

Ruth Alice White, HoCoClimateAction Advocacy Lead and Steering Committee member
8945 Footed Ridge Columbia Md

Comments from Howard County Climate Action opposing CB 55 and CR 133

Howard County Climate Action is a 12 year old local group working on climate education and advocacy.

We understand that Council member Yungman plans to introduce an amendment limiting CB55 to agriculture preservation easements only, not on all RR and RC zoned properties and this does not change our testimony.

I am aware that multiple groups are submitting written and oral testimony against these bills, and I will try not to repeat testimony I believe the council will get from others.

Howard County's 2030 General Plan and Climate Action Plans speak to the need for Howard County to develop clean and renewable energy sources in the county to meet greenhouse gas reduction goals.

<https://www.howardcountymd.gov/Departments/Planning-and-Zoning/Community-Planning/General-Plan>

<https://livegreenhoward.com/energy/climate-action-plan/>

https://livegreenhoward.com/wp-content/uploads/2018/05/Howard-County_ClimateActionPlan.pdf

Given the urgent climate crisis we cannot delay in developing clean energy resources we need. Our young people are telling us we need rapid action now.

The county just passed legislation, CB 59 in 2016, to allow solar on agricultural preservation lands under certain strict conditions. This is critical to the swift development of solar since solar on farm lands can be larger and produce much more electricity than much smaller installations on rooftops or parking lots. And the roll out of solar on homes is slow.

The Maryland legislature just passed the Clean Energy Jobs Act in 2019 to increase the amount of solar and wind energy in Maryland. We hope that the offshore wind projects being developed will be operational soon. But without a cable under the Chesapeake Bay to connect us, offshore wind is still likely years away. It is critical we develop more solar in Maryland and in Howard County to provide clean energy here.

Most of Howard County's farmland is covered under agriculture preservation rules. (almost 23,000 acres of HoCo's total 32,436 acres of farmland per a USDA Agriculture Survey, 2017). As a result, these bills would stop most of the potential projects in Howard County. Since

proximity to appropriate power hookups is required, only a very small part of Howard County farmland can meet the requirements for solar development.

To get county approval (by the ALPP), projects cannot use more than 33% of a landowners' property, so the majority of any farm that hosts solar will still be available for farming.

The community solar projects, which are not "commercial" projects under PSC definitions, are very small as required under the state community solar pilot project. The proposed community solar projects in Howard County are 1/5 of 1% of the farmland in Howard County. Suggestions that community solar is a threat to farmland or food supply is simply untrue.

We have heard that some farmers (and non-farmers) are concerned that Howard County farms should continue to contribute to Howard County food needs and that we need this food. We also believe local food is a high benefit. But a 2015 study showed that except for chicken, Maryland farms produce only a very tiny percentage of the food Marylanders eat. Although food from Howard County farms is a social good it is NOT nearly enough to feed us.

<https://mdfoodsystemmap.org/wp-content/uploads/2015/04/Maryland-Grown.pdf> In addition, studies have found that food-growing and solar are compatible uses. (See two articles

Crops under solar panels can be a win-win

<https://arstechnica.com/science/2019/09/crops-under-solar-panels-can-be-a-win-win/>

and

Energy and food together: Under solar panels, crops thrive

<https://www.pri.org/stories/2018-06-08/energy-and-food-together-under-solar-panels-crops-thrive>.

Again we note existing law and policies were debated in the previous county council. A deliberate and reasoned process resulted in regulations and policy procedures. We need to give this policy a chance and not precipitously enact a one-year delay that could severely harm the solar industry. This proposal takes a sledgehammer to the policy that supports solar. We are aware of four pending projects (both commercial and smaller community solar projects). Let's not halt on this program before it has a chance. Existing county policy includes detailed guidance and regulation of how much of a parcel can be in solar, the conditions, the amount of remaining land that must be high grade (USDA f-grades I-IV), etc. In other words, it has been methodically and systematically developed to balance agriculture and solar needs.

<https://www.howardcountymd.gov/LinkClick.aspx?fileticket=JNnvr90DsEo%3d&portalid=0×tamp=1492532215477>

For all these reasons and more, we urge disapproval of CB 55 and CR 133

Testimony of Theodore F. Mariani Re CR 133 -2019 October 21 2019

I am Theodore F. Mariani and I reside at 16449 Ed Warfield Road,
Woodbine Md 21797

In order to support the intent of CB 55 the Council should also enact CR 133. This resolution tracks with what the State has done in creating a Task Force to examine all aspects of the provision of renewable energy so that it can be done state wide in a responsible way.

The Howard County development regulations lack a full appreciation of the impact of large scale CSF projects on sensitive farm land and environmental resources. For example the regulations as written allow, thru a conditional use, up to a 75 acre CFS on sites in the Ag Pres program. While the regs call for a recommendation from the Ag Board the recommendation is not binding on the Hearing Authority (HC Bd of Appeals) which has ultimate decision power in Conditional Use cases.

The Ag Board has recently realized that its original criteria for recommending approval was at fault since it allowed approval of a project (Broadwater Lane)that permitted over 50 % of the site's best farmable land to be converted to a CSF. To correct this the Board revised their criteria to limit the CSF to 10% of the farm or 10 Acres for the entire solar facility, which ever is less. In the Broadwater Lane case this new criteria would have reduced the proposed CSF from 20 acres to 6 acres. The board's new criteria also states that the CSF should be sited to :

- 1) Support the "Primary" agricultural purpose of the property.
- 2) Minimize impact on existing environmental features (green infrastructure network, streams, wetlands, etc.)
- 3) "maintain the integrity and spirit of the Agricultural Land Preservation Program"
- 4) Demonstrate that the CSF is NOT sited on the most tillable land.
- 5) The applicant must also make a good faith effort at minimum disruption of the agricultural operation.

Since the Broadwater Lane case and 3 other similar projects have already been reviewed and approved by the Ag board , based on it's previous criteria, and are up for consideration by the Board of Appeals it is urgent

1. The first part of the document is a letter from the author to the editor of the journal.

The author expresses his appreciation for the editor's invitation to contribute to the journal and mentions that he has been working on this paper for some time.

The author then discusses the main findings of his research, which are based on a series of experiments conducted over a period of several months. He notes that the results are consistent with his theoretical predictions and that they provide strong evidence for his proposed model.

The author also discusses the implications of his findings for the field of research and suggests that further work is needed to explore the underlying mechanisms. He concludes by thanking the editor and the reviewers for their helpful comments and suggestions.

The author then provides a detailed description of the experimental setup and the methods used to collect and analyze the data. He explains how the data were collected over a period of several months and how they were analyzed using a series of statistical tests. He also discusses the limitations of the study and the need for further research.

The author then discusses the implications of his findings for the field of research and suggests that further work is needed to explore the underlying mechanisms. He concludes by thanking the editor and the reviewers for their helpful comments and suggestions.

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that the Council enact CB 55 and CR 133 to head off this ill conceived project and the 3 similar projects awaiting hearings. It is clear that all four of these projects violate the Ag Boards' new criteria and should be reconsidered.

It is important to recognize that the State is moving to create a rational approach to the development and siting of CSF projects. Also that the State has the ultimate decision making authority on Land use and that local jurisdictions should be consistent with State policy (Reference the Tier legislation where the State established a policy and the county was constrained to enact regulations that were consistent with that policy)

CR133 will provide a mechanism for the County to develop a policy on the development and siting of renewable energy systems that is consistent with the State's efforts and guidance to ensure the protection of our cherished natural resources.

In order to have a full degree of support county wide we recommend a modification in the composition of the Task Force proposed in CR 133. While the proposed composition of the Task Force has strong representation from the Solar Energy sector, it lacks any input from the residential communities that will be abutting these installations. It is vital that the Criteria and Guidelines established by the County be cognizant of the impacts of CSF's on neighboring properties. Having a balanced input from all affected parties early in the process is essential in achieving a result that will gain acceptance county wide.

Our support for CR 133 includes the inclusion of the following modifications to the Resolution:

- 1) Eliminate or clarify the intent of #5 Page 2 Line 24 which refers to the possible approval of solar facilities without a Conditional Use. If the intent is to allow solar facilities that are sized to support of the the actual power needs of the farm itself (following the MALPF model of 125% of demonstrated farm use) this would be appropriate . Allowing CSF on Ag Pres land without a Conditional Use approval should never be considered.
- 2) Page 2 Line 1 Add words "preliminary findings" The Task Force should incorporate in its final report a full consideration of the State Task Force study that might not be finalized by July 2020.

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3) Page 1 Line 25 thru Page 2 Line 8. Revise composition of the Task Force to include representation from the residential community county wide. I Suggest adding the following —5. Three members appointed by the following citizen associations, Howard County Citizens Association, Greater Highland Citizens Association, and Concerned Citizens of Western Howard County.

I We appreciate the opportunity to present our views and trust you will act decisively and quickly to address this matter.

Theodore F. Mariani FAIA PE MCRP
President Concerned Citizens of Western Howard County

1. $\int_0^1 x \sin(x) dx$
Use integration by parts: $\int u dv = uv - \int v du$
Let $u = x$, $dv = \sin(x)$
Then $du = dx$, $v = -\cos(x)$
 $\int_0^1 x \sin(x) dx = -x \cos(x) + \int \cos(x) dx$
 $= -x \cos(x) + \sin(x) \Big|_0^1$
 $= -1 \cdot \cos(1) + \sin(1) - (0 + 0)$
 $= \sin(1) - \cos(1)$

2. $\int \frac{1}{x^2 + 1} dx$
This is a standard integral:
 $\int \frac{1}{x^2 + 1} dx = \arctan(x) + C$



HCCA

Howard County Citizens Association

Since 1961...

The Voice Of The People of Howard County

Date: 21 October 2019

Subject: HCCA Testimony on CR133-2019 Establishing Task Force for Solar

Dear Council Members,

My name is Stu Kohn. I am the President of the Howard County Citizens Association, HCCA and I am testifying on their behalf. Our position on this proposed Resolution is "undecided." We congratulate Council Member Yungman for perhaps trying to make a wrong a right. Commercial Solar Facilities should not be allowed on designated Agricultural Preservation land – period. The question is a Task Force necessary. We are not sure. We say this because as you know there is a State Task Force established by the Governor. Why not allow them to do their work and see the results of their study. If it is decided that a Howard County Task Force to study commercial solar facilities on agricultural land preservation parcels is essential then we have the following recommendation and question.

Please refer to Page 1, Line 25 -26 that the Task Force consists of the following members: We would like to gain better transparency by you considering three additional qualified representatives from the community, one each from the west, central, and east. By qualified we mean they are very familiar with the Ag Preservation program and either reside on or are immediately impacted by any proposed Commercial Solar Facilities on Ag Preserve land.

Please refer to Page 2, Lines 24 and 25 where it reads, "circumstances or exceptions when solar facilities may be installed on agricultural preservation easements without a conditional use application." What does this mean regarding that the Task Force shall investigate and make recommendations? Why should there be any exceptions by not going through the Conditional use process? Especially since in the Zoning Regulations under Section 106.1 - County Preservation Easements -- Conditional Uses it states, "Conditional Uses shall not be allowed on agricultural preservation easements unless they support the primary agricultural purpose of the easement property, or are an ancillary business which supports the economic viability of the farm, and are approved by the hearing authority in accordance with the applicable provisions of Sections 130.0 and 131.0 of these regulations."

Regardless of the decision on this Resolution we want to emphasize that Council Member Yungmann is doing the right thing.

Thank You

Stu Kohn

HCCA President

October 21, 2019 CB133-2019

Howard County Council,

I think maybe this should be done after the few solar arrays that are out there in the works get done. When I was on the Ag Pres board in 2016, we (the board) tried to set parameters and thought we did a pretty good job with what little information we had at the time. The need for saving ag land and the need to be profitable for everyone is a must and the only way I see is to make changes as you go, just like what you have done with development. If no one had the right to build a house, you wouldn't know what will work and what doesn't work. I also think you need a person from SDAT to be a member or at the very least, be a part of the process. No one seems to know what they will tax you at, and the county should also require a bond from the solar companies to protect both the land owner and the county, you hold the easement, you stand to lose as well if a solar company fails. If we stop farming our property the ag assessment goes away, maybe that is a compromise to call solar commercial and tax it accordingly, I think the stakes need to be equal.

Thank You !!! Howie Feaga

**TESTIMONY OF THERESE M. MYERS RE CB 55-2019 AND CR 133-2019
HOWARD COUNTY COUNCIL, OCTOBER 21, 2019**

GOOD EVENING. MY NAME IS THERESE MYERS AND I LIVE AT 5421 BROADWATER LANE IN CLARKSVILLE, MARYLAND. MY PROPERTY OVERLOOKS 5545 BROADWATER LANE, AN AGRICULTURAL PRESERVATION PARCEL AND ONE OF THE PROJECTS CURRENTLY AWAITING A CONDITIONAL USE HEARING FOR COMMERCIAL SOLAR.

IF THIS PROJECT IS APPROVED, I WILL HAVE COMMERCIAL SOLAR WRAPPED AROUND THE FRONT AND SIDE OF MY HOUSE.¹ THIS PROJECT CERTAINLY GOT MY ATTENTION AND IS THE REASON I BECAME INVOLVED WITH THIS ISSUE. BUT THIS ISSUE IS SO MUCH BROADER THAN MY SITUATION.

THIS PAST JULY, WITH THE SUPPORT OF MANY HOWARD COUNTY CITIZENS, I URGED COUNCILMAN YUNGMANN TO SPONSOR A BILL THAT WOULD PLACE A MORATORIUM ON THE SITING OF COMMERCIAL SOLAR ON AGRICULTURAL PRESERVATION LAND SO THAT THE ISSUE OF RESPONSIBLE SITING OF SUCH PROJECTS COULD PLAY OUT AT THE STATE LEVEL.

I AM DELIGHTED THAT HE HEARD US AND RESPONDED WITH THIS WELL-THOUGHT OUT BILL 55 AND COMPANION RESOLUTION 133, BOTH OF WHICH DESERVE THE COUNCIL'S FULL SUPPORT.



¹ Please see Attachment showing my house highlighted in yellow.

ON AUGUST 14, 2019 GOVERNOR HOGAN ISSUED AN EXECUTIVE ORDER CREATING A TASK FORCE TO STUDY RESPONSIBLE SITING OF RENEWABLE ENERGY DEVELOPMENT IN OUR STATE.² INDEED, THIS EXECUTIVE ORDER ESSENTIALLY AFFIRMED AND BROADENED THE SCOPE OF SENATE BILL 744 THAT HAD PASSED UNANIMOUSLY (47-0) IN THE MARYLAND SENATE, A BILL THAT SOUGHT TO BALANCE AGGRESSIVE DEVELOPMENT OF SOLAR ENERGY PROJECTS WITH STRATEGIC SITING TO PROTECT OUR STATE'S NATURAL RESOURCES AND AGRICULTURAL HERITAGE.³

IN HIS EXECUTIVE ORDER, GOVERNOR HOGAN DECLARED, "UNWISE SITING OF RENEWABLE ENERGY PROJECTS COULD JEOPARDIZE MARYLAND'S FARMS, FORESTS, WATERWAYS AND WETLANDS."⁴ THE GOVERNOR'S TASK FORCE WILL MAKE RECOMMENDATIONS FOR AVOIDING LOCATIONS THAT ADVERSELY IMPACT AGRICULTURAL PRESERVATION AREAS.⁵ IT IS PRUDENT TO WAIT AND RECEIVE THE STATE'S RECOMMENDATIONS BEFORE MOVING FORWARD WITH PETITIONS TO SITE COMMERCIAL SOLAR ON HOWARD COUNTY'S AGRICULTURAL PRESERVATION PARCELS.

COUNTY BILL 55 IS NOT ANTI-SOLAR. IT IS PRO-SOLAR, BUT IT IS PRO-SOLAR IN A RESPONSIBLE MANNER. IT MERELY CALLS FOR A REASONABLE PAUSE WHILE THE

2 Executive Order 01.01.2019.09 (Aug. 14, 2019)

3 See Maryland Senate Bill 744, Protecting Natural Resources and Preserving Productive Farms – Commission on the Development of a Blueprint for Solar Energy in Maryland. This Bill passed unanimously (47-0) in the Senate on March 11, 2019 and was deemed an EMERGENCY MEASURE because our State's natural resources and productive farmland are increasingly under threat.

4 Executive Order 01.01.2019.09 at 1.

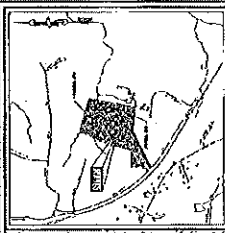
5 Id. at 3.

STATE COMPLETES IT STUDY TO DETERMINE HOW TO SITE THESE PROJECTS IN A RESPONSIBLE MANNER.⁶

YOUR VOTE IN FAVOR OF BILL 55 AND RESOLUTION 133 WILL SHOW THAT YOU RECOGNIZE THE IMPORTANCE OF BALANCING THE EXPANSION OF RENEWABLE ENERGY WITH RESPONSIBLE SITING TO PROTECT OUR COUNTY'S NATURAL RESOURCES AND PRECIOUS FARMLANDS.

I URGE YOU TO VOTE IN FAVOR OF COUNTY BILL 55 AND COUNTY RESOLUTION 133.

⁶ See id. at 5 (requiring Task Force to submit to Governor final report detailing its recommendations on responsible renewable energy development and siting within one year of date of Order).



CONDITIONAL USE PLAN
 2245 BROADWAY LANE, CHATTANOOGA, TN 37424
 ZONED R2(4)

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3088 NORTH BRIDGE STREET, SUITE 100, CHATTANOOGA, TN 37424
 PHONE: (615) 262-5000 FAX: (615) 262-5001

PROFESSIONAL SEAL: REGISTERED PROFESSIONAL ENGINEER, STATE OF TENNESSEE, NO. 28158

NO. OF SHEETS: 2 SHEETS: 1 OF 2
 DRAWN BY: J. H. WOOD
 CHECKED BY: J. H. WOOD
 DATE: 10/11/18
 SCALE: AS SHOWN
 V.O.B. 182

PROJECT: PROPOSED SOLAR ARRAY DEVELOPMENT
 SHEET NO.: 1 OF 2
 DATE: 10/11/18

PETITIONER: ROBERT H. VOGEL ENGINEERING, INC.
OWNER: [Name]

ATTORNEY: [Name]

PLAN VIEW
 SCALE: 1"=100'

**HOWARD COUNTY GOVERNMENT
CB55-2019 AND CR133-2019**

**Commercial Solar Facility Conditional Use Temporary Prohibitions and Task Force to
Study Commercial Solar Facilities on Agricultural Land Preservation Parcels**

Legislative Public Hearing

October 21, 2019 7 PM Banneker Room George Howard Building

By

**Mindy Burstein and Peter Solomon
5601 Foxview Court, Clarksville MD 21029**

We are testifying to strongly support the temporary prohibition on development of Commercial Solar Facilities and the creation of a task force to study the issues surrounding the use of agricultural land for Commercial Solar Facilities.

We've lived here for 25 years. We bought the land in part because we were informed the farm next door was preserved agricultural land. We felt this would assure the character of our neighborhood in perpetuity.

We are pro solar. We believe that renewable energy is an essential part of any strategy to combat climate change. Nevertheless, this is a residential neighborhood. The agricultural preserved parcel is surrounded by homes. Developing a CSF on such a parcel would adversely change the character of the neighborhood. We do not believe that this was the intent of conditional use regulations.

Instead, the intent of these regulations was to help struggling Howard County farmers keep their farms economically viable. This is not the case with the Broadwater farm. In fact, the owner is neither a Howard County resident nor involved in the farm's agricultural activity. He is simply an investor. The county's conditional use regulations should seek to exclude non-resident investors so that actual farmers receive the benefits.

Although studies show that CSF's may be less expensive per Kilowatt than rooftop solar, this analysis does not capture the fact that rooftop solar does not require any additional land or transmission lines. Rooftop solar creates a truly distributed system and leaves neighborhood character intact. Has the county explored strategies to encourage or subsidize rooftop installations rather than large scale commercial solar facilities? The proposed task force would allow the county to evaluate this approach.

When a commercial solar facility is installed within or adjacent to a residential community, environmental issues must be fully vetted. For example, are current regulations sufficient to protect neighborhoods from additional rainwater runoff causing erosion and runoff into ponds and streams? Do they protect wildlife and their habitats impacted by these facilities? Do current setbacks and screening requirements protect neighbors from the adverse effects on the quiet enjoyment of their neighborhoods? Also, this year there were 3 tornadoes in one month, one within 2 miles of the proposed Broadwater CSF. Do installation and safety requirements adequately protect neighborhoods from disaster? The Broadwater farm is 100 feet away from a neighboring pond that feeds the nearby streams. Who will be responsible if the toxic materials in the solar panels that include lead and cadmium were to enter the pond, streams and ground water?

It is imperative that the county place a temporary prohibition on conditional use petitions until a task force can study these issues and recommend a comprehensive strategic approach to implementing solar energy in Howard County that benefits all constituents.

Ann H. Jones
2921 Greenway Drive
Ellicott City, MD 21042
410-461-6869
annholmesjones@gmail.com

October 21, 2019

Howard County Council
George Howard Building
3430 Court House Drive
Ellicott City, MD 21043

RE: Council Bill 55-2019; Council Resolution 133-2019
Position – Undeclared

Land is a very limited resource, particularly land with good soil, adequate rainfall and excellent local markets. We are a small county with tremendous development pressure. It was in recognition of this pressure that Howard County established a well-funded and successful agricultural easement purchase program. Had this program not existed, it is unlikely that there would still be significant farmland in Howard County.

CB 55 does not declare war on solar. Rather, it advocates stepping back a bit and making sure we get it right. I am aware that many people go by a farm field and feel like its vacant land – just sitting there for the taking. But that land helps to provide clean water, clean air, allows us to connect with the outdoors, oh and by the way – produces food too.

There are families here who have played by the rules to date and are in the pipeline for the approval of their solar projects. I believe that they should be allowed to continue through the process and develop their project.

We know more about the impact of these facilities will have than we did several years ago. We can evaluate the impact they will have on the ability of a farmer to continue farming. The collectors will be there for a minimum of 25 years and could be there for 40 years or more. We need to get it right.

Howard County is the only county in Maryland allowing ^{commercial} solar on permanently protected agricultural land. Land protected under the Maryland Agricultural Land Preservation Foundation does not allow commercial solar facilities. Land protected with the Maryland Environmental Trust does not allow commercial solar facilities. There are many reasons why this is the case, ranging from IRS requirements for donated easement or the bargain sale of conservation easements to the legislative purpose of the individual programs.

We need to encourage solar development that is ancillary to and compatible with the main farming operation. I am confident that this can and should be done. It may not take a year – but we do need to step back and carefully consider the best way to create a sustainable solar future and protect our best agriculture land.