

Western Massachusetts Solar Forum – Session 2 Attendee Q&A Questions/Comments

The following are questions received from Attendees during Session 2. These questions have been shared with Session 2 speakers to inform them of the engagement and issues of interest to the community. We are not asking the speakers to offer direct answers to these questions. The Clean Energy Extension and our partners are using these questions to inform remaining Sessions and the agenda for the anticipated Part II of the forum in 2024. Thank you for these questions.

1. How and/or when does the suitability criteria kick in for current proposals? If our community is waiting for the AG's approval of a new bylaw that will impact a site that has been determined as not suitable on the DOER's storymap, what happens?
2. You comment that MA is 60% forests and that the greening of the grid can come from other acres, not the forested ones, but where?
3. Why assume future solar electricity displaces future solar electricity? The entire point of building solar is to displace fossil fuels. The carbon avoidance of solar should be based on displacing fossil fuel generated electricity.
4. Does the carbon calculator incorporate the work of soil scientists (i.e., Elaine Ingham, Christine Jones) and impact of forests on hydrology cycles (i.e., Walter Jehne) re: the lost potential of regenerating ecosystems for climate resilience?
5. Why should we allow solar in forests at all given that the studies are showing we have sufficient disturbed areas if we are willing to incentivize and put money toward them instead of letting the easier cheaper places.
6. Related to climate, a thorough study was done on maximizing solar, so how do we do the same for ag/food, given the Northeast becoming more important for ag/food as extreme weather creates issue in heavy ag areas, for related policy planning for both?
7. If we want to protect more forests and agricultural lands, what are the kinds of developments that should be restricted besides solar? How can these other kinds of developments be controlled to save forests?
8. What kind of zoning, regulation, or bylaws could support municipalities with solar implementation on their own buildings or in general implement solar on existing development?
9. How much have you heard from local farmers re agrivoltaics? We are overwhelmingly hearing need for more support for food production, food security, flexibility, soil health, especially considering recent land impact/crop loss w/floods/drought
10. Has the SJC ruled on prohibiting solar on farmland, forests, downtowns, etc. even if they are reasonably related to public health, welfare or safety? Is the AG decision the same as SJC decision?
11. The DOER map is not accurate for my property. It needs review.
12. For MA parcels that have solar developed, the “technical potential” is far greater than what was actually built. What lessons can be learned from past developments that will allow future solar developments to get closer to the “technical potentials”?

13. How is DOER going to utilize the prioritization of solar siting shown in the Technical Potential report via the SMART program? Right now, there is a disconnect; it is up to the developers to choose where they want to go?
14. Is there any truth to the idea that, for commercial building owners that are not committed to long-term ownership of their structures, there is little incentive to develop roof top or parking lot solar? Is this an obstacle for MA solar goals?
15. Given that solar accounts for less than 15% of forest conversion, what can individuals and organizations do to protect forests (and natural and working lands in general) from development other than solar?
16. How much has UMass extension reached out to farmers re their view of agrivoltaics vs wanting more support for regenerative ag/soil building practices and ensuring climate resilience (floods, drought) food production, flexibility, stability?
17. It only took three years to create and drop the atom bomb. What do we need to do to get this done and not just keep studying? We want action and the help to take it from the legislature and the state policy makers and implementers.
18. Are there other projects you can envision to transition fossil fuel plants to renewable energy facilities and what can the state (re policy, legislation, regulation...) and towns do to coordinate and facilitate?
19. Would keeping invasives out of pollinator habitat include spraying herbicides? Are there other strategies being presented to limit pesticide use?
20. Can Neighbor to Neighbor's model be applied to a regional solar action plan? Many needs and concerns go across town lines, from keeping water clean to minimizing erosion to training the necessary labor force.
21. What agencies in the state will work to reach out to owners of developed, disturbed sites to educate them about the value of solar, to help us meet our MA GHG targets with the least impact on natural and working lands?
22. How can towns reconsider drafting and amending bylaws given the outdated 1985 solar section of the Dover Amendment (aimed at rooftop not ground-mounted solar) is being currently challenged at the state house so the new AG might respond differently in the future?
23. How much capacity (MW) per acre was assumed for ground mounted solar in the Technical Potential for Solar model?
24. Do you know how much of the decrease in forest use for solar has moved to agricultural land?
25. Large ground mounted solar incentive programs began in 2010, could you please clarify what is more challenging about SMART from a planning perspective?
26. At some point let's discuss best practices versus smart practices. My understanding is that the former are rarely reviewed and some "best" practices are not so good and not well enforced.
27. Can you address the recent AG decision for Wendell that prohibits STANDALONE energy storage systems using solar exemption? This is new "policy" that has significant zoning implications.

28. How does the acreage for solar development compare to other types of development in the Commonwealth during the same time frame?
29. What is the minimum size of solar project in the data set and how are you defining these land use categories?
30. How much has development other than solar reduced forest, cropland, grassland, etc.?
31. Do you have any data on acreage of land cleared for development of other uses (e.g., housing, retail, commercial development)?
32. Can you guess why conversion of forest land has decreased in the past two years researched?
33. Is your sense that the average size of industrial scale solar installs is getting bigger or staying the same? Reduced given efficiency?
34. Naturally not all forests are equal with respect to ecosystem services including carbon capture. The Harvard Forest recently proved that hemlock forests are actually sources of carbon. Have you assessed forest loss by timber type?
35. What, if any, incentives do we have in MA for building solar on disrupted land? Is this something local zoning boards could adopt?
36. Can you say more about why tenants changing over time would present a challenge to landlords putting solar on roofs of apartment buildings? I don't understand that since the buildings have long-term owners, and all tenants need electricity.
37. Shaded cars are great for some of the year, but I dare say that more of the year the sun is actually welcome and warms a cold car?
38. The presenter indicated that ground mount solar costs more than rooftop for comparable size/capacity yet most developers argue that large scale ground mount is more efficient & cheaper and prefer it. Why?
39. In the agrivoltatics slide, can you explain what "flat, open land close to 3P power is best" means?
40. What can towns and citizen groups do to help increase rooftop solar in their communities?
41. What are the safety concerns about having less room for fire access on roofs?
42. New installations often want to include batteries in the project. Could you comment?
43. How are you calculating farmland saved/retained because of Agrivoltaics?
44. Despite state prioritization of land protection documented by BioMap, Ch40A Sec. 3, para 9 does not allow towns to zone to support BioMap protections. Our town is specifically being sued for doing so. Can you speak to the gap?
45. In light of the Harvard Forest's recent determination that hemlock forests are now sources of carbon emissions why not identify forests that are ineffective at carbon sequestration and allow their conversion to solar?
46. Is there a calculator to use to quantify the carbon sequestration impact of forested and other open space? We need one for our town's emissions inventory and planning.