



Committee: Economic Matters

Testimony on: HB0908/SB0613 – Electricity – Community Solar Energy Generating Systems Program

Position: Favorable

Hearing Date: February 23, 2023

Submitted on behalf of the student chapter of Chesapeake Physicians for Social Responsibility (CPSR). CPSR is a statewide evidence-based organization of over 940 physicians and other health professionals and supporters that addresses existential public health threats: nuclear weapons, the climate crisis, and the issues of pollution and toxic effects on health, as seen through the intersectional lens of environmental, social, and racial justice.

We strongly support HB0908/SB0613, which will make permanent the Community Solar Energy Generating Systems Pilot Program. This bill will also require community solar energy generating systems to serve at least 40% of its kilowatt-hour output to low- and moderate-income (LMI) subscribers. This bill will make renewable energy more accessible and affordable to Maryland residents and allow our state to contribute to combating climate change.

Community solar legislation has been enacted in 22 states, allowing residents to participate in renewable energy, even if they are not able to have solar on their own home (1). Approximately 75% of Maryland residents are unable to have on-site solar, due to roof restrictions, not owning their own home, or living in an apartment (2). Maryland’s community solar pilot program began operation in 2017, and has allowed for over 10,000 families, including LMI subscribers, to participate in renewable energy (2). This program has also led to the creation of jobs in the community, and costs 5-10% less than standard utility service (2). Despite these benefits, we are in danger of losing community solar in Maryland, as the program is set to stop accepting new applications after July 2023 under current legislation. Thus, there is an urgent need to make community solar a permanent part of Maryland’s electricity sector. This would allow our state to continue toward its greenhouse gas (GHG) reduction goals and to promote public health and environmental justice.

Community solar benefits public health. As medical student members of the healthcare community, we strongly believe in the benefits of clean and renewable energy and the elimination of our planet’s reliance on fossil fuels. Multiple health professional organizations, such as the World Health Organization, and medical journals, such as *The Lancet*, have deemed climate change to be the single biggest health threat facing humanity. Transitioning to solar energy, along with other renewables, will reduce the emission of greenhouse gases, which exacerbate climate change and are highly detrimental to public health.

I, Joyce Cheng, was one of three students who initiated the “Solar on our Schools” movement in the Fairfax County Public School (FCPS) system, while I was in high school and college in Virginia (3). This advocacy campaign took years to come to fruition, but in 2022, FCPS finally

approved a contract to begin installing rooftop solar panels on schools (4). Although the logistics and finances of commercial solar differ from that of community solar for individual families, the overarching benefits and principles remain the same.

Solar energy replaces the need for fossil fuels, which increases energy independence and decreases emissions of harmful gases such as nitrogen oxides, sulfur dioxide, and carbon dioxide. This leads to the reduction of premature deaths, heart attacks, asthma exacerbations, and hospitalizations for cardiovascular or respiratory issues (5). Furthermore, the continued use of fossil fuels directly leads to ocean acidification and pollution and contributes to climate change, which is causing increased extreme weather events, sea level rise, and increased vector-borne disease. In the United States, 350,000 premature deaths in one year were attributed to fossil fuel-related pollution, and the annual cost of the health impacts of fossil fuel-generated electricity was estimated to be up to \$886.5 billion (6). Fine particulate matter (PM_{2.5}) is a particularly detrimental pollutant and major contributor to the global burden of morbidity and mortality due to its ability to penetrate the respiratory tract. Recent research has estimated that a global total of 10.2 million premature deaths annually is attributable to the fossil-fuel component of PM_{2.5} (7). Research has also estimated that if 27% of U.S. electricity demand is met by solar by 2050, cumulative power sector GHG emissions would be reduced by 10%, resulting in cost savings of up to \$252 billion (8). Regardless of the specific numbers, it is irrefutable that transitioning from fossil fuels to solar energy will improve public health, save lives, and result in significant health-related cost savings.

Community solar contributes to environmental justice. LMI families and communities have been disproportionately affected and disadvantaged by the health effects of climate change. They are often excluded from clean energy infrastructure, despite having higher energy burdens, due to older infrastructure, outdated appliances, and ineffective insulation (9). The majority of LMI households are renters, not owners, of their homes, limiting their ability to invest in renewable energy improvements (10). Community solar provides the benefit of rooftop solar to those who would otherwise not have access to this opportunity because they do not own their property or cannot afford to invest in the infrastructure of rooftop solar panels.

One of the goals of the community solar program is to create energy equity by requiring nearly half of the program's energy output to serve LMI families. However, as is, community solar billing excludes many of these families because, unlike other non-utility suppliers of electricity whose charges are included in the utility bill, it must be paid through a separate bill, with a credit on the utility bill. This discrepancy in billing does not allow families to fully use energy assistance grants and also excludes families that do not have bank accounts or credit cards, who typically pay their utility bills with cash. These barriers make community solar inaccessible to many of the intended beneficiaries. This bill proposes consolidating community solar credits and charges together on one electric bill through the customer's utility provider, such as BGE or Pepco. This would allow LMI families to use their energy assistance credits towards community solar while granting them the ability to pay with cash, as they would for other utility bills. LMI households participating in community solar will also benefit from more affordable electricity bills, as LMI residents are eligible for discounts of up to 25% off their electricity bill. These changes expand access to community solar and clean energy to everyone and are key to addressing energy equity for LMI residents.

As medical student members of the healthcare community, we strongly support and urge favorable action on HB0908/SB0613 which aims to strengthen and solidify our state's Community Solar Energy Generating Systems Pilot Program. Passage of this bill will protect the health of all Maryland residents by mitigating the negative effects of fossil fuels and will promote environmental justice by ensuring that LMI families can benefit from this cost-saving program.

Respectfully submitted,

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