

## **Montgomery County Group**

Testimony of Montgomery County Sierra Club on Montgomery County Bill No. 11-18

President Riemer and Councilmembers, my name is Michal Freedman and I am here as Vice Chair of the Montgomery County Sierra Club. As you know, Bill 11-18 requires certain new buildings to have a portion of the roof covered with solar thermal or photovoltaic systems unless a waiver is granted by the Department of Permitting. We submit this testimony to express our support for the bill in principle. This means that we favor the bill's core requirement, but we ask that various aspects of it be re-assessed.

This Council has resolved that we in Montgomery County will immediately and aggressively reduce greenhouse gas emissions to help avert the worst effects of climate instability. To do so, we must immediately accelerate the substitution of clean renewable energy – namely solar and wind energy – for fossil fuels.

There is currently an enormous gap between how much solar energy we need and how much we produce, as demonstrated in the Coalition for Green Capital's market assessment prepared for the County in 2016. Roughly translating from State statistics, Montgomery County produces about 40 MW solar. Yet to achieve just 2% of the solar needed, Montgomery Count's "share" is about 200 MW. To achieve a large-scale shift to renewables will require many multiples of this number.

How will we get there?

If the 2017 climate resolution requiring zero greenhouse gas emissions by 2035 is to be more than rhetoric, the County must move with unprecedented speed to change course. Buildings, which account for 74% of electricity use in the US according to the US Energy Information Administration, are critical to achieving our clean energy goals. And buildings, while by no means the full answer, promise great potential. According to Environment America, a research and policy center ("Shining Cities:2018 How Smart Local Policies are Expanding Solar Power in America"), several cities, including Baltimore and Philadelphia, could install at

least 2,000 MW of solar PV capacity on rooftops. In a comparable solar zone, Montgomery County too has great untapped potential.

Several cities in the U.S. have adopted mandatory solar rooftop requirements on new buildings, including San Francisco and several other California cities. According to Environment America, solar energy is most efficient and cost-effective when designed into new construction from the start. If included in the original construction, the expense of a solar system is part of the overall building cost, so the owner pays for the solar system over the duration of the loan, during which time the free energy generated by the solar panels offsets the added financing cost. Assertions that this bill imposes high costs should be viewed skeptically, given the savings over the entire life cycle of a building.

In our remaining testimony we raise questions about some specific aspects of the bill – which buildings are covered and to what extent.

The bill limits its coverage to non-residential and multifamily residential buildings of at least 10,000 square feet of gross floor area. At least some cities adopting rooftop solar requirements set the limit at 2,000 square feet. In Montgomery County, most commercial buildings are less than 10,000 square feet, according to the Montgomery County Commercial and Multifamily Building Study, 2013. If we are resolved to expand solar greatly, why would we exclude most commercial buildings?

A second limitation is the bill only covers multifamily residential buildings higher than four stories. San Francisco covers buildings that are between one and 10 stories. Taller buildings have been excluded presumably because they are more likely to have limited rooftop availability, given the mechanical systems needed for large buildings. But what is the rationale for excluding buildings of one to three stories?

The bill also only requires 15% of the roof area for solar systems. The rationale for the scope of the requirement chosen is also not clear.

Finally, the bill currently allows a waiver when compliance would be "impractical or unduly burdensome and the public interest would be served by the waiver." While Sierra Club recognizes that a waiver provision is needed to allow some administrative flexibility, the waiver must not be applied so expansively as to erode the requirement itself. We urge the Council to make clear its legislative intent that, like comparable legislation elsewhere, the waiver is aimed

at technical barriers such as heavily shaded areas or other unusual circumstances and is not to become routine.

In sum, our County's express commitments to respond to the climate threats we face in an effective way require that we aggressively ramp up the County's solar production. Buildings contribute to the problem and should be key to the solution, especially when integrating solar on rooftops is cheaper while a building is under construction. However, it is important that the specifics of the bill be fully assessed before enactment, so that the details harmonize with the overall objective. We urge more consideration of the bill's coverage.