government is the most directly connected to the community and its needs.

Local neighborhoods should have the ability to hold their elected officials accountable for projects that impact their surrounding land. These decisions should not be made solely by officials who are not directly connected to the affected communities.

Thank you for your time and consideration.

Sincerely, Kalindi Hooper 11122 Pfeffers Rd Kingsville MD 21087

SB0931-OPP-Katherine Kraszewski-Mason Farms Produc

Uploaded by: Katherine Mason Kraszewski

Position: UNF

ORAL Testimony - 2 minutes

Mason Farms Produce LLC

February 28, 2025

SB0931

In OPPOSITION

Good afternoon. My name is Katherine Mason Kraszewski and I am a fifth-generation, certified organic farmer in Queen Anne's County. Our farm specializes in grains and vegetables, and for the past 125 years, my family has lived, worked, and thrived on the same tract of land.

The bill being debated today represents a direct infringement on the rights of farmers to manage their own land. It must be our decision, and our decision alone, as to what our fields are used for, whether it's growing crops, raising livestock, or pursuing alternative energy solutions that benefit us. While solar energy is an important renewable resource, forcing us to abandon productive agricultural land for large-scale solar projects would ruin our livelihoods, disrupt our food production, and negatively impact our rural economies.

To be clear, I do understand the benefits of solar energy. Our farm installed solar panels a decade ago, and for most of the year, that energy takes care of our operation. However, it was <u>our</u> decision. It was not forced upon us in any way.

Many family farms operate on tight margins, and they rely on the use of all their land for agricultural activities. A bill that limits farmers' rights would inevitably diminish their ability to continue farming or even drive them out of business. And once our farmland is gone, there is no way to get it back.

The dedication and investment it takes to earn a living in the agricultural industry is no small feat. Rather than forcing farmers to give up control over their land for solar energy projects, the bill should encourage voluntary and mutually beneficial arrangements. To put it simply, do not let our farms and rural communities suffer and become obsolete at the hands of this bill. Thank you.

HB1036- Written Testimony-Opposition.pdfUploaded by: Kimberly Doran Lyons

Position: UNF

<u>Prepared Testimony of Kimmi Doran Lyons</u>

Before the House Committee of Economic Matters

Hearing on: HB1036 Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

February 28th, 2025

Chairman Wilson, Delegate Wilson and Members of the Committee,

My name is Kimmi Doran Lyons, and I help run my family farm Highview Farms which is a 500-acre grain and hay operation and beef farm of 170 head. I also serve as the Maryland Farm Bureau District 4 director representing Harford, Baltimore and Cecil counties. Finally, I am the Agricultural Business Development Associate for Harford County.

I strongly urge you to oppose HB1036, as Maryland has lost thousands of acres of farmland each year. This bill has potential to take even more farmland. Overriding the local or county zoning laws to approve solar energy projects would take the power from individual counties to determine whether the land is suitable for solar energy.

Solar on farmland is a huge threat to our food security in the state of Maryland. County governments should be allowed to determine what is best for their county and citizens. For example, my family rents 50% of our farmland, most of which is owned by out-of-state citizens. If a solar company offers those owners more money than what the land is worth, they would be tempted to break our lease and incorporate solar on the property. This would cause us to lose land in current production and must decrease our cattle herd. The meat we raise is sold locally to our community and local restaurants. This would force the demand for food supply to the large retail grocers and decrease the purchases of locally grown products.

I put a lot of faith in my county government and elected officials to put the needs of the county first and foremost. In my career I represent the 614 farms here in Harford County and help them to be economically successful, this would be a major setback for our farmers to have access to affordable farmland.

Farmers deserve to have a voice in legislation to continue feeding and clothing our communities.

Thank you for your consideration.

Kimmi Doran Lyons

TESTIMONY.pdfUploaded by: Kristen Nickerson
Position: UNF

Senator Brian Feldman, Chair
Delegate C.T. Wilson, Chair
Members of the Senate Education, Energy and the Environment
Committee & House Economics Matters Committee

RE: SB0931/HB1036 Position: **OPPOSED**

Dear Senators and Delegates,

My name is Kristen Nickerson. I am a sixth-generation farmer in Kent County where we raise grain, vegetables and livestock. Every day I tend to the land and the livestock with the utmost care, in hopes that I leave it to my children in better condition than when I started. Our farm, like so many others, is not just a piece of property—it's our home, our livelihood, and our legacy. It provides food for our community and beyond, it provides incomes for multiple families, it provides satisfaction of a good day's work and it provides hope for our future generations to continue on. The passage of SB0931/HB1036 would be devastating to my family farming business and agriculture in Maryland as a whole.

County and local governments have implemented zoning and land use ordinances that reflect what their tax paying residents desire. Often the residents themselves are involved in the writing of such documents so it truly represents what the local residents want. The Renewable Energy Certainty Act will preempt all county and local jurisdictions and allow the PSC and Solar developers to completely upend the plans that are in place to site sprawling, unsightly and unreliable solar panels all over the once productive farmland of Maryland.

The Renewable Energy Certainty Act has only one thing certain about it - and that is it will cripple the #1 industry in the state of Maryland. This unparalleled government overreach shows complete disregard to the very people that provide food security for the residents of this state, country and world.

I strongly urge you to give SB0931/HB1036 an Unfavorable recommendation.

Kristen Nickerson

ForeverMD.SB931_final (1).pdf Uploaded by: Kristin Kirkwood



Enhancing and Advancing Land Conservation

Committee: Senate - Education, Energy and the Environment; House - Economic Matters

Testimony on: SB931/HB1036 "Renewable Energy Certainty Act"

Position: UNFAVORABLE

Hearing Date: February 26, 2025

Dear Chair and Committee Members:

Forever Maryland represents Maryland's land trust community. Local land trusts are valuable partners in the efforts to preserve the most important farms, forests and ecological areas in the state. We work side by side with state and local government to reach the goal of permanently preserving 40% of the state by the year 2040.

On behalf of Forever Maryland and more than 20 affiliated local land trusts, we are writing to express our strong opposition to the Renewable Energy Certainty Act (SB931/HB1036). The bill virtually eliminates local authority over the siting and taxation of solar energy projects, with permanent consequences for Maryland's largest industry – agriculture.

As Maryland strives to transition to renewable energy, it is essential that we also respect local control and ensure the protection of vital resources, including irreplaceable farmland and forests. Marylanders should not be forced to choose between reducing greenhouse gas emissions and the future of agriculture. Thoughtful and vigilant local planning is the best way to allow both to coexist.

Allowing large-scale solar projects to be sited on agricultural land without local oversight could lead to the irreversible loss of productive farming areas. These lands are economic and environmental engines - providing jobs, food, habitat, essential ecosystem services, and more – and they must be preserved for future generations.

Commercial solar installations should not be permitted on preserved land. Further, when these energy installations are permitted on unpreserved farms and forests (as opposed to built infrastructure or brown-field sites), the solar developers should be required to pay a mitigation fee designated for land preservation, similar to how the Real Estate Transfer Tax currently functions.

By removing local control over these important issues, SB931/HB1036 undermines the ability of local governments to ensure that solar projects align with the best interests of their constituents and adhere to state-mandated Comprehensive Plans.

Many rural government leaders are farmers themselves, with deep generational knowledge of the land and the local economy. Their expertise should be leveraged—not ignored—when making

decisions about where solar projects should be located. These leaders understand which lands are most suitable for solar development and which should be preserved for agricultural production. Removing their ability to guide solar siting decisions risks placing projects in inappropriate locations that could threaten the long-term viability of local food production and rural economies.

Local governments can provide vital information to assess the impacts of solar projects on both the environment and local economies. Removing their authority to regulate and tax these projects risks undermining the ability of rural governments to ensure that development aligns with the needs of their communities and adhere to state-mandated Comprehensive Plans. Further, it deprives communities of necessary resources that come from taxing such projects, which are critical for funding local services.

Maryland's land trust community respectfully urges the committee to oppose SB931/HB1036 "Renewable Energy Certainty Act". Rather than eliminating local authority, we ask Maryland to work with local jurisdictions to create a framework that allows for clean energy development while safeguarding farmland and preserving local communities.

20250228 HB 1036 Public Utilities Generating Stati Uploaded by: Larry Porter



JAMES TRAVIS BREEDING, PRESIDENT LARRY C. PORTER, VICE PRESIDENT NORMAN FRANKLIN BARTZ, III., COMMISSIONER 109 Market Street, Room 123 Denton, Maryland 21629

House Bill 1036

Public Utilities—Generating Stations—Generations and Siting (Renewable Energy Certainty Act)

Position: UNF Date: February 28, 2025 To: Economic Matters

On behalf of the Caroline County Commissioners, we wish to express our strong opposition for House Bill 1036 Public Utilities—Generating Stations—Generations and Siting (Renewable Energy Certainty Act), While we recognize the importance of renewable energy, this bill removes local authority over solar development and could lead to unchecked utility-scale solar expansion on prime agricultural land. It undermines the zoning protections we've put in place to balance solar growth with farmland preservation and shifts critical land-use decisions away from the communities they impact the most.

Caroline County has carefully developed zoning regulations (Ordinance #2017 and 2017-2), which were adopted in 2017, to ensure responsible solar development while preserving our rural character. These regulations include:

- A 2,000-acre limit on commercial solar projects to prevent excessive loss of farmland.
- Strict zoning requirements that allow solar projects only in specific districts (R Rural, C-2 General Commercial, and I-2 Light Industrial), subject to Special Use Exceptions and Site Plan Approval.
- Prohibitions on solar projects in Transferable Development Rights (TDR) receiving areas and on land under preservation easements to protect designated farmland.
- 200-foot minimum setbacks from property lines and roads to maintain rural aesthetics and mitigate impacts on neighboring properties.

HB 1036 undermines these local protections by:

- Stripping counties of zoning authority over large-scale solar projects, allowing the state to dictate land use.
- Forcing counties to fast-track approvals for solar projects that meet state-mandated siting criteria, eliminating meaningful local oversight.
- Granting automatic tax exemptions for solar projects, which could reduce county tax revenue for essential services.
- Shifting financial risks to counties by letting the state dictate decommissioning plans for aging solar farms.

In addition to our concerns regarding solar siting, HB 1036 fails to address the increasing deployment of large-scale battery energy storage systems (BESS), which currently lack sufficient local and state regulation. These battery storage facilities, often paired with solar farms, pose significant safety hazards and create land-use conflicts that cannot be ignored.

- 1. Fire, Explosion, and Toxic Hazards
 - Lithium-ion battery storage systems have been linked to thermal runaway incidents, leading to fires that are difficult to control and may burn for hours or even days. Unlike conventional fires, battery fires release toxic fumes and require specialized firefighting techniques that most local fire departments are not yet trained or equipped to handle.
 - If a battery fire occurs, it could lead to the release of hazardous gases such as hydrogen fluoride, which pose serious health risks to nearby residents and first responders.
 - Leaking battery components could contaminate groundwater and soil, impacting local farms and water supplies.

This bill directly conflicts with Senate Bill 478, which rightly affirms that local governments should have the final say on solar siting decisions. Caroline County is not opposed to solar energy—we already permit commercial solar power within a structured, locally controlled framework. Taking away local input and forcing counties to accept large-scale solar projects without zoning oversight will undermine farmland preservation, impact rural communities, and favor developers over residents.

We urge you to oppose HB 1036 and protect local control over land-use decisions. If you would like more information on how this legislation would impact Caroline County, we would be happy to discuss it further.

Sincerely,

J. Travis Breeding, President

Unfavorable SB0931_HB1036.pdf Uploaded by: Lauren Daffin Position: UNF

February 25, 2025

The Honorable Brian Feldman Chair, Education, Energy, and the Environment Committee Maryland State Senate 2 West Miller Senate Office Building Annapolis, MD 21401

The Honorable CT Wilson
Chair, Economic Matters Committee
Maryland House of Delegates
231 Taylor House Office Building
Annapolis, MD 21401

Re: Public Utilities – Generating Stations – Generation and Siting (Renewable Energy Certainty Act) - Letter of Opposition

Chair Feldman and Chair Wilson,

Please accept this letter as part of the testimony submitted for your public review of the Renewable Energy Certainty Act, as set forth in 2025 Senate Bill 931 and House Bill 1036.

Chair, and members of the committee, my name is Lauren Daffin. First of all, I would like to thank you for this opportunity to share my strong opposition to Senate Bill 931. I am not a farmer, but I come from generations of farmers. I have inherited their incredible work ethic, resilience and respect for agriculture. I am not a farmer, but farming has played a remarkable role in who I am today. Farming also plays a remarkable role in the state of Maryland and our local communities. I am not a farmer, but I'm hoping that makes this testimony even more meaningful. I am now a high school Social Studies teacher. I teach American Government to sophomore students, and today I took off work to lead by example and demonstrate the civic responsibility and engagement that I encourage my own students to embody. In government class. I teach my students that legislators should reflect the values, concerns, and needs of their constituents when making decisions. Your primary duty is to serve the people and act in our best interest. Your primary duty is NOT to pass the greatest land grab in our state's history. Your primary duty is NOT to ensure the permanent destruction of Maryland's farmland. Your primary duty is NOT to act in the best interest of solar developers whose main concern is profit and control. Your main concern should be preserving Maryland's largest economic sector, which is farming and agriculture. If our cherished farms are replaced with solar power, this will result in irrevocable damage to Maryland's small-town economies and rural communities. If our cherished farms are replaced with solar power, this will result in irrevocable damage to the lives of farmers throughout our state and people like me-who might not ever get a chance to experience life on a farm if they are replaced with large-scale solar projects.

The Renewable Energy Certainty Act is unacceptable and inexcusable. County zoning laws exist to reflect the needs, priorities, and concerns of local communities. Overriding these laws will irrevocably silence residents' voices regarding farming operations and land-use decisions that directly impact them and the agriculture industry in the state of Maryland as a whole. Local governments carefully plan zoning laws to balance agricultural, residential, commercial, and industrial needs. State interference will lead to far-reaching conflicts with existing land use and farming operations. In addition, allowing the state government to override local zoning laws for solar projects could set a precedent for other types of state interference, weakening local governance and decision-making autonomy. While you may think expanding solar energy is essential for sustainability, I emphatically urge you to recognize and consider the significance of opposing this bill. As your constituent, I urge you to take ethical action in your decision making. I urge you to oppose Senate Bill 931. Please carefully consider our public concerns and heartfelt testimony today, and thank you again for this opportunity to share my opposition to Senate Bill 931.

Respectfully submitted, Lauren Daffin

STOP SB931_HB1036.docx.pdfUploaded by: Lillian Howard

Senator Brian Feldman, Chair Delegate C.T. Wilson, Chair Members of the Senate Education, Energy and the Environment Committee & House Economic Matters Committee

Dear Senators and Delegates,

I was born and raised on my family's farm along the Eastern Shore of Maryland, and have seen the land around me get developed consistently throughout my life, and each new shopping center, solar field, sports complex, and cookie-cutter neighborhood that takes over rich soil and open fields breaks my heart.

Let the counties decide for themselves what development is best for them. How can someone at the Public Service Commission in Baltimore, who may have never felt the healing powers of being out in nature and hearing the birds rather than the deafening sound of a highway or the polluted view of skyscrapers or solar fields, decide what is best for rural communities who live and breathe agriculture. The Eastern Shore of Maryland, and Maryland in general thrive off of farming, it is not only how they make a living, but it is their way of life. Taking away locals' voice in deciding what gets taken over by solar fields and what stays farmland is unconstitutional and inhumane, in my opinion.

If you can't see it from an agricultural point of view, look at it economically: agriculture is Maryland's largest commercial industry, and employs thousands of Marylanders, contributing billions of dollars to the state's economy. Taking away farmers' land, means taking away the economic growth farming provides to the state.

Without farmers, you wouldn't have food to eat. If you take away their land, you are also taking away food from your table and thousands of others' while also hurting the state's economy.

Farms make Maryland the incredible state that it is, please do not take away our greatest asset.

Why not redevelop the blighted areas in already developed towns and cities, instead of taking over hundreds of thousands of acres of our productive farmland and food supply?

Sincerely, Lillian Howard Cecil County, MD

25 MGPA_HB1036_SB931.pdf Uploaded by: Lindsay Thompson



Maryland Grain Producers Association 118 Dundee Ave, Chester, MD 21619 Lindsay.mdag@gmail.com (p) 443-262-8491 www.marylandgrain.com

Date: February 29, 2024

Senate Bill 931 – House Bill 1036 - Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Committees: Education, Energy and Environment

Economic Matters

MGPA Position: Opposed

The Maryland Grain Producers Association (MGPA) serves as the voice of grain farmers growing corn, wheat, barley and sorghum across the state. MGPA opposes Senate Bill 931/House Bill 1036 as drafted.

Specifically, MGPA is concerned with the bills prohibition of local planning and zoning authorities from prohibiting solar energy development. We interpret this to mean that counties could not adopt comprehensive planning and zoning plans that allow for solar in certain areas while prohibiting it in other and therefore preempt localities from preserving prime and productive farmland. Additionally, we are concerned with the provision exempting commercial solar installations from personal and real property taxes which would put further strain on county government's already dire fiscal conditions in many cases.

During the interim, a working group including agricultural interests, counties, government agencies and solar developers met and thought we had come to agreement on many items. One of those items was updating the definition of Agrivoltaics to agricultural production activities co-located with solar and done in a manner that the land would remain in agricultural production after the solar was decommissioned. That definition was not included in this bill but would be:

- (2) "Agrivoltaics" means the simultaneous use of areas of land, which shall be maintained in Agricultural Use Assessment as determined under Title 18 and the Maryland Assessment Procedures Manual, in consultation with the Maryland Department of Agriculture, for both solar power generation and:
- (i) raising grains, fruits, herbs, melons, mushrooms, nuts, seeds, tobacco, or vegetables;
- (ii) raising poultry, including chickens and turkeys, for meat or egg production;
- (iii) dairy production, such as the raising of milking cows;
- (iv) raising livestock, including cattle, sheep, goats, or pigs;
- (v) horse boarding, breeding, or training;
- (vi) turf farming;
- (vii) raising ornamental shrubs, plants, or flowers, including aquatic plants;
- (viii) aquaculture;
- (ix) silviculture; or
- (x) any other activity as determined under Title 18 and the Maryland Assessment Procedures Manual in consultation with the Department of Agriculture as an agricultural activity, except pollinator habitat and apiaries.

When the expanded Renewable Portfolio Standard passed in 2019, 14.5% of the state's energy be produced by instate cited solar energy. The land use of choice for solar developers seems to be agricultural land as it is available in

large, flat parcels and is therefore the least expensive site for ground mounted solar. It is unclear exactly how many acres of farmland will be taken for solar development. Estimates in various reports range from 30,000 to 130,000 acres. This would represent up to 10% of Maryland farmland.

Maryland farmland and farmers are already under immense pressure from development and land conversion. From 2017 to 2022, Maryland lost 12,000 acres of agricultural land. Since the RPS was first passed in 2002, Maryland has lost nearly 100,000 acres of agricultural land. This has lasting impacts on farm families, food production and the environment.

Counties need to have the authority to thoughtfully determine where industrial solar generation best fits within the landscape of each unique county. This is not to say that counties should be able to prohibit solar on certain land uses but it is reasonable to allow counties to protect the agricultural and rural fiber of their counties while allowing solar in other areas.

Thank you,

Lindsay Thompson

Executive Director

HB1036 Opposition.pdfUploaded by: Lory Ebron Position: UNF

COMMISSIONERS FOR SOMERSET COUNTY

11916 SOMERSET AVENUE, ROOM 111 PRINCESS ANNE, MARYLAND 21853 TELEPHONE 410-651-0320, FAX 410-651-0366

COMMISSIONERS
CHARLES LAIRD, PRESIDENT
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ELDON WILLING
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COUNTY ADMINSTRATOR RALPH D. TAYLOR DEPUTY COUNTY ADMINISTRATOR ERNEST J. LEATHERBURY, JR. COUNTY ATTORNEY KIRK G. SIMPKINS

February 26, 2025

Delegate C.T. Wilson, Chair Economic Matters Committee 230/231 Taylor House Office Building Annapolis, Maryland 21401

RE: Opposing HB1036 – Public Utilities – Generating Stations – Generation and Siting (Renewable Energy Certainty Act)

Dear Chairman Wilson,

I am writing you as the President of the Board of County Commissioners for Somerset County regarding Maryland House Bill 1036 to express our strong opposition to this bill. Effectively, this bill undermines the ability of our county has to regulate renewable energy as we believe is in our best interests for our county.

Our Planning Commission and Department of Technical and Community Services has done extensive research and conducted numerous meetings over the past 5 years for the siting and regulation of renewable energy in Somerset County, including a solar acreage limit of 1,800 acres, of which approximately 1,300 acres are already utilized by solar energy facilities.

It must be noted that aside from our smaller land size, our county is also disproportionally affected by the increasing Critical Area development requirements and the Critical Area itself. Passing this bill would not only place an undue and unfair hardship on Somerset County as a rural county, but also defeat all of the work done by our county to regulate and control renewable energy as we see best for our county.

Respectfully,

Charles Laird, President

Board of County Commissioners for Somerset County

Cc: Delegate Otto

HB1036-SB0931_Keegan-Ayer_OPP.pdfUploaded by: M.C. Keegan-Ayer



M.C. Keegan-Ayer, District 3 Frederick County Council

Frederick County Council Winchester Hall 12 East Church Street Frederick, Maryland 21701 February 28, 2025

Chairman Brian Feldman Education, Energy and Environment Committee Maryland Senate

Chairman Wilson Economic Matters Committee Maryland House of Delegates

RE: HB1036/SB931 - OPPOSED

Chairman Feldman, Chairman Wilson and Honorable Members:

Thank you for taking to time to hear from us today. I am M.C. Keegan-Ayer from Frederick County and the First Vice President of Maryland Association of Counties. I am here today to **OPPOSE** these bills and to express specific concerns MACo has about bills HB1036/SB931, as currently written. MACo President Jack Wilson and I sent a letter in February to the Chairs of these committees outlining the concerns of the MACo members about these two bills.

Our MACo Legislative Committee, which has representatives from all 24 jurisdictions across the state, voted unanimously to oppose these bills. On that point I need to be clear, to have a unanimous vote to oppose legislation as critical as this, is highly unusual. Normally on an issue of this importance, the members are able to see their way to a "support with amendments" position, which then allows the MACo staff the flexibility they need to work with stakeholders develop compromise language.

Let me also be very clear, we did NOT hear from counties that they are opposed to renewable energy sources or to large-scale utility sized solar arrays – counties need to be able to respond to the concerns of our mutual constituents. Residents want to have a say on livability factors and the "look, smell, and feel" of the communities they call home.

President Wilson and I have met with the leadership of all the counties across the state about this specific issue – the need to embrace green, renewable energy sources, to better meet the power

needs of our constituents as the state transitions away from fossil fuels. In every county the single greatest issue was good neighbor issues, livability issues – how bad actors have negatively impacted the "look, smell and feel" of the communities. One of the primary responsibilities of local elected leaders is to determine how our county grows and what that growth will look like. Our residents, our mutual constituents, want to have input into what their community will look like as it grows – and these bills will upend that ability.

In addition, at a time when all counties are trying to preserve green space, open space and farmland, to meet other state requirements for land/farm preservation, as well as ambitious greenhouse gas and emissions goals, placing solar arrays on farmland must be well-planned so we are not losing the benefits of the carbon-sink capabilities of greenspace and open farmland. And this is where local control becomes so important. Local officials are the most informed about local lands, land benefits and land values. Protecting the best soils, protecting the most productive farmland ensures that critical food production can continue, and can continue simultaneously with the development of these large utility scale solar fields, while continuing to protect our environment. Local control can and will allow this to occur with the necessary input from the residents. It can be a win for all.

MACo has been a committed partner, working with all stakeholders throughout this process to ensure the correct balance of all our needs. We remain at the table, which is why we are here today – to work in collaboration with the Chairs and Members of these committees and the House and Senate to develop compromise legislation where all our constituents feel that their needs and their concerns are being heard and given due consideration.

I appreciate your time this afternoon and thank you for your attention.

Sincerely,

M.C. Keegan-Ayer

SB931_HB1036 Renewable Energy Certainty.pdfUploaded by: Mark Debnam

Senator Brian Feldman, Chair

Delegate C.T. Wilson, Chair

Members of the Senate Education, Energy and the Environment Committee &

House Economic Matters Committee

February 26, 2025

RE: SB0931/HB1036 Renewable Energy Certainty Act

Position: **Opposed**

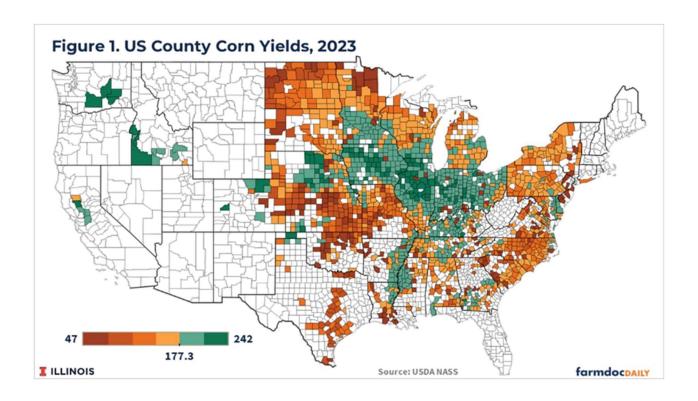
Dear Senators and Delegates,

We are seventh-generation livestock and grain farmers in Kent County, Maryland and want to carry on our family's legacy into the future. We oppose SB0931/ HB1036 as it would allow state government to override local or county zoning laws to approve solar energy projects. That puts our state's finite farmland at risk. Every year, Maryland is already losing thousands of acres of farmland, and this heavy-handed legislation has the chance to take even more out of production. Since 1950, only 75 years ago, Maryland has lost 2.1 million acres, half of its

farmland.

Estimate of the acres needed for solar production to reach the state's 14% renewable fuel carve-out for solar energy range from 30,000 to 100,000 acres. While others argue that this is an insignificant percentage of Maryland's 1.9 million acres of farmland, we disagree. Even though the pace of the farmland loss has slowed in recent years, farmland acres are still decreasing. At what point will too many acres be lost? Maryland still faces development pressure from suburban sprawl and low-density rural development. No more farmland is being created. With fewer acres to farm, it is even more difficult for young farmers like us to compete for farmland to rent or purchase. Additionally, this bill seems to be at odds with our state's historic farm preservation goals as Maryland has consistently ranked as the top 2 or 3 states in the U.S. for Agricultural Land Preservation programs.

The Eastern Shore of Maryland with its lower population density, relatively flat terrain and vast open acres stands to lose a higher percentage of acres from this bill. Solar panels should not be installed on prime and productive farmland. As you can see from the map below representing national corn yields by county, Maryland's Eastern Shore has the largest pocket of highly fertile, productive land on the East Coast. The soils in this area rival the quality of soils in the midwestern corn belt and should used for its highest and best use- producing food!



All Maryland residents benefit from a strong, profitable Maryland agricultural industry. We need to maintain our farmland acres to continue to produce local, nutritious, delicious food for Marylanders. Remember No Farms, No Food.

Mark Debnam, Millington, MD

Andrew Debnam, Kennedyville, MD

Mitchell Debnam, Still Pond, MD

Economic Matters Comm Solar HB 1036.pdfUploaded by: Mark Sultenfuss

To the Economic Matters Committee:

My name is Mark Sultenfuss, and I am from Centreville, MD. We own and operate a third-generation grain and cattle farm. I am writing to express my strong opposition to SB0931 and HB1036. This bill raises significant concerns, particularly regarding its impact on agriculture.

As a lifelong farmer in Queen Anne's County, I predict the detrimental effects that large-scale solar farms will have on our productive farmland. Some may view crops as an alternative use for for open farmland, which can be repurposed for industrial or commercial use when the need arises. However, my fellow farmers and I see this differently. Converting some of the nation's most fertile farmland into power generation and battery storage for suburban and urban areas threatens the livelihood of our region.

While agricultural productivity per acre has increased over time, efficiency begins with the soil's natural potential. The soils of Delmarva are among the most productive in the country, comparable to those in Illinois and Iowa. These unique soils—composed of sand, silt, clay, and organic matter—have taken thousands of years to develop. Unlike other early colonial settlements, Delmarva's farming practices preserved these soils, maintaining their productivity to this day.

This productivity is essential to the poultry industry, which thrives on Delmarva due to its proximity to over 20 million consumers along the I-95 corridor. A broiler chicken raised here can be harvested, processed, transported to grocery stores as far as Boston, and served for dinner within 48 hours. The poultry industry is the backbone of our farm economy here, supporting both agriculture and affiliated businesses. Despite increasing urbanization, agriculture remains the largest contributor to Maryland's economy.

The unchecked expansion of solar farms would significantly reduce the land available for growing corn and soybeans—essential feed ingredients for poultry growers. While importing feed from the Midwest is an option, it would increase costs for consumers and result in a larger carbon footprint. Losing a critical mass of productive farmland would fundamentally alter the profitability and infrastructure of the poultry industry, jeopardizing the economic stability of our region.

The loss of regional farmland will have significant consequences, even for non-farmers. As locally grown food becomes scarcer, prices will rise, and the once-tranquil views of open farmland will disappear. The rural character that attracted many residents to the area will be lost. Additionally, farming supports a "pass-through" economy, where farmers' expenditures circulate within the local community. As agriculture declines, many related businesses—such as farm equipment dealers, steel fabricators, automobile retailers, farm supply stores, and insurance agencies—will also suffer.

From a conservation standpoint, vast solar panel fields provide little to no suitable habitat for wildlife, particularly once enclosed by fencing. Delmarva's iconic migratory waterfowl will lose essential overwintering grounds, along with other species that rely on these open fields during migration. Deer and wild turkeys will be displaced as fields and wooded edges disappear, while predatory birds like Bald Eagles and raptors will struggle to adapt, leading to population declines. If large expanses of farmland and woodlands are converted into solar fields, many of the region's once-thriving wildlife species could become nothing more than a distant memory.

For these reasons, I strongly oppose SB 0931 and HB 1036 and urge decision-makers to consider the long-term consequences of sacrificing agricultural land for solar development.

HB1036_MCC_Testimony.pdf Uploaded by: Marshall Cahall

February 26, 2025

To: Economic Matters Committee

From: Marshal Cahall – Chesterville Bridge Farm, LLC

RE: Opposition of SB0931 / HB1036 - Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

As a 35-year-old third-generation farmer in Maryland operating a diverse agricultural business cultivating over 2,300 acres of land, utilizing both convention and organic production systems, I submit written testimony in opposition of SB0931 / HB1036 - Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act). This legislation would place an undue burden on rural counties, Maryland Farmland, and Maryland's Agricultural Industry as a whole, as well as codify the state's ability to preempt county and local zoning laws, thereby circumventing each county's comprehensive planning process.

The state of Maryland has created a challenging energy environment by simultaneously increasing energy demand and decreasing energy supply through years of legislation and policy decisions that have changed the energy industry and outlook. It's no secret, higher energy prices are hurting businesses and state residents across the board, and we're all feeling the pain of increasing costs. Increasing energy production and working towards clean energy production are important goals, but these goals have led to high prices and now seek to threaten our rural communities, family farms, and Agriculture - our state's largest commercial industry.

SB0931 / HB1036 would take away our county's rights to decide where solar panels could be sited in their communities, take away the rights of the county to appropriately tax these commercial energy generation facilities, and change rural communities forever. Counties spend a significant amount of time and resources every few years to complete comprehensive planning that shapes the future growth and allows residents voices to be heard – this bill would circumvent that process and eliminate the input of residents. The bill will also create an unfair advantage for solar companies competing with Maryland Farmer's for access to land, which will have a cascading effect on the rural businesses that are supported by those farmers.

While I support the effort to expand clean and affordable energy production in Maryland to meet the state's growing energy demand, it cannot be at the expense of rural communities, family farms, and Maryland's Agricultural Industry. SB0931 / HB1036 is a blatant example of state government overreach that will lead irrevocable harm to our state's rural communities. I respectfully oppose SB0345 / HB1036 and urge an unfavorable report by the Committee.

Sincerely,

Marshal Cahall

Chesterville Bridge Farm, LLC

Lehmer anne

I urge you to vote no on HB1036 Renewable Energy C Uploaded by: Mary Schmid

I urge you to vote no on HB 1036 Renewable Energy Certainty Act (RECA). I believe this is an extreme overreach by State government. County representatives are more than capable of establishing location and criteria for solar farms as they do in ALL other zoning uses and issues in their county. This bill has several concerns for us as follows:

- Poorly chosen sites could have many adverse impacts on adjacent property owners. Legislation should allow sites to be chosen based on impact to all affected stakeholders in the proximity to the solar farm site which is the opposite of this Bill.
- So much money has been spent to protect environmental issues and planning for communities in order to have balanced development in the future. The State has always granted the ability to local jurisdictions to determine what uses are permitted under which circumstances in their zoning areas. This Bill seeks to override local jurisdictions that clearly know what is best for their communities/constituents and threatens their goals of long range planning.
- The State is currently supporting solar farms with tax and other incentives. When these incentives are ultimately ended and/or solar farm technology is outdated, who is going to remove the infrastructure of these sites that are in our communities, on our neighborhood streets or scenic byways. The expense will ultimately fall on the taxpayers.

- It is unfair to have representatives from other jurisdictions determining what is best as far as solar farm locations in suburban or rural communities. What may work in western Maryland or Baltimore City might not work for communities on the eastern shore of Maryland or in central Maryland counties. It's easy to approve a solar farm when you don't have to live next to it and have property values, farm land, forests, and view sheds affected by it. Local jurisdictions should have the ultimate say in what gets approved and where.

I appreciate you taking a moment to reconsider the appropriateness of this Bill.

Thank you, Mary Schmid 11022 Pfeffers Road Kingsville, MD 21087

UNF.Megan FryUploaded by: Megan Fry
Position: UNF

Senator Brian Feldman, Chair
Delegate C.T. Wilson, Chair
Members of the Senate Education, Energy and the Environment Committee &
House Economic Matters Committee

Dear Senators and Delegates,

I am writing to ask for your support in keeping our farmland secure so that we can continue to cultivate the health of our communities both locally and nationally through food production. Most take for granted that these valuable acres often sought after for development are critical for food production. If we don't continue to preserve these acres we risk losing the greatest aspect of national security, food.

My family and I share a deep connection to agriculture, we are farmers working tirelessly every day to ensure our nation's food supply. We ourselves have risked everything to purchase the land we own, not as an investment to cash in one day or to have taken out from under us by the government, but to create a legacy where future generations continue the commitment, we make in securing our nation's food supply. We are already witnessing the development encroaching on our rural areas the pressure that creates. The significant pressure we have faced in recent years has been the impact of solar companies and the offers they are making to neighboring landowners. This drives up land rents and purchase value crippling a farmers' ability to compete for productive land. We realize that the likelihood of this farmland ever returning to productive use is nearly nonexistent once solar fields are erected. SB0931 and HB1036, which would accelerate this destruction, represent the greatest single threat to Maryland farmland and agriculture in the state's history.

As I write this, I can appreciate how for those so far removed from farming it is easy to take all these implications for granted. I am sure the overall impact these bills have to where your food comes from has not once crossed your mind. So long as you walk in the grocery store and there's food on the shelves to purchase, the origin likely doesn't matter to you. I am asking that you take some time to consider what our state looks like if significant acres of our farmland disappear to solar fields and development that comes with these projects. Vesting sole authority over the siting of farmland-destroying solar and battery storage projects with the Public Service Commission in Baltimore—rather than with local communities—disregards those most directly impacted.

Preempting local zoning, imposing a one-size-fits-all landscaping plan, and eliminating the local authority to tax for these sprawling projects—despite their immense cultural and historical impacts on farming communities—is unfair and unacceptable.

Maryland farms feed our local communities, the state's urban centers, our nation, and the world. Maryland farming is a major financial engine and employer for Maryland. Please reject SB0931 and HB1036,crafted by the lobbying interests that have no regard for our precious and irreplaceable farmland. These lands should not be sacrificed for unsightly solar panels and risky, environmentally harmful battery storage units.

I urge you to give an unfavorable recommendation.

Sincerely, Megan Fry Kent County

No to Solar on our Farms.pdf Uploaded by: Meghann Liebetreu Position: UNF

Please protect and conserve Maryland's farmland. The current bill being proposed will allow more prime farmland to be removed from production. Not only will this destroy prime 1 &2 soil, the best farming soil that exists, additionally, Maryland's native wildlife could also be devastated, along with negative impacts to local waterways. It is our duty to conserve this precious land for future generations. Maryland should view this proposal as an incredible detriment to agriculture, the environment, as well as any historical archeological artifacts on the farmland.

Sincerely,

Meghann Liebetreu

OPPOSE HB1036 SB931 Renew Energy Certain Act.pdf Uploaded by: Pam Meister

Board of County Commissioners

Kenneth A. Kiler, President Joseph A. Vigliotti, Vice President Thomas S. Gordon III Michael R. Guerin Edward C. Rothstein



Carroll County Government

225 North Center Street Westminster, Maryland 21157 410-386-2043; 1-888-302-8978 fax 410-386-2485 MD Relay 711/800-735-2258

HB 1036/SB 931 – OPPOSE Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

February 18, 2025

The Honorable C.T. Wilson, Chair House Economic Matters Committee 231 Taylor House Office Building 6 Bladen Street Annapolis, MD 21401

The Honorable Brian Feldman, Chair Senate Education, Energy, and the Environment Committee 2 West Miller Senate Office Building Annapolis, Maryland 21401

Dear Chairs Feldman, Wilson and Committee Members:

The Carroll County Board of Commissioners (BoC), unanimously oppose HB 1036/SB 931 – Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act) and urge you to reconsider its implications.

The proposed mandate undermines local governance and disrupts the delicate balance between energy demands, property rights, and environmental stewardship. Carroll County has a proud, decades-long tradition of agricultural preservation—carefully protecting the land to support farmers, local businesses, and rural communities. HB 1036/SB931 threatens to dismantle that legacy, stripping away our ability to safeguard farmland and preserve our way of life.

Carroll County is already facing significant challenges with the Maryland Piedmont Reliability Project (MPRP). If the project comes to fruition, MPRP will seize over 476 acres of farmland, 125 acres of forest, and 17 acres of wetlands in Carroll County alone. The MPRP controversy has demonstrated how local concerns are often disregarded in favor of corporate and external interests. HB 1036/SB 931 will further erode the BoC's ability to advocate for residents and protect against similar risks in the future.

Without clear local benefits, BoC cannot afford another policy that shifts financial and environmental burdens to the taxpayers. While recognizing the importance of clean energy, projects must be planned, sited, and regulated with efficiency, transparency, and respect for local communities. The MPRP demonstrates how regional energy initiatives are being forced upon counties with minimal local input and authority. The Renewable Energy Certainty Act will set a dangerous precedent, enabling similar overreach for future energy projects.

Maryland must take a more thoughtful approach to renewable energy, one that does not prioritize industrial-scale solar fields at the expense of agricultural preservation and local economic development. Agriculture is the backbone of Carroll County's economy and top economic driver. Agribusiness

HB 1036/SB 931 — OPPOSE Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)
Page 2

supports jobs, bolsters local businesses, and sustains the tax base. Protecting the agriculture industry has allowed the county to maintain a strong financial standing, including a AAA bond rating. Poorly sited energy projects will jeopardize the industry that sustains Carroll County, threatening livelihoods and weakening the economic foundation for future generations.

For further context, attached is a guest column from the *Baltimore Sun*, which highlights the broader concerns surrounding MPRP—many of which are directly relevant to HB1036/SB931. These are not abstract policy debates; they are urgent, real-world issues impacting our residents, businesses, and environment.

We urge you to **oppose HB 1036/SB 931** and work with jurisdictions to develop solutions that respect local governance, protect communities, and ensure Maryland's energy future benefits all its residents.

We appreciate your time and consideration and look forward to continued collaboration.

Sincerely,

THE BOARD OF COUNTY COMMISSIONERS OF CARROLL COUNTY

Kenneth A. Kiler President Joseph A. Vigliotti Vice President

Edward C. Rothstein (COL, Ret.)

Thomas S. Gordon III Michael R. Guerin

Letter 2 SB0931 HB1036.pdfUploaded by: Patricia Langenfelder Position: UNF

Senator Brian Feldman, Chair
Delegate C.T. Wilson, Chair
Senate Education, Energy and the Environment Committee
House Economic Matters Committee

Re: SB 0931, HB 1036 Oppose

Dear Senators and Delegates,

I am writing to oppose the Renewable Energy Certainty Act. Our family farm, comprised of the 5th, 6th and 7th generations, is located in Kent County where we produce field crops, livestock and vegetables. Over the years we have worked hard to build our farm business into a successful diversified operation sustaining 7 families. We have also put much of the land we own into preservation programs in order to assure there will be agricultural land here in perpetuity.

I have participated in the development of the last three Comprehensive Plans in Kent County, knowing firsthand what the citizens envisioned for our future. I worked on the last rewrite of the Land Use Ordinance, and I have served on the Planning Commission where we implemented and interpreted those documents. Kent's vision is to keep agriculture #1, preserve our historic past, and to allow growth and development in areas served by water and sewer.

Now come SB0931 and HB1036, which will allow solar developers and the Public Service Commission to take a sledge hammer to any and all local zoning regarding the siting of solar arrays. It seems "they" know better than the locals as to what is best for their county. All of those wide open, flat fields of the Eastern Shore are so tempting to a solar developer. Who cares if a farmer will lose a few hundred acres, but it won't stop with one farm! Those fertile fields are the life blood of the farmers: good soil = good crops = good income. The loss of thousands of acres will have a devastating impact on agriculture, not to mention local economies.

Preemption of local zoning as proposed by these two bills is unfair and unacceptable, and I strongly urge an unfavorable recommendation.

Sincerely,

Patricia A. Langenfelder Grand View Farm LLC Kennedyville, MD 21645

OPPOSE HB1036 Public Utilities Taking Farmland.pdf Uploaded by: Peggy Williams

Position: UNF

HB1036 OPPOSE

Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Dear Committee Members:

I am opposed to the taking of this valuable land and prime farming land/soil for use in solar projects. This is not what the people of Maryland want. I oppose this bill because the local and surrounding community have previously benefitted from using this land for agricultural and youth education purposes. If it is taken away, we will lose a very valuable resource in Anne Arundel County.

Peggy Williams

Severna Park

HB 1036.pdfUploaded by: Randy Guy
Position: UNF

St. Mary's County Government

COMMISSIONERS OF ST. MARY'S COUNTY



James R. Guy, President Michael R. Alderson, Jr., Commissioner Eric S. Colvin, Commissioner Michael L. Hewitt, Commissioner Scott R. Ostrow, Commissioner

House Bill 1036 - Public Utilities - Generating Stations – Generation and Siting (Renewable Energy Certainty Act) OPPOSE

February 25, 2025

The Honorable C.T. Wilson, Chairman Economic Matters Committee 230 Taylor House Office Building Annapolis, Maryland 21401

RE: House Bill 1036 - Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Dear Chairman Wilson:

The Commissioners of St. Mary's County <u>OPPOSE</u> House Bill 1036 - Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act) which is being heard in the Economic Matters Committee.

We urge an unfavorable report on House Bill 1036. We do not support the introduction of this legislation and do not believe it would benefit the citizens of St. Mary's County. Thank you for your consideration as well as your attention to this matter.

Sincerely,

COMMISSIONERS OF ST. MARY'S COUNTY

James Randy Guy, President

CSMC/AB/tr T:/Consent/2025/035

Cc: Senator Jack Bailey
Delegate Todd Morgan
Delegate Matthew Morgan
Delegate Brian Crosby
Commissioner Mike Alderson, Jr.
Commissioner Eric Colvin
Commissioner Michael Hewitt
Commissioner Scott R. Ostrow
David Weiskopf, County Administrator
David Yingling, Deputy County Administrator
Buffy Giddens, County Attorney
John Sterling Houser, Deputy County Attorney

HB1036 testimony.pdfUploaded by: Renee Hamidi Position: UNF





Committee: Economic Matters

Testimony on: HB1036 "Public Utilities - Generating Stations - Generation and Siting (Renewable Energy

Certainty Act)"

Position: Unfavorable

Hearing Date: February 28, 2025

Valleys Planning Council, a non-profit that conserves land and resources, preserves historic character and maintains the rural feel and land uses in northwestern Baltimore County, urges an unfavorable report on HB1036, which would remove control over siting and developing solar generation and energy storage facilities.

For years, Maryland has struggled with the issue of solar siting. While the push for renewable energy is important, it must not come at the cost of responsible land use planning, agricultural preservation, and local authority. HB1036 would have long-term consequences, undermining local decision-making and sacrificing valuable farmland and forests without sufficient safeguards.

1. Agricultural Land Is the Primary Target for Solar Development

Solar developers prioritize agricultural land because it is relatively flat, unshaded, and inexpensive to develop. However, this comes at a steep cost—once farmland is developed, it is permanently altered. Developers argue that solar panels can be removed after 25 or 30 years, allowing the land to return to farming. But in reality, how likely is it that Maryland would choose to remove solar energy infrastructure in the future? And even if it did, how many farmers would still be available to restore the land to agricultural use?

2. Maryland Has Alternatives for Solar Siting

There are far more suitable locations for solar installations that do not require sacrificing farmland. A 2019 study by the Valleys Planning Council found that Baltimore County and Baltimore City alone have more than **30,000 acres** of optimal solar sites, including rooftops, parking lots, and brownfields. These areas would not require the destruction of active farmland or forests. Yet, HB1036 provides no guardrails to steer solar development toward these less disruptive alternatives.

3. Environmental Risks and Uncertain Long-Term Consequences

The environmental impact of large-scale solar development on farmland and forests is not fully understood. Concerns include:

- Soil degradation: Long-term solar panel coverage, topsoil removal, grading, and construction-related compaction could leave soil unsuitable for future farming. There is no strong evidence proving that land covered by solar panels for decades can return to productive agriculture as solar installations have not been around for long enough to assess the consequences.
- **Deforestation**: Clearing forests for solar development eliminates their contribution to combatting climate change. Trees act as carbon sinks, and their removal not only releases stored carbon but also eliminates



critical habitat for wildlife. Even if land were replanted in the future, it would take decades to regain lost ecological benefits.

• **Habitat disruption**: Large-scale solar installations could fragment ecosystems, threaten local wildlife, and alter natural water drainage patterns.

4. Energy Storage Projects Pose Safety Risks

Beyond solar installations, energy storage projects—such as large-scale battery facilities—introduce significant safety concerns. Just last month, California saw its fourth major battery storage fire at the same facility since 2019. It burned for five day, releasing smoke all the while. Without local oversight, these facilities could be built too close to sensitive areas, placing residents and wildlife at risk.

5. Undermining Local Authority and Community Involvement

HB1036 strips counties of their zoning and planning authority over solar projects. Many counties have been working for years to establish fair, balanced policies on solar siting. This bill would override those efforts, removing any negotiating power counties have with developers.

Additionally, developers who might otherwise be willing to compromise with local communities—such as adjusting setbacks or adding screening to reduce visual impact—would have no obligation to do so. The bill fails to provide sufficient opportunities for meaningful public engagement, leaving local residents with little say in decisions that directly affect their communities.

6. Counties Need a Seat at the Table

A county that cannot regulate or tax solar projects is a county that has lost its authority. Rather than imposing a blanket policy that disregards local needs, Maryland should work collaboratively with counties to establish guidelines that:

- Protect valuable agricultural land
- Preserve community character and environmental resources
- Encourage solar development in appropriate locations

For these reasons, I respectfully urge an unfavorable vote on HB1036. Thoughtful, balanced policy—not top-down mandates—will ensure that Maryland expands its renewable energy capacity **without sacrificing farmland, local authority, or community well-being.**

Renée Hamidi Executive Director Valleys Planning Council

optimal solar siting.pdf Uploaded by: Renee Hamidi Position: UNF







Optimal Solar Siting for Maryland

A Pilot for Baltimore County and City

Susan Minnemeyer and Emily Wiggans ChesapeakeConservancy.org

October 2020

Acknowledgments

This publication was made possible thanks to the support of the Valleys Planning Council. The authors would like to thank Teresa Moore of the Valleys Planning Council for providing valuable insight and assistance.



We are indebted to all who provided data and review feedback during the design and development of this study.

Authors

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Emily Wiggans is a Geospatial Analyst and represents Chesapeake Conservancy on the Water Data Collaborative, an initiative to support community science for water quality monitoring. She helps to manage the CIC's web mapping infrastructure and provides geospatial analysis for conservation and restoration projects.

Chesapeake Conservancy

We believe that the Chesapeake is a national treasure that should be accessible for everyone and a place where wildlife can thrive. We use technology to enhance the pace and quality of conservation, and we help build parks, trails and public access sites.

Our mission is to conserve and restore the natural and cultural resources of the Chesapeake Bay watershed for the enjoyment, education, and inspiration of this and future generations.

The Chesapeake Conservancy serves as a catalyst for change, advancing strong public and private partnerships, developing and using new technology, and driving innovation throughout our work. We empower the conservation community with access to the latest data and technology.

Conservation Innovation Center

The Chesapeake Conservancy's Conservation Innovation Center (CIC) was established in 2013 to use cutting-edge technology to empower data-driven conservation and restoration. Just as the use of technology changed the corporate world and made it more efficient, technology can do the same for the conservation movement. Through national and international partnerships, the CIC makes this data accessible for restoration professionals to practice precision conservation, yielding greater impact with less resources.



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Summary

Maryland's updated Renewable Portfolio Standard (RPS) will require 50 percent of electricity to be generated from renewable sources by 2030, with a 14.5 percent carve-out for solar energy. The Power Plant Research Program report on the RPS standard has projected that 9,000 gigawatt hours per year (GWh/yr), or 8,946 MW of installed solar capacity, will be required to come from solar energy generation by 2030, from a mix of residential, commercial, community, and utility-scale sources. Baltimore City and County could be expected to provide a portion of solar energy installations; a reasonable goal based on share of energy consumption would be for 1,967 GWh/yr of solar energy to be provided from the Baltimore region.

Maryland's current solar capacity stands at 1,250 MW, or enough energy to generate 1,258 GWh/yr of energy annually, about 14 percent of the goal to be reached by 2030. Baltimore City and County could potentially contribute a significant share of the area needed to scale up solar, but where exactly would such solar arrays be located?

In the absence of incentives for siting future solar arrays elsewhere, prime agricultural farmland will likely be key, compounding the loss of farmland to residential and commercial development and the stresses on food production likely to come with climate change.

To produce the additional solar energy capacity needed in less than a decade, utility-scale solar promises to scale up quickly at the lowest cost, compared to other options. But to meet the full range of potential benefits from solar energy and to avoid environmental tradeoffs, maximizing the amount of solar energy captured in the built environment can achieve renewable energy goals with the fewest adverse impacts, while also providing the greatest number of jobs and the opportunity for more residents to access the economic benefits of solar energy. Ground-mounted solar arrays on preferred sites that avoid prime farmland, forested areas, and ecologically valuable areas can also contribute to rapid solar expansion.

According to this study, Baltimore City and County offer nearly 33,806 acres of potential optimal solar sites located on rooftops, parking lots, and degraded lands (see Table 2). An additional 3,400 acres of preferred ground-mounted sites could provide options for solar energy development without displacing agriculture on prime farmland while also minimizing environmental impacts by avoiding forested and ecologically sensitive lands.

Optimal solar energy sites in Baltimore City and County could generate more than 22,789 GWh/yr of electricity from solar energy, which would far exceed even the statewide solar carve-out goal of 9,000 GWh/yr. It is likely, however, that only a small portion of the pool of identified sites will prove to be viable development locations for a variety of reasons, ranging from property owner willingness, site feasibility, building suitability for rooftop installations, or other factors. We compared the total potential energy generation for optimal and preferred ground-mounted sites in comparison with the solar energy generation, 1,967 GWh/yr, that would be reasonable to expect from Baltimore City and County based on the region's share of statewide energy consumption.



Based on this goal, just 8.6 percent of optimal sites, or 7.0 percent of optimal and preferred ground-mounted sites combined, would need to prove viable for Baltimore County and City to provide their estimated share of the state's future solar carve-out by 2030. The analysis demonstrates that a sufficient number of optimal locations for solar energy siting exist to meet the state's renewable energy goals.

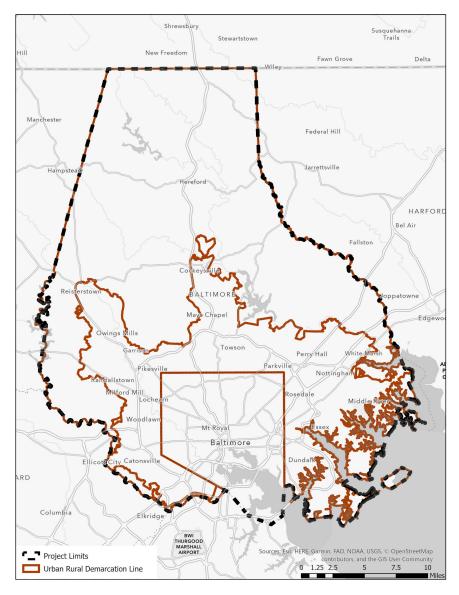


Figure 1. Study area: Baltimore County and City, with urban-rural demarcation line shown outside city borders

An additional component of preferred ground-mounted sites could provide further options for siting that would avoid key adverse tradeoffs associated with land use and solar energy development—the loss of forest, ecologically sensitive lands, or prime farmlands. However, any use of open land will involve some land use tradeoffs. Therefore, these are considered second-tier options relative to optimal sites in the built environment or on degraded lands.

Policies and incentives that would guide solar energy development toward these optimal and preferred solar sites could ensure that solar energy expansion provides the greatest possible benefit for Maryland's citizens. Promising approaches toward guiding solar energy development to preferred locations have been developed in a number of states, with New Jersey and Massachusetts potentially serving as case studies for guidance development.

Introduction

Maryland's new Renewable Portfolio Standard, established as part of the Clean Energy Jobs Act of 2019, will require 50 percent of electricity generation to come from renewable energy sources by 2030, with 14.5 percent coming from solar energy. Our objective in this study is to identify suitable locations for solar energy development, while avoiding undesirable environmental tradeoffs. Ground-mounted solar energy projects can be land-intensive, highlighting the need for careful consideration of siting to maximize benefits and minimize potential adverse impacts. We approached this objective with a high-resolution geospatial analysis of criteria for optimal and preferred solar siting for Baltimore City and County (Figure 1) and measure developable area to determine potential renewable energy generation. This approach may be used by decision makers to evaluate solar energy development proposals and to develop incentives to encourage development in preferred locations. Our study followed these principles:

- Solar energy development is critical to meeting Maryland's renewable energy goals.
- Careful siting of solar development can maximize benefits and reduce adverse impacts.
- Solar development should avoid adverse environmental impacts wherever possible by making the most of opportunities on already-developed or degraded lands.
- Consideration of equity and opportunity will help ensure solar energy benefits are available to all residents.

Our analysis is not intended to be exhaustive of all criteria used to select sites, and further screening will be needed. Policies or incentives may be required to guide solar development to preferred sites.

Our approach to determine optimal solar siting involves first identifying potential solar sites that meet both legal and technical criteria for allowing solar energy development, and then evaluating potential solar sites on environmental, equity, and efficiency criteria to determine optimal siting (Figure 2). We obtained geospatial data from a variety of sources—notably, the Baltimore County and City data portals, the Maryland Departments of Natural Resources (DNR), Planning (MDP), Environment (MDE), the Power Plant Research Program's SmartDG+ planning tool, and the Maryland iMAP data collection.



Figure 2. Approach to identifying optimal and preferred sites for solar energy development

¹Dance, S. "Maryland bill mandating 50% renewable energy by 2030 to become law, but without Gov. Larry Hogan's signature." The Baltimore Sun. May 22, 2019. https://www.baltimoresun.com/news/maryland/environment/bs-md-renewable-energy-law-20190522-story.html. Accessed May 28, 2019.



Potential solar energy development sites for our study area were identified using zoning data along with screening layers of protected areas, easements, and other areas where solar development would not be permitted. We also screened out ecologically important areas such as Maryland's Targeted Ecological Areas, identified by the state as being high-priority conservation areas.

Next, for parcels more than five acres in size, we overlaid potential solar sites with Chesapeake Conservancy's high-resolution (one meter) land-cover data and the soil survey data from the U.S. Department of Agriculture (USDA) to generate metrics for land area composition, including tree canopy cover, non-forest vegetation cover, prime farmland, and non-prime soils, on each parcel. We ranked parcels by their available solar opportunity area (SOA) or amount of land available in the parcel without either prime farm soils or tree cover. We also calculated building footprint area and the amount of impervious surface area along with city and county parking lot data to identify parcels with significant opportunities for rooftop or parking-canopy solar arrays. For properties smaller than five acres, we combined parcels by zoning category (residential, residential multifamily, commercial, industrial, mixed use, and resource conservation) to identify total rooftop and parking-canopy area opportunity by zone.

We evaluated opportunities on degraded sites—including landfills, Voluntary Cleanup Program (VCP) sites, underutilized industrial sites, and other contaminated, underutilized, or abandoned sites—by collecting data on relevant properties in consultation with city and county planning and GIS staff. In addition, we considered some special classes of properties, including public buildings such as schools, firehouses, and other public properties, where this information was available.

Results were tallied into three categories considered optimal siting opportunities: degraded lands, parking canopies, and rooftops. Land parcels more than five acres in size offering significant solar opportunity area not located on degraded sites, prime farmland, or forest were considered "preferred ground-mounted sites." These areas did not meet the criteria for optimal sites, but they offer large areas suitable for ground-mounted solar arrays while avoiding the most adverse environmental impacts (Table 1).

Table 1. Ranking of optimal and ground-mounted solar energy sites with respect to land use tradeoffs

	Ranking	Land use tradeoffs
Optimal sites	High	Few to none
Preferred ground-mounted sites	Medium	Lowest among ground-mounted options
Other sites	Low	Loss of prime farmland Loss of environmentally sensitive areas

Finally, we developed metrics for each category of optimal and preferred sites for solar energy capacity, measured in megawatts (MW) and annual energy generation in gigawatt hours per year (GWh/yr). We then evaluated the ability for Maryland state and regional governments to meet solar energy requirements through development on optimal and preferred sites to meet the state's Renewable Portfolio Standard goals for solar energy.

Challenges for Scaling Solar Energy Generation

Improving affordability, advances in technological efficiency, and a wide array of federal, state, and local incentives have led to rapid growth in installed solar capacity across Maryland. Solar installations range in size from small-scale residential and community rooftop systems, to small and large rooftop commercial installations, large community ground-mounted systems, and utility-scale large solar photovoltaic (PV) facilities operating as power plants. Residential and commercial installations are typically "behind the meter" (BTM) resources, while larger community and utility-scale solar resources connect directly to the grid.2

According to the U.S. Energy Information Administration, utility-scale solar in Maryland generated 448,000 MWh in 2018, or 1.3 percent of Maryland's total net electricity generation of 34.1 million MWh (Figure 4). However, the amount of energy from utility-scale solar is growing rapidly

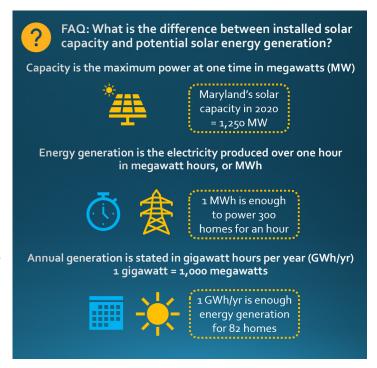
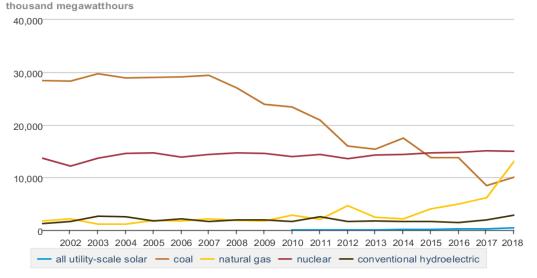


Figure 3. Frequently asked question about solar capacity and potential electricity generation

(Figure 5). A cost-benefit analysis of solar energy in Maryland assumed an additional 2.4 GW of solar energy resources will be installed between 2019 and 2030, and projects this growth will generate more than \$7 billion in economic returns to the state.

Figure 4. Maryland annual net generation for electric power, all major sources





Data source: U.S. Energy Information Administration

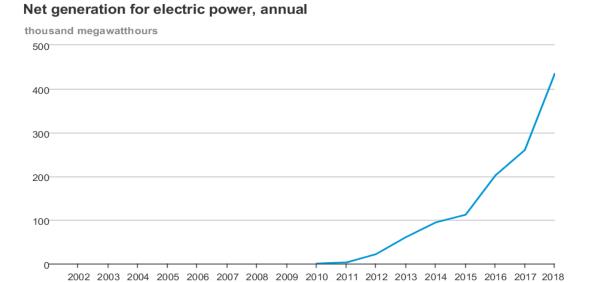
²"Benefits and Costs of Utility Scale and Behind the Meter Solar Resources in Maryland." Daymark Energy Advisors, RLC Engineering, and ESS Group. Nov. 2, 2018, https://cleantechnica.com/files/2018/11/MDVoSReportFinal11-2-2018.pdf. Accessed May 30, 2019.



To meet the goals of Maryland's RPS standard, it is estimated that the 14.5 percent solar carve-out would require 9,000 GWh/yr of electricity to be generated by solar statewide (Figure 6), starting in 2028. To set a goal for this study, we estimated the share of future solar energy generation that would be needed to meet the RPS goals for Baltimore City and County by three methods: electricity consumption, land area, and population (Table 2). The combined energy generation that would be required for the area ranged from a low of 619.8 GWh/yr, when calculated as a portion of land area, to 2131.2 GWh/yr, when calculated as a portion of population. We chose to use energy consumption as the prospective goal for the desirable amount of solar energy generation opportunities for our study area, to identify enough optimal locations to generate at least 1,967 GWh/yr of electricity. However, there is no requirement that solar development to meet the RPS be distributed by any of these methods.

Source: U.S. Energy Information Administration

Figure 5. Maryland annual net generation for electric power from utility-scale solar



Maryland : all utility-scale solar

Figure 6. 14.5% solar carve-out Tier 1 requirements in Maryland compared to projected Maryland solar generation, 50% **RPS Scenario**

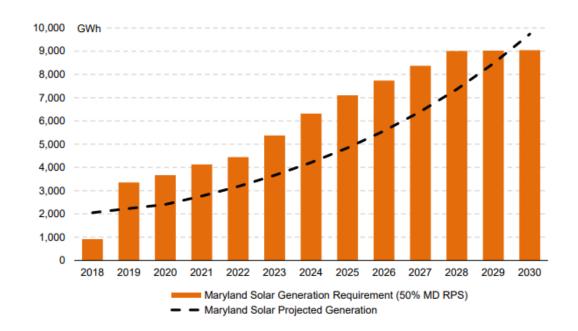


Table 2. Baltimore City and County share of solar carve-out calculated as share of Maryland total by electricity consumption (the method chosen for study goals), land area, and population

Electricity consumption (EIA, BGE)

	Consumption (GWh/yr)	% of state consumption	Solar carve-out share (GWh/yr)
Baltimore City	6,271.5	10.1%	909.1
Baltimore County	7,295.5	11.8%	1,057.5
Baltimore City and County combined	13,567.0	21.9%	1,966.6
Maryland	62,086.5	100.0%	9,000.0

Land Area (Maryland Geological Survey)

	Land area % of state Solar (square miles) land area		Solar carve-out share (GWh/yr)
Baltimore City	80.3	0.8%	73.5
Baltimore County	597.6	6.1%	546.4
Baltimore City and County combined	677.9	6.9%	619.9
Maryland	9,844.0	100.0%	9,000.0

Population 2018 (US Census)

			Solar carve-out share (GWh/yr)
Baltimore City	602,495	10.0%	897.4
Baltimore County	828,431	13.7%	1,233.9
Baltimore City and County combined	1,430,926	23.7%	2,131.3
Maryland	6,042,718	100.0%	9,000.0

Source: "Final Report Concerning the Maryland Renewable Portfolio Standard..." Maryland Department of Natural Resources. https://dnr.maryland.gov/pprp/Documents/FinalRPSReportDecember2019.pdf. Accessed 8 Mar. 2020.

Siting Concerns

States and counties across the country are working to address the need to increase their solar PV energy capacity rapidly while addressing concerns about how and where solar facilities are developed. The potential for rapidly scaling up the amount of renewable energy produced, as the cost of solar PV panels rapidly declines, makes utility-scale solar an attractive option. But it carries environmental trade-offs in the land required for siting, especially in land-constrained regions. The majority of solar power plants are on privately held land but are subject to approval by state and local agencies. The permitting process, including environmental review, can take three to five years to complete.³

Estimates of the land required per MW of electricity generated vary from less than five up to eight acres. A Maryland Public Service Commission study found large solar projects in Maryland at the higher end of estimates.4 The amount ultimately needed for ground-mounted utility-scale solar will depend on a variety of factors, including future energy use and the portion of solar energy development that will occur on agricultural land. The Governor's Task Force on Renewable Energy Development and Siting estimates the amount of land required may range from 7,500 to 35,000 acres.

Meanwhile, rooftop solar installations in urban and suburban areas are able to meet a great amount of electricity demand with relatively few adverse environmental impacts. Significant potential exists to continue expanding rooftop solar in residential, community, and commercial installations. According to the National Renewable Energy Laboratory (NREL), Maryland has the potential to offset 38.7 percent of statewide electricity sales with rooftop solar, with a 17.3 percent potential offset from medium to large buildings. Solar parking canopies are a relatively new option for solar energy generation, with grants available from the Maryland Energy Administration to offset installation costs for businesses and nonprofits.6

Tradeoffs of land use demand for solar

Designating increasing amounts of land for solar energy development will take land out of other uses. Without siting guidelines and incentives, the majority of future land used for solar energy development is likely to come from agriculture. Loss of forest cover, wetlands, and ecologically sensitive areas have additionally been identified as undesirable environmental tradeoffs. Loss of forests and wetlands additionally will result in greenhouse gas emissions associated with land clearing, which counteracts the climate mitigation benefits provided by increasing renewable energy.

Loss of prime farmland to solar energy development is a key concern related to Maryland's efforts to scale up solar rapidly to reach the goals of the RPS. According to the USDA National Agricultural

⁶ Parking Lot Solar PV Canopy with EV Charger Grant Program. Maryland Energy Administration. https://energy.maryland.gov/business/Pages/incentives/PVEVprogram.aspx. Accessed Sept. 26, 2020.



³ "Final Report Concerning the Maryland Renewable Portfolio Standard..." Maryland Department of Natural Resources (DNR). Dec. 2019. https://dnr.maryland.gov/pprp/Documents/FinalRPSReportDecember2019.pdf. Accessed Mar. 8, 2020.

⁴ "Governor's Task Force on Renewable Energy Development and Siting: Interim Report." Dec. 1, 2019. https://governor.maryland.gov/wp-content/uploads/2019/12/Final-Interim-Report.pdf.

⁵ Gagnon, P., Margolis, R., Melius, J., Phillips, C., and Elmore, R. "Rooftop Solar Photovoltaic Technical Potential in the United States: A Detailed Assessment." NREL. Jan. 2016. https://www.nrel.gov/docs/fy16osti/65298.pdf. Accessed May 27, 2019.

Statistics Service, the acreage of cropland harvested in Maryland has decreased by more than 280,000 acres between 1997 and 2017, or 14 percent. Prime farmland, or the land best suited to agriculture, makes up about 20 percent of Maryland's land, and is found mainly on the Eastern Shore and in north central Maryland. The main source of the loss of prime farmland has historically been suburban development, but solar expansion is likely to be a growing cause of farmland loss in the future. The Governor's Task Force on Renewable Energy Development and Siting, in its interim report, projects that while half of current solar capacity comes from large-scale solar arrays, in the future 75 percent may come from utility-scale solar, and a range of 60 to 100 percent of solar development may occur on agricultural lands.8

The main source of greenhouse gas emissions associated with solar energy is the manufacture and shipping of the panels, which results in 45 grams of carbon dioxide emitted for every kWh of energy produced. Clearing forest increases these emissions by an estimated 73 percent (Figure 7) from the biomass of forest lost, plus lost future carbon sequestration. Compared to fossil-fuel-based energy sources, however, solar energy results in fewer carbon dioxide emissions, even when established on forest land. But for Maryland's overall energy-related carbon dioxide emissions to fall as rapidly as possible, limiting loss of forest cover related to solar energy establishment is critical.

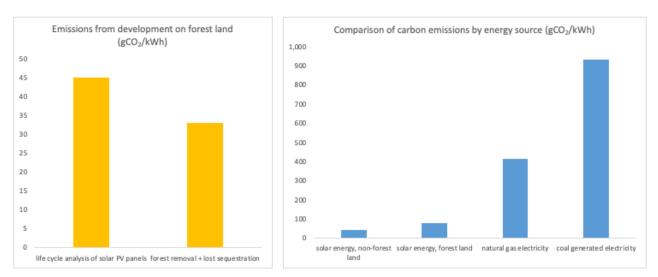


Figure 7. Carbon dioxide emissions associated with solar energy development and conversion of forest land

Solar development in the built environment

One of the most attractive aspects of solar energy systems is their potential to be co-located with other land uses within cities and suburban areas. This includes residential solar, but also larger-scale community and commercial solar installations on building rooftops and over parking lots in solar canopy installations. Contaminated lands and brownfields, including landfills and former industrial sites, offer additional opportunities for solar development.

⁸ "Governor's Task Force on Renewable Energy Development and Siting: Interim Report." Dec. 1, 2019. https://governor.maryland.gov/energy-task-force/.



USDA's National Agricultural Statistics, Maryland Field Office. Updated Nov. 5, 2019, https://www.nass.usda.gov/Statistics_by_State/Maryland/index.php. Accessed Mar. 13, 2020.

Encouraging the use of contaminated and degraded lands for solar energy is one of the best ways to minimize the land use effects of development. Environmentally contaminated lands affected by the improper handling or disposal of hazardous materials or waste are tracked by the U.S. Environmental Protection Agency (EPA) and state voluntary cleanup programs (VCPs). An NREL analysis, "Solar Development on Contaminated and Disturbed Lands," found 20 million acres of such lands that could be suitable for the deployment of solar PV and concentrated solar power (CSP) systems. 9 The U.S. EPA RE-Powering America's Land Initiative identifies opportunities to site renewable energy on contaminated lands, landfills, and mine sites, with 130,000 sites located nationwide. Completed solar PV projects in Maryland on these sites include Fort Detrick, a Superfund site, and former landfills in Ellicott City, Hagerstown, and Williamsport. O Solar energy development on brownfield and closed landfill sites promises new opportunities for making productive use of and generating income from long-abandoned land areas.

In densely populated areas of the country, there may be sufficient opportunities on already-developed or previously degraded lands to preclude the necessity of converting large areas of rural land for solar. A recent study of opportunities for solar development in California identified sufficient opportunities for photovoltaic and concentrated solar power within the built environment to exceed current statewide electricity demand. This study is the first to conduct this type of analysis for Baltimore City and County, and such an analysis could potentially be conducted for Maryland statewide, providing valuable information to guide the development of policies for solar energy development. The demonstration of sufficient opportunities for solar energy generation within the built environment could provide a strong alternative to rural land conversion, especially if coupled with financial incentives and regulatory provisions to reduce project costs and ease the permitting process.

Solar development policies to encourage development in optimal locations

There appears to be broad consensus on several principles for solar energy siting, as reflected in the findings of the Governor's Task Force on Renewable Energy Development and Siting Interim Report¹² and the Abell Foundation report, "An Opportunity for Maryland to Get Solar Siting Right." The Maryland Department of Natural Resources report on the Renewable Portfolio Standard provided estimates of the potential land use impacts of the RPS, economic impacts of solar energy development, and options for extending solar energy benefits to low- and moderate-income communities.¹⁴

^{14 &}quot;Final Report Concerning the Maryland Renewable Portfolio Standard..." DNR. https://dnr.maryland.gov/pprp/Documents/ FinalRPSReportDecember2019.pdf. Accessed Sept. 3, 2020.



⁹ Macknick, J., Lee, C., Mosey, G., and Melius, J. "Solar Development on Contaminated and Disturbed Lands." National Renewable Energy Laboratory (NREL). Dec. 2013.

¹⁰ "RE-Powering America's Land Initiative: Benefits Matrix." EPA. Oct. 2018. https://www.epa.gov/sites/production/files/2018-10/documents/benefits_matrix_final_101818_web.pdf.

¹¹ Hernandez, R., Hoffacker, M. & Field, C. "Efficient use of land to meet sustainable energy needs," Nature Climate Change 5, 353. Mar. 16, 2015. https://doi.org/10.1038/nclimate2556.

^{12 &}quot;Governor's Task Force on Renewable Energy Development and Siting: Interim Report." https://governor.maryland.gov/energy-task-force/.

¹³ Schmidt-Perkins, D. "An Opportunity for Maryland to Get Solar Siting Right," The Abell Report, Vol. 32:7, Sept. 2019. https://www.abell. org/publications/getting-solar-siting-right-maryland. Accessed Sept. 3, 2020.

Ground-mounted solar competes with desirable land uses for food production and environmental services.

- Conversion of prime farmland for solar energy development should be avoided because it removes the best land needed for food production.
- Loss of forest cover and ecologically sensitive lands are undesirable environmental tradeoffs for lands critical to environmental protection and climate mitigation and resilience.

However, solar energy development is an opportunity to put degraded or contaminated lands and underutilized industrial sites to productive use.

• Capped landfills, contaminated lands, sites adjacent to wastewater treatment plants, and other abandoned sites can be repurposed for solar energy production.

Solar energy development in the built environment does not interfere with the productive use of developed lands.

- Solar energy production is compatible with residential, commercial, and public building uses
 it co-exists with and enhances these property uses.
- Solar parking canopies provide benefits including shaded parking, urban heat island reduction, and opportunities for electric vehicle charging.

With proper siting, solar energy development contributes to economic growth and provides opportunities for economic equity.

- Solar energy produced through distributed generation with net metering, including virtual net metering, provides significant economic benefits to homeowners and commercial property owners as well as considerable cost savings for public buildings and services.
- Solar energy development is an important and growing source of employment.
- Skilled jobs within or accessible to low- to moderate-income areas provide significant equity benefits.
- Nonprofit community solar offers significant equity opportunities when savings or income from net metering, renewable energy credits (RECs), and investment tax credits (ITCs) are passed on to subscribers.

The New Jersey Board of Public Utilities has been a leader in creating incentives for solar energy development on preferred sites through its Community Solar Energy Pilot Program, administered by New Jersey's Clean Energy Program. The program developed a system for reviewing applications to the program, which assigned points to projects meeting criteria for equity, preferred siting, and other benefits (Box 1).

According to data provided during a stakeholder engagement hearing on July 27, 2020, the board received 252 applications for the Community Solar Energy Pilot Program, including 232 applications for low- and moderate-income (LMI) projects; 112 applications for projects located on rooftops; 54 applications sited on landfills, brownfields, historic fill areas, or parking canopies; and 75 in whole or in part on farmland. Following evaluation, the board approved 45 community solar projects, all of which were LMI projects, with 30 sited on rooftops, 9 sited on landfills, and 6 sited on parking canopies, brownfields, or other degraded lands.

¹⁶ "New Jersey Community Solar Energy Pilot Program: Program Year 1 Lessons Learned." New Jersey Board of Public Utilities. July 9, 2020. https://www.bpu.state.nj.us/bpu/pdf/publicnotice/Notice%20Community%20Solar%20Request%20for%20Comments%20PY1%20 Lessons%20Learned%2007-09-2020.pdf. Accessed Sept. 1, 2020.



¹⁵ New Jersey's Clean Energy Program. https://njcleanenergy.com/. Accessed Sept. 1, 2020.

Box 1. New Jersey Board of Public Utilities: Community Solar Energy Pilot Program Rules

The application form outlines the requirements for projects within the pilot program, including a criteria rubric by which applications will be evaluated and ranked for selection by the board. New Jersey is the first state ever to utilize an evaluation rubric for its community solar program, as opposed to a first-come, first-served process. The rubric will ensure an intentional selection approach and fair access to the program among diverse solar vendors and project types, and it will help maximize the state's knowledge gained from the pilot program.

- Low- and moderate-income and environmental justice inclusion (30 points max.);
- Siting, with priority given to landfills, brownfields, areas of historic fill, rooftops, parking lots, and parking decks (20 points max., with a potential five-point bonus for landscaping, land enhancement, pollination support, storm water management, soil conservation, and/or decommissioning plans);
- · Product offering, with priority given to those that guarantee savings of greater than 10 percent (15 points max.);
- Community and environmental justice engagement (10 points max.);
- Subscribers, with priority given to projects with a majority of residential subscribers (10 points max.);
- · Other benefits, with priority given to projects providing local jobs, job training, or demonstration of co-benefits such as paired with storage or a microgrid project (10 points max.); and
- Geographic limit within EDC service territory, with priority given to projects with subscribers in the same municipality or an adjacent municipality to the project's location (five points max.).

Projects must receive at least 30 points to be considered for participation in the pilot program. Projects that receive more than 30 points will be awarded capacity in the pilot program in order, starting with the highest-scoring project and proceeding to the lowest-scoring project.

Source: "NJBPU Unveils Application Process for New Statewide Pilot Community Solar Plan." New Jersey Board of Public Utilities. Mar. 29, 2019. https://www.nj.gov/bpu/newsroom/2019/approved/20190329.html.

A considerable barrier to expanding solar energy access to low- and moderate-income households is access to financing for LMI solar projects. The Climate Access Fund (CAF)¹⁷ is an initiative based in Baltimore that provides discounted energy access to lower-income households in Maryland through community solar power. The fund serves as a nonprofit Green Bank¹⁸ to help secure low-cost capital for solar energy projects at favorable rates and terms to traditional market financing. CAF raises funding for community solar projects, provides guaranty capital, and also offers low-cost debt with flexible terms. With these offerings, CAF solar projects are able to serve 100 percent LMI customers, whereas other community solar programs typically will require only a portion of LMI customers; for example, New Jersey's Community Solar Energy Pilot Program requires 51 percent LMI subscribers for a project to receive LMI points in their ranking system.

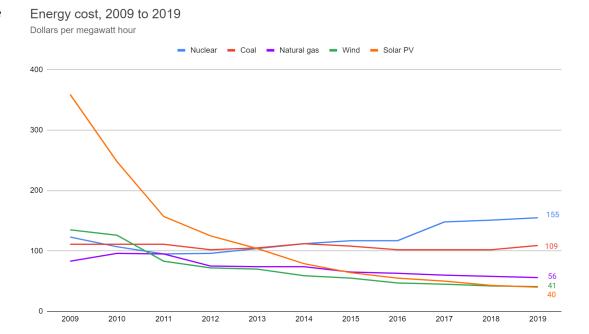
¹⁸ Green Banks. https://www.nrel.gov/state-local-tribal/basics-green-banks.html. NREL. Accessed Sept. 3, 2020.



¹⁷ Climate Access Fund. https://climateaccessfund.org/. Accessed Sept. 3, 2020.

Figure 8. The average cost of utility-scale solar is rapidly declining and is now less expensive than fossil fuels19

Source: Lazard's Levelized Cost of Energy Analysis, 2019



Solar Development in Baltimore County and Baltimore City

According to the PJM, the regional electricity transmission organization for Maryland, the state had 1,250 MW capacity in installed solar projects in March 2020.²⁰ The state ranks fifteenth in the nation in solar power, and sixteenth in solar jobs. Maryland's solar capacity is projected to more than double within the next five years.²¹ Baltimore County has 98 MW of solar capacity and the city of Baltimore has an additional 15.4 MW, for a total of more than 8,400 individual solar installations in the region. Large rooftop solar installations include Amazon's fulfillment facility at Sparrow's Point, General Motors' transmission assembly plant in White Marsh, IKEA's Baltimore location, and several other commercial projects such as Target and Macy's locations. At this time, Baltimore County's largest operating utilityscale solar power plant is nearly 3 MW in capacity, while statewide, the largest facility registered in PJM GATS is a 100 MW Great Bay Solar installation in Somerset County.

Most projects for ground-mounted solar within Baltimore County are still in the planning stages. Maryland's Community Solar Energy Pilot Program allows projects with up to 2 MW capacity. There were a total of eighteen applications for BGE's Community Solar Pilot Program in Baltimore County, primarily for ground-mounted solar projects, including a 1 MW operating facility in Kingsville, Maryland. Baltimore County passed solar legislation in June 2017 (Bill 37-17).²² The bill limited "commercial" solar facilities to ten per council district. The third council district, which has the bulk of the county's farmland, was the first to have ten applications for community solar projects.

²² County Council of Baltimore County, Maryland, Bill No. 37-17. http://resources.baltimorecountymd.gov/Documents/CountyCouncil/bills/ bills%202017/b03717.pdf.



¹⁹ Berke, J. "Renewable energy is getting cheaper and it's going to change everything." World Economic Forum. May 14, 2018. https://www. weforum.org/agenda/2018/05/one-simple-chart-shows-why-an-energy-revolution-is-coming-and-who-is-likely-to-come-out-on-top. Accessed June 28, 2019.

²⁰ Renewable Generators Registered in GATS. PJM Generation Attribute Tracking System. https://gats.pjm-eis.com/gats2/PublicReports/ RenewableGeneratorsRegisteredinGATS. Accessed Mar. 14, 2020.

²¹ "State Solar Spotlight: Maryland." Solar Energy Industries Association. https://www.seia.org/sites/default/files/2019-12/Maryland.pdf. Accessed Feb. 26, 2020.

As of March 2020, fifteen of these projects have had their zoning petitions for solar installations granted, two are pending, and one has been withdrawn.²³ Because land use is managed by each county in Maryland, there is wide variation as to how solar power plants are regulated. In some counties, they are treated as industrial use and allowed only in industrial zones as a principal use, while other counties, including Baltimore County, allow them by special exception in agricultural and other zones. This use was not contemplated in most local comprehensive plans, and many local jurisdictions had to scramble to get regulations on the books. Some have gone back to revise regulations to address concerns, particularly about the use of prime soils and forested lands as the first choice for such facilities. The Governor's Task Force on Renewable Energy Development and Siting is expected to provide recommendations for policies and incentives at the state and local scale.

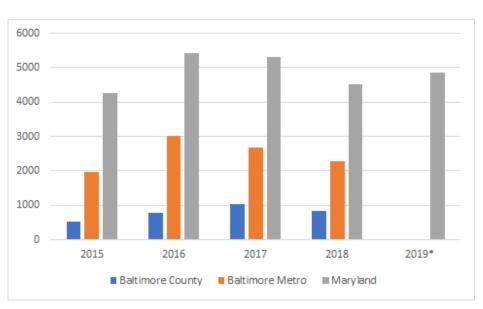
Employment in the Solar Industry

Employment trends in Baltimore County, the Baltimore metropolitan region, and Maryland reflect trends in the solar industry nationwide. Baltimore County solar industry employment declined in 2018, while in the Baltimore metropolitan region, employment declined in both 2017 and 2018. Statewide, solar industry employment rebounded 7.5 percent in 2019, following declines in the two previous years. Tariffs on imported solar panels imposed in January 2018 are cited as the main reason for recent employment trends. Nationally, the solar industry employs nearly 250,000 workers, showing a rebound in 2019 of 2.3 percent, somewhat less than the projected 7 percent increase in 2018.²⁴

Within Maryland, the newly passed Renewable Portfolio Standard is expected to boost solar energy jobs significantly in the state. According to a study by the Maryland Public Service Commission, the new RPS standard is expected to generate 22,563 job-years (a job year is equivalent to one person being employed for one year) over the next ten years, through the addition of 2.4 GW of solar energy generating capacity.25

Figure 9. Solar industry employment, 2015-2019

*2019 data provided statewide employment figures only



²³ Baltimore County - My Neighborhood. https://myneighborhood.baltimorecountymd.gov/. Accessed Mar. 14, 2020.

²⁵ "Benefits and Costs of Utility Scale and Behind the Meter Solar Resources in Maryland." Daymark Energy Advisors, RLC Engineering, and ESS Group. Nov. 2, 2018,



²⁴ National Solar Jobs Census 2019. The Solar Foundation. Feb. 2020. http://www.SolarJobsCensus.org.

Equity and Opportunity

The rapid growth in solar energy provides an opportunity to ensure that all people have access to affordable, renewable energy. Low-income communities have borne many of the adverse effects of energy production in the past—for example, from increased exposure to pollution related to energy production and low rates of employment in lucrative energy-related fields.

Access to affordable energy. Solar energy provides opportunities to incorporate equity concerns into the placement of solar energy resources and the equitable distribution of solar energy economic benefits. Maryland's Community Solar Pilot Program and aggregate net energy metering (ANEM) policies increase the affordability of energy by allowing customers to access the financial benefits of excess generation credits.²⁶

However, community solar may not be providing access to many low- and moderate-income customers. According to a survey by the Smart Electric Power Alliance (SEPA), only 44 percent of community solar programs have low- and moderate-income (LMI) subscribers. To expand participation to LMI customers, SEPA recommends, the subscription price for solar energy must be equal to or lower than the prevailing electricity cost. NREL has found, however, that utility-supplied green power products, which typically supply energy from both solar and wind, have premium pricing, costing the average home \$18 a month more than standard pricing.^{27,28}

Employment opportunities. Solar energy development is also providing rapid growth in green energy jobs in the United States. Planning for equity and opportunity in solar site planning, by prioritizing the inclusion of lower-income and urban communities as well as sites accessible by public transportation in solar project plans, could provide much-needed employment opportunities. Locating projects within IRS Opportunity Zones, which are economically distressed communities where new investments may be eligible for preferential tax treatment, is another potential way to generate benefits for lower-income communities. Community solar projects can increase access to solar energy and energy cost savings to all residents, including those who are not homeowners—an important equity consideration.

Policies and incentives to guide solar siting. Thirty states, the District of Columbia, and three territories have renewable portfolio standards that provide targets for electricity generation from renewable sources.²⁹ Policies and regulations vary widely across states. Massachusetts and New Jersey have been lauded for their policies, rebates, and incentives that guide solar energy development toward preferred sites. Solar Power Rocks is an organization that provides annual rankings of states in terms of solar energy policies, and in 2019 the site piloted an evaluation of policies for low-income families.³⁰

³⁰ Solar Power Rocks. https://www.solarpowerrocks.com/. Accessed Mar. 17, 2020.



²⁶ "Report on the Status of Net Energy Metering in the State of Maryland." Public Service Commission of Maryland. Sept. 1, 2018, https://www.psc.state.md.us/wp-content/uploads/FINAL-2018-Net-Metering-Report.pdf. Accessed Feb. 26, 2020.

²⁷ O'Shaughnessy, E., Liu, C., and Heeter, J. "Status and Trends in the U.S. Voluntary Green Power Market." NREL. Oct. 5, 2016. https://www.nrel.gov/docs/fy17osti/67147.pdf. Accessed Apr. 30, 2020.

²⁸ Green Power Pricing. U.S. EPA. Apr. 15, 2019, https://www.epa.gov/greenpower/green-power-pricing. Accessed Apr. 30, 2020.

²⁹ State Renewable Portfolio Standards and Goals. National Conference of State Legislatures (NCSL). Apr. 17, 2020. https://www.ncsl.org/research/energy/renewable-portfolio-standards.aspx. Accessed Sept. 26, 2020.

Results and Discussion

Our analysis found 33,806 acres of optimal sites for solar energy development in Baltimore County and the city of Baltimore (Table 3). Of this total, the great majority is within the built environment, either on rooftops (65.6 percent) or in large parking lots greater than once acre in size or on parking garages (31.1 percent). An additional 1,116 acres (3.3 percent) fall within degraded lands. We estimate a total of 22,789 GWh/yr of electricity could be generated from these sites, demonstrating that extensive opportunities exist within optimal and preferred sites to contribute proportionally to Maryland's RPS goals.

We identified an additional 3,400 acres of preferred locations for ground-mounted solar energy development. These potential sites, at least five acres in size, offered significant land acreage avoiding prime agricultural soils, forested land, and important ecological areas. Many of these sites contain pasture on marginal agricultural land, so they would offer fewer land use tradeoffs related to agriculture or environmental impacts. Solar energy production on sites such as these could provide an additional 5,237 GWh/yr of electricity generation.

Of the potential optimal and preferred ground-mounted sites identified, only a portion will prove to be viable sites for solar energy development. In Table 2, we estimated Baltimore County and City's respective shares of Maryland's solar carve-out as 1,058 GWh/yr of electricity generated from solar for Baltimore County and 909 GWh/yr for Baltimore City. Table 4 shows the percentage of optimal and preferred ground-mounted sites that would be needed to meet Maryland's solar energy goals. Even if the region restricted solar energy development only to optimal sites, just 8.6 percent of these would need to be developed to meet the regional share of the state's RPS goal.

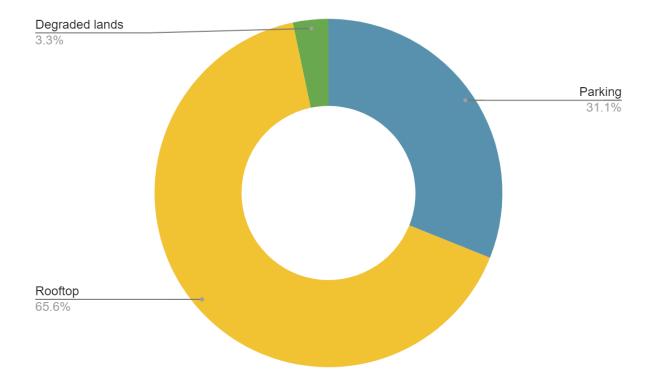
Table 3. Potential energy generation from preferred and optimal sites

	Total area (acres)	Potential electricity generation (GWh/yr)
Baltimore County		
Optimal		
Parking	6,904	3,949
Rooftop	14,405	9,762
Degraded lands	1,116	1,719
Total optimal	22,425	15,430
Preferred ground-mounted	3,400	5,237
Doltimore City		
Baltimore City		
Optimal		
Parking	3,611	2,066
Rooftop	7,809	5,292
Degraded lands	_	_
Total optimal	11,420	7,358
Preferred ground-mounted	_	_
Baltimore County and C	ity (combin	ned)
Optimal	, (••	,
Parking	10,515	6,015
Rooftop	22,214	15,054
Degraded lands	1,116	1,719
Total optimal	33,845	22,788
Preferred ground-mounted	3,400	5,237
Total optimal and preferred	37,245	28,025

Table 4. Percentage of optimal solar sites that would reach renewable energy goals, based on energy consumption

	Baltimore County	Baltimore City	Total
Energy generation potential (Optimal)	15,431	7,358	22,789
Energy generation potential (Preferred ground-mounted)	5,237	_	5,237
Generation goal, based on energy consumption	1,058	909	1,967
% optimal sites to reach goal	6.9%	12.4%	8.6%
% optimal + preferred sites to reach goal	5.1%	_	7.0%

Figure 10a. Total optimal sites for solar energy development in Baltimore County and City (acres)



15,000 Baltimore County Baltimore City

10,000

7,809

1,116

Figure 10b. Optimal sites for solar energy development in Baltimore County and City (acres)

Optimal Solar Sites on Degraded Lands

Parking

Baltimore County offers 1,116 acres of degraded lands with potential for solar energy development. These include closed landfills, Hernwood and Parkton, the decommissioned Pikesville Reservoir, and land at the wastewater treatment plant. Similar locations have been developed for solar throughout Maryland. Of these, we have identified 182 acres of underutilized industrial sites as well as 570 acres of brownfield sites. Some of these locations could potentially be used for solar energy development, either as an interim land use or as part of cleanup or redevelopment projects. We did not assess degraded lands opportunities within Baltimore City, as most properties in the Voluntary Cleanup Program (VCP) are on small sites and data on underutilized industrial sites were not available.

Rooftop

Rooftop Solar

Rooftop solar offers the largest opportunity at more than 22,000 acres, with 7,809 acres in the city of Baltimore and 14,405 acres in Baltimore County. According to PJM GATS, Baltimore City has 15.4 MW of installed solar capacity, or 26 watts per capita, using 2018 U.S. Census population estimates. In comparison, Washington, D.C., has 82 MW of installed solar capacity, or 117 watts per capita, a rate more than quadruple that of Baltimore, indicating significant capacity for growth.

Across Baltimore City and County, residential rooftops make up the majority of rooftop area, with nearly 58 percent in Baltimore County and more than 60 percent in Baltimore City. Commercial and industrial sites offer the potential for large installations, some of which rival the size of utility-scale solar. Taking advantage of roof space on large public buildings offers a major opportunity for city and county governments to contribute toward solar energy goals, with more than 750 acres of rooftop available on Baltimore County public schools, firehouses, and other county buildings.



Degraded lands

We estimate potential energy production from Baltimore City rooftops as 5,292 GWh/yr, and for Baltimore County, 9,762 GWh/yr. This likely overestimates potential energy generation, as we did not take into account roof angle or shading by tree canopy. Previous estimates of solar energy potential for Baltimore rooftop solar are available from Google Project Sunroof (2,800 GWh/yr)³¹ and NREL (2,549 GWh/yr).32

Figure 11. Rooftop area for Baltimore County and City (acres)

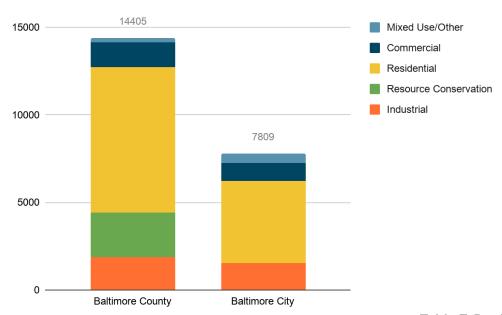


Table 5. **Baltimore County** potential rooftop solar area

Zoning Group	Acres
Residential	8,298
Resource Conservation	2,557
Industrial	1,870
Commercial	1,436
Mixed Use/Other	244
Total	14,405

Table 6. **Baltimore City** potential rooftop solar area

Building Type	Acres
County Public Schools	297
Firehouses	14
Other County-Owned Buildings	131
Total	442

Table 7. Rooftop solar development area on public buildings in Baltimore County

Zoning Group	Acres
Commercial	1,018
Educational Campus	130
Hospital Campus Zoning District	110
Industrial	1,522
Mixed Use	270
Open Space and Environmental Districts	59
Residential	1347
Residential Multifamily	3,353
Total	7,809

³¹ Google Project Sunroof. https://www.google.com/get/sunroof/data-explorer/. Accessed Mar. 8, 2020.

³² Google Project Sunroof. https://www.google.com/get/sunroof/data-explorer/. Accessed Mar. 8, 2020.



Parking Canopy Opportunities

Parking lots offer more than 28 percent of the optimal solar energy development area identified in Baltimore County and City. The estimate was restricted to lots less than one acre in size and parking garages with an open-top deck. While parking canopies are among the most expensive types of solar installations, they offer desirable amenities, including shaded parking spaces and the potential to charge electric vehicles.

Solar panels can generate approximately 2 kW per parking space.³³ Assuming 150 parking spaces per acre, 300 kW can be generated per acre of parking lot.³⁴ With 10,515 acres of parking lots more than one acre in size, Baltimore County and City have the potential for 3,507 GWh/yr of solar generation from parking canopy solar.

Table 8. Solar energy development area for parking canopies (acres)

	Baltimore County	Baltimore City	Total
Parking lots > 1 acre	6,898	3,578	10,476
Garages	6	33	39
Total	6,904	3,611	10,515

Preferred Ground-Mounted Solar Sites

Our analysis of ground-mounted solar development opportunities identified 3,400 acres of land parcels suitable for solar projects of 1 MW or more that would offer the fewest environmental tradeoffs. Parcels identified as preferred sites passed initial screens for legal and technical feasibility, and they were among the highest-ranking sites for additional criteria, including low portions of land occupied by tree canopy and prime farmland. A significant number of sites identified included active farms (horses or other grazing animals, with open land in pasture) as well as large residential properties. It is likely that only a small portion of these parcels would be available for solar energy development.

Preferred sites for ground-mounted solar represented just 0.8 percent of Baltimore County's land area, highlighting the challenge of identifying lands with the fewest environmental tradeoffs. Many additional opportunities exist for solar energy use of a portion of these lands, with on-farm solar used for only part of the land. Rooftop opportunities were also assessed for all rural lands.

We identified only 20 acres of ground-mounted solar opportunities in low- and moderate-income areas or IRS Opportunity Zones, as well as 76 acres of large rooftop opportunities. Because these tracts in Baltimore County and City are largely in urban and close-in suburban areas, the primary opportunities in these areas are likely to be for rooftop solar, including residential, community, and commercial opportunities.

³⁴ Holland, R. "Estimating the Number of Parking Spaces per Acre." UT Extension. May 2014. https://ag.tennessee.edu/cpa/Information%20 Sheets/CPA%20222.pdf. Accessed Mar. 7, 2020.



³³ Shoup, D. Parking and the City. Routledge, 2018.

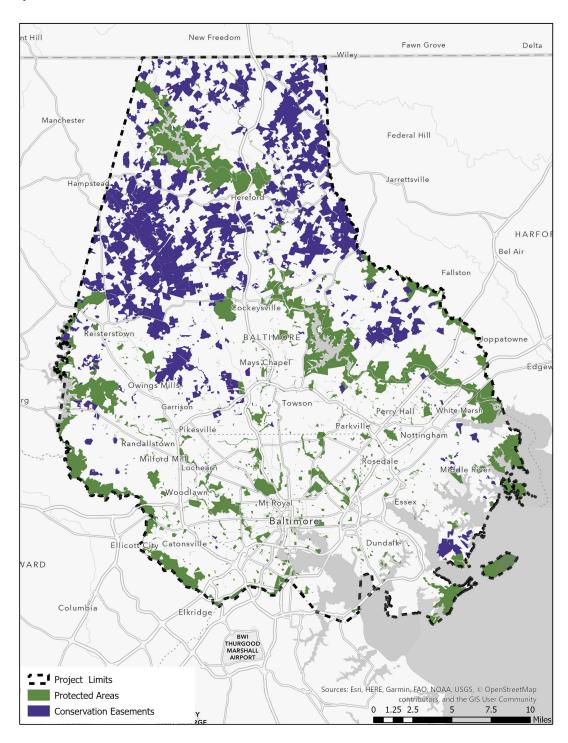
Conclusions

Maryland's new Renewable Portfolio Standard creates strong incentives to ramp up solar energy development quickly to meet the requirements of generating 50 percent of electricity from renewable energy, with a 14.5 percent carve-out for solar energy. Key benefits of solar energy development include the flexibility to install solar PV panels in a variety of environments and settings, from residential home installations to utility-scale deployments. The potential to co-locate solar energy facilities with other land uses would enable both the reuse of long-abandoned degraded or contaminated lands, as well as using commercial, multi-family residential, and governmental facilities to meet renewable energy goals. This would avoid competition with alternate land uses or the generation of adverse environmental effects. Community solar programs and prioritizing development on desirable sites within low- and moderate-income areas can increase access to energy savings as well as provide job opportunities. Finally, quantifying and mapping both potential and optimal solar sites across Baltimore County provides valuable information for planning the development of sufficient solar energy capacity. It is clear from this analysis that thoughtful siting of solar projects can maximize environmental and economic benefits and minimize undesirable tradeoffs that cause conflict and significantly delay solar projects. By utilizing less than 10 percent of the available optimal sites, Baltimore County and City can meet their respective shares of the state's solar contribution toward renewable energy goals.



Appendix A: Maps

Map 1. Protected areas and conservation easements

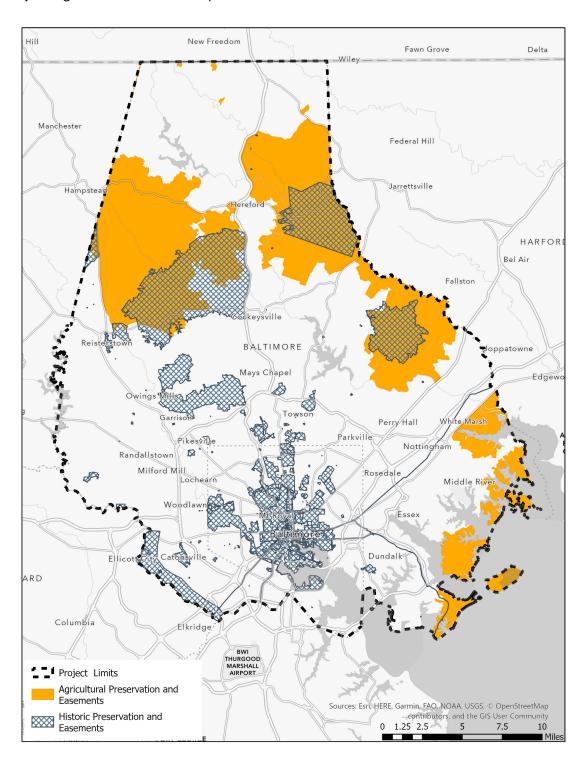


Data: Federal, state, and local protected areas, State Scenic Rivers, State Scenic Byways, publicly managed conservation lands, Maryland Environmental Trust Easements, other conservation easements

Sources: Maryland Department of Natural Resources (DNR), Chesapeake Conservation Partnership



Map 2. Agricultural and historic preservation and easement areas

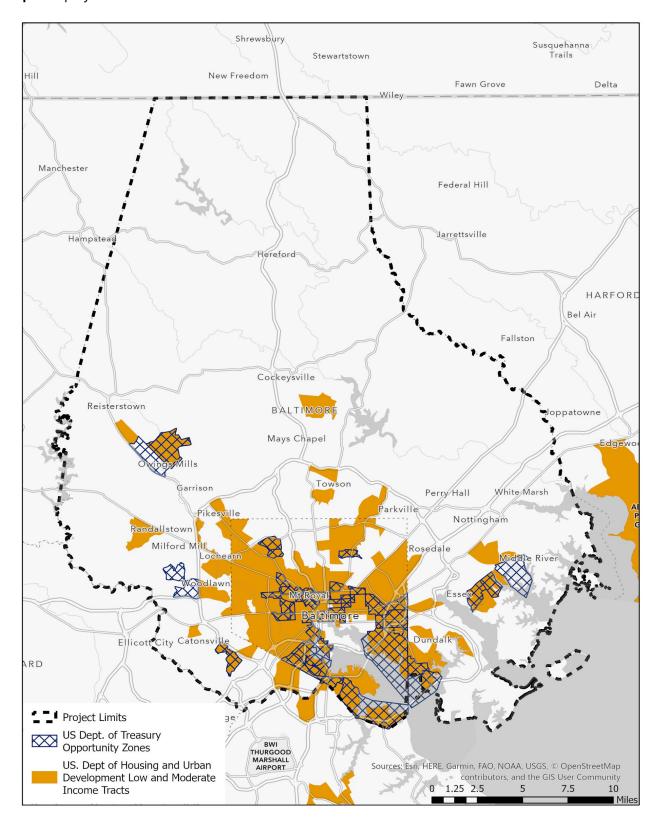


Data: Maryland Agricultural Land Preservation Foundation (MALPF) easements, Rural Legacy Areas, National Register of Historic Places: Historic Districts, National Register of Historic Places, National Historic and Scenic Trails, State Heritage Areas, National Historic Landmarks

Sources: Maryland DNR, Chesapeake Conservation Partnership



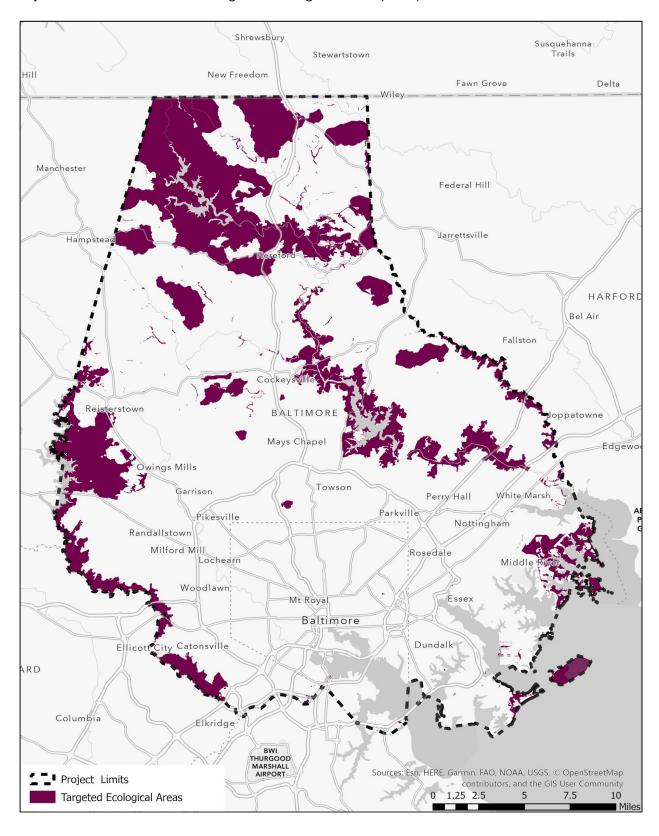
Map 3. Equity criteria: Low- and moderate-income areas



Sources: U.S. Department of Treasury, IRS; U.S. Department of Housing and Urban Development

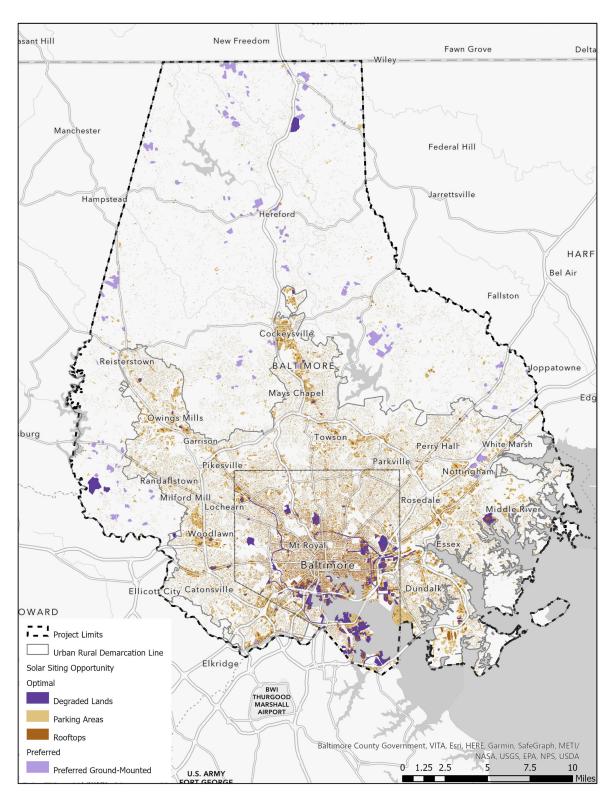


Map 4. Environmental criteria: Targeted Ecological Areas (TEAs)



Source: Maryland Department of Natural Resources

Map 5. Results: Optimal and preferred ground-mounted solar energy development sites



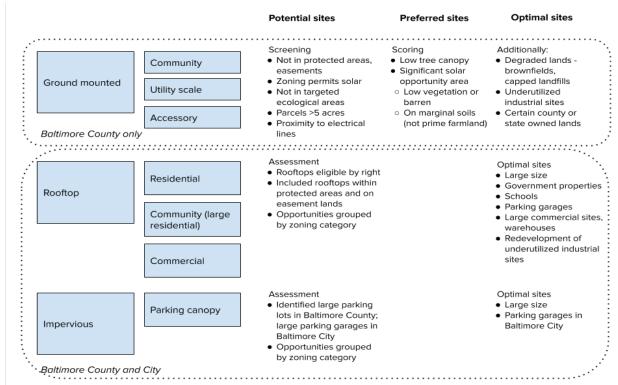
Sources: Chesapeake Conservancy analysis results displayed using Baltimore City and County parcel and building footprints data



Appendix B: Methods

This study followed a stepwise approach in analyzing opportunities for solar energy development in Baltimore County and City, with the overall approach provided in Figure 1 and additional details provided in Figure 12.

Figure 12. Methods workflow for identification of potential, preferred, and optimal solar sites



First, potential solar sites were identified by analyzing parcels that passed initial screening, removing lands where zoning would not permit solar, and assessing proximity to the electrical grid. Next, sites were scored according to environmental, equity, and efficiency criteria to determine high scoring sites with sufficient solar opportunity. Additionally, degraded lands were considered for solar development potential.

GIS data for this project was acquired from a variety of reliable sources—notably, Baltimore City and County data portals, as well as the Maryland Department of Planning, for parcel data. The core analysis for solar suitability determination involved reviewing all parcels in Baltimore City and County, and selectively removing them based on characteristics that would preclude or make solar development less preferable. Due to differences in data availability, not all of the methods utilized in Baltimore County translated to Baltimore City. The best possible alternatives and solutions were considered to determine viable suitable solar siting in Baltimore City.



Identification of preferred sites for ground-mounted solar

We identified opportunities for ground-mounted solar in Baltimore County only. The analysis began with a screening process to identify parcels where solar energy development would be legally and technically feasible. We reviewed solar zoning regulations, removing parcels where ground-mounted solar panels would not be permitted. Next, we screened out protected local, state, and federal lands, as well as conservation, agricultural, and historic easements. Parcels less than five acres in size were not considered to ensure a minimum energy generation capacity of approximately 1 MW.

Next, we assessed remaining parcels for suitability based on environmental data, including tree canopy cover and the presence of prime agricultural soils. Land cover was analyzed within the remaining parcels using Chesapeake Conservancy's high-resolution (1 meter) Chesapeake Bay land cover dataset to document the vegetation coverage of each parcel. From the land cover data, the total Solar Opportunity Area (SOA) was calculated, considering the following land cover types most suitable for placement of solar PV panels: herbaceous vegetation, shrubland, and barren land. The area in structures (homes, commercial buildings, etc.), impervious surface such as parking lots, and tree canopy was also determined for each parcel. A ranking system with values of 1 to 5 was calculated based on 20 percent thresholds for tree canopy and SOA, with a higher rank indicating parcels more suited to solar development.

For example, a site containing 25 percent tree canopy was assigned a value of 4, whereas a 25 percent SOA value was assigned a 2. Those two land cover characteristics were assigned inverse rankings, as sites with more trees would be less suitable for development. Conversely, parcels with a higher portion of SOA contain more land that was already cleared of trees, reducing the environmental impacts of solar panel installation.

Next, parcels were assessed for proximity to existing electrical grid resources based on datasets developed for the Smart DG+ website application, provided by ERM and the Maryland Power Plant Research Program. Sites remote from the electrical grid were removed from further analysis.

Next, parcels were assessed for the presence of prime farmland soils, using 10-meter Gridded Soil Survey Geographic (gSSURGO) data. Soils described as "prime farmland" or "farmland of statewide importance" were considered the least suitable for solar energy development and ranked accordingly. For example, parcels with the highest proportion of prime farmland were ranked 0, while parcels with no prime farmland were given a rank of 4.



Equity analysis of low-and moderate-income tracts

Using data from the U.S. Department of Housing and Urban Development on low- and moderate-income areas, and from the U.S. Department of Treasury on Opportunity Zones, parcels were given a point if they intersected either dataset. Those datasets were used as proxies for equity in solar development.

By totaling the ranks for each factor across the remaining parcels, a tiered scheme of most-to-least preferred solar parcels can be sorted and displayed to distinguish easily between differently ranked opportunities. The highest value was 14, where a parcel had extremely low tree cover, extremely high SOA, and no valuable soils. Based on a review of parcels and their values, all parcels with a value of 10 or higher were selected as preferred solar opportunities. The final step for the preferred data was to determine if the opportunity the parcel presented was more likely a ground-mounted solar construction project or a rooftop or parking canopy, based on the parcel's portion of impervious surface. From the remaining parcels, a threshold of 20 percent or less impervious surface was used to categorize a parcel as "likely ground-mounted," where the remaining were "likely rooftop/canopy solar." Some small manual adjustments were made based on parcels with a high area in structures that outweighed what would otherwise be a high impervious value as well (shopping mall/big box store).

Identification of degraded lands and other opportunity sites

Finally, degraded lands were considered, using data from Maryland Department of the Environment's Voluntary Cleanup Program and data from the Utility-Scale Solar Energy Coalition's analysis for solar potential on Maryland's contaminated lands. These sites are considered optimal for solar development from the analysis, though more study will be necessary at the located sites to determine the validity and feasibility of solar. This is especially true in Baltimore City, where many contaminated and environmentally degraded lands have obstructions, such as railroad tracks, that would reduce feasibility for development. This analysis was intended to be a first step in determining possible best-suited solar locations, and any specific site may require more scrutiny to determine suitability.

Other GIS analysis involved using data from the Baltimore County and Baltimore City data portals to determine structure footprint area, with specific breakouts for public schools and parking garages. Within Baltimore County, landfills, the wastewater treatment plant, and fire department facilities were also broken out specifically. Using data provided by the localities, and with results from the process above, under-utilized industrial opportunities were also identified.

Rooftop analysis

Rooftop area was calculated as the area classified as structures in Chesapeake Conservancy's 2013–14 land cover classification for the Chesapeake Bay watershed.



Energy generation potential

We used a formula provided by the U.S. EPA Green Power Partnership to calculate annual solar PV system output as a function of the equation E = A * r * H * PR, in which A = Total solar panel Area (m2); r = Solar panel efficiency (%); H = Annual average solar radiation on tilted panels (shadings not included); PR = Performance ratio, coefficient for losses (range between 0.5 and 0.9); and E = Energy (kWh).³⁵ Based on feedback on a review draft presented to the Governor's Task Force on Renewable Energy Development and Siting, we calculated energy generation potential as detailed below.

- For parking canopies, we assumed 15 percent solar panel efficiency and a density of 150 parking spaces per acre with a size of 16.7m2 each. We used the NREL Annual Technology Baseline (ATB) for Chicago (the closest of the scenario cities to Baltimore in terms of annual solar radiation), and used the moderate scenario for 2020.36
- For rooftop solar, we assumed solar panel efficiency of 11% percent, based on a recommendation from the Solar Energies Industry Association (SEIA).
- For ground-mounted solar, including on degraded sites or land meeting criteria for preferred ground-mounted solar, we assumed a solar panel efficiency of 25 percent. This value was chosen based on SEIA and other feedback and values provided in the NREL 2020 ATB.37

³⁷ "2020 Annual Technology Baseline Electricity Data Now Available." NREL. July 9, 2020, https://www.nrel.gov/news/program/2020/2020annual-technology-baseline-electricity-data-now-available.html. Accessed Sept. 13, 2020.



³⁵ Green Power Equivalency Calculator - Calculations and References. EPA. https://www.epa.gov/greenpower/green-power-equivalencycalculator-calculations-and-references. Accessed Mar. 8, 2020.

^{36 &}quot;2020 Annual Technology Baseline Electricity Data Now Available." NREL. July 9, 2020. https://www.nrel.gov/news/program/2020/2020annual-technology-baseline-electricity-data-now-available.html. Accessed Sept. 13, 2020.

Written Testimony_Rob Davis.pdf Uploaded by: Rob Davis Position: UNF



Written Testimony of Rob Davis
Farmer, Rich Levels Grain
Board Member, Maryland Grain Producers
Co-Founder, Farmers Alliance for Rural Maryland
Before the Senate and House Committees
Opposition to Senate Bill 0931 and House Bill 1036

February 26, 2025

Dear Senators Feldman & Kagan, Delegate Wilson & Crosby, and Members of the Committee,

My name is Rob Davis, and I am a 7th-generation grain and poultry farmer on the Eastern Shore of Maryland. I serve as a board member of the Maryland Grain Producers and cofounded the Farmers Alliance for Rural Maryland (F.A.R.M.) to advocate for responsible land-use policies that protect Maryland's agriculture industry.

I strongly oppose Senate Bill 0931 and House Bill 1036 because they strip local governments of their authority over land use and accelerate the conversion of some of the most productive farmland in the country into industrial solar fields.

Maryland's Farmland is Among the Most Productive in the Nation

Maryland farmers are world-class food producers, operating on some of the best soils in the country with ideal climate conditions for growing high-yield crops.

- Our region's ability to efficiently produce grain, poultry, and livestock is unmatched due to our climate, soil quality, and proximity to key agricultural markets.
- Unlike other states, Maryland farms can grow, process, and distribute food within a
 few hours of major urban centers, including Baltimore, Washington, D.C.,
 Philadelphia, New York, and Boston—reducing food transportation costs and
 emissions while ensuring a stable, local food supply.

Maryland agriculture is not just efficient—it is sustainable. Farmers on the Delmarva Peninsula have developed a closed-loop agricultural system that maximizes nutrient recycling and energy efficiency:

- Manure from chickens fertilizes corn and soybean crops, reducing the need for synthetic fertilizers.
- On one of our farms wash-water from an egg facility irrigates fields, improving soil health and conserving water.
- The corn plant itself is a natural solar panel, converting sunlight into food while sequestering carbon.
- That corn feeds our poultry, which in turn produces eggs and meat that sustain families across the country.
- In my own case, this entire process happens within a 10-mile radius of my home farm—a beautifully orchestrated balance of nature, technology, and responsible land stewardship.

Maryland farmers have spent generations perfecting this agricultural system—yet SB 0931 and HB 1036 threaten to disrupt this balance by replacing fertile cropland with industrial solar panels.

Replacing Farmland with Solar Hurts Maryland's Food Supply

- My family's farming operation consists of about 5,000 acres (mostly leased), where we grow corn, soybeans, wheat, and barley, along with managing six chicken houses.
- 100% of our electricity needs are already offset by just 1.5 acres of solar panels that we installed last year. Peak solar production lines up with our peak demand, in the summer when we are running fans to cool chicken and pumping water to irrigate crops. We don't need 400-acre solar fields on farmland to meet our energy goals.
- The Delmarva Peninsula is a corn-deficit region, meaning we already import grain from the Midwest to support poultry production.
- When a 500-acre farm near us was converted to solar panels, that land stopped producing 100,000 bushels of corn per year—which means, for the next 30 years, the poultry industry will have to import an additional 100,000 bushels annually from the Midwest. That's at least 100 additional tractor-trailer loads of grain per year, increasing transportation emissions, fuel costs, and reliance on out-of-state supply chains—all while Maryland's own land sits covered in solar panels instead of growing food.

This is a dangerous and unnecessary shift away from local, sustainable agriculture.

We Support Renewable Energy—But Not at the Cost of Farmland

Maryland Farmers are not opposed to renewable energy—we are already using it responsibly. But solar projects should be sited in appropriate locations:

- Rooftops and parking lots
- Brownfields and abandoned industrial sites
- Utility corridors and degraded land

Farmland should never be the first choice for large-scale solar installations. Once it is paved over with panels, it will never return to food production.

Respectfully,

Rob Davis

2025 MGA - HB 1036.pdfUploaded by: Robert Cassilly Position: UNF

ROBERT G. CASSILLY Harford County Executive



ROBERT S. McCordDirector of Administration

February 26, 2025

Delegate C.T. Wilson, Chair Economic Matters Committee 230 Taylor House Office Building 6 Bladen Street Annapolis, Maryland 21401

Re: Letter of Opposition on HB1036 – Generating Stations – Generation and Siting (Renewable Energy Certainty Act)

Dear Chairman Wilson and Committee Members,

House Bill 1036 establishes a clear path for the preemption of local zoning authority by restricting and prohibiting local zoning laws that regulate the construction of certain solar energy generating stations and energy storage devices. Further, this bill creates an exemption from personal and real property taxes for solar energy generating stations.

The Renewable Energy Certainty Act undermines local taxing authority, local zoning authority, essential community input and protections. This bill does not contemplate essential safety measures affiliated with utility scale battery storage devices. Should one of these stations or devices catch fire, they are extremely difficult to extinguish, release toxic gases as they burn, and toxins spread through water runoff from attempting to extinguish the fire.

In general, HB1036 disregards local land use, comprehensive planning, and economic factors that would otherwise allow counties to partner with the State to achieve renewable energy portfolio goals. This bill is in direct conflict with the County Comprehensive Plan and long-standing land use and property rights assurances provided by the Zoning Code which are consistent with the Comprehensive Plan.

I respectfully request that the Economic Matters Committee report unfavorably on HB1036.

Thank you.

Yours truly

Robert G. Cassilly

UNF.Lawrence Richardson.Harford Co. Govt.

Uploaded by: Robert Cassilly

Position: UNF

ROBERT G. CASSILLY Harford County Executive



ROBERT S. McCORD Director of Administration

February 26, 2025

Senator Brian Feldman, Chair Education, Energy, and the Environment Committee 2 West Miller Senate Office Building 11 Bladen Street Annapolis, Maryland 21401

Re: Letter of Opposition on SB931 – Generating Stations – Generation and Siting (Renewable Energy Certainty Act)

Dear Chairman Feldman and Committee Members,

Senate Bill 931 establishes a clear path for the preemption of local zoning authority by restricting and prohibiting local zoning laws that regulate the construction of certain solar energy generating stations and energy storage devices. Further, this bill creates an exemption from personal and real property taxes for solar energy generating stations.

The Renewable Energy Certainty Act undermines local taxing authority, local zoning authority, essential community input and protections. This bill does not contemplate essential safety measures affiliated with utility scale battery storage devices. Should one of these stations or devices catch fire, they are extremely difficult to extinguish, release toxic gases as they burn, and toxins spread through water runoff from attempting to extinguish the fire.

In general, SB931 disregards local land use, comprehensive planning, and economic factors that would otherwise allow counties to partner with the State to achieve renewable energy portfolio goals. This bill is in direct conflict with the County Comprehensive Plan and long-standing land use and property rights assurances provided by the Zoning Code which are consistent with the Comprehensive Plan.

I respectfully request that the Education, Energy, and the Environment Committee report unfavorably on SB931.

Thank you.

Yours truly,

Robert G. Cassilly

HB 1036, Oppose (Ron Weiss) Rev..pdf Uploaded by: Ron Weiss

Position: UNF

HB 1036, Oppose

Ron Weiss, Fort Washington

I am Ron Weiss of Fort Washington, and I strongly oppose HB 1036, the Renewable Energy Certainty Act (RECA),

I support the Maryland Association of Counties' (MACo) position against this legislation. While I fully support Maryland's transition to clean energy, this bill, in its current form, undermines essential safeguards for community safety, local decision-making, and responsible renewable energy development.

As a resident of Fort Washington, I have firsthand experience with the dangers of **poorly regulated energy storage projects**. Without prior notice, **Pepco attempted to install a lithium-ion battery energy storage system near homes and a daycare center in my community**. Upon researching lithium-ion battery storage, I discovered:

- Thermal runaway failures have caused serious fires and released hazardous fumes.
- 26% of inspected energy storage systems had issues with fire detection and suppression, and 18% had thermal management problems.
- No local or state agency could guarantee safety or provide updated permitting standards that addressed these risks.

It took three years of community advocacy, with the help of County Councilman Ed Burroughs,

Delegate Kris Valderrama, and Congressman Glenn Ivey, to successfully stop the project. However, no community should have to fight this hard to protect their safety.

MACo's opposition to RECA is entirely justified because the bill:

- 1. **Strips local governments of essential oversight** in permitting large-scale renewable energy and storage projects.
- 2. Fails to establish adequate fire safety and emergency response regulations for battery energy storage systems (BESS).
- 3. Allows renewable energy companies to bypass fair tax contributions, shifting financial burdens to local taxpayers.
- 4. Threatens housing affordability by prioritizing solar over land needed for development.
- 5. Fast-tracks projects without ensuring proper site selection, public engagement, or safety measures.

HB 1338, which I strongly support, fills the regulatory gap for battery storage systems by requiring state-level permitting and review before these projects are placed in residential areas. New York State has already taken action by implementing modern fire code regulations for energy storage systems, while Maryland still relies on outdated 2018 fire codes that do not account for lithium-ion risks.

Until Maryland establishes a commission and enforces proper safeguards for battery energy storage, **fast-tracking projects under HB 1036 would be reckless and put Maryland residents at unnecessary risk**.

I urge the committee to:

- 1. **Reject HB 1036 in its current form** and support MACo's proposed amendments to restore local government oversight and enforce safety standards.
- 2. **Support HB 1338**, which ensures state-level permitting for battery energy storage systems to prevent unsafe siting near residential communities.
- 3. **Prioritize safety-first clean energy policies** that balance progress with public health and community well-being.

Maryland needs clean energy, but we **cannot compromise safety, tax fairness, and local decision-making** in the process. I appreciate the opportunity to submit this testimony and urge you to **vote unfavorably on HB 1036 unless it is significantly amended**.

Sincerely,

Ron Weiss, Fort Washington

HB 1036, Oppose (Ron Weiss).pdf Uploaded by: Ron Weiss Position: UNF

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Sincerely,

Ron Weiss, Fort Washington

HB1036 unfavorable. Local governance matters..pdf Uploaded by: Ryan Powers

Position: UNF

Dear Economic Matters Committee,

Although I am in favor of developing more solar energy, I am opposed to this bill's prohibition of local counties deciding what's best for their county.

Many in Maryland, including a majority in my county, are in favor of solar energy projects. Ultimately, it should be left for local residents to decide how they want to power their county and MD.

Thank you,

Ryan Powers

Glenwood, MD

SB0931 and HB1036

Uploaded by: Sophie Sultenfuss

Position: UNF

To Whom It May Concern,

My name is Sophie Sultenfuss, and I am a senior in high school, proudly growing up on a third-generation farm on the Eastern Shore. I am writing to express my strong opposition to SB0931 and HB1036, as these bills pose a serious threat to Maryland's farming community and the generations of families who have dedicated their lives to the land.

Farming is more than just a profession—it's a way of life. From an early age, I have spent countless hours riding in the passenger seat of a tractor, listening to the wisdom of my father and other local farmers. These conversations have shaped my deep appreciation for the hard work, dedication, and sacrifice that go into maintaining our fertile land. However, large-scale solar farms threaten to strip future generations of these experiences, replacing our rich, productive soil with industrial energy production.

Some may argue that farmland can simply be repurposed for industrial use, but those of us who work the land know better. The Eastern Shore boasts some of the most fertile soil in the nation, strengthened by centuries of careful stewardship and crop rotation. This productivity supports not only local farmers but also the larger agricultural economy, including the poultry industry. If farmland is lost to solar panels, the ripple effect will be devastating—grain supplies for feed manufacturers will dwindle, impacting chicken farmers, processing plants, and countless jobs across the region. Prices for chicken and eggs will rise, and entire communities will suffer.

The negative impacts extend beyond farming. The Chesapeake Bay's ecosystem, which provides a critical habitat for waterfowl, deer, and other wildlife, will be disrupted. The hum of solar panels will replace open fields where birds once nested, directly affecting hunters, boaters, and conservationists who rely on these natural spaces. Our region's heritage—rooted in both agriculture and the great outdoors—will be irreversibly changed.

Farming is not just a business; it's a network of livelihoods that supports families, local businesses, and the environment. Nine out of ten times, farmers reinvest their earnings into farm supply stores, feed stores, seed manufacturers, and crop insurance companies. The loss of farmland to solar development will not only jeopardize individual farms but also the businesses and communities that depend on them.

I urge you to consider the long-term consequences of these bills, or join me in my opposition to them. The future of Maryland's farming community, our economy, and our environment is at stake. Please stand with us in preserving our land, our livelihoods, and our way of life.

Sincerely, Sophie Sultenfuss

HB1036 Opposition Letter001.pdfUploaded by: Stephanie Jarrell Position: UNF



County Commissioners:

James J. Moran, At Large Jack N. Wilson, Jr., District 1 J. Patrick McLaughlin, District 2 Philip L. Dumenil, District 3 Christopher M. Corchiarino, District 4

February 25, 2025

The Honorable C.T. Wilson Chairman, Economic Matters Committee 230 Taylor House Office Building House Office Building, Room 231 Annapolis MD 21401

THE COUNTY COMMISSIONERS OF QUEEN ANNE'S COUNTY

The Liberty Building 107 North Liberty Street Centreville, MD 21617

e-mail: QACCommissioners&Administrator@gac.org

County Administrator: Todd R. Mohn, PE Executive Assistant to County Commissioners: Stephanie L. Jarrell County Attorney: Patrick Thompson, Esquire

RE: HB1036 – Renewable Energy Certainty Act (Public Utilities – Generating Stations – Generation and Siting)
OPPOSITION

Dear Chairman Wilson,

Please consider this letter of <u>opposition</u> for House Bill 1036. This bill establishes a clear path for the preemption of local zoning authority by restricting and prohibiting local zoning laws that regulate the construction of certain solar energy generating station and energy storage devices. Further, this bill creates an exemption from personal and real property taxes for solar energy generating stations.

HB1036 completely disregards the good faith collaboration in which Queen Anne's County participated along with state and county leaders, nongovernmental organizations, and solar industry leaders to advance Maryland's renewable energy goals through clear, effective, and balanced policies. The Renewable Energy Certainty Act undermines local taxing authority, local zoning authority, essential community input and protections. This bill does not contemplate essential safety measures affiliated with utility scale battery storage devices.

In general, HB1036 disregards local land use, comprehensive planning, and economic factors that would otherwise allow counties to partner with the State to achieve renewable energy portfolio goals. This bill is in direct conflict with the Queen Anne's County Comprehensive Plan and long-standing land use and property rights assurances provided by QAC Zoning Code which are consistent with the Comprehensive Plan.

Thank you for the opportunity to **oppose** this legislation.

Respectfully,

QUEEN ANNE'S COUNTY

BOARD OF COUNTY COMMISSIONERS

Christopher M. Corchiarino, President

Jack N. Wilson, Jr.

Philip L Dumenil

James J. Moran

Patrick McLaughlin

SB0931-OPP-Stephen Kraszewski-Mason Farms Produce Uploaded by: Stephen Kraszewski

Position: UNF

ORAL Testimony – 2 minutes Mason Farms Produce LLC

February 28, 2025

SB0931 - Public Utilities - Generating Station - Generation and Siting In OPPOSITION

My name is Stephen Kraszewski, and I belong to a 5th generation family organic farm in Queen Anne's County. I'm also a husband and a father. A caretaker. A steward for the land. One word that comes to mind as I think about what this all means: LEGACY.

Farming families, farming communities are built on legacies, shared from one generation to the next. Some legacies span multiple generations - like an heirloom passed down. Their mark on the land runs deep and transcends merely occupying the land, becoming more than the sum of its parts.

Some legacies are just beginning or have yet to begin – fledgling but determined to anchor themselves, spreading their roots. My own legacy joined with my wife's heritage and the support not to mention the success we enjoy was built amongst friends, neighbors, businesses and indeed spreads across multiple industries because few sectors touch or influence other parts of our economy like agriculture can.

These old and new generations should be inheriting something secure, grounded, dependable. I have learned that cultivating a farm and its relationships is so much like developing the soil: it takes time, investment, and careful stewardship. But we also know this can all unravel quickly.

What happens when the backbone of a farmer's livelihoods is uprooted? How will this committee, who is almost wholly tasked with funding Maryland agriculture and the programs and institutions that help anchor it, respond when agriculture's pillars are toppled and the ground upheaved.

The bottom line is Maryland farming is a hedge against climate change. Our crops and soil can capture and store carbon from the air. Our conservation practices keep the rain where it falls. The soil can hold on to moisture for a drought. Our covers keep living roots in the soil.

I ask this committee to give an unfavorable report on SB0931. Thank you.

SB0931-OPP-Stephen Kraszewski-Mason Farms Produce Uploaded by: Stephen Kraszewski

Position: UNF

February 28, 2025 SB0931 Public Utilities – Generating Station – Generation and Siting Education, Energy and the Environment Committee Statement in Opposition of SB0931

Stephen Kraszewski - Organic Farmer, Queen Anne's County, MD

As an organic grower I understand the time and effort that is involved in transitioning ground to meet organic certification requirements. I also realize with care, stewardship, and acceptance of the challenges that facilitate sustainable agriculture I can make the payoffs worthwhile. **Long-term goals require long-term investments**.

At Mason Farms Produce LLC, I follow a simple philosophy: Adapt, Adopt, and Action. This approach drives our thinking forward, providing the motivation to do better; we build resilience through trial and error, learning from failures and teaching lessons to hand down to the next generation.

We extend and diversify our rotations. We use novel techniques to plant crops, control pests, sow cover crops and build soil health. Our aim is investment through innovation and vice versa. Organic farmers use traditional / cultural farming practices to lay the groundwork in our fields, but we also glean from new ideas to face the future. Public and private sectors like UMD Extension and Chesapeake Bay Foundation have made great strides in their outreach programs to educate and support Maryland's farmers. Organic farms like ours rely heavily on their programs, resources, and experience to navigate the challenges we producers face.

Their efforts and investments have allowed us the means to thrive both economically and environmentally. Without agricultural grant funding, financial support or facilitated learning we are at a disadvantage and I'm certain our farming plans would be short-lived.

A long-term investment, as I mentioned before, requires predictability, consistency, accountability, and communication. The State of Maryland has made these same investments to buttress its #1 industry; funding that is facilitated and directed through our largest public institutions: MDA and NRCS. Our farm has a history of participation in many publicly funded agricultural initiatives:

- MACS State Cost Share
- EQIP Federal Cost Share
- Cover Crop Program
- Soil Conseravtion
- Nutrient Management

These stalwart initiatives and investments won't mean much in the face of solar energy projects that disrupt, weaken and erase the land they were meant to manage.

Producers in the path or in close proximity to unchecked, expanding energy infrastructure projects will be at a disadvantage – the friability of their once certain livelihoods will result in a hedge against innovation; what's more likely is a rush towards quick payoffs and fast returns.

Productive lands require investment to thrive – this bill introduces such turmoil and uncertainty that farmers will have to accept short land leases, never willing to steward the land for fear to losing their investment. This is particularly true for organic operations like ours who seek longer land agreements in order to see economic and environmental efforts bear fruit.

From the standpoint of a family-owned operation the fallout from large subsidized solar projects, unchecked by local stakeholders, could be tremendously negative. I urge this committee to reject the inherently misguided provenance of this legislation – SAY NO TO SB0931 AND GIVE THE FARMERS THE CHANCE TO GUIDE THEIR OWN FUTURE!

Again, I urge you to give an unfavorable recommendation.

Respectfully, Stephen Kraszewski, Organic Farmer Mason Farms Produce LLC Queen Anne's County

SCA testimony SB931-HB10360-Feb26.pdfUploaded by: Steven Findlay

Position: UNF



February 26, 2025

Senator Brian Feldman, Chair

Delegate C.T. Wilson, Chair

Members of the Senate Education, Energy and the Environment Committee &

House Economic Matters Committee

Dear Senators and Delegates,

On behalf of the 300 individuals and families affiliated with Sugarloaf Citizens Association—a 501(c)(3) civic, environmental and farming advocacy group based in Dickerson, MD—I write in opposition to SB0931 / HB1036.

This bill, as written, would do way more harm than good. It is a major threat to the agriculture industry in the state—an industry that employs some 350,000 people (including 6,000 full-timer farmers) and contributes approximately \$8.2 billion to the state's economy annually. One third of Maryland's land—1.9 million acres—is in agriculture. Of that, 500,000 acres is prime farm land. This legislation would open up a significant part of that prime farmland for the siting of large-scale ground-based solar arrays.

We fully support enhanced renewable energy and policies that would add to the state's renewable energy supply. But not at the expense of high-quality farmland and to the detriment of that vital industry in our state. There is ample space not on arable farmland to site solar facilities in the state of Maryland.

Utility-scale solar will permanently take thousands if not tens of thousands of acres of farmland out of production over the next decade—at a time when the Mid-Atlantic is being regarded as among the nation's areas most resilient to climate change.

Moreover, the bill's provisions are poorly crafted. They include threats to forested land, open space, and natural resources. In addition, the bill is a state "power grab" over the long-established purview county governments have over land-use decisions and zoning. And the bill as written would bar local taxation of solar projects—a ridiculous proposal which could have long-term adverse consequences to county governments.

The economics of the situation are by now well know. Solar companies can and will pay five to 10 times more to lease farmland than a farmer can pay a landowner. Sixty percent of farmland in Maryland is leased by farmers from landowners. Solar companies have

blanketed the state with such inquiries. We have received several at our 110-acre property in Dickerson.

Solar competition for ag land would drive up prices, placing farmland ownership out of reach for aspiring new farmers.

Maryland farming is a major financial engine and employer in Maryland. Maryland farms feed our local communities, the state's urban centers, our nation, and the world. Please reject SB0931 and HB1036.

Sincerely,

Steven Findlay

President, Sugarloaf Citizens Association

Stern Field

Anne Arundel County_UNF_HB1036_SB931 Uploaded by: Tom Ni

Position: UNF



February 28, 2025

Senate Bill 931/House Bill 1036

Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Senate Education, Energy, and the Environment Committee House Economic Matters Committee

Position: UNFAVORABLE

Anne Arundel County **OPPOSES** Senate Bill 931/House Bill 1036 - Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act) as drafted. During my first term, Anne Arundel County engaged stakeholders across the County to develop and implement Plan2040, the County's General Development Plan. Plan2040 provides a shared, long-range framework for addressing land use issues and sets the policy framework to protect the natural environment, shape development of the built environment, provide public services to promote healthy communities, and support a diverse, resilient economy. It was developed through dozens of public forums and is informed by thousands of comments from the community, as well as coordination from more than 20 County departments, State and Federal agencies, non-profit organizations, and members from the private sector.

Anne Arundel County is Maryland in miniature, and as such has a large rural area with a significant agricultural and agritourism economy. Plan2040 contains many goals and policies to enable our agricultural economy to be sustainable and thrive in a changing economy. It also seeks to protect our natural resources, and protect and restore our sensitive environmental features. At the same time, an important part of protecting our natural resources and sensitive environmental features is transitioning to clean and renewable energy sources. I believe that meeting our energy and environmental goals and protecting our rural and agricultural lands are not mutually exclusive goals. Thoughtful and collaborative planning on both fronts, that takes into account the needs of the community and engages those that are impacted by significant changes to land use policy, is of paramount importance in achieving those goals.

That is why, in Anne Arundel County, we have undertaken a comprehensive review of land in the County that is suitable for solar facilities and other renewable energy sources. The Resilience Authority of Annapolis and Anne Arundel County, created during my first term, is currently in the process of a thorough and comprehensive analysis of Anne Arundel County's available land, including brownfield sites and built environments, and how to best meet our clean energy goals while adhering to our values as outlined in Plan2040 of protecting and preserving our rural agricultural areas and green space by evaluating the feasibility of solar facilities on all of these sites. This work is still underway, and I strongly believe that it needs to be completed in order for us to move forward with implementing Plan2040 and achieving our clean energy goals. This Bill as introduced would upend that work and negate much of the progress we have made.

Phone: 410-222-3687

Accordingly, Anne Arundel County urges an **UNFAVORABLE** report on Senate Bill 931 and House Bill 1036 as introduced, and I look forward to continued partnership and collaboration to ensure that our rural and environmentally sensitive areas are protected and preserved, while moving toward a cleaner and greener energy future.

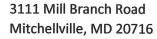
Steuart Pittman

County Executive

StofCPita

Phone: 410-222-3687

Against HB1036-SB931.pdf Uploaded by: Tom Terry Position: UNF





February 26, 2025

To: Maryland Legislature

I am opposed to the proposed bill <u>HB1036/SB931</u> that would allow state government to override local or county zoning laws to approve solar energy projects.

This bill threatens to take prime farmland out production and undermine local authority over solar projects.

Maryland is already losing thousands of acres of farmland each year, and this heavy-handed legislation has the chance to take even more out of production.

Thomas A. Terry

Ample Grange Farm, LLC

Co-Manager / Member

20250228 HB 1036 Public Utilities Generating Stati Uploaded by: Travis Breeding

Position: UNF



JAMES TRAVIS BREEDING, PRESIDENT LARRY C. PORTER, VICE PRESIDENT NORMAN FRANKLIN BARTZ, III., COMMISSIONER 109 Market Street, Room 123 Denton, Maryland 21629

House Bill 1036

Public Utilities—Generating Stations—Generations and Siting (Renewable Energy Certainty Act)

Position: UNF Date: February 28, 2025 To: Economic Matters

On behalf of the Caroline County Commissioners, we wish to express our strong opposition for House Bill 1036 Public Utilities—Generating Stations—Generations and Siting (Renewable Energy Certainty Act), While we recognize the importance of renewable energy, this bill removes local authority over solar development and could lead to unchecked utility-scale solar expansion on prime agricultural land. It undermines the zoning protections we've put in place to balance solar growth with farmland preservation and shifts critical land-use decisions away from the communities they impact the most.

Caroline County has carefully developed zoning regulations (Ordinance #2017 and 2017-2), which were adopted in 2017, to ensure responsible solar development while preserving our rural character. These regulations include:

- A 2,000-acre limit on commercial solar projects to prevent excessive loss of farmland.
- Strict zoning requirements that allow solar projects only in specific districts (R Rural, C-2 General Commercial, and I-2 Light Industrial), subject to Special Use Exceptions and Site Plan Approval.
- Prohibitions on solar projects in Transferable Development Rights (TDR) receiving areas and on land under preservation easements to protect designated farmland.
- 200-foot minimum setbacks from property lines and roads to maintain rural aesthetics and mitigate impacts on neighboring properties.

HB 1036 undermines these local protections by:

- Stripping counties of zoning authority over large-scale solar projects, allowing the state to dictate land use.
- Forcing counties to fast-track approvals for solar projects that meet state-mandated siting criteria, eliminating meaningful local oversight.
- Granting automatic tax exemptions for solar projects, which could reduce county tax revenue for essential services.
- Shifting financial risks to counties by letting the state dictate decommissioning plans for aging solar farms.

In addition to our concerns regarding solar siting, HB 1036 fails to address the increasing deployment of large-scale battery energy storage systems (BESS), which currently lack sufficient local and state regulation. These battery storage facilities, often paired with solar farms, pose significant safety hazards and create land-use conflicts that cannot be ignored.

- 1. Fire, Explosion, and Toxic Hazards
 - Lithium-ion battery storage systems have been linked to thermal runaway incidents, leading to fires that are difficult to control and may burn for hours or even days. Unlike conventional fires, battery fires release toxic fumes and require specialized firefighting techniques that most local fire departments are not yet trained or equipped to handle.
 - If a battery fire occurs, it could lead to the release of hazardous gases such as hydrogen fluoride, which pose serious health risks to nearby residents and first responders.
 - Leaking battery components could contaminate groundwater and soil, impacting local farms and water supplies.

This bill directly conflicts with Senate Bill 478, which rightly affirms that local governments should have the final say on solar siting decisions. Caroline County is not opposed to solar energy—we already permit commercial solar power within a structured, locally controlled framework. Taking away local input and forcing counties to accept large-scale solar projects without zoning oversight will undermine farmland preservation, impact rural communities, and favor developers over residents.

We urge you to oppose HB 1036 and protect local control over land-use decisions. If you would like more information on how this legislation would impact Caroline County, we would be happy to discuss it further.

Sincerely,

J. Travis Breeding, President

2025-MML-HB1036-Unfavorable.pdfUploaded by: Tyler Brice Position: UNF



TESTIMONY

February 28, 2025

Committee: House – Economic Matters

Bill: HB1036 - Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Position: <u>Unfavorable</u>

Reason for Position:

On behalf of the Maryland Municipal League (MML), representing 161 local governments across the state, we respectfully submit this testimony in <u>opposition</u> to House Bill 1036, the Renewable Energy Certainty Act (RECA). While we strongly support the development of renewable energy as a crucial part of Maryland's energy future, we believe that the current form of this bill undermines local governance and compromises important community interests.

RECA proposes sweeping changes that would significantly reduce the role of local governments in the siting and approval of renewable energy projects, particularly large-scale solar energy generation systems. This shift would bypass critical local input that is essential for ensuring that projects align with the needs and concerns of the communities they impact. Municipalities play an integral role in ensuring that development is compatible with local zoning laws, environmental protections, and safety concerns, which are vital to preserving the character and livability of our communities.

Local governments have a responsibility to ensure that projects like these are thoughtfully sited, with adequate infrastructure, emergency access, and protections for residents. However, under the current provisions of HB 1036, municipalities would lose meaningful control over the siting process and the ability to require necessary community safeguards. Specifically, this bill allows for expedited approvals that could bypass local zoning laws and environmental reviews, potentially leading to incompatible developments that disrupt communities and burden municipal resources.

The bill allows renewable energy projects to receive tax incentives, which could shift the financial burden to local governments and their taxpayers. This could result in reduced resources for essential municipal services such as education, public safety, and infrastructure maintenance, without corresponding benefits to the local tax base.

The Maryland Municipal League uses its collective voice to advocate, empower and protect the interests of our 160 local governments members and elevates local leadership, delivers impactful solutions for our communities, and builds an inclusive culture for the 2 million Marylanders we serve.



Maryland Municipal League

The Association of Maryland's Cities and Towns

Local governments are also concerned about the safety implications of large-scale renewable energy storage projects, which are not adequately addressed in this bill. There are growing concerns about the risks posed by energy storage facilities, such as fires, hazardous waste, and the potential for toxic fumes, especially when these projects are located near residential, commercial, or institutional properties. Municipalities need the authority to assess and address these risks to protect the health and safety of their residents.

The Maryland Municipal League urges the committee to consider the substantial concerns raised by municipalities regarding local control, community safety, tax equity, and environmental protections. The current language of HB 1036 fails to provide sufficient safeguards for local governments and their residents. We believe that a more balanced approach is needed—one that allows for the responsible development of renewable energy while preserving the vital role of local governments in managing community growth, infrastructure, and safety. We respectfully request that the committee give an *unfavorable* report on HB 1036.

For more information, please contact Tyler Alexis Brice, Manager of Advocacy and Public Affairs, at tylerb@mdmunicipal.org or 254-652-8110.

Thank you for your consideration.

MDFB - Opposition - SB931HB1036 Renewable Energy C Uploaded by: Tyler Hough

Position: UNF



Maryland Farm Bureau

3358 Davidsonville Road | Davidsonville, MD 21035 410-922-3426 | www.mdfarmbureau.com

February 26, 2025

To: Senate Education, Energy, and the Environment and House Economic Matters Committee

From: Maryland Farm Bureau, Inc.

RE: Opposition – SB931/HB1036 Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

On behalf of the nearly 8,000 member families of the Maryland Farm Bureau, I submit this written testimony in strong opposition to SB931/HB1036, the so-called "Renewable Energy Certainty Act." This legislation represents an overreach of state authority, impeding on the rights of local governments and landowners by preempting county land use policies in favor of a top-down, one-size-fits-all mandate.

While Maryland Farm Bureau supports the expansion of renewable energy, this bill disregards the fundamental principle of local control and hands decision-making power over rural landscapes to those who don't live or work in these communities. It is unacceptable for the state to strip away local authority and dictate land use policies that will have irreversible consequences on agriculture, rural economies, and community planning.

Maryland Farm Bureau's policy is crystal clear:

"We urge local control of any growth management programs and zoning regulations within our state. We strongly oppose any state preemption of local and county land use policies for renewable energy generation projects."

SB931/HB1036 is contradictory to this policy, placing an undue burden on rural communities for the long-term negative impact on local economies, infrastructure, and farmland preservation. This bill prioritizes energy developers over the very landowners and agricultural operations that sustain Maryland's food supply.

By removing local oversight, this legislation will pave the way for the widespread displacement of prime agricultural land, forcing farmers to compete with industrial-scale solar and energy storage projects for limited space. This, coupled with the Department of Legislative Services recommendations to zero out land preservation programs, is very concerning to the priorities of the state.

Additionally, this bill fails to recognize the need for balanced, community-driven renewable energy solutions that work in harmony with agriculture rather than replacing it. If the state is serious about integrating solar into Maryland's landscape, it must prioritize solutions like agrivoltaics—where renewable energy is paired with active agricultural production—not impose blanket policies that ignore the needs of farmers and rural communities.

While Maryland Farm Bureau acknowledges the amendments submitted by the Maryland Association of Counties, these do not go far enough to correct the fundamental flaws of this bill. We also stress the need to include a clear, enforceable definition of agrivoltaics to ensure that farmland remains actively

used for agricultural production rather than being sacrificed to industrial energy sprawl. The definition must include the following:

"Agrivoltaics means the simultaneous use of areas of land, which shall be maintained in Agricultural Use Assessment as determined under Title 18 and the Maryland Assessment Procedures Manual in consultation with the Maryland Department of Agriculture, for both solar power generation and:"

- 1. Raising grains, fruits, herbs, melons, mushrooms, nuts, seeds, tobacco, or vegetables;
- 2. Raising poultry, including chickens and turkeys, for meat or egg production
- 3. Dairy production, such as the raising of milking cows;
- 4. Raising livestock, including cattle, sheep, goats, or pigs;
- 5. Horse boarding, breeding, or training;
- 6. Turf farming;
- 7. Raising ornamental shrubs, plants, or flowers, including aquatic plants;
- 8. aquaculture,
- 9. Silviculture.

or 10. Any other activity as determined under Title 18 and Maryland Assessment Procedures Manual in consultation with the Maryland Department of Agriculture, except pollinator habitat and apiaries.

The bottom line is this: SB931/HB1036 is an aggressive overreach that prioritizes renewable energy developers over farmers, local communities, and Maryland's long-standing tradition of land-use governance.

Tyler Hough

Director of Government Relations

Please contact Tyler Hough, though@marylandfb.org, with any questions

UNF.Tyler Wolf Uploaded by: Tyler Wolf Position: UNF

Ladies and Gentlemen of the state legislature-

My name is Tyler Wolf and I am a lifelong resident of Frederick County and a first generation farmer. I would like to voice my opposition to SB0931. I do understand that we live in a growing area with a growing need for electricity, however, I do not believe expanding solar on farmland is the answer to our problems. As a first generation and relatively beginning farmer, access to land is one of, if not the largest challenge I face. As solar arrays continue to devour the farmland in my area at an even higher rate than development, it makes land access more and more challenging.

While our growing population continues to need more energy, it also needs more food. Where is this food going to be produced if we devote too much of our land to energy generation? While the current percentage of land occupied by solar may not seem significant, the laws of supply and demand then make the remaining land more expensive and less affordable to our agricultural producers. Many people lament that the younger generation does not want to work hard and continue to farm, but this simply isn't true. There are many of us who would like to start, grow, or maintain farm operations, but have a hard time overcoming the challenges of land access. This causes many farm operations to stagnate, cease, or not begin in the first place. How are we supposed to keep farming as our land becomes overrun with homes and solar generation facilities? This is not a problem limited to young and beginning farmers, however. I have spoken with other, well-established farmers in my area who are facing the same challenges and wondering how to move forward.

I understand that power generation is a necessity, but I believe there are better ways to go about it. As I regularly drive around the 70/81 corridor in Hagerstown, I see countless warehouses being constructed on what was farmland. If we are going remove that land from production, why are we not developing programs to make it have multiple uses, and cover the roofs of these buildings with solar panels? It is already occupied ground that would then become useful for multiple purposes.

Ultimately, I believe the authority to approve solar projects needs to be at the county level, to ensure these projects fit the community, not from state legislators that may have several hundred miles between them and the areas where these facilities are proposed. Thank you for considering my concerns.

Tyler Wolf

CTWilson.BCATest.SolarSenBill0931Hrg2.28.25.pdf Uploaded by: Dan Seamans

Position: INFO

Boyds Civic Association P.O. Box 285 Boyds, MD 20841

February 25, 2025

Delegate C.T.Wilson 231 Taylor House Office Building 6 Bladen St. Annapolis, Maryland 21401

RE: Maryland Senate Bill 931; House Bill 1036 - Renewable Energy Certainty Act

Written Testimony - House Economic Matters Committee Hearing 2/28/25, 1:30p

Senator Feldman,

Good day, my name is Dan Seamans, a resident of Boyds, MD since 1960, living on farmland and later in the Ag Reserve.

Like Members of the Boyds Civic Association and many other Montgomery County residents, I am opposed to any regulation allowing solar installations in the Ag Reserve on soil Types I or II.

The establishment of Montgomery County's Solar ZTA 20-01 in the Ag Reserve Zone in 2021 restricted solar installations on these Prime Soils, but allowed solar installations on Type III soils, also a USDA Prime Soil. The Mont. Co. Solar ZTA thereby provided a major concession to help facilitate solar energy production, while still preserving the purpose of the Ag Reserve. Other provisions of the Solar ZTA 20-01 restrict solar facilities in stream beds, on erodible slopes and where trees need to be removed, important environmental protections.

Maryland Legislation passed in 2022 intends to Regulate solar projects state wide via Maryland's Public Service Commission. It allows the solar projects size to increase from 2 MW to 5 MW and would allow installations on the best soils, Types I and II, in conflict with Mont. Co's Solar ZTA.

Current problems with solar projects, and restrictions on their construction,

are fairly conclusively recognized to be caused by grid location and

capacity. Utility companies must approve a project's connection to their grid. A solar power project is best located within 0.25 to 0.40 miles from a power line of suitable capacity, due to conditions of electrical efficiency. Connection approvals have therefore been very limited in the Ag Reserve due to grid conditions there, rather than by Mont. Co's Solar ZTA 20-01.

Maryland and the MD Public Service Commission should seriously consider the conundrums involved in solar projects in Mont. Co's Ag Reserve. The goals of Montgomery Co.'s Solar ZTA was to protect the best soils in Ag Reserve **and** allow solar facilities. There should not be an override of its well-considered provisions.

The areas of soil Types I and II in the Ag Reserve do not contain the only available open spaces for feasible solar installations in the county. A few of these are:

- 1.) There is considerable open space on commercial rooftops and parking garages.
- 2.) There are many open spaces near high tension power lines countywide that could upload power from larger or smaller solar production facilities.
- 3. There is enormous space in Rights of Ways under the network of high-tension power lines for solar installations tailored to conditions there.

Many locations exist where such facilities can be placed that are at, or nearer to, where the power is consumed, a more efficient distribution method.

Maryland should consider increased subsidies for home and commercial solar installations and subsidies for battery storage related to solar generated power. Stored power can mitigate weather-related fluctuations and provide supplemental power during times of peak usage.

In truth, I am enthusiastic about solar energy as a clean alternative to fossil fuels. I spent most of the last 45 years burning wood as renewable alternative heating, obtained from dead or dying trees in my woods. I recently curtailed it, due to its carbon foot print. Solar has become the leading alternative, especially with commercial recycling of panels occurring now.

However, allowing solar on the best soils in the Ag Reserve is not wise. Attempting to eclipse Mont. Co's Solar ZTA should not be prompted by current grid conditions in one locale, nor because the timeline set for achieving higher solar energy production is not on track at the moment.

Thank you for hearing this testimony.

Sincerely,

Dan Seamans, President Boyds Civic Association

OPC Testimony HB1035 & SB0937, HB1036 & SB0931, an Uploaded by: David Lapp

Position: INFO

DAVID S. LAPP PEOPLE'S COUNSEL

——— OPC

BRANDI NIELAND
DIRECTOR, CONSUMER
ASSISTANCE UNIT

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CARISSA RALBOVSKY
CHIEF OPERATING OFFICER

BILL NO.:

House Bill 1035/Senate Bill 0937 – Public Utilities -Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act) The President and Senator Feldman The Speaker and Delegate Wilson

House Bill 1036/Senate Bill 0931 – Public Utilities -Generating Stations - Generation and Siting (Renewable Energy Certainty Act) Senator Feldman Delegates Wilson and Crosby

House Bill 1037/Senate Bill 0909 – Energy Resource Adequacy and Planning Act Senator Hester

Delegate Crosby

COMMITTEE: Education, Energy, and the Environment

Economic Matters

HEARING DATE: February 28, 2025

POSITION: Informational

The Office of People's Counsel ("OPC") respectfully offers the following informational comments on the package of energy bills proposed by Senate and House leadership: House Bill 1035/Senate Bill 0937, the Next Generation Energy Act; House Bill 1036/Senate Bill 0931, the Renewable Energy Certainty Act; and House Bill 1037/Senate Bill 0909, the Energy Resource Adequacy and Planning Act. Collectively, these bills seek to encourage the development of in-State energy generation by (1) streamlining the permitting and regulatory processes for priority energy projects; (2) creating an integrated resource planning ("IRP") process to forecast the State's energy needs; and (3) establishing a nuclear energy generation procurement mechanism run by the Public Service Commission ("PSC").

Our comments below (1) describe the pros and cons of long-term, ratepayer-backed procurements for generation projects, (2) discuss provisions in the legislation intended to protect utility customers; and (3) provide context explaining that Maryland is not facing immediate needs for significant expansion of in-State generation to maintain reliable service.

I. Ratepayer-backed procurements

A stated goal of HB1035/SB0937 is to facilitate construction of new energy generation in Maryland by directing the PSC to (1) hold one or more "solicitations" for the construction or expansion of "dispatchable energy generation," and (2) establish a procurement mechanism for nuclear energy generation, which would function similarly to the State's existing offshore wind ("OSW") renewable energy credit, or OREC, program. These long-term procurements would—like ORECs—be backed by utility ratepayers. Under the OREC model, the price ratepayers will pay for the output of the facility is set before the plant goes into service. If the OREC price is below market prices when the power is delivered, Maryland customers benefit. But ratepayers take on significant risks that the prices locked-in through long-term procurements will exceed market prices when the power is delivered. Whether long-term procurements increase or decrease costs for customers largely depends on whether the solicitation procures energy and capacity at prices that end up being above or below market rates. A procurement during times of high prices could benefit customers if prices remain high over the 20-30 years following the date of commercial operation of the plant—which itself could be more than 10 years from the procurement date. But if the solicitation process locks in prices that are higher than actual market prices in future years, customer bills will be higher than they otherwise would be. This risk for ratepayers exists under any long-term, fixed-price arrangement, and the further out in time the arrangement lasts, the more difficult it is to speculate on future generation markets.

If a new generation facility is owned by a utility—or is otherwise backed by utilities—there is additional risk for ratepayers. For example, it is very difficult to shield customers from cost overruns in the plant development process when the project is owned by the utility. To the extent that the uncodified study directed by HB1036/SB0931 anticipates the possibility that ratepayers—through partnerships between the State's electric utilities and electricity suppliers—will back the development of new generation in the State, these risks are worthy of serious consideration. For additional discussion of the risks of utility-owned generation, please see the attached FAQs, also available on OPC's website.

II. Protections for utility customers

While there are risks inherent to locking in energy prices through long-term, ratepayer-backed procurements, these risks can be mitigated to some degree.

HB1035/SB0937 includes several provisions to mitigate these risks, some of which could be strengthened, as follows:

- Prohibiting the costs related to the construction or operation of an approved dispatchable energy generation project from being recovered through utility rates. As drafted, the bill does not direct procurement of the energy generated by these projects, and if strictly enforced, this provision could help to prevent ratepayers from bearing the risks of facility investments, including potential cost overruns.
- Requiring the PSC to determine net rate impact thresholds for the nuclear energy generation projects procured as a result of the bill. As in the OSW statute, these thresholds can put an upper limit on resulting increases on customer bills. Instead of setting a specific threshold in statute, as the General Assembly did in the case of ORECs, however, HB1035/SB0937 directs the PSC to determine the relevant thresholds and keep them confidential. Although the intent of leaving specific thresholds out of the statute appears to be to keep project applicants from "bidding to the cap," the bill as drafted provides the PSC with no guidance about how to determine an appropriate ratepayer impact threshold, leaving open the potential for an excessively high threshold in order to meet the goals of the bill. As an additional, minimum ratepayer protection, the bill should provide the PSC with some guidance on the level of the allowable ratepayer impact for nuclear procurements. For example, the bill could direct the PSC to base the threshold on its determination of the procurement's value in mitigating customer exposure to future high wholesale market prices, taking into account best estimates of future prices in the capacity, energy, and ancillary service markets.
- Requiring that a PSC order approving a proposed nuclear project provide that ratepayers and the State be held harmless for any cost overruns associated with the project. This provision is particularly important given the recent history of nuclear power development in the United States. The most recent completed reactors in the United States— Vogtle units 3&4 in Georgia—were significantly behind schedule and cost \$36.8 billion: \$22 billion more than the initially projected cost of \$14 billion. In December 2023 and May 2024, the Georgia Public Service Commission approved on aggregate a 23.7 percent rate increase and a 47.3 percent expansion in utility rate base, in exchange for only a 7.51 percent expansion in generating capacity for Georgia Power. The electricity from Vogtle is, therefore, the most expensive in the world at \$10,784/kW; typical

¹ Georgia Pub. Serv. Comm'n, *Order Adopting Stipulation*, Docket No. 29849, Document Filing No. 217284 (Jan. 31, 2024), https://psc.ga.gov/search/facts-document/?documentId=217284, at 13 (allowing for recovery of financing costs and capital costs).

generation prices for wind, solar, or natural gas range from \$1,000 - \$1,500/kW.² Recent developments with small modular nuclear reactors ("SMRs") have not fared any better. In November 2023, NuScale, the developer of a SMR that had been the project closest to reaching commercialization, cancelled its project after significant delays and costs increased from initial estimates of \$3 billion in 2015 to \$9.3 billion at the time of cancellation in 2023.

• Barring payments under a long-term pricing schedule until electricity supply is generated by the project. This provision appears to protect customers from paying for nuclear generation if the project never goes into operation. It should be noted, however, that when a project is completed, it could mean a substantial increase in utility rates at the time of commercialization, depending on market prices.

OPC appreciates these efforts to limit ratepayer exposure to the risk of cost overruns and to prevent customers from paying for projects until the project generates energy.

There are other elements of the three bills intended to provide additional protections for ratepayers, including:

• Prohibiting an electricity supplier or other owner of a generating station from entering into a contract for the provision of the direct supply of electricity to a commercial or industrial customer in a way that bypasses interconnection with the electric transmission distribution systems or the distribution services of an electric *company*. The addition of any facility that consumes a large quantity of electricity in Maryland will have impacts on the grid and on other Maryland customers, regardless of whether a large new customer is interconnected in the traditional way or co-located with generation in a way that bypasses interconnection or the distribution services of an electric company. Although the addition of load in either case can cause the same additional costs, the cost responsibility under federal and state law and regulation may be different depending on whether the load is a behind-the-generator-meter configuration, or a "non-co-located" equivalent load. By prohibiting co-location that bypasses interconnection or an electric company's distribution services, this provision ensures that the PSC has jurisdiction over the facilities serving co-located configurations located within the state of Maryland and may set rates for the collection of transmission costs from co-located load customers. The provision would also limit the possibility that co-located load in Maryland would not be subject to the state's renewable portfolio standards ("RPS") and requirements to procure ORECs and contribute to the Electric Universal Service Program ("EUSP").

² Patty Durant, Kim Scott, and Glenn Caroll, *Plant Vogtle: The True Cost of Nuclear Power in the United States*, Cool Planet Solutions (May 2024), https://truthaboutvogtle.com/wp-content/uploads/2024/06/Truth-about-Vogtle-report.pdf, at 23.

- Streamlining permitting and other regulatory processes for priority energy projects. Provisions of both HB1035/SB0937 and HB1036/SB0931 seek to eliminate barriers to the development of clean energy generation in the State by streamlining or expediting what can be time-intensive permitting and regulatory processes. To the extent that expediency is appropriately balanced with adequate opportunity for public notice and participation, these measures have the potential to benefit ratepayers by enabling the deployment of more clean energy resources and bringing down the wholesale costs of electricity.
- Integrated resource planning ("IRP"). IRP allows for a transparent, structured, and systematic review of the multiple options available to expand an electric system. In evaluating resource adequacy and the expansion needs of the system, IRP considers holistically the different components of the system—i.e., transmission, generation (including storage), distribution, and non-wires alternatives (such as storage, demand response and energy efficiency)—and permits consideration of different options for preferred expansion of the system. Absent an IRP process or similar planning, there is less assurance that any discrete system expansion or procurement will be cost effective or coordinated with the overall needs of the electric system to allow service for Maryland customers at the lowest possible cost.

III. No need for immediate action on significant expansion of generation in Maryland

Important context to any legislation that increases risks to Maryland utility customers is that the State does not need to take immediate action to encourage the development of large power plants in the State. Under conservative assumptions, Maryland has sufficient resource adequacy—ability to "keep the lights on"—in the near term to meet the peak demands on its system. Specifically, sufficient transmission and generation resources currently exist to meet the resource adequacy needs for every part of the State through at least 2029.³ For additional information and context, please see the attached FAQs, also available on OPC's website.

Further out into the future, PJM is not forecasting significant load growth in Maryland. Load growth is forecasted in the Frederick area due to data center projects; however, that area has not historically been transmission-constrained, meaning that there is sufficient existing transmission capacity to allow that area to be served by all the

³ See Office of People's Counsel Comments, Public Service Commission Admin Doc. No. PC66, Submission No. 31 (explaining results of technical analysis). Beyond 2029, additional planned transmission capacity is needed. PJM has already approved construction of transmission—scheduled to come online in 2028—to fill this need. *Id.*

resources in PJM. PJM's forecasts of average annual demand growth through 2045 for the other Maryland zones that have historically been transmission-constrained—including the BGE zone—are modest, ranging from 0.37 percent to 0.67 percent.⁴

Even if new generation—even new *clean* energy generation specifically—is needed, the high prices in PJM capacity market are providing incentives to existing generation—though not limited to clean energy generation—to remain online and to new generation to come online. These resources would be backed by private investors—without the set-prices created by the procurement mechanism in HB1035/SB937 that are backed by utility customers. No Maryland laws preclude new generation of any sort from building in Maryland, provided they meet siting and other local requirements. Moreover, any new nuclear energy generation would take many years before commencing operations, likely more than 10-15 years and potentially much longer, extending further out in time the uncertainty of calculating an appropriate cost to which ratepayers would be committed.

OPC appreciates the opportunity to provide this information on HB1035/SB0937, HB1036/SB0931, and HB1037/SB0909.

⁴ https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2025-load-report.pdf.

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(January 28 2025)

Maryland Resource Adequacy FAQs

What is resource adequacy?

Resource adequacy requires having enough electricity generation to serve peak demand—including a "reserve margin" buffer for uncertainty—along with enough room on the transmission system to reliably deliver the power to customers.

Who is responsible for ensuring resource adequacy in Maryland?

PJM Interconnection, LLC (PJM), the regional transmission organization (RTO) for Maryland and 13 other jurisdictions in the region, is responsible for ensuring resource adequacy in Maryland. RTOs like PJM operate the transmission system and the wholesale energy markets and are regulated by the Federal Energy Regulatory Commission (FERC). Subject to FERC's oversight, PJM sets the reserve margin necessary to meet the reliability and resource adequacy criteria established by the North American Electric Reliability Corporation (NERC) and the regional entity to which NERC delegates authority, the Reliability First Corporation, to determine and assess electric reliability, including resource adequacy, for PJM.

PJM evaluates resource adequacy for the PJM region as a whole, as well as smaller zones within the region (called Locational Deliverability Areas or LDAs).

How is resource adequacy achieved in Maryland?

PJM runs auctions for "capacity" in which generation companies commit to being available to run when needed to meet demand. The capacity auctions (in PJM parlance, the Base Residual Auction, or BRA) are run annually and have the goal of ensuring sufficient generation to meet power needs for the region as a whole (PJM's regional territory) and—based on the ability of the transmission system to import power—for the smaller zones within the region. The auction is designed to enable the procurement of sufficient resources to satisfy the resource adequacy criteria applicable to PJM and Maryland.

What is the resource adequacy situation now?

PJM ran its latest capacity auction in July 2024. That auction secured enough capacity to meet anticipated customer peak power demands and a sufficient reserve margin for the PJM region as a whole and for most zones in Maryland for the 2025/2026 delivery year—which runs from June 1, 2025, to May 31, 2026. In that auction, the capacity bids to meet PJM's requirements in Baltimore Gas & Electric's service territory zone—called the "BGE LDA"—fell just short because the Brandon Shores and Wagner power plants, having announced an intention to retire, did not bid into the auction. Although these results *do not* indicate expected outages in the BGE LDA, the results *do* indicate a need for more generation or transmission.

PJM ensured reliability in the BGE LDA for the 2025/2026 delivery year by entering into "reliability must-run," or "RMR" arrangements with Brandon Shores and Wagner. RMR arrangements keep the plants online past their intended retirement date and obligate the plants to generate power until planned transmission enhancements add new capabilities to import power into the area. It is reasonable to conclude that the BGE LDA will not have resource adequacy—or reliability—issues for the foreseeable future because of the RMR arrangements and the planned transmission enhancements that will replace the generation lost by these plants' retiring.

Under RMRs, generators commit not to retire their power plants at their announced retirement date and are guaranteed payment at a regulated rate which is almost always much higher than the market rate. They are paid that higher rate even if their exclusion from the capacity market increases the clearing price for the capacity market.

Following the summer 2024 auction, OPC and many others challenged PJM's policy of excluding Brandon Shores and Wagner from the auction, and PJM is now seeking to change that policy to include RMR units in the auction. Doing so should reduce the costs for ratepayers in the region, who currently functionally pay for the capacity of the power plants twice: once through the inflated capacity market prices, and again through the RMR arrangement that also ensures the units act as capacity.

OPC released a report on the 2024 capacity market auction, the RMR arrangements and their impacts on customers in August 2024.¹

¹ Bill and Rate Impacts of PJM's 2025/2026 Capacity Market Results & Reliability Must-Run Units in Maryland, OPC (August 2024).

What are the future prospects for resource adequacy in Maryland?

Maryland appears to have sufficient resource adequacy in the near term to meet the peak demands on its system.² Any assessment of Maryland's resource adequacy should include an assessment of both generation resources located within each of the LDAs in Maryland and an assessment of the power transfer capacity into the LDAs in Maryland using the transmission system. It should also include other measures such as demand response and energy storage, accounting for existing tools the Public Service Commission has to mitigate resource adequacy issues. The contribution to resource adequacy from Maryland-located generation depends, in part, on finalizing RMR arrangements for the Brandon Shores and Wagner power plants near Baltimore—which appears imminent—and the continued availability of the Calvert Cliffs Nuclear Plant to serve existing customers.

Based on information received from Maryland utilities, PJM is not forecasting significant data center growth in Maryland. Some data center growth in the Frederick area will occur, but that area is not transmission-constrained, which means that existing and planned transmission for those data centers will ensure resource adequacy there. PJM's forecasts of average annual demand growth through 2045 for the other Maryland zones—including the BGE zone—are modest, ranging from 0.37% to 0.67%. PJM's transmission solutions for planned power plant retirements intend to address the resource-adequacy impacts of those retirements. Further, all of Maryland's coal-fired power plants have already retired or announced plans to retire. Higher capacity market prices across PJM also are incentivizing plants to remain online or come out of retirement.³

PJM is scheduled to run its next auction in June 2025 for the 2026/2027 delivery year that runs June 1, 2026, to May 31, 2027. Some analysts are predicting that there will not be enough capacity to meet the expected demand and reserve margins for PJM as a whole in that auction. These predictions are due to forecasts of data center growth mostly outside of Maryland and present issues largely beyond Maryland's control.

Does Maryland's status as a "net importer" of generation mean more in-State generation is needed for resource adequacy?

No. Resource adequacy depends only in part on the geographic source of energy production. It is mostly a function of peak demand and the combination of generation and transmission capability to meet that demand. Maryland's status as a net importer speaks to overall energy consumption—at all times of day over the course of a year—and is measured in megawatt-hours (or kilowatt hours), which is a different measurement than used for reliability and system capacity—*megawatts*. Meeting resource adequacy requires

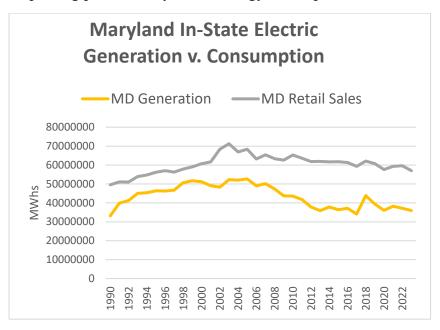
² Public Service Commission PC66, Comments of the Office of People's Counsel (Jan. 17, 2025).

³ See, for example, Middle River Power reverses plan to shut 540-MW plant amid record PJM capacity prices, Utility Dive (Sept. 12, 2024). The plant discussed in this article is in Illinois.

having sufficient *megawatts* available at time of highest demand on the system, while Maryland's status as a net importer of 40 percent of its *megawatt hours* speaks only to overall energy consumption.

The relevant available data does not show that there is a near-term need for generation located in Maryland for reliable electric service. The transmission system in place can import sufficient power into Maryland, and new transmission under development will increase that capability as power plants retire.

Maryland has imported a portion of its power needs for many decades through both periods of high and low energy costs.⁴ In fact, more states in PJM are energy importers than exporters. D.C. imports about 98 percent of energy, and Delaware about 57 percent. As long as there is enough capacity in the region and sufficient transmission to deliver the electricity, importing part of Maryland's energy needs poses no risk to Marylanders.



Maryland, like many states in PJM, has long imported more electricity than it generated.

In fact, Maryland customers benefit from being part of a diverse regional system and market, and it has been part of PJM for more than 60 years.

It is true, however, that new generation is needed within PJM's broader footprint, considering increasing demand from data centers and potential power plant retirements.⁵

⁴ See State Electricity Profiles, EIA, Table 10. Maryland has been a net energy importer of electricity every year since 1990 (the EIA only provides data going back to the '90s). In 2013, Maryland imported 30,881,323 MWh, or 46% of its total electricity from other states, the highest annual import to date. 1998 was the lowest year of imports since 1990, with 13,945,102 MWh, or 22% imported into the state. In 2023, 24,139,011 MWh, or 40% of the state's demand, was imported.

⁵ At least some of this demand may be illusory. *See*, e.g., <u>Investors may overestimate benefits to utilities of datacenter boom</u>, <u>S&P Global</u> (June 18, 2024). Regardless, because PJM has accepted projected load growth from data centers, it has increased the capacity requirements to meet the reliability requirement.

Maryland, however, cannot address regionwide resource adequacy issues raised by data center growth elsewhere in PJM without taking on significant costs.

How can Maryland lower the costs of assuring resource adequacy for customers?

Even though it is likely that there will be sufficient resources in Maryland to meet resource adequacy standards, tight market conditions *throughout* PJM could lead to high prices for capacity for Maryland customers in upcoming years. A variety of "no-regrets" solutions could enhance resource adequacy, reduce risks to customers of reliability issues, and minimize the chances of paying high prices for potentially unnecessary transmission and generation. These no-regrets measures include:

• Demand flexibility and response. Foremost among "no regrets" solutions are measures to enhance demand flexibility and response. Demand response refers to programs that pay or credit consumers for decreasing their energy use during peak demand hours. Estimates from the EmPOWER future programming work group indicate that it would be cost effective to deploy more than four times the amount of demand response utilities paid for in 2023. Demand response can bid into PJM's capacity market, and so, in addition to decreasing the real-time cost of electricity, can decrease capacity costs for consumers.

The electric system is built for—and resource adequacy is measured based on—peak demands on the system. Programs that encourage consumption more evenly across the day would decrease peaks that drive resource adequacy needs and thereby decrease system costs.

- Energy efficiency. Maryland could also take measures to require more energy efficient appliances. While energy efficiency can no longer bid into PJM capacity markets, encouraging energy efficiency can still reduce capacity demand. Energy savings means that less capacity is needed to serve the lower peak demand, thus decreasing capacity costs, while also lowering customer bills. An analysis for the EmPOWER energy-efficiency programs found vast quantities of cost-effective energy-efficiency savings are available beyond what the current EmPOWER program alone can provide.
- Existing transmission enhancements. The transmission system is part of the resource adequacy equation. Limits on how much electricity can be delivered

⁶ Utilities procured 125 MW of demand reduction in 2023. See The EmPOWER Maryland Energy Efficiency Act Report 2024, Public Service Commission (May 2024), at 15. It would be cost effective to procure more than 500 MW of demand response. See Maryland GHG Abatement Study Final Response, Applied Energy Group (Dec. 2, 2022), at 40. Originally submitted to the PSC under maillog number 300426.

⁷ On Nov. 5, 2024, FERC accepted tariff revisions from PJM that prevent energy efficiency from participating in the capacity markets. *See* <u>Docket No. ER24-2995</u>.

over any given transmission line are determined by the physical characteristics of the wire. Grid enhancing technologies, also called GETs, refer to a suite of new technologies that provide low-cost methods to make the most of existing transmission infrastructure. GETs can help defer, or even avoid, expensive construction of new transmission lines and enable more generation to connect to the system and serve customers. One study estimates that GETs could save \$1 billion annually across PJM by 2033.8

- Distributed Energy Resources (DERs). Greater deployment of DERs—such as rooftop solar, community solar, and batteries—can also promote resource adequacy and decrease capacity costs. DERs connect to the distribution grid—and not the transmission grid—and so are not impacted by the current delays in PJM's process for connecting generation at the transmission level. DERs can either participate as demand response—by allowing residential customers to draw energy from their battery or "behind-the-meter" solar, rather than the grid, during times of peak demand—or they can be aggregated in a "virtual power plant" (VPP) to act as a generator that can bid capacity into the capacity auction. Studies have shown that virtual power plants can provide great value to the grid, with one study finding that VPPs could save utilities \$15-\$35 billion in capacity investments over a 10-year period.⁹
- Energy storage. Energy storage can "firm up" the capacity value of intermittent renewable generation by allowing energy from solar and wind to be stored and later deployed at moments of peak demand. Energy storage can help avoid costly transmission-system upgrades by pre-flowing energy over a transmission line and storing it on the other side of the line prior to times of peak demand. When demand peaks, energy can then be supplied both over the transmission line in real time, and from the batteries.
- Surplus interconnection service. PJM is asking FERC to approve more robust surplus interconnection service (SIS), which could also promote resource adequacy and lower costs. Many generators—especially intermittent renewable generation—do not use their full allowable transmission capacity.

More robust SIS would enable additional generating units to share the interconnection with existing generators so long as the combined generation does not export more than the existing generation's maximum allowed output at any given moment. SIS could allow solar and wind resources to add battery storage to their sites and significantly increase supply in the PJM capacity market. One study estimated that batteries utilizing SIS on existing PJM solar interconnections alone could unlock an additional 5,862 MW of capacity—an

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⁸ GETting Interconnected in PJM, RMI (February 2024).

⁹ Real Reliability: The Value of Virtual Power, Brattle (May 2023), at 25.

amount equivalent to about 90% of Maryland's largest utility's current peak demand. ¹⁰ If FERC approves PJM's proposal, State policies to site batteries alongside intermittent generators using SIS could add new capacity within approximately one year.

Are there other measures that Maryland should take to assess or address resource adequacy?

Maryland can require greater information about large customers—such as data centers—that plan to locate in Maryland and take measures to ensure that new big customers do not harm existing customers. For example, Maryland could require large customers to provide for their own generation needs and contribute to State policies and programs such as the Electric Universal Service Fund, EmPOWER, and the State's clean energy goals. Further, data centers that have flexible power needs could bring benefits to the system.

Also, the State could take actions to promote more accurate forecasts of future loads, and State agencies can advocate for beneficial changes to PJM and FERC policies. OPC is very active as a member of PJM, engaging daily in PJM workgroups and processes and advocacy before the FERC.

Is now a good time for Maryland to require in-State generation?

No. Interest rates are high, supply chain challenges are ongoing, and the high prices in PJM capacity market are providing incentives to existing generation to remain online and new generation to come online without ratepayer backing. As has long been the case for Maryland, if it's profitable because it's needed, private generation companies can provide the investor backing for new generation plants.

Moreover, any new baseload generation would take many years before commencing operations, likely more than six years and potentially longer, extending further out in time the uncertainty of calculating an appropriate cost that ratepayers would be committed to.

Further, the data on load forecasts is fraught with speculation. Demand growth is likely to "fail to materialize as forecast," a January 2025 analysis from Bank of America concludes, and when this happens "there are significant risks to overbuild of resources with no demand to serve." Without an immediate urgency, Maryland would be better off waiting to see how projections for increasing electricity demand in other parts of PJM play out.

¹⁰ ReSISting a Resource Shortfall: Fixing PJM's Surplus Interconnection Service (SIS) to Enable Battery Storage, ACORE (Sept. 18, 2024).

¹¹ US Power & Utilities: Year Ahead 2025: Is Past What's Prologue?, Bank of America (January 7, 2025)

Finally, as described above, there is no immediate resource adequacy issue requiring Maryland to take action that risks further increases to utility customer bills. Most Maryland utility customers are already facing some of the highest bills they've ever seen because of massive rate increases over recent years, as described in our June 2024 rates report.

Would allowing Maryland's utility monopolies to build and own power plants enhance resource adequacy and, if so, at what cost?

As noted above, Maryland does not need to take action to encourage the building of large power plants within the State. While any generation may lower costs in the medium to long term, utility-owned generation would likely do so at a higher cost than relying on independent power producers to construct more generation in the competitive market or making the most of the alternatives described above. In Maryland, law in place since 1999 allows utilities to build and own generation subject to Public Service Commission approval, but this law has not been utilized.

Allowing utilities to build generation poses significant risks to Maryland's utility customers, with few offsetting benefits.

First, utility ratepayers could bear uneconomic costs. Maryland ratepayers would still have to cover power plant costs (plus a profit margin) if the units sit unused because there are other lower-cost generators available to serve customers or they are incompatible federal or State climate goals. Indeed, data shows that New Jersey customers narrowly avoided paying nearly a half billion dollars above the market over the last ten years because a proposal to build out-of-market generation was overturned by the courts.

Second, utilities have no inherent advantages in constructing generation over non-utilities other than their ability to recover all their costs—no matter how high—from their captive customers. Non-utility generation companies, in fact, purchase the equipment to build generating plants from the same vendors as a Maryland utility would. Also, many non-utility companies have much greater experience actually building generation, which utilities have not done for about three decades.

Third, any new gas plant will take years—likely much more than five years—to come online. ¹² By that time, planned new transmission is highly likely to be completed that will be available to serve Maryland customers and would allow other generation sources to

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¹² See Silverman et. al, <u>Outlook for Pending Generation in the PJM Interconnection Queue</u> (May 2024) at 9, (finding that "[A]bsent significant reforms or market innovations, most projects entering PJM's queue today are unlikely to come online before 2030.").

compete against—and potentially out-compete—a utility-owned generating plant, to the detriment of customers, as the New Jersey example shows.¹³

Finally, although additional new generation anywhere in the PJM region potentially decreases capacity costs by increasing supply, in the case of utility-owned generation, customers themselves do not necessarily benefit from lower prices. Rate-regulated utilities—which have exclusive government monopolies and captive customers—are paid on a "cost-plus return" basis, and if the costs are higher than competitor's costs, the utility is generally entitled to recover those costs plus its return as a matter of law. And because there is great uncertainty with projecting generation market prices over the life of the power plant, it is not possible to know whether utility ownership of generation will benefit customers.

What *would* be certain, however, is that captive utility customers bear all the risks that the future costs paid to the utilities would be higher than market prices. That is the opposite of how risks are allocated currently to the investors of competitive generation companies.

Would it be different if Maryland directed its utilities to competitively procure new in-State generation through purchase power agreements?

Requiring a competitive procurement for generation rather than simply requiring utility generation investments would be more protective of utility customers because it would avoid some—though not all—of the problems described immediately above.

Most importantly, it would not avoid the guesswork about future market prices that puts ratepayers at risk. As the New Jersey example noted above illustrates, locking in prices with private generation companies shifts the risks of low future market prices to customers. One simply cannot know what the future capacity and energy markets will do. As with utility ownership, what *would* be certain is that captive utility customers would bear all the risks that the future costs of the procurement would be higher than market prices.

capacity in the queue or under construction in PJM. See Serial Service Request Status, PJM.

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¹³ There is currently 427.9 MW of capacity associated with projects that are not yet constructed but that do have signed interconnection service agreements (ISAs) in Maryland. These plants can come online and are not impacted by the queue delays. Queue delays are holding back a much larger tide of generation that wants to interconnect. There is 6,122.0 MW of capacity in the queue in Maryland, and 152,384.0 MW of

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Position: INFO



February 26th, 2025

Committee: Senate - Education, Energy and the Environment; House - Economic Matters

Testimony on: SB931/HB1036 "Renewable Energy Certainty Act"

Hearing Date: February 26, 2025

Dear Chairman Feldman and Committee Members,

American Farmland Trust (AFT) is a national nonprofit organization committed to saving the land that sustains us by protecting farmland, promoting sound farming practices and keeping farmers on the land. One of the strategies to achieve this mission in 2025 is to advance Smart Solar development to maximize the benefits to rural economies and farm viability and minimize the conversion of high-quality farmland out of production in order to get renewable projects built.

Solar energy development is taking place in the context of a continuing national trend of farmland loss. In AFT's 2019 Farms Under Threat the State of the States report, AFT found that between 2001 and 2016, 11 million acres nationally were lost or threatened by high- and low-density residential development. In Maryland, 102,700 acres of agricultural land were developed or compromised by residential and commercial development from 2001-2016. Nearly 58,500 of those acres were Nationally Significant – land best suited for intensive food and crop production. If recent trends continue, 178,200 acres of Maryland's farmland will be paved over, fragmented, or converted to uses that jeopardize agriculture -- 54% of Maryland's conversion is projected to occur on the state's best land.

Solar is a cost-competitive form of domestic energy production that is being developed to decarbonize the electric grid—and much of it is also being sited on farmland. Modeling done by AFT through its <u>Farms Under Threat: 2040</u> analysis, projects that without policy intervention 83% of new solar development nationally will take place on agricultural land, with almost half on our most productive land for producing food and other crops. Most of this new solar development is concentrated in rural communities with favorable siting characteristics—flat, open, and sunny land with grid interconnection near energy demand—some of which already face high rates of farmland conversion to urban and residential development. And much of this new solar development will be large utility-scale projects.

This solar growth can provide important financial benefits in the form of long-term leases for landowners and tax revenue for rural municipalities, which can contribute to farm profitability. But it is also raising concerns about the conversion of limited high-quality farmland out of production, displacement of farmer-renters outcompeted by solar developers, and the impacts to the local farm economy from large-scale conversion of productive farmland in host communities for 25-40 years or more. Farms are anchor businesses in rural communities, not only providing food, fuel, and fiber but also supporting an ecosystem of services and businesses such as feed and seed dealers, equipment purveyors, and veterinarians. In short, supporting farm viability and keeping land in production to continue this local economic activity is critical to enhancing rural vitality as solar development expands in Maryland.

American Farmland Trust has developed four Smart Solar Principles that are designed to help ensure that solar development strengthens farm viability and rural vitality to get projects built. These principles are:

- Prioritize siting on the built environment and contaminated (e.g., landfills, brownfields) and marginal land;
- > Safeguard the ability to use land put into solar for farming by protecting soil health, especially during high disturbance times of construction and decommissioning;
- Expand development of agrivoltaics projects which integrate agricultural production into solar arrays; and
- > Promote farm viability and equity by ensuring farmer engagement and shared benefits.

AFT reviews proposed renewable energy policies to analyze both how well they adhere to these principles and achieve AFT's Smart Solar goals, and also in light of its experience with policy work in other states. Through these lenses, AFT has a several comments for the legislature and other stakeholders to consider as it reviews SB931/HB1036:

• More work can be done to incorporate Smart Solar Principles and ensure permitted projects support farm viability. No matter where permitting jurisdiction is housed, Smart Solar Principles should be fully incorporated into these policies to achieve the goals of maximizing benefit for farm communities while

minimizing harms. According to an internal GIS analysis, only 25% of the land in Maryland that is within 3 miles of transmission and under 7% slope is classified as USDA Prime soils. Nearly a third of the 75% that is left is farmland. While Maryland SB931 does incorporate some standards to protect topsoils during construction, it does not contain policies, like mitigation fees, that could steer siting away from high-quality farmland towards more marginal farmland, nor does it advance or incentivize agrivoltaic projects that keep high quality farmland that *is* converted to solar in agricultural production. Finally, while there are welcome protections for topsoil written into the current draft, the standards are not yet comprehensive enough to safeguard the ability to farm the land that is put into solar now or in the future. In short, more can be done to strengthen the bill's adherence to AFT's Smart Solar principles.

- Much of the proposed policy conflicts with current home rule and minimizes local control and benefits. The legislation proposes re-housing permitting for all projects 2MW and above with the state, preempts local policymaking that is more restrictive than the standards detailed in the bill, and limited the ability to collect local taxes on renewable facilities. Two megawatts in size translates to projects that are as small as ten acres in size—which comfortably would fall within the jurisdiction of a single municipality. In AFT's experience, states that have re-housed some permitting authority with the state have done so only in the case of larger projects that cross jurisdictional boundaries—for example, in 2019, the state of New York created a new state agency to permit renewable projects that are 20-25MW or above. While this was still perceived as a taking of power that was granted to municipalities (triggering legal action), the state was judicious in only giving itself authority for projects that crossed the boundaries of many municipalities.
- Height standards, as written, would limit agrivoltaic development. Some of the standards written in the bill may be so detailed as to have unintended consequences. For instance, the standard limiting arrays to 20 feet in height have no exception for agrivoltaic projects, which are sometimes designed to be vaulted higher in the air to allow farm machinery to pass underneath. This bright line would have an unintended consequence of limiting the ability to develop certain types of farm-friendly agrivoltaic projects.

While AFT acknowledges the need for clean energy, we believe that well-designed and sound strategies must be developed to incentivize many of the underlying issues this bill is attempting to address. **AFT recommends taking the time to re-draft the current legislation with a wider array of stakeholders rather than passing the bill as written**. AFT is at the ready to assist in helping to incorporate its Smart Solar principles into this or other proposed legislation to increase farm viability and keep land in production as the state works to decarbonize its grid.

Sincerely,

Eric Bronson Sr. Smart Solar Specialist, Mid-Atlantic Region

Samantha Levy Sr. Policy Manager for Conservation and Energy

HB1036-AdvocatesForHerringBay-Information.pdf Uploaded by: Kathleen Gramp

Position: INFO



Testimony of the Advocates for Herring Bay¹ Regarding SB 931/HB 1036—Public Utilities – Generation and Siting Submitted by Kathleen Gramp, February 26, 2025

Informational

The Advocates for Herring Bay (AHB) have an active interest in solar policy because of our dual focus on clean energy and promoting the health and sustainability of Maryland's ecological resources. We are submitting information for the record on two environmental concerns—forest and stormwater management—that are not addressed effectively by SB931/HB1036 or in current law.

Minimizing impacts on forests: Maryland lags behind states like New Jersey in mitigating the impacts of multi-acre solar arrays on forested land. For example, New Jersey's <u>Solar Act of 2021</u> expressly precludes siting projects larger than 5 megawatts on designated forested lands without a waiver. Similarly, the list of surfaces eligible for <u>New Jersey's community solar program</u> excludes forested land. SB931/HB1036 does not address the potential impacts of solar projects on forested land.

The potential for impacts on Maryland's forests is real. A 2017 solar application would have cleared 240 acres but was disapproved based on wetlands issues. Attachment 1 shows three recent projects being built on parcels that are completely forested, including a 22-acre area that is part of Maryland's Habitat Connectivity Network. Those and other forest-related projects are in areas that experienced the greatest forest loss over the 2013-2018 period, according to a 2022 study by the Hughes Center on Agro-Ecology.²

Legislative options for minimizing the loss of ecologically valuable forests could include enacting provisions similar to those in SB983/HB827 regarding forest clearance,³ adopting New Jersey's waiver approach, or directing the state to screen projects using Maryland's maps of Ecosystem Services Values.⁴

Ensuring best practices for stormwater and erosion control. Maryland's solar-specific stormwater law and guidelines were written more than a decade ago, before the state began experiencing more intense rain events stemming from climate change. They also predate research on best practices by the National Renewable Energy Laboratory (NREL), Penn State, and Virginia Tech.

Recent studies show that well-drained soils and deep-rooted vegetation under and between the panels can reduce runoff.⁵ For that "green infrastructure" to be effective, stormwater estimates and strategies must account for the effects on runoff from the solar panels (which may vary in their impacts), the absorptive capacity of soils before and after construction, and the permanent groundcover at each site.⁶ Attachment 2 highlights ways that soil characteristics and the absorptive capacity of ground covers could affect runoff.

Legislative options for ensuring best practices could include enacting provisions similar to those in SB983/HB827 (as amended)⁷ or directing the state to update its solar-specific stormwater guidelines to incorporate best practices for estimating and managing runoff at each site, including methods that account for the effects of solar panels, soil characteristics, and ground covers on runoff. While SB931/HB1036 includes discrete directives regarding grading, mowing, herbicide applications, and bonding to ensure vegetation is maintained for the first 3 years of the project, it does not require doing the holistic analyses or using the resources shown to be effective in minimizing runoff from solar projects.

¹ The Advocates for Herring Bay, Inc. is a community-based environmental group in Anne Arundel County.

² See Technical Study of Changes in Forest Cover and Tree Canopy in Maryland, November 2022.

³ See SB 983/HB 827 as introduced, Section 7-207.4 on page 5, lines 18-24.

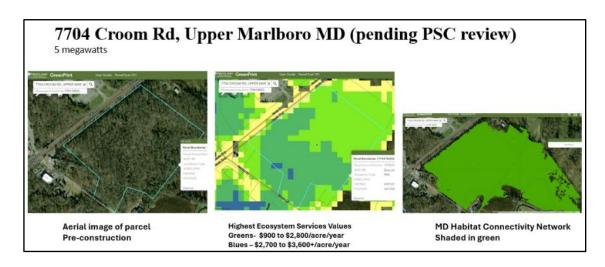
⁴ See MD Department of Natural Resources background on Ecosystem Services Value.

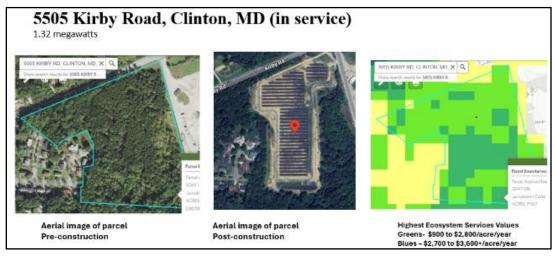
⁵ See Penn State University, Solar Farms with Stormwater Controls Mitigate Runoff, Erosion, July 18, 2024.

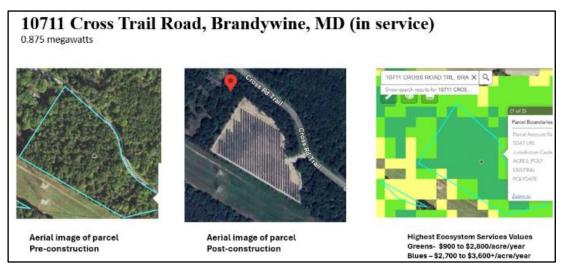
⁶ See NREL's <u>overview of the PV-SMaRT program</u>.

⁷ See bills as introduced, Section 7-207.4 on page 5, lines 25-31. It is our understanding that those provisions will be amended to clarify that the standards shall the consider effects of soil characteristics and ground covers on runoff.

Attachment 1: Examples of Solar Projects Sited on Forested Parcels Maps of ecosystems services values are from MD DNR's Greenprint GIS







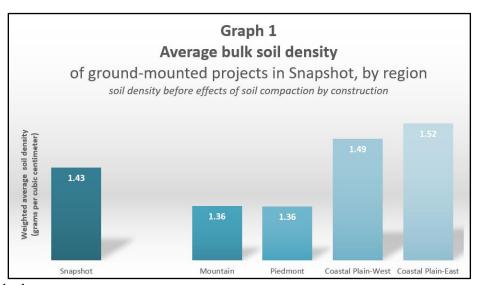
Attachment 2: Overview of Solar Stormwater Runoff Estimates and Issues

Presentations at an April 2023 conference convened by the Chesapeake Bay Program addressed some of the challenges and opportunities for managing stormwater runoff from solar arrays. The conference included a review of a federally funded modelling effort known as "PV-SMaRT," which is being developed by the National Renewable Energy Lab (NREL) and the Great Plains Institute (GPI) to estimate the key drivers of runoff from solar projects.

Policymakers can use the PV-SMaRT calculator to gauge how estimated runoff may differ under varied environmental conditions. ¹⁰ Key inputs to the model include the density and depth of the soil, the type of ground cover under the arrays, and rainfall in a 24-hour period. All of the data presented in this Attachment assume that solar panels have an average width of 10 feet and are installed in rows 25 feet apart.

To apply the model to conditions in Maryland, AHB developed a "snapshot" of the types of soils under existing ground-mounted solar arrays using the U.S. Department of Agriculture's (USDA's) Web Soil Survey. 11 Because of data limitations, it was not possible to account for every ground-mounted solar project in the state. However, AHB's Snapshot covers over 1,700 acres of solar arrays spread across 20 counties and may provide reasonable parameters for estimating stormwater runoff using the PV-SMaRT calculator. 12

Graph 1 summarizes USDA's data on the weighted-average bulk density of the soils at the sites shown in the Snapshot. Because of the data limitations, this analysis aggregates the county-level results into broad geographic regions. Several sites had slopes higher than 10 percent, notably those on brownfields, but all of the runoff estimates presented here assume lower slopes. USDA's data also suggest that soil depths will exceed the 60-inch



metric used in the PV-SMaRT calculator.

See the proceedings of the April 2023 Scientific and Technical Advisory Committee's conference on <u>Best Management Practices to Minimize Impacts of Solar Farms on Landscape Hydrology and Water Quality</u>
 See Great Plains Institute Rest Practices: Photovoltaic Stormwater Management Research and Testing (PV)

⁹ See Great Plains Institute, <u>Best Practices: Photovoltaic Stormwater Management Research and Testing (PV-SMaRT)</u>, January 2023.

¹⁰ NREL's <u>overview of the PV-SMaRT program</u> includes a link to the PV-SMaRT calculator.

¹¹ See USDA Web Soil Survey.

¹² See Advocates for Herring Bay, Solar Soil Snapshot, 2024.

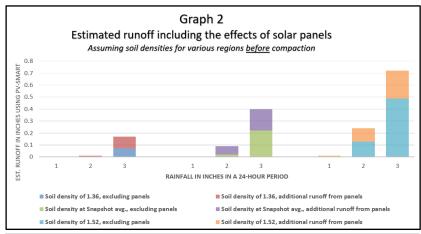
¹³ For this analysis, the "Mountain" region includes Allegany, Garrett, and Washington Counties; "Piedmont" includes Baltimore, Carroll, Frederick, Harford, Howard, and Montgomery Counties; "Coastal Plain-West" includes Anne Arundel, Charles, and Prince George's Counties; and "Coastal Plain-East" includes Caroline, Cecil, Dorchester, Kent, Queen Anne's, Talbot, Wicomico, and Worcester Counties.

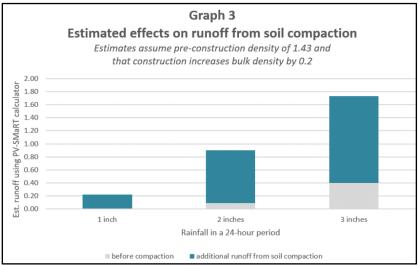
Testimony of the Advocates for Herring Bay Page 4 of 5

The following graphs summarize estimates of potential stormwater runoff trends in Maryland using the PV-SMaRT calculator and data from AHB's Snapshot. Unless otherwise noted, the estimates assume that the ground cover under the solar panels is turf grass. In addition, the estimates of runoff account for mitigation benefits of the "disconnection" distances between rows of panels. That is, the amounts shown are the incremental amounts of runoff not addressed by the vegetation between rows.

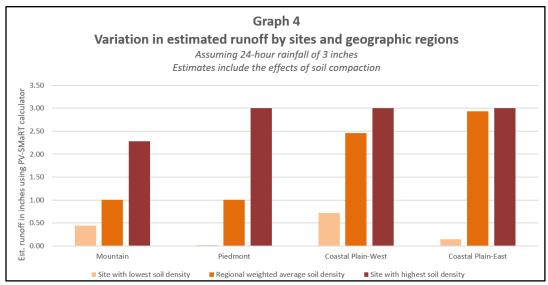
- Graph 2 shows the importance of including the solar panels in the calculation of impervious surfaces, especially as Maryland experiences more intense rain events;
- Graph 3 attests to the importance of accounting for the effects of bulk soil density on stormwater runoff, especially after any soil compaction resulting from construction¹⁴;
- Graph 4 illustrates the importance of accounting for the geographic diversity of soil densities among projects and regions of the state; and
- Graph 5 shows variations in the amounts of runoff that can be absorbed by different types of ground covers under the solar panels.

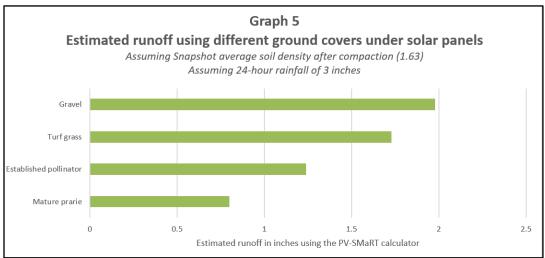
Finally, sustaining the infiltrative capacity of vegetation over the multi-decade life of solar projects will require continuous monitoring and maintenance. Patchy growth—which increases stormwater runoff—is already an issue for some existing Maryland solar projects (see Figure 1).

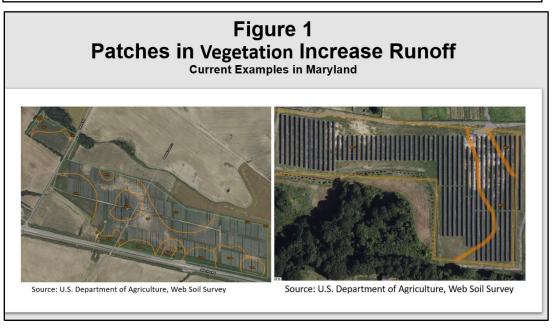




¹⁴ This analysis assumes that compaction will increase soil density by 0.2, the amount estimated by the Center for Watershed Protection for "construction, no grading." See Stormwater Center, <u>Compaction of Urban Soils</u>.







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Position: INFO



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February 28, 2025

To: Members of the House Economic Matters Committee

Members of the Senate Education, Energy, and the Environment Committee

From: Independent Electrical Contractors (IEC) Chesapeake

Re: Letter of Information for House Bill (HB) 1036 and Senate Bill (SB) 931 -

Public Utilities - Generating Stations - Generation and Siting (Renewable

Energy Certainty Act)

Independent Electrical Contractors (IEC) Chesapeake represents approximately 200 electrical contractors who employ approximately 15,000 workers in the mid-Atlantic region. In addition, IEC Chesapeake has nearly 1,000 electrical apprentices. IEC Chesapeake offers this letter of information for the Committee's consideration.

As the Committees consider SB931 and HB1036, which have requirements for the siting of solar generating stations, IEC Chesapeake strongly encourages that work on these projects be performed by licensed electricians. Utilizing licensed electricians on solar projects is good for the consumer, ensures safety, and promotes skilled craftsmanship.

Thank you for your consideration. If you have any questions, please contact Grant Shmelzer, Executive Director of IEC Chesapeake, at 301-646-0197 or at gshmelzer@iec-chesapeake.com or Kevin O'Keeffe at 410-382-7844 or at kevin@kokeeffelaw.com.

About Us

Independent Electrical Contractors (IEC) Chesapeake represents members throughout Delaware, Maryland, Virginia, West Virginia, and Washington, D.C. Our headquarters are located in Laurel, Maryland. IEC Chesapeake has an extensive apprenticeship program for training electricians. In addition, IEC Chesapeake promotes green economic growth by providing education and working with contractor members, industry partners, government policy makers and inspectors to increase the use of renewable energy.

HB1036_SB0931 - Public Utilities - Generating Stat Uploaded by: Landon Fahrig

Position: INFO



TO: Members of the Senate Education, Energy, and the Environment Committee & the House

Economic Matters Committee

FROM: MEA

SUBJECT: HB1036/SB0931 - Public Utilities - Generating Stations - Generation and Siting

(Renewable Energy Certainty Act)

DATE: February 28, 2025

MEA Position: LETTER OF INFORMATION

The bill will require that the Public Service Commission ("the Commission") and the Maryland Energy Administration ("MEA") shall: (1) develop technical safety standards for the installation and maintenance of residential rooftop solar energy generating systems; and (2) establish minimum qualifications for individuals installing and maintaining residential rooftop solar energy generating systems.

The bill does not specify which agency –the Commission or MEA– would cover the cost of developing these standards. MEA is not a regulatory body, and does not typically create standards of this sort nor collect fines as prescribed in the bill. Since solar installation and maintenance is outside of MEA's expertise, MEA would need a consultant for \$100,000 to assist with this effort unless the Commission would cover that cost.

This bill would also provide a significantly greater deal of siting certainty for the development of solar energy generation. The Maryland Supreme Court upheld state preemptive authority for generation in excess of 2 megawatts¹. This bill specifically applies to *solar* projects over 2 megawatts that are not located on a rooftop, carport, brownfield or those sighted behind the meter of a retail electricity customer. The bill sets specific requirements for siting including boundaries from property lines and occupied buildings, fencing, and vegetative buffers. The bill also prohibits jurisdictions from adopting zoning laws or regulations that prohibit the construction or operation of solar energy generating stations, denying site development plans that meet the siting requirements laid out in the bill, and requires local jurisdictions to expedite the review and approval of site development plans that meet the requirements of the legislation. Ultimate siting authority is maintained by the Public Service Commission ("the Commission).

Similarly, the bill creates siting standards for energy storage devices. "Energy storage device" is defined as a resource capable of absorbing electrical energy, storing it for a period of time, and delivering the energy for use at a later time as needed, regardless of where the resource is located on the

¹Board of County Commissioners of Washington County, Maryland v. Perennial Solar, LLC, No.66, September Term, 2018

electric distribution system. In particular, within the legislation, certain aspects of the current CPCN process –including public comment opportunities, public hearings, and notice thereof— would apply to energy storage devices in excess of 100 kilowatts [sic.]. Because the definition of "energy storage device" does not require interconnection to the distribution grid, MEA would note that this broad definition and the overall small battery size limitation may inadvertently include some passenger electric vehicles within the definition of "energy storage device" in excess of 100 kilowatt-hours(emphasis added).

Lastly, the bill creates an "automatic enrollment project", a local government owned and operated community solar energy generating system which (either the local government or its designee) serves as the subscription coordinator to automatically enroll customers, at least 51% of which must be low- to moderate-income subscribers. MEA would note that, though there is a requirement for subscribers to be low- to moderate-income or live in overburdened or underserved census tracts, there is no requirement for low-income subscribers. This means an automatic enrollment project is not guaranteed to reach low-income residents.

Our sincere thanks for your consideration of this testimony. For questions or additional information, please contact Landon Fahrig, Legislative Liaison, directly (<u>landon.fahrig@maryland.gov</u>, 410.931.1537).

25-0225 L Wilson - HB1036.pdfUploaded by: Laura Hurley Position: INFO



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WICOMICO COUNTY COUNCIL John T. Cannon, President/At-Large Jeff Merritt, Vice-President/District #2 James Winn, At-Large Shanie Shields, District #1 Shane T. Baker, District #3

Josh Hastings, District #4 Joe Holloway, District #5 Laura Hurley, Council Administrator

February 25, 2025

Economic Matters Committee Attn: The Honorable C.T. Wilson, Chair 230 Taylor House Office Building House Office Building, Room 231 Annapolis, MD 21401

RE: HB1036-Renewable Energy Certainty Act

Dear Chairman Wilson and Committee Members,

The Wicomico County Council supports the amendments proposed by the Maryland Association of Counties (MACo) for House Bill 1036, which are enclosed for your reference. We believe these amendments will ensure that local governments retain meaningful oversight over solar energy generation systems and related infrastructure, consistent with our County Comprehensive Plan, by addressing key concerns in the current bill.

As currently drafted, the Renewable Energy Certainty Act undermines our community's local taxing authority, zoning control, and resident input, while also failing to address critical safety measures related to utility-scale battery storage devices. Furthermore, House Bill 1036 overlooks important local land use practices, comprehensive planning, and economic considerations that have enabled productive state and county partnerships in achieving renewable energy portfolio goals. It also conflicts with long-standing land use and property rights assurances established in our Zoning Code.

The Wicomico County Council remains committed to protecting local interests and ensuring that community values and safety are prioritized in all renewable energy initiatives. We appreciate the opportunity to share our perspective and support the proposed amendments as submitted by MACo as a balanced and effective path forward.

Sincerely,

WICOMICO COUNTY, MARYLAND

John Y. Cannon, Council President

Enclosure

cc: Wicomico County Council

Wicomico County Delegation Wicomico County Executive

Bunky Luffman, Director of Administration

MACo Amendments to HB 1036 / SB 931

Amendment #1:

On page 2, after line 7, INSERT,

A PERSON MAY NOT EXERCISE A RIGHT OF CONDEMNATION IN CONNECTION WITH THE CONSTRUCTION OF A SOLAR ENERGY GENERATING STATION.

Amendment #2:

On page 4, after line 29, INSERT,

- (4) "PROJECT AREA" MEANS THE LIMIT OF DISTURBANCE. A PROJECT AREA MAY BE ONE OR MORE CONTIGUOUS PARCELS OR PROPERTIES UNDER THE SAME OWNERSHIP OR LEASE AGREEMENT.
- (5) "SOLAR ENERGY GENERATING SYSTEM" MEANS A GROUND-MOUNTED SOLAR ARRAY AND ANCILLARY EQUIPMENT, AND ACCESSORY BUILDINGS OR FACILITIES THAT GENERATE, MAINTAIN, OPERATE, MANAGE, DISTRIBUTE, AND TRANSMIT POWER. A SOLAR ENERGY GENERATING SYSTEM DOES NOT INCLUDE PROJECTS WHICH ARE BUILT OVER ROADS, PARKING LOTS, OR ROADWAY MEDIANS. THE SIZE OF A SOLAR ENERGY GENERATING SYSTEM IS DETERMINED BY THE PROJECTS INTERCONNECTION AGREEMENT.

Amendment #3:

On page 5, after line 17, INSERT,

(3) THE PROJECT HAS ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL APPROVALS.

Amendment #4:

On page 5, lines 18-20, after "(D)" STRIKE the lines in their entirety and INSERT,

"IN ACCORDANCE WITH COMAR 20.79.01.05, 90 DAYS BEFORE SUBMITTING AN APPLICATION FOR APPROVAL UNDER THIS SECTION, THE APPLICANT SHALL PROVIDE IMMEDIATE NOTICE OF THE APPLICATION TO:

Amendment #5:

On page 6, in line 17 after "(F)" STRIKE the lines through page 8, line 16 in their entirety and INSERT,

FOR SOLAR ENERGY GENERATING SYSTEM APPLICATIONS SUBJECT TO THE CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY (CPCN) PROCESS, THE FOLLOWING STANDARDS WILL APPLY:

- (1) ALL SOLAR ENERGY GENERATING SYSTEMS SHALL BE SUBJECT TO THE SOLAR ENERGY GENERATING SYSTEM SITING STANDARDS.
- (2) GROUND MOUNTED SOLAR ENERGY SYSTEMS 5 MEGAWATTS AND ABOVE SHALL NOT BE PERMITTED ON ANY LOT, PARCEL, OR TRACT OF LAND THAT;
 - IS LOCATED WITHIN A PLANNED GROWTH AREA AS IDENTIFIED IN A LOCAL JURISDICTION'S ADOPTED COMPREHENSIVE PLAN, OR;
 - IS ZONED FOR MEDIUM DENSITY RESIDENTIAL, HIGH DENSITY RESIDENTIAL, OR MIXED-USE WITH A RESIDENTIAL COMPONENT, OR;
 - IS LOCATED WITHIN AN AREA DESIGNATED FOR HOUSING IN;
 - MD. CODE ANN., TITLE 05, HOUSING AND COMMUNITY DEVELOPMENT, OR;
 - MD. CODE ANN., TITLE 34, SUBTITLE 03, LAND USE.
- (3) GROUND MOUNTED SOLAR ENERGY SYSTEMS BELOW 5 MEGAWATTS MAY BE PERMITTED ON A LOT, PARCEL, OR TRACT OF LAND WITHIN A PLANNED GROWTH AREA AS IDENTIFIED IN A LOCAL JURISDICTION'S ADOPTED COMPREHENSIVE PLAN IF:
 - 1. THE SITING OF THE FACILITY DOES NOT OBSTRUCT OR HINDER EXISTING, PLANNED, OR ANTICIPATED INFRASTRUCTURE THAT IS NECESSARY TO SERVE FUTURE HOUSING OR MIXED-USE PROJECTS, INCLUDING WATER, SEWER, AND COMPREHENSIVELY PLANNED ROADWAYS.
 - 2. THE SITING OF THE FACILITY DOES NOT OBSTRUCT OR HINDER THE DESIGN AND DENSITY OF A FUTURE HOUSING OR MIXED-USE PROJECT.

- 3. DOES NOT OCCUPY MORE THAN 10% OF THE LOT, PARCEL, OR TRACT OF LAND.
- (4) THE APPLICANT SHALL PROVIDE NOTIFICATION OF ALL SOLAR ENERGY GENERATING SYSTEMS WITH THE LOCAL GOVERNMENT EMERGENCY RESPONSE SERVICES. THE REGISTRATION SHALL INCLUDE A MAP OF THE SOLAR FACILITY NOTING THE LOCATION OF THE SOLAR COLLECTORS AND THE PANEL DISCONNECT. FACILITIES MUST PROVIDE SITE ACCESS AND CIRCULATION FOR EMERGENCY VEHICLES.
- (5) A LOCAL GOVERNMENT SHALL APPLY A STANDARD PROCESS FOR THE REVIEW AND APPROVAL OF SITE DEVELOPMENT PLANS FOR SOLAR ENERGY GENERATING SYSTEMS OVER 5MW, INCLUDING THE REVIEW AND APPROVAL OF THE SITE PLAN BY THE PLANNING COMMISSION.
- (6) A LOCAL GOVERNMENT SHALL REQUIRE A STANDARD PROCESS FOR THE ADMINISTRATIVE REVIEW AND APPROVAL OF SOLAR ENERGY GENERATING SYSTEMS THAT ARE 5MW OR LESS.
- (7) SETBACKS FOR SOLAR ENERGY GENERATING SYSTEMS WILL BE MEASURED FROM THE NEAREST SOLAR ARRAY OR ACCESSORY EQUIPMENT, BUILDINGS OR FACILITIES THAT GENERATE, MAINTAIN, OPERATE, MANAGE, DISTRIBUTE, AND TRANSMIT POWER TO THE PROPERTY BOUNDARY. A LOCAL GOVERNMENT MAY ESTABLISH LESS RESTRICTIVE SETBACKS, BUT SETBACKS FOR SOLAR ENERGY GENERATING SYSTEMS MAY NOT EXCEED:
 - 1. 100 FEET FROM ALL PROPERTY LINES, EXCLUDING PROPERTY LINES THAT BISECT THE INTERIOR OF A PROJECT AREA:
 - 2. 150 FEET FROM NEAREST WALL OF RESIDENTIAL DWELLING
 - 3. FENCING SHALL NOT BE PLACED CLOSER THAN 50 FEET FROM THE EDGE OF A DEDICATED, PRESCRIPTIVE, OR COMPREHENSIVELY PLANNED PUBLIC ROAD RIGHT OF WAY.
 - 4. WITH THE EXCEPTION OF EQUIPMENT REQUIRED BY THE LOCAL UTILITY FOR INTERCONNECTION INTO GRID INFRASTRUCTURE, NO SOLAR ARRAY OR ACCESSORY EQUIPMENT, BUILDINGS, OR FACILITIES SHALL BE LOCATED WITHIN A DEDICATED, PRESCRIPTIVE, OR COMPREHENSIVELY PLANNED PUBLIC ROAD RIGHT OF WAY.
- (8) VISUAL IMPACTS OF SOLAR FACILITIES ON PRESERVATION AREAS, SUCH AS RURAL LEGACY AREAS, AGRICULTURAL PRESERVATION AREAS, PUBLIC PARKS, SCENIC RIVERS AND BYWAYS,

DESIGNATED HERITAGE AREAS, HISTORIC STRUCTURES OR SITES LISTED ON OR ELIGIBLE FOR THE NATIONAL REGISTER OF HISTORIC PLACES OR A COUNTY REGISTER OF HISTORIC PLACES, MUST BE MITIGATED. A VIEWSHED ANALYSIS MUST BE SUBMITTED AS PART OF THE LOCAL GOVERNMENT APPLICATION TO ASSURE THAT VISUAL IMPACTS ARE MINIMIZED THROUGH SOLAR PANEL PLACEMENT, HEIGHT, LANDSCAPING, AND SCREENING.

- (9) LANDSCAPE BUFFER A LOCAL GOVERNMENT MAY REMOVE OR RELAX ANY OF THE FOLLOWING STANDARDS IN AREAS WHERE THE APPLICANT CAN REASONABLY DEMONSTRATE THAT SUCH REQUIREMENTS WOULD HAVE LESSER OR NO VISUAL BUFFER VALUE.
 - 1. A LANDSCAPE BUFFER THAT IS A MINIMUM OF 35 FEET WIDE MUST BE PROVIDED ALONG ALL PROPERTY LINES OR ALONG THE EXTERIOR **BOUNDARY OF THE SOLAR ENERGY GENERATING SYSTEM. ALTERNATIVE** LANDSCAPE BUFFER LOCATIONS MAY BE PROPOSED WITHIN THE **BOUNDARY OF THE PROJECT SITE WHERE THE ALTERNATIVE BUFFER** LOCATION MAXIMIZES THE EFFECTIVENESS OF THE SCREENING EFFORT. THE BUFFER MUST BE DESIGNED TO PROVIDE FOUR-SEASON VISUAL SCREENING OF THE SOLAR ENERGY GENERATING SYSTEMS AND INCLUDE MULTI-LAYERED. STAGGERED ROWS OF OVERSTORY AND UNDERSTORY TREES AND SHRUBS THAT ARE A MIX OF EVERGREEN AND DECIDUOUS **VEGETATION. WITH AN EMPHASIS ON SPECIES THAT ARE NATIVE TO THE** AREA. ALL PLANT MATERIAL SHALL CONFORM TO THE PLANT SIZE SPECIFICATIONS AS ESTABLISHED BY THE AMERICAN STANDARD FOR **NURSERY STOCK ANSI Z60.1 AND SHALL BE PLANTED TO THOSE** STANDARDS. A LOCAL GOVERNMENT MAY REQUIRE A LANDSCAPE BUFFER OF UP TO 50 FEET WHERE DEEMED NECESSARY TO MEET THE **REQUIREMENTS OF (F)(8) ABOVE.**
 - 2. THE LANDSCAPE BUFFER MUST BE INSTALLED AS EARLY IN THE CONSTRUCTION PROCESS AS PRACTICABLE AND PRIOR TO ACTIVATION OF THE SOLAR ENERGY GENERATING SYSTEMS.
 - 3. THE SIZE OF TREES AND SHRUBS AT THE TIME OF PLANTING MUST ACCOMMODATE ADEQUATE SCREENING OR BUFFERING BY THE END OF 5 YEARS OF PLANTING. VEGETATION USED TO ESTABLISH A VISUAL SCREEN MUST NOT BE TRIMMED TO STUNT UPWARD AND OUTWARD GROWTH OR TO OTHERWISE LIMIT THE EFFECTIVENESS OF THE VISUAL SCREEN.
 - 4. IF FENCING IS PROPOSED, A LANDSCAPE BUFFER MUST BE PLACED BETWEEN THE FENCE AND THE PUBLIC VIEW. IF WIRE MESH IS USED, IT SHALL BE BLACK OR GREEN VINYL. NO BARBED OR RAZOR WIRE MAY BE

USED ON FENCING AROUND THE SOLAR ENERGY GENERATING SYSTEM.
FENCING SHALL BE INSTALLED AT THE INTERIOR EDGE OF THE LANDSCAPE
BUFFER OR IMMEDIATELY ADJACENT TO THE SOLAR ENERGY GENERATING
SYSTEM.

- 5. IF FOREST OR HEDGEROWS EXIST WHERE SCREENING OR BUFFERING IS REQUIRED, IT MUST BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE AND SUPPLEMENTED WITH NEW PLANTINGS WHERE NECESSARY TO PROVIDE THE DESIRED SCREENING OR BUFFERING. EXISTING NONINVASIVE VEGETATION MAY BE USED FOR MEETING THE LANDSCAPE BUFFER REQUIREMENT, SUBJECT TO MEETING THE REQUIREMENTS UNDER (F)(9) I-IV) AND (F)(8).
- 6. ALL LANDSCAPING, SCREENING, AND BUFFERING MUST BE MAINTAINED WITH A 90 PERCENT SURVIVAL THRESHOLD FOR THE LIFE OF THE SOLAR ENERGY GENERATING SYSTEMS VIA A MAINTENANCE AGREEMENT THAT INCLUDES A WATERING PLAN. A LOCAL GOVERNMENT MAY ELECT TO REQUIRE A COST ESTIMATE AND LANDSCAPE SURETY. SUCH A SURETY WILL BE APPROVED AND HELD BY THE LOCAL GOVERNMENT FOR UP TO THREE YEARS AND UPON INSPECTION, MAY RELEASE UP TO 50% AND THEN BE HELD FOR TWO ADDITIONAL YEARS TO DETERMINE THE PLANT MATERIAL HAS BEEN MAINTAINED IN GOOD HEALTH. THE LOCAL GOVERNMENT RESERVES THE RIGHT TO INSPECT AND REQUIRE REPLACEMENT OF PLANT MATERIAL.

(10) GRADING

- 1. GRADING SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE TO PRESERVE AGRICULTURAL SOILS AND PREVENT SOIL EROSION.
- 2. TOPSOIL SHALL NOT BE REMOVED FROM PARCEL.
- 3. TOPSOIL MAY BE TEMPORARILY STOCKPILED TO ACHIEVE GRADE BUT SHALL BE WHOLLY REPLACED TO ACHIEVE VEGETATIVE STABILIZATION.
- (11) AFTER THE SEEDING OR PLANTING OF VEGETATION, THE USE OF HERBICIDES TO CONTROL VEGETATION IS STRONGLY DISCOURAGED AND MAY ONLY BE USED FOR THE PURPOSE OF CONTROLLING INVASIVE SPECIES IN COMPLIANCE WITH DEPT OF AGRICULTURE'S WEED CONTROL PROGRAM.

- (12) FOR PROJECTS OR PORTIONS OF PROJECTS NOT USED FOR AGRIVOLTAICS, NATIVE POLLINATOR PLANT SPECIES OR NATIVE MEADOW SPECIES SHALL BE PLANTED AND MAINTAINED THROUGHOUT THE SOLAR PROJECT'S LIFE. THE SEED MIX SHALL INCLUDE A DIVERSITY OF SPECIES WITH VARIED BLOOM TIMES. MOWING SHALL BE LIMITED AND PERFORMED ON A SCHEDULE THAT PROMOTES THE ESTABLISHMENT OF THE NATIVE PLANTINGS, CONTROLS INVASIVE SPECIES, AND AVOIDS IMPACTS TO WILDLIFE (POLLINATING, NESTING, ETC.).
- (13) EXCEPT AS REQUIRED FOR SAFETY, EMERGENCY, OR BY APPLICABLE FEDERAL, STATE, OR LOCAL AUTHORITY, NO VISIBLE LIGHT SHALL EMANATE FROM THE SOLAR ENERGY GENERATING SYSTEMS FROM DUSK TO DAWN DURING OPERATIONS.
- (14) LOCAL GOVERNMENTS SHALL APPLY ENVIRONMENTAL SETBACKS AND BUFFERS CONSISTENT WITH THE REQUIREMENTS APPLIED TO COMMERCIAL OR INDUSTRIAL LAND USES.
- (15) HEIGHT- MAXIMUM HEIGHT OF 15 FEET FOR ALL SOLAR ENERGY GENERATING SYSTEMS AND ACCESSORY STRUCTURES, UNLESS PROVIDING AGRIVOLTAICS WITH FARMING OPERATIONS BENEATH SOLAR PANELS. THIS DOES NOT APPLY TO THE EQUIPMENT NECESSARY FOR UTILITY INTERCONNECTION.
- (16) DECOMMISSIONING AND RESTORATION OF THE PROPERTY
- (I) THE PROPERTY OWNER OR APPLICANT MUST PROVIDE A COPY OF THE DECOMMISSIONING AND RESTORATION PLAN TO THE LOCAL GOVERNMENT PRIOR TO LOCAL GOVERNMENT APPROVAL. A LOCAL GOVERNMENT MAY ELECT TO ADOPT DECOMMISSIONING AND RESTORATION REQUIREMENTS CONSISTENT WITH THOSE ESTABLISHED BY THE PSC.

A BOND OR OTHER FINANCIAL ASSURANCE SHALL BE REQUIRED TO ASSURE COMPLETE REMOVAL OF A SOLAR ENERGY GENERATING SYSTEM IN AN AMOUNT EQUAL TO AN ESTIMATE OF THE COSTS ASSOCIATED WITH THE REMOVAL OF THE SOLAR ARRAY. THE FINANCIAL ASSURANCE SHALL BE AUTOMATICALLY RENEWABLE. A FINANCIAL ASSURANCE PROVIDED TO SATISFY THE CONDITIONS OF THE MARYLAND PUBLIC SERVICE COMMISSION'S CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY MAY SATISFY A LOCAL GOVERNMENT FINANCIAL ASSURANCE REQUIREMENT PROVIDED IT COMPLIES WITH THE FOREGOING AND IS ENFORCEABLE BY THE LOCAL GOVERNMENT.

THE FINANCIAL GUARANTEE MUST BE PROVIDED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT OR GRADING PERMIT, WHICHEVER IS APPLIED FOR FIRST. NOTICE MUST BE PROVIDED TO THE PSC AND THE LOCAL GOVERNMENT WITHIN 30 DAYS OF THE SALE OR TRANSFER OF

THE LEASE OR PROPERTY AND A NEW FINANCIAL GUARANTEE MUST BE PROVIDED BY THE NEW LEASE HOLDER OR PROPERTY OWNER.

WHEN THE SOLAR ENERGY GENERATING SYSTEM CEASES TO GENERATE ELECTRICITY FOR SALE, DOES NOT INPUT ELECTRICITY INTO THE ELECTRIC GRID FOR 12 CONSECUTIVE MONTHS (UNLESS NOTICE FOR REPOWERING IS FILED WITH THE PSC,) OR THE LEASE FOR THE SITE EXPIRES, ALL LOCAL APPROVALS WILL TERMINATE AUTOMATICALLY. THE PROPERTY OWNER OR APPLICANT SHALL UPDATE THE DECOMMISSIONING PLAN COST ESTIMATE AND CORRESPONDING APPROVED FINANCIAL INSTRUMENT EVERY FIVE YEARS AFTER THE PSC'S APPROVAL OF THE FIRST DECOMMISSIONING PLAN TO ADJUST FOR INFLATION AND ANY OTHER NECESSARY CHANGES. REMOVAL OF THE SOLAR ENERGY GENERATING SYSTEM WILL BEGIN WITHIN 90 DAYS AFTER TERMINATION OF THE APPROVAL, AND RESTORATION OF THE PROPERTY TO THE CONDITION THAT EXISTED PRIOR TO THE INSTALLATION OF THE SOLAR ENERGY GENERATING PANELS AND ACCESSORIES WILL BE COMPLETED WITHIN TWELVE MONTHS OF THE START OF SOLAR PANEL REMOVAL. RESTORATION WILL INCLUDE THE REMOVAL FROM THE PROPERTY OF ALL ABOVE-GROUND FACILITIES, AS WELL AS ALL UNDERGROUND FOOTINGS, SUPPORTS, WIRES, MATERIALS, FENCES, ROADS, AND BERMS. ONLY LIKE-KIND TOPSOIL MAY BE USED FOR RESTORATION.

(II) THE PROPERTY OWNER OR OWNER OF THE SOLAR ENERGY GENERATING SYSTEM MUST PROVIDE NOTICE TO THE LOCAL GOVERNMENT AND THE PSC WHEN THE LEASE FOR THE SITE EXPIRES, WHEN THE SOLAR FACILITY CEASES TO GENERATE ELECTRICITY FOR SALE, OR DOES NOT INPUT ELECTRICITY INTO THE GRID FOR 60 DAYS OR LONGER, UNLESS DUE TO ROUTINE MAINTENANCE ACTIVITY.

(17) COMMUNITY MEETINGS

- 1. SOLAR DEVELOPERS SHALL HOLD AT LEAST ONE PUBLICLY ADVERTISED COMMUNITY MEETING WITHIN 10 MILES OF THE PROPOSED SOLAR ENERGY GENERATING SYSTEM AND WITHIN THE SAME COUNTY PRIOR TO APPLYING FOR A CPCN TO COLLECT COMMUNITY FEEDBACK AND PROVIDE OPPORTUNITIES FOR THE SOLAR DEVELOPER TO ADDRESS CONCERNS PRIOR TO FILING FOR A CPCN OR LOCAL APPROVAL.
- 2. IN UNDERSERVED OR OVERBURDENED COMMUNITIES AS DEFINED BY MDE, SOLAR DEVELOPERS SHALL HOLD AT LEAST ONE PUBLICLY ADVERTISED COMMUNITY MEETING WITHIN 10 MILES OF THE PROPOSED SOLAR ENERGY GENERATING SYSTEM AND WITHIN THE SAME COUNTY, AND ONE VIRTUAL MEETING, PRIOR TO APPLYING FOR A CPCN TO COLLECT COMMUNITY FEEDBACK AND PROVIDE OPPORTUNITIES FOR THE SOLAR DEVELOPER TO ADDRESS CONCERNS PRIOR TO FILING FOR A CPCN OR LOCAL APPROVAL.

- 3. PUBLIC NOTICE OF THESE COMMUNITY MEETINGS SHALL BE POSTED AT LEAST 14 DAYS PRIOR TO THE MEETING DATE. IT SHALL BE THE RESPONSIBILITY OF THE APPLICANT TO PLACE A PUBLIC NOTICE SIGN WITHIN 10 FEET OF EACH PROPERTY LINE WHICH ABUTS A PUBLIC ROAD. IF THE PROPERTY DOES NOT ABUT A PUBLIC ROAD, A SIGN SHALL BE PLACED IN SUCH A MANNER SO THAT IT MAY BE MOST READILY SEEN AND READ BY THE PUBLIC. THE SIGN(S) SHALL BE AFFIXED TO A RIGID BOARD AND MAINTAINED AT ALL TIMES BY THE APPLICANT UNTIL THE MEETING IS HELD. THE DATE, TIME, LOCATION, AND DESCRIPTION OF THE PROPOSED SOLAR DEVELOPMENT SHALL BE INCLUDED ON THE SIGN OF THE MEETING SHALL BE INDICATED ON THE SIGN(S).
- 4. THE SOLAR DEVELOPER SHALL DOCUMENT THE PUBLIC COMMENTS AND INCLUDE THE COMMENTS IN THEIR APPLICATIONS FOR LOCAL GOVERNMENT AND CPCN APPROVAL.

Amendment #6:

On page 8, STRIKE lines 17 through 26 in their entirety and INSERT,

- (G) (1) FOR SOLAR ENERGY GENERATING SYSTEM APPLICATIONS ABOVE 2 MEGAWATTS, LOCAL JURISDICTIONS MAY NOT ESTABLISH SOLAR ENERGY GENERATING SYSTEM SITING POLICIES MORE RESTRICTIVE THAN THOSE ENUMERATED IN SECTION (F).
- (2) LOCAL GOVERNMENTS SHALL PROCESS THE APPLICATION FOR SOLAR ENERGY GENERATING SYSTEM APPLICATIONS BELOW 5MW AS PERMITTED USES SUBJECT TO ADMINISTRATIVE PROJECT REVIEW STANDARDS.
- (3) ACCESSORY USE ON SITE NET METERING SOLAR ENERGY GENERATING SYSTEMS SHALL NOT BE SUBJECT TO THESE ENUMERATED PROVISIONS BUT MUST COMPLY WITH LOCAL LAND USE AND BUILDING CODE REQUIREMENTS.

Amendment #7:

On page 8, line 27, through page 9, line 2, STRIKE in its entirety.

Amendment #8:

On page 9, line 7 through page 11, line 25, STRIKE in their entirety.

Explanation: The Public Service Commission is in the process of establishing a permitting and regulatory framework for expediting the safe development of utility scale battery storage in Maryland. This language conflicts with this effort and will further delay the rollout of energy storage infrastructure.

Amendment #9:

On page 21, after line 27, INSERT,

SECTION 5. THE PUBLIC SERVICE COMMISSION, IN CONSULTATION WITH THE POWER PLANT RESEARCH PROGRAM AND COUNTIES, SHALL EXPLORE THE FEASIBILITY OF ESTABLISHING A LIMIT ON THE TOTAL AMOUNT OF PRIME AGRICULTURAL LANDS OCCUPIED BY SOLAR DEVELOPMENT IN EACH COUNTY. THE PUBLIC SERVICE COMMISSION SHALL DELIVER AN INTERIM REPORT BY DECEMBER 1ST, 2025, AND A FINAL REPORT BY DECEMBER 1ST, 2026.

INFO.Nancy Soreng.League of Women Voters in Maryla Uploaded by: Nancy Soreng

Position: INFO



TESTIMONY TO THE SENATE EDUCATION, ENERGY AND THE ENVIRONMENTCOMMITTEE

SB 931– Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

POSITION: Information Only

BY: Linda Kohn, LWVMD President

Date: February 28, 2025

Although the League of Women Voters of Maryland is a strong supporter of expanding the production of electricity with technology that does not contribute to climate pollution, we have never studied the topic of solar siting on a statewide basis. We recognize that various parts of the state may have differing views on what is appropriate and desirable for their communities so we are taking no position on SB 931.

However, one of our local Leagues, the League of Women Voters of Montgomery County Maryland, has studied that topic extensively as it relates to siting solar in the Agricultural Reserve. Excerpts from two facts sheets they published on the subject follow this testimony. We believe the experience and insights in these documents may provide you with a better understanding of some of the issues related to solar siting and assist you in your deliberations of this SB 931.

When you take a look at the following documents you will see that the policy makers and the stakeholders in Montgomery County underwent an extensive process to develop the current Zoning Text Amendment that outlines the parameters for siting solar on agricultural land. LWVMD is not in the position to say whether those parameters make sense for the entire state, but LWV Montgomery County asked us to make sure that you are aware that at least one jurisdiction in Maryland has already studied this issue and enacted zoning laws based on much public input and their unique feature, the Agricultural Reserve.

The following is an excerpt from the League of Women Voters of Montgomery County December 2021 Fact Sheet: PRESERVING THE AGRICULTURAL RESERVE

PROPOSED SOLAR DEVELOPMENT

In January 2020, a zoning text amendment, ZTA 20-01 Community Solar in the Agricultural Reserve (AR), was proposed to revise the AR zoning code "to allow the blending of solar arrays with farmland on a small portion of the Agricultural Reserve." The measure was to allow up to 1,800 acres of AR zoned land to be utilized for commercial solar production. Also included was a proposal to increase the amount of solar energy allowed to be generated as an accessory use to farming from 120% of the onsite consumption to 200%.

Responses to the proposed ZTA 20-01 were complex and divergent except for one point of agreement: the production of solar energy is a timely and urgent goal. All interest groups reiterated the need for locating solar energy sources in the county and for using those sources to contribute clean energy to the county's energy grid, especially given that the county is not well suited for wind or nuclear energy. Nevertheless, conservationists and farmers disagreed with environmentalists and solar developers on how this should be accomplished.

The arguments surrounding ZTA 20-01 clearly reflect different opinions about the Agricultural Reserve's purpose and illuminate the complexity of locating solar arrays, especially on farmland, a dilemma many communities across the country are facing. When ZTA 20-01 was first introduced, the goal was to site solar fields on 1,800 acres of any class of soil. Additionally, the ZTA proposed the codevelopment of solar and farming; solar production in the Agricultural Reserve would be a "blending of solar arrays with farmland. Farmland and solar can go together.... Visionary farmers are pioneering 'dual use' of land beneath solar arrays by cultivating pollinator friendly wildflowers...grazing sheep and growing vegetable crops for local food and grapes for local wine." The science of combining farming and solar on the same plot of land is called agrivoltaics ("agri" comes from agriculture; photovoltaics are the conversion of light into energy) and is a new, rapidly growing research area.

Arguments Against ZTA 20-01

The strongest opposition to locating solar arrays in the Agricultural Reserve comes from farmers and conservationists who want to maintain the master plan zoning of the land for farming as the primary use. The opposing arguments include:

- 1) The Agricultural Reserve has been a bastion of climate protection for 40 years; it improves air quality through vegetative cover, provides water quality protection particularly in sensitive headwater areas, sequesters carbon through forestation and cover crops, supports managed growth and controls the public costs of urban sprawl.
- 2) Local food production has taken on new urgency as the potential for the reserve to meet the need for table crops increased during the pandemic.
- 3) Some farm owners currently collect solar energy on their farms to supply the farm's energy needs. This use of solar is considered "accessory" to farming and is provided for in the current zoning ordinance as "limited use." Limited use is available to additional farms in the reserve.
- 4) Landowners who lease farmland likely will opt to install solar for annual rent payments greater than tenant farmers' payments. Fifty-seven percent of land farmed in the reserve is rented, not farmed, by its owner—so farmers renting land and would-be farmers searching for land to rent will lose out if forced to compete for land access with the deep-pocketed solar industry. Land rents being offered by the solar industry are sometimes more than 20 times higher than what many land-leasing farmers currently pay.

5) Opening the Agricultural Reserve to non-farm uses threatens the legal tools that have protected the reserve so far. ZTA 20-01 lowers the bar and could lead to additional acres being targeted by the zoning amendment. Opening the reserve to non-farming uses encourages other challenges to primary farmland use.

Support for ZTA 20-01

- 1) State policymakers project that if the state adopts a 100% clean energy standard, Montgomery County's share of solar will likely be around 2,500 megawatts, based on our population. Producing 2,500 megawatts requires between 12,500 and 20,000 acres of solar arrays. Farmland in the Agricultural Reserve is needed to provide enough space to meet this goal.
- 2) Solar installation on county rooftops is inadequate to meet the goal of 2,500 megawatts. According to data from the National Renewable Energy Laboratory, rooftop solar could only account for 25-50% of the county's share of solar energy under a 100% clean energy standard. The county has issued approximately 9,300 permits for residential rooftop solar. With 390,000 housing units, the county has a long way to go and the clock is ticking. Rooftop solar is limited by rooftop space available and the time it takes to scale up the placement of solar panels on rooftops.
- 3) The solar projects allowed by ZTA 20-01 do not require any public money; they are privately financed on private land zoned AR.
- 4) Because the Agricultural Reserve is not zoned for commercial development, the land is considerably cheaper than most land in the county. Installation of solar energy collectors on inexpensive open land offers solar developers' greater profits on their investments.

Outcome of the Debate

After much deliberation and adoption of several amendments in the Planning, Housing, and Economic Development Committee, ZTA 20-01 was presented to the County Council and council members agreed they required more input from "stakeholders." A town meeting was called in November for solar installers, farmers and supportive organizations to speak to the pertinent issues. This discussion resulted in the formation of a workgroup consisting of individuals representing the stakeholders. Assisted by council staff, the stakeholder workgroup met to discuss in greater detail the issues surrounding solar on farmland and proposals to amend ZTA 20-01. Stakeholders and council members were asked to submit amendments in writing to council staff so that proposed amendments could be organized and posted online.

ZTA Provisions Adopted

The working group recommendations adopted by the council in February of 2021 included that commercial solar be permitted as a Conditional Use on a limit of 2% of the Agricultural Reserve and that the hearing examiner in the Conditional Use process require proof that the proposal has been submitted to the Office of Agriculture for comment. The hearing examiner's decision must consider the recommendations of the Office of Agriculture.

Additional features of the text amendment include:

- 1) The installation must have secured written authorization for acceptance of the power to be generated by the local utility servicing the area in which the generating field is installed.
- 2) The land having soil classifications I and II may not be used for solar installation.
- 3) Topsoil may not be removed from the site.
- 4) Except for pad areas for transformers and electrical equipment, the use of concrete is prohibited.
- 5) The types of solar generation materials are limited and must be removed within one year of discontinuation of use.

- 6) The area under the solar panels must be actively used for farming or agricultural purposes including pollinator-friendly plants, grazing farm animals and/or other agrivoltaic plant material.
- 7) Conservation of trees, scenic views, stream buffers, and wetlands is required and 15% slopes, susceptible to high levels of erosion, may not be utilized for solar installation.
- 8) The Planning Department must prepare an impact report after two years with input from community stakeholders and the Office of Agriculture.
- 9) The amount of solar energy allowed as an accessory use to farming was raised from 120% to 200% of onsite use.

State regulations apply to solar generation throughout Maryland. Among these regulations is the percentage of green energy to be supplied by the utility companies. Potomac Edison, the utility servicing most of the Agricultural Reserve, is meeting its current renewable energy requirements as reflected in its tariff document filed with the state and is only accepting applications that are placed on a waiting list. This limitation impacts not only commercial installation, but accessory use as well. There is a significant possibility that the required level of green energy will be increased in the near future and some farmers are looking at solar installation as a way to boost income from their farms.

Ongoing Solar Concerns

One of the basic assumptions that undergirds ZTA 20-01 is that farmland used for solar installations will continue to be productive as farmland. The County Council has authorized a pilot program to determine the viability of co-developing land for solar and farming. The agrivoltaic pilot is proposed for the Poolesville golf course property owned by the Montgomery County Revenue Authority. The pilot proposes a 1- to 2-acre solar array that will promote different types of agricultural production under the solar panels. The National Renewable Energy Laboratory has been contracted to assist in planning the types of solar collection and approaches to agriculture to ensure a meaningful pilot. There is no evidence that solar and farming are compatible in the Agricultural Reserve. In fact, copious research and reams of abstracts about agrivoltaics, nationally and internationally, support the idea that the science is new, burgeoning, and short on examples where the two simultaneous uses of farmland can be brought to scale.

A second concern emerging from the debate around placing solar arrays in the Agricultural Reserve is whether the county is opting for rezoning farmland in a rush to meet clean energy goals without a broader inquiry into where and how solar might be implemented throughout the entire county. The proposed use of farmland in the Agricultural Reserve for solar generation is only one of the many alternative uses to agriculture that have been proposed for the area. The initial and the ongoing actions taken by the county government to preserve the land for farming are described below.

The following is an excerpt from the League of Women Voters of Montgomery County December 2024 Fact Sheet: THE AGRICULTURAL RESERVE: CHALLENGES AND ISSUES

Solar Projects in the Agricultural Reserve

ZTA 20-01, Montgomery County Council's most recent ordinance governing SCS in the Agricultural Reserve (and other county AR zones) is known as Zoning Text Amendment 20-01, Solar Collection System, AR Zone Standards.

The ZTA revised use standards to allow for larger facilities in the AR zone and amended provisions for site plan approval in the AR zone and other zones. It includes the following:

- An SCS is allowed as a conditional use of two megawatts or as an accessory use to farming where the system produces up to 200% of baseline energy use on-site (does not require site plan approval).
- The area under the solar facility must satisfy one of the following: designated pollinator-friendly,

maintained in a manner suitable for grazing farm animals, or maintained for other agrivoltaics plant material.

- Cumulatively, on all AR-zoned land, a maximum of 1,800 acres of land may be covered by solar panels.
- SCS are restricted from being sited on soils classified category 1 and 2 (USDA); from stream buffers and wetlands; and on slopes steeper than 15%. Topsoil may not be stripped from the site.
- Forest Conservation requirements must be met.
- Use of concrete is prohibited except for transformers and electrical equipment.
- Written authorization from the local utility company that allows the SCS to be connected to the utility grid must be submitted.
- Facilities in the AR zone that are not developed as accessory to farming must comply with the zoning conditional use process which includes obtaining site plan approval from the County Hearing Examiner and Planning Board.
- An SCS must be removed within 12 months of the date when the use is discontinued.
- Montgomery Planning must submit an annual impact report to the County Council.

Montgomery Planning Impact Report on SCS in the AR Zone

In response to the requirement of ZTA 20-01 that an annual report on the impact of the SCS in the AR Zone be submitted to the County Council, Montgomery Planning presented its December 28, 2023, report, which includes "a recommendation to the County Council on whether the solar program should be contained, expanded, or discontinued based directly on any measurable and substantive impacts."

The Planning Board's report includes the following:

- A. The Planning Board has recommended two projects for conditional use approval:
 - 1) Riggs Road/Free Fein Solar, 5011 Riggs Road, Gaithersburg, MD. Approved to construct a two-megawatt SCS on approximately 7.73 acres (4.9 acres for the solar array and 2.8 acres for the access drive). Located on Category III, IV, and V soils. Construction has not begun. Project will not prohibit equestrian facilities, has little impact on the environment, and applicant will install pollinator plantings below the solar arrays.
 - 2) Gregg Road Solar, 4434 Gregg Road, Brookeville, MD. Approved to construct a two-megawatt SCS on approximately 12.84 acres (8.77 acres for the solar array and four acres for a Forest Conservation area). Project will be on Category III and IV soils, include pollinator plantings, and screening of site. Forest Conservation Plan has been submitted. No final approval yet from the hearing examiner.

B. Hurdles for SCS in the AR Zone:

- 1) Two-megawatt limitation and the exemption of solar installations on Category I and II soils.
- 2) Utility approval for a project to connect to the grid. Available capacity to absorb new electric generation by local power circuits does not always exist. (The AR is at the edge of the service areas for all three electricity providers—PEPCO, BG&E, and Potomac Edison.)
- 3) Two-megawatt limit requires upgrades to regional power stations which are expensive and sometimes unprofitable. Size restrictions also discourage investment in small projects when larger capacity projects may be available elsewhere.

C. Recommendations for SCS in the AR Zone:

- 1) Advised the County Council to improve coordination with utility companies.
- 2) Recommended increased size from two megawatts to five megawatts to match the state cap.
- 3) Recommended conversion of SCS to "limited use." Currently the "conditional use" designation requires a process for approval that is rather costly and lengthy.

FirstEnergy LOI HB1036 - Renewable Energy Certaint Uploaded by: Timothy Troxell

Position: INFO



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Letter of Information - House Bill 1036 Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act) Economic Matters Committee Friday, February 28, 2025

Potomac Edison, a subsidiary of FirstEnergy Corp., serves approximately 285,000 customers in all or parts of seven Maryland counties (Allegany, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington). FirstEnergy is dedicated to safety, reliability, and operational excellence. Its ten electric distribution companies form one of the nation's largest investor-owned electric systems, serving customers in Ohio, Pennsylvania, New Jersey, New York, West Virginia, and Maryland.

Thank you for the opportunity to provide this Letter of Information on HB1036. Potomac Edison / FirstEnergy appreciates the bill's intent to enhance Maryland's renewable energy landscape and support community solar initiatives. However, we believe that a few targeted amendments are necessary to ensure its smooth implementation.

Recommended Amendments:

- 1. Adjusting the Implementation Timeline related to Utility Consolidated Billing
 - This bill is proposed to take effect before Maryland's Utility Consolidated Billing system is operational. Given the complexity of integrating these new processes, this will create significant implementation challenges.
 - o Potomac Edison / FirstEnergy recommends pushing the effective date to April 2026.
 - This mirrors New Jersey's approach of allowing a transition period of 4 months between Utility Consolidated Billing and Auto-Enrollment. This phased approach will provide utilities, solar organizations, and stakeholders the necessary time to align systems, reducing administrative burdens and potential disruptions.
- 2. Refining the Community Solar Credit Banking Process (Page 16, Lines 10-21)
 - The provision allowing community solar organizations to bank credits for one year before allocating to one or more subscribers presents operational challenges. If allocation does not occur, then banked credits will be purchased by the utility under the existing process of purchasing output from qualified facilities.
 - Again, learning from New Jersey's approach, **Potomac Edison / FirstEnergy recommends:**
 - Allow banking in the first 12 months and then freezing the bank at month twelve.
 - Cashing out any excess generation in months 13+.
 - Process the cashing out of any remaining bank at the end of month twenty-four.
 - This would ensure flexibility while maintaining a predictable structure for credit allocation.

- 3. Clarification of Utility Interaction with Subscriber Organizations (Page 16, Lines 28-30)
 - Potomac Edison / FirstEnergy recommends the bill explicitly state that utilities are required to only work with one Subscriber Organization (SO) per project to avoid administrative confusion.
 - Without this clarification, multiple entities could attempt to solicit customer enrollment or unenrollment, creating conflicts, potential oversubscription issues (exceeding 100% capacity), and inconsistent customer status updates. Ensuring a single point of interaction per project will enhance efficiency and reduce operational risks for all involved.

HB1036 presents a strong framework for advancing Maryland's clean energy goals, but careful refinements are needed to align implementation with utility systems, ensure operational efficiency, and optimize credit banking processes. By adopting these amendments, Potomac Edison / FirstEnergy believes this legislation will be better positioned to support Maryland's renewable energy transition without undue administrative burdens.