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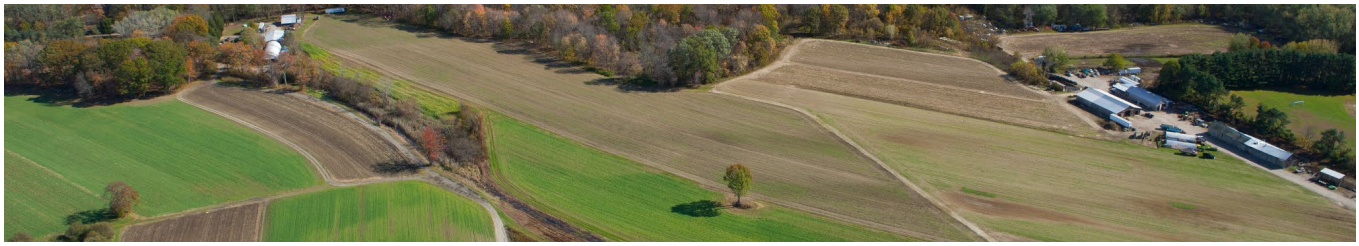
Clean Energy Extension

FACT SHEET

Legal and Financial Considerations for Solar PV Arrays



In 2018, the Massachusetts Department of Energy Resources (MA DOER) established the Solar Massachusetts Renewable Target (SMART) program, which regulates incentives associated with new solar photovoltaic (PV) development in the state. This document is part of a series of fact sheets designed to help farmers and others navigate the program. Additional fact sheets and information are 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; however, 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 operations, 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-site 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 likewise be subject to income tax.

If you own your own system, you will also receive SMART incentive payments (known as "tariff" payments) for every kWh of electricity generated. You should consult with your tax advisor about how to handle the value of SMART incentive 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. MA DOER suggests SMART program incentives will in most cases be considered taxable income.

Property Tax Implications

Certain solar PV systems are exempt from Massachusetts real estate property tax for a period of 20 years from installation. Historically, under a law dating back to the 1970s, a property tax exemption applied to solar PV systems that were "utilized as a primary or auxiliary power system" for a taxable property. The exemption explicitly applied to off-grid solar PV systems, but over the years, it was generally interpreted to include grid-connected systems sized to meet the electricity demand of the buildings or property they are associated with. In 2021, this law was updated by the *Act Creating a Next Generation Roadmap for Climate Policy*. The updated exemption applies to solar systems co-located with energy storage systems that are either 1) less than 25 kW in capacity, 2) sized to meet no more than 125% of on-site electricity need, or 3) for which the owners have negotiated a Payment In Lieu of Taxes (PILOT) with the municipality in which the facility is located. For more information, see this guidance from the Massachusetts Department of Revenue (MA DOR): https://dlsgateway.dor.state.ma.us/gateway/DLSPublic/IgrMaintenance/773

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 believe 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 61 Property Tax Implications

As with other types of development, converting an undeveloped property to solar will in many cases terminate its eligibility for participation in Chapter 61 tax reduction programs (i.e. Chapter 61, 61A, and 61B). Depending on which program the property has been participating in, this determination may be made by the State Forester (Chapter 61), or the local tax assessor. **Note that certain solar facilities may be allowed on Chapter 61A properties** (see next section). When a property is removed from the Chapter 61 program, it will be subject to typical conditions associated with exit from the program. Depending on the tenure of the property's participation in the program, this might include property tax arrears for up to the previous 5 years, or if the land is to be leased or sold to a solar developer, the town may have the right of first refusal on that lease or sale. For more information, see this guidance from MA DOR:
https://dlsgateway.dor.state.ma.us/gateway/DLSPublic/FAQMaintenance/Index/128

Chapter 61A Status

Originally, the Chapter 61A program was intended for properties solely in horticultural or agricultural production. As part of the Municipal Modernization Act, a new section was added to Chapter 61A. Under section 2A, Chapter 61A lands "*may, in addition to being used primarily and directly for agriculture or horticulture, be used to site a renewable energy generating source*," which includes a facility that generates electricity using solar or wind energy. However, the renewable energy facility must produce energy for the exclusive use of the land and farm on which it is located, and cannot produce more than 125% of the annual energy needs of that farm and land. The farm and land on which the facility is located includes contiguous or

non-contiguous land that is owned or leased by the land and farm owner. For more information, see this guidance from MA DOR: https://dlsgateway.dor.state.ma.us/gateway/DLSPublic/FAQMaintenance/Index/128

This is important to note because SMART program guidelines allow for projects on agricultural land supporting up to 200% of on-farm use, or dual-use systems up to 2 MW AC, but these values differ from Chapter 61A size requirements. 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 important to contact your town tax assessors' office to determine the future status of the property.

Liability Insurance

Liability insurance associated with the solar array may differ greatly from liability insurance associated with a residence, business, or 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.

Liens

Many lending institutions, for various liability and risk concerns, will not allow solar facilities to be placed onto a property with a lien. If the property 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 property.

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 (MDAR).

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 MDAR.

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.

More Information

For more information, visit our website: https://ag.umass.edu/clean-energy/solarag.

After reviewing website materials, you can contact Zara Dowling (zdowling@umass.edu, 413-545-8516) with any additional questions related to solar PV use on your farm.