Clean Energy Extension

FACT SHEET

Legal and Financial Considerations for Solar PV Arrays on Farms

The Massachusetts Department of Energy Resources has established the Solar Massachusetts Renewable Target (SMART) program, which will regulate incentives associated with new solar photovoltaic (PV) development in the state, beginning November 26, 2018. A series of fact sheets designed to help farmers navigate the program is available on the UMass Clean Energy Extension (CEE) website, https://ag.umass.edu/clean-energy.

There are many legal requirements outside of the SMART regulation that must be met as part of the permitting process to install a solar PV array. **Installation will have important implications for taxes, insurance, and land status**. This fact sheet addresses some of the legal and financial issues you may encounter when considering a ground-mounted solar PV system on your property, but this list is by no means exhaustive.

Solar Array Ownership

Do you want to own your solar array installation, or lease the land to a developer, while perhaps retaining the right to farm it under dual-use? If you lease to a developer, they can handle many of the logistical aspects of the project, including interconnection with the grid, permitting, SMART applications, financing, installation, day-to-day operation, and finally, de-commissioning. On the other hand, financing your own system will allow you to reap the full financial benefits that may accrue, as well as retain full control over the land and system. If you own your own system you may be able to receive a federal tax credit for up to 30% of the system installation cost, as well as depreciation of the equipment. If you choose to build and own a system sized to meet more than your on-farm needs, you can sell the excess electricity through net metering to other customers within your service territory. You will need to negotiate a private contract with these customers regarding how much they will pay for net metering credits, and assign credits to these customers using a Schedule Z Net Metering document.

Income Tax Implications

Before signing a contract for solar PV development, it is *highly recommended* that you consult your tax advisor. If you sign a lease with a solar developer installing solar PV on your property, any lease payments made to you by the developer will be subject to income tax. If you own your own system and sell net metering credits through a private contract, those sales will also be subject to income tax. If you own your own system, you will also receive tariff payments for every kWh of electricity generated. You should consult with your tax advisor about how to handle the value of tariff payments in calculating your income, but they will likely be subject to income tax. Tax law holds that an item of gross income is taxable unless specifically excluded from income tax. Some individuals have argued incentives for solar PV systems could be excluded from income tax under Internal Revenue Code ("IRC") section 136, Energy Conservation Subsidies. This section excludes from income tax subsidies paid directly or indirectly from a utility to a customer for the purchase or installation of any energy conservation measure. The IRS has issued little guidance on the issue, but in one Private Letter Ruling, PLR 201035003, the IRS held that for a specific individual, SREC income was not excluded under section 136, and was therefore subject to income tax. It is likely that SMART program tariffs will also be subject to income tax.

Property Tax Implications

Certain solar PV systems are exempt from Massachusetts real estate property tax for a period of 20 years from installation. Under a law that dates back to the 1970s, a property tax exemption applies to solar PV systems that are "utilized as a primary or auxiliary power system" for a taxable property. The exemption explicitly applies to off-grid solar PV systems, but over the years, it has generally been interpreted to include grid-connected systems sized to meet the electricity demand of the buildings or property they are associated with. More recently, the Department of Revenue issued guidance which stated that any solar PV system which exported power to the grid at any time was subject to property tax, even if over the course of a year there was no net export of electricity. However, this interpretation was challenged by individual property owners, and in at least two separate rulings, the MA Appellate Tax Board interpreted the exemption more broadly to include a variety of solar PV systems, including those virtually net-metered to supply electricity to another property. If you have a PV system sized to primarily supply power to your farm, talk with your town tax assessors – they will likely consider the project exempt from property tax for 20 years. If you are contemplating a larger system, consult with a tax professional and work with your local tax assessor. Depending on the size, location, and system ownership, your system may be exempted from property tax, may be taxed, or may be subject to a negotiated Payment In Lieu of Taxes (PILOT) or Tax Increment Financing (TIF) agreement.

The other relevant property tax issue regarding a solar array on your property is whether it is taxed as "real" or "personal" property. This is mainly a concern if someone other than the landowner owns the solar array. If a solar array is taxed as *real* property, the property tax liability falls to the owner of the land the array is situated on; if *personal*, the property tax for the solar array is the responsibility of the PV system owner, who could be a landowner or a developer. For property tax purposes, solar array panels and associated equipment may be assessed as part of the real property if they are intended to remain on the site for their entire useful lives, are designed specifically for the parcel, or might cause damage to the land or equipment if removed. If they are easily removable or intended to be removed and replaced periodically while located at the site, they could be separately assessed as personal property. If you own the land a solar array is built on, but the array itself is owned by another entity or individual, you may want to determine whether the panels can be taxed as personal property so that you are not responsible for paying property tax on them. If you believes that solar panels on your land are personal property, you must report the array to the assessors' office on a Form of List by March of each year, and the local assessor will make a formal determination.

Chapter 61A Status & Additional Property Tax Implications

This is a very important consideration if your land is enrolled in a Chapter 61A program, or has been within the last 5 years. Under the SMART regulation, traditional ground-mounted systems can produce up to 200% of annual farm electricity consumption, and qualifying dual-use ground-mounted systems can provide up to 2 MW of electrical capacity under the Guideline for these systems. ***However, current guidance from the MA Department of Revenue allows town tax assessors' offices to remove properties from the Chapter 61A program if electricity generation exceeds 125% of annual on-farm electricity consumption.*** If the property is removed from Chapter 61A, it may be subject to tax arrears for the previous 5 years, and if the land is to be leased to a solar developer, the town may have the right of first refusal on that lease. Further, if the property is qualifying as Category 1 Agricultural due to its participation in Chapter 61A (rather than the presence of Prime Farmland Soils), this would be invalidated after 5 years, and the solar facility may no longer qualify under the Category 1 Agricultural designation of the SMART program. Clearly, this is a situation that should be avoided. If you are interested in sizing a ground-mounted traditional or dual-use system that exceeds 125% of on-farm demand, and the property is in the Chapter 61A program or has been within the last 5 years, it is very important to contact your town tax assessors' office. In the absence of new guidance from the Massachusetts Department of Revenue, it is at the discretion of the local assessors' office to include or remove your property from the Chapter 61A program. A good case may be made that the land, especially in dual-use systems, is still under agricultural use, and should not be removed from the program. Some towns may be open to keeping your property in the program, but if you are working with a developer, the town could request what is known as a

Payment in Lieu of Taxes (PILOT), given that the property may be generating more revenue than it would under strictly agricultural production.

APR Status

If your land is under an Agricultural Preservation Restriction (APR) held by the Commonwealth of Massachusetts, a solar PV system on that land can be sized to generate no more than 200% of the annual electricity consumption of the farm. This limit on the size of the solar installation does not apply to any portion of the property excluded from the APR. Before proceeding with solar PV development on APR-restricted land, you must apply and receive a Certificate of Approval from the Massachusetts Department of Agricultural Resources.

Farm Viability Program Status

If your land is held in agricultural-only use through a covenant under the Farm Viability Enhancement Program, the land is subject to the same restrictions as for an Agricultural Preservation Restriction for the length of the covenant (typically, 5-10 years). During this time, a solar PV system on that land can be sized to generate no more than 200% of the annual electricity consumption of the farm. This limit on the size of the solar installation does not apply to any portion of the property excluded from the covenant. Before proceeding with solar PV development at any scale, you must apply and receive a Certificate of Approval from the Massachusetts Department of Agricultural Resources.

Liens

Many lending institutions, for various liability and risk concerns, will not allow solar facilities to be placed onto farms with a lien. If the farm is not fully paid off, check with your lending institution. If not negotiated beforehand, full payment of the remaining balance may be due should a solar facility be established on the farm.

Liability Insurance

Liability insurance associated with the solar array may differ greatly from liability insurance associated with farm operation. If you own the solar array, or are responsible for liability associated with it, is it important to discuss coverage with your insurance provider.

Crop Insurance

Having a building-mounted, canopy-mounted, or traditional ground-mounted solar PV array located outside of active agricultural areas should not affect crop insurance coverage on your farm, but dual-use systems could present a more complex scenario. Dual-use production should not affect public insurance coverage or your ability to participate in programs orchestrated by the Farm Service Agency (FSA), but check with your county agent if you have concerns. Private farm insurance organizations may not be familiar with dual-use, or may be hesitant to insure crops grown in a dual-use system. If you are in the habit of purchasing private crop insurance, it is important to discuss the insurance implications with your insurer early in the process.

Newsletter and More Information

To stay up to date on the latest information from UMass Clean Energy Extension, please sign up for our newsletter at https://ag.umass.edu/clean-energy.

Contact River Strong (gcstrong@umass.edu, 413-545-8510) with any questions related to solar PV use on your farm.