

SMART Stakeholder Feedback 2024

Respectfully submitted by
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Question 1. The SMART program currently provides added incentives for certain project types, including building mounted, canopy mounted, landfill, brownfield, agricultural, floating, community solar, and projects serving low income or public entities, projects with energy storage, and axis racking. DOER seeks additional feedback on changes or improvements that will advance achievement of the Commonwealth's 2050 GWSA mandates while balancing land use, equity, and economic considerations.

- a. What project type incentive changes could improve program outcomes?***
- b. Should other project types also be prioritized?***

- Despite the stated incentives, there are loopholes in the SMART project eligibility that result in preferred project types - building mounted, canopy mounted, landfill, brownfield development - not being incentivized or adequately built. This needs to change as these project types are preferred for important reasons, and overlooked at our future peril. These are the obvious best sites for both optimum solar exposure and minimum damage to living and working ecosystems. They are being passed over because clearcutting forested sites near existing electrical transmission lines is a big cost saver.
- Perhaps what should also be incentivized is building the electric grid infrastructure that would make these sites more attractive to development. For which it would appear that an army of electricians is required. Are the policies and resources available in Massachusetts to support this increase in training these technicians? What incentives exist for attracting young people to these important skilled jobs? Are there specific barriers to women and minorities succeeding in this field?

- The Mass Audubon/Harvard Forest (<https://storymaps.arcgis.com/stories/932be293f1af43c8b776fdad24d9f071>) from 2023 specifically identifies the Community Solar loophole that allows for building large scale solar in forests, thus destroying the important forest ecosystems that should be conserved. This loophole not only rewards developers (many of which are not based in Mass or even in the U.S.) for destroying valuable biodiversity, agricultural, forestry and wetland resources, but additionally also destroys quality of life for abutters and other residents by degrading groundwater quality, eroding slopes and roads, and potentially leaving the municipality with a huge clean up bill. As a resident of a town where the Community Solar loophole is causing much grief, it is clear that the “community” part of this has more to do with small towns being strongarmed into cooperation for the profit of big corporations.
- Battery (Energy) storage in the current form of technological development is a threat to the environment and should not receive incentivization. In addition, it is an enormous fire risk for small rural towns with limited equipment, staff and resources to respond to a potentially catastrophic fire, explosion or hazardous release.
- Public entity status is a loophole that allows private developers to avoid the usual requirements, including protection of forests, wetlands, groundwater, drinking water and agriculture. This option should be eliminated completely.
- Dual use agrivoltaics are not proven to work and should not be incentivized. Additional research is needed to find what works in what sorts of locations as this varies tremendously.

Question 9. Are there examples of dual use agrivoltaics policies in other jurisdictions that align with Massachusetts’ solar and agricultural objectives? Please provide citations and summaries of those policies.

Dual use agrivoltaics are a lovely idea and we all aspire to have our technology and nature coexist like cake and icing. However they are not proven to work and should not be incentivized. If allowed, they should only be allowed in limited instances for grazing. It would be better to collect data through small-scale pilot studies in a variety of site types, with a variety of

dual usage before allowing full implementation and subsidies for agricultural deployment.

Instead of bulldozing and replanting a solar site, what if the existing topsoil with its native vegetation was preserved intact? This might be worth incentivizing after studying to see if it is even possible. Developers typically like to bulldoze and obliterate everything in a site. It would take some creativity for them to figure out how to do anything different.

Question 13. Are there any Commonwealth policies (e.g., renewable energy goals, land use priorities, housing policy) that you believe the SMART program inadvertently conflicts with? Please describe any potential modifications to SMART that would alleviate these conflicts.

SMART regs currently do not align with existing policy documents and reports. These are:

- The Massachusetts Technical Potential of Solar Report documents that there is 15-18 times the available land for the Commonwealth to meet its climate goals and creates a system based on suitability for where siting of solar should occur.
 - *“Because of the amount of suitable solar potential identified, we can be aggressive with our solar policy while balancing land use priorities and protecting our natural resources.”*
 - I believe this states that we can protect and preserve our existing forests, wetlands and farmlands without sacrificing any of them for solar development.
- The Massachusetts Clean Energy and Climate Plan for 2025 and 2030. Identifies that “Natural and working lands’ ability to sequester emissions will be a critical component of achieving net zero GHG emissions in Massachusetts”.
 - *“To retain NWL [Natural Working Lands] carbon sequestration capacity for 2050 and prevent further emissions, the Commonwealth is committing, through state conservation efforts, to the goal of increasing permanent conservation of undeveloped land and water (including wetlands) in Massachusetts to at least 28% and 30% by 2025 and 2030, respectively.”*

- I believe it is obvious that the easiest and fastest way to accomplish this is to protect and preserve existing natural areas. Every acre of forest, farm, wetland, meadow, or wildlife habitat destroyed is an opportunity lost to save taxpayer resources.
- The Massachusetts Clean Energy and Climate Plan for 2050.
 - *“Climate-intensified ecological disturbances, the conversion of forests to other land uses, and a slowdown in the growth of Massachusetts’ aging forests present considerable risks and challenges to maintaining current levels of carbon sequestration through 2050”*
 - Our forests and wetlands not only provide wildlife habitat and biodiversity, they also buffer climate extremes, clean the water and air, and sequester more carbon the longer they are allowed to grow undisturbed.
- The BioMap program. By MassWildlife and The Nature Conservancy. This needs further protection from SMART projects. While current regulations seem like they should protect BioMap land, in practice, this does not happen because of the loopholes created by the SMART project eligibility. I have seen this myself in my own town where most of the town, bordering and included in the Quabbin watershed, is core or critical habitat. Yet “Community” solar has clearcut acres of forests, and sued the town when citizens objected to more and larger proposals. Policy changes at the state level would be hugely beneficial for avoiding this.

Question 14. Is there any additional feedback you wish to provide to DOER?

- Strengthen performance standards so there are scientifically-based requirements proven to protect against soil disturbance, erosion, stormwater runoff, water contamination, and in the case of storage equipment, fire and its hazardous toxic consequences. Detailed study of each proposed project site should be undertaken to ensure the overall benefit will be worth the inevitable degradation.

- There needs to be explicit environmental protections to prevent contamination of drinking water/water supply from risk of contamination from lithium-ion energy storage systems (ESS) and the use of PFAS on solar arrays. In addition, since PFAS is unavoidable in fire fighting situations there needs to be regulations to preclude any installations with fire safety risks from being sited where PFAS couldn't be promptly contained or cleaned up before contaminating groundwater, soil, and vegetation.
- There needs to be a requirement for community comment before SMART Statement of Qualification is approved for the subsidy, and the community needs to be able vote on approval after a suitable discussion period including scientific presentation of the pros and cons. The state needs to value community voices as least as much as corporate profits.
- All SMART applications and associated documentation should be publicly available on a DOER website; posted in a timely manner to allow for community engagement.
- Limit on solar development size should remain at 5MW
- I strongly believe that the preservation of intact forests should be a priority. To that end, I strongly urge an incentive program aimed at private landowners in the form of direct forest preservation subsidies. For example, instead of logging their forested lands periodically to qualify for a tax break, what if landowners received a real estate tax exemption on qualifying forests/wetlands? The state could then support the municipality that was losing that tax revenue with grants of some kind. I suspect that if large private landowners didn't need to pay local taxes on their forested lands, they would be happy to forego solar development with all the hassles involved. We need to reward the owners of forests, farms and wetlands for preserving them undisturbed, instead of penalizing them constantly with taxes and regulations. In future I am sure intact forests will be worth far more in real terms than they appear to be now, for the ecosystem services they provide including water and air quality, carbon sequestration, biodiversity habitat, and climate mitigation.