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Clean Energy Extension

The Clean Energy Extension is an Affiliate of the UMass Amherst Center for Agriculture, Food and the Environment

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July 6, 2022

Senators Michael Barrett, Cynthia Creem, and Bruce Tarr Representatives Jeffrey Roy, Tackey Chan, and Bradley Jones Massachusetts State House

RE: Section 48 of S.2842, Pollinator-Friendly Solar Incentive

Dear Honorable Members of the Clean Energy and Climate Conference Committee:

Thank you very much for the hard and important work in bringing together an important bill to extend our Commonwealth's leadership on clean energy and climate change, while enhancing the strength and resilience of our economy. As your Conference Committee now wrestles with bringing your two versions together, we wanted to bring forward important context surrounding the amendment championed by Senator Jo Comerford that is now included in the Senate version as Section 48, but which language does not appear in the House version. The language of the referenced section is provided at the end of this letter.

As Massachusetts reaches essentially 100% renewable electricity by 2050, solar PV will need to play an important role in coordination with offshore wind, large scale hydro, and energy storage. The EEA-commissioned Massachusetts 2050 Decarbonization Roadmap (December 2020, page 55) suggests that we will need a 5 to 7-fold increase in the solar deployment that we see today. As solar development now comes to scale, pressures on siting and land use are becoming important issues to which state and local officials and their constituents are becoming attentive. Maximizing the ecosystem services that land used by solar can provide is essential to help balance these inherent tradeoffs, and to enhance the willingness of communities to host solar.

Amongst that most promising, effective, and practical ways to add ecosystem service value to larger scale groundmounted solar arrays is through the purposeful and carefully designed incorporation of pollinator-friendly habitat, and by extension habitat for a variety of other native wildlife species. Pollinator-friendly solar is of growing interest around the country as developers, policymakers, and biologists recognize its importance. Pollinatorfriendly solar certification programs are now available in 16 states, and the U.S. Department of Energy recently announced \$10 million in funding to understand how best to cost-effectively deploy pollinator-friendly and other wildlife-friendly measures at solar facilities. Since 2019, Massachusetts has been a leader in pollinator-friendly solar deployment, in no small part due to a small incentive adder in our Department of Energy Resources solar SMART program. However, in late December 2021, the MA Department of Public Utilities decided to disallow utility cost recovery for this adder. DPU's decision was subject to a Motion to Reconsider and was subsequently harshly criticized in an Attorney General's Office opinion. However, while the matter is being reviewed by DPU, DOER has paused acceptance of pollinator-friendly applications to the SMART program, and utility companies are no longer distributing this tariff payment to solar facility owners. This important section in the Senate bill will provide the legislative direction to DOER to confirm this incentive as part of the state solar program and provide market confidence for solar developers to expeditiously proceed with pollinator-friendly development across the Commonwealth.

Over a full year, and in consultation with state and federal agencies, pollinator experts, and stakeholders in the agriculture, wildlife biology, and solar energy communities, UMass Clean Energy Extension developed standards, fact sheets, and best practices for pollinator-friendly solar habitat. In 2019, the Clean Energy Extension established the UMass Pollinator-Friendly Solar PV Certification Program, which then served as the basis for the DOER SMART incentive adder. In its review of pollinator-friendly certification programs, the national Electric Power Research Institute recognized the UMass program for the thoroughness of its certification criteria, its grounding in reference documents, and its third-party monitoring of project success.



The SMART adder for pollinator-friendly solar, introduced in April 2020, was set at \$0.0025/kWh, critical for these projects to be motivated and maintained, but by far the smallest of the SMART adders – more than an order of magnitude smaller than other important adders incorporated in the SMART program, such as \$0.06/kWh for agrivoltaics (or "dual use") and canopy solar, \$0.05/kWh for community shared solar, or \$0.03/kWh for low-income properties. Therefore, the environmental and public good value of this pollinator certification can be provided at a very low incremental cost to ratepayers within the context of the SMART program.

Over the year and a half in which the SMART adder was in place, the Clean Energy Extension certified as pollinator-friendly over 150 MW_{DC} of solar, covering nearly 650 acres across 36 projects. Nowhere else in the Commonwealth is this much important pollinator habitat being developed at this rate or scale. These 650 acres provide strong support for the Commonwealth's *Massachusetts Pollinator Protection Plan* goals to maintain both the commercial bees and native pollination services that support agricultural production across the state. Since the DPU ruling at the end of 2021, applications for Certification have slowed to a trickle; and additionally alarming, previously certified facilities are sharing concerns with us regarding their ability to establish or maintain pollinator habitat in this uncertain regulatory environment. With every month's delay in resolution of this issue, we risk multiple certified projects – and many acres of pollinator habitat - dropping out of our program.

With the early success of the pollinator-friendly certification, its potential to provide habitat for other wildlife, and strong support for implementation from municipal leaders and community members, UMass Clean Energy Extension is moving forward with national research proposals to further understand the value of this habitat for threatened species, ecosystem services, community acceptance of solar, and solar permitting timelines, as well as identify the most cost-effective methods for successful implementation. Continuing to support wildlife friendly habitat as part of our solar development will be critical for this research and, through research results, to cost-efficiently mitigate biodiversity impacts as we move towards a decarbonized energy future.

While not pertinent to the primary importance of restoring this adder, the Pollinator-Friendly Solar PV Certification Program has also been an important source of revenue for the UMass Clean Energy Extension, with certification application fees supporting extension staff dedicated to this program and efforts to collaborate with national experts for external research dollars from federal and other sources. In this way, reinstating this adder to the SMART program will be substantively helpful to the Clean Energy Extension as we continue to diversify, sustain our funding sources, and provide valuable research and outreach information for the Commonwealth.

We hope this context is helpful in your consideration of this provision to restore the Pollinator-Friendly Solar Incentive and to incorporate the language from the Senate bill into the reconciled bill.

Thank you for your important work in this area. Please do reach out if we can provide any clarification or further information about pollinator-friendly solar programs or the Clean Energy Extension in general.

Regards.

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Reference Bill Language

S.2842, Pollinator-Friendly Solar Incentive

SECTION 48. Said chapter 164 is hereby further amended by adding the following section:-

Section 149. The department of energy resources shall include in the solar incentive program established in section 11 of chapter 75 of the acts of 2016, and in any successor solar incentive program, additional incentives for pollinator-friendly solar installations that have been certified by a recognized pollinator-friendly solar photovoltaic certification program at a higher education institution in the commonwealth or that have obtained another equivalent certification as determined by the department. The department shall promulgate regulations to implement this section.