

Energy committee Column for Ashfield News September 2023 Community Solar Action Plan

In May of this year 242 Ashfield residents participated in the Community Solar Survey conducted as part of the Solar Planning Process the Energy Committee facilitated in partnership with Umass Clean energy Extension. The results from this survey were combined with the Technical solar Assessment done last winter to produce **Ashfield's Community Solar Action Plan**. This report is currently in draft form but as soon as it is ready it will be made available at the Town Hall, the Library, and on the town website for residents to review. If you did not get a chance to participate never fear- there will be other opportunities to voice your opinion. This month's Energy Committee column will provide information on results of the survey and the recommendations on action steps to increase our renewable energy production here in town.

To avoid devastating consequences of climate change every community in Massachusetts will need to increase our solar production as quickly as possible. 94% of Ashfield residents who participated in the survey had a positive or very positive attitude towards solar power and 69% of those surveyed supported increasing our solar production here in Ashfield to meet our own energy needs. To do that we would need approximately 15MW (megawatts) of solar production, approximately 12 times the electricity we currently produce from solar.

There is community support for solar. The trick is to increase our solar production in a way that maintains or enhances the special qualities of Ashfield- our agricultural heritage, natural beauty, and important ecosystems. 74% of survey participants supported solar on rooftops, on parking lots, and on already disturbed lands. These are clearly the places to start.

The Community solar action plan looked at solar in different settings, technical potential, financial considerations, and identified action steps. The different settings considered were: municipal buildings/land, residential rooftops/ yards, businesses, farm building roofs, agrivoltaics (dual use farming/solar), on margins of farm land, disturbed land, and large scale solar on private land. The results of this survey will keep the Energy committee busy for years to come!! The following are some highlights pointing us to possible next steps.

Municipal Solar

Ashfield has 5 municipal buildings (the wastewater treatment plant, library, town hall, town garage, and fire station) as well as Sanderson Academy. There was strong support by survey respondents for adding solar to municipal buildings and for solar and battery storage for the school and emergency shelter. There are many possibilities to explore here. Of the municipal buildings the wastewater treatment plant has the highest electricity use AND is near 3 phase power lines, which are necessary for solar installations over 50KW. This may make it a good candidate for solar.

Residential Solar

Currently there are 157 residential solar arrays in Ashfield averaging 7.8 KW for a total of 1,231 kw of solar production. There was strong support in the survey for residential solar and 54% of those responding who did not yet have solar were interested in getting it. This argues strongly for another "Solarize Ashfield" campaign as was done in 2016. Residents could benefit from support, resources, guidance, on getting solar and this is definitely something the Energy Committee can help with.

Community Solar

Many people who participated in the survey but did not yet have solar mentioned shading as a major impediment. For those wanting to get their power from solar but not able to have solar on their property the option of Community solar may be appealing, where solar can be sited in a sunny spot and households could purchase power from that array. This concept could be paired with solar sited on disturbed land such as around the transfer station or some of the sand/ gravel pits in town.

On Farm Solar with Farming Continuing

Ashfield has approximately 250 acres in cultivation and 1,500 acres in pasture and hay. We love our farms and there was not much support for siting solar on farmland EXCEPT the following: Some farms have very large barn roofs which could be ideal for solar without disrupting farming in any way. Agrivoltaics is a relatively new concept where solar is sited on farms but raised higher off the ground and spaced farther apart so that grazing and even crop production can happen underneath. Residents were more supportive of this concept. Residents were also more supportive of solar in the margins of farm fields.

Protecting Forest and Farmland vulnerable to solar development

The community Solar action Plan makes clear that private land near 3 phase power lines is most vulnerable to solar development. 3 Phase power lines run along Baptist corner Road to rt 116 and along rt 116 to the junction with rt 112. It is recommended that these lands be prioritized for protection if solar development is not wanted there.

Advocating for Grid Upgrades

The Community Solar Action Plan recommends that we advocate with Eversource to extend 3 phase power lines south along rt 112 to allow possible larger municipal solar development at Sanderson Academy and the Town Garage, both of which could be good sites for solar.

The Energy Committee will be reviewing the Community Solar Action Plan and beginning to work on next steps. We would love your help! Come to a meeting, volunteer some time. The solar array on Mohawk Trail roof just started producing in July. It is really satisfying to be part of positive change. There is a lot of potential right now in Ashfield to make a difference. Our next meetings will be Monday September 18, Monday October 16, Monday November 27 3:45 in lower town hall and on zoom. Hope to see you there! And feel free to email us with any Q's or concerns energy@ashfield.org.