American Farmland Trust

**Smart Solar Siting Principles and Examples of Land Use Laws that Support Renewable Energy While Protecting Farmland**

PRINCIPLES OF SMART SOLAR SITING ON FARMLAND (SSS)

- Maximizes potential for solar while minimizing impact on most productive farmland in order to address climate change
- Integrated into local policies and laws to guide siting to less productive farmland or previously disturbed land
- Requires projects to be built, operated, and decommissioned in ways that preserve the ability for land to be farmed
- Encourages dual use/co-location of energy generation and active farming on same parcel
- Engages farmers in the community in decision making; renewable energy projects, especially when sited on marginal farmland, can provide critical support for farm operations

KEY STEPS TO ENCOURAGE SMART SOLAR SITING IN LOCAL LAND USE LAWS

1. Engage farmers in your community and check with your agricultural and farmland protection plan to better understand when, where, and how solar should be sited on farmland in your community
2. Include a Statement of Purpose
3. Define Important Local Farmland to Protect
4. Define Different Approval Processes for Different Scales: Small vs. Large
5. Permit Renewable Energy for On-Farm Use
6. Prioritize Siting on Unproductive Land, rooftops, and Previously Disturbed Areas
7. Require Developers to Construct, Operate, Maintain, and Decommission Arrays Located on Farmland in ways that Follow NYSDAM Guidelines to Protect Active Agricultural Use for the Future
8. Encourage Dual Use/Collocation of PV solar with Active Farming

Examples:

**Statement of Purpose:**

Town of Red Hook: "*The Town of Red Hook finds that protection of agriculture is essential to implementing the goals of the Town of Red Hook Comprehensive Plan and Open Space Plan.*"

Town of Farmington: The goal is to: "*enhance agricultural viability and preserve productive agricultural land resources and provide public utilities that meet present needs and anticipate future needs of residents; and… support green economy innovations; and support NYS's energy goals.*"

**Definition, Productive Farmland:**

For solar PV facilities, project sponsors should avoid installing solar arrays on the most valuable or productive farmland—a finite, irreplaceable resource. This can include specifications based on current use or soil type:

1. Prime Farmland Soils
2. Prime Farmland Soils (if drained)
3. Soils of Statewide Importance
4. Unique Soils

Productive Farmland, Common: *Land designated by the U.S. Department of Agriculture as Prime Farmland or Prime Farmland If Drained, representing, land that has the best combination of physical and chemical characteristics for producing food, feed," forage, fiber, and oilseed crops and is also available for these land uses, or Unique Soils, or land designated as Farmland of Statewide Importance by the USDA, New York State Department of Environmental Conservation, or the U.S. Army Corps of Engineers.*

**Avoiding Productive Farmland:**

*Note: Decisions about how to best protect farmland in solar land use laws should consider local values, topography, and needs. For more information local soil resources, please contact your county Soil and Water Conservation District or Agricultural and Farmland Protection Board.*

Village of Lyndonville: "*Utility-scale solar energy systems are not allowed on Prime Farmland except pursuant to NYS Agricultural and Markets Law which allows agricultural operations in State-certified agricultural districts to install solar energy systems producing up to 110% of the farm's electric load.*"

Town of Rochester: "*Large scale solar energy systems shall not be permitted to be constructed on areas of prime farmland as designated by the USDA."*

Town of Sennett: "*No Solar Farm shall be installed on Prime Farmland, farmland of statewide importance, farmland of local importance, of unique soils as defined by the US department of Agriculture (USDA), New York State Department of Environmental Conservation, the U.S. Army Corps of Engineers, or local governing body."*

Town of New Scotland: "*No Large-scale solar project shall be permitted on: a) any site that is prime farmland or which contains prime soils. The applicant may submit information to demonstrate that the soils on the proposed project site are not prime soils or have poor drainage."*

Town of Persia: Small and medium scale: "*shall undergo site plan review within residential and commercial districts: no solar array shall be installed on prime farmland, farmland of statewide importance, farmland of local importance or unique soils."* Large scale: "*subject to site plan review; no large-scale ground mounted solar array shall be installed on prime agricultural soils as defined by DEC, US Army corps of engineers or other...*"

Town of Marbletown: "*Large Scale Solar Energy Systems shall not be permitted to be constructed on areas of the first 4 prime farmland soil types as designated by the US Dept. of Agriculture: Ba-Barbour loam...CnA, CnB-Chenango gravelly silt loam...Te-Teel silt loam...Un-Unadilla silt loam*."

**Permitting Renewable Energy for On-Farm Use:**

Agricultural Districts Law: Energy Generating systems that produce up to 110% of on farm energy needs are considered "farm equipment" as it relates to any local laws or regulations and any protection under the Agricultural Districts Law.

Town of Copake: "*A solar energy system located on a farm operation as defined in S301 (11) of NYSDAM law and located in an agricultural district which primarily serves the needs of the farm and produces up to 110% of farm's needs shall be deemed a small scale solar energy system."*

Town of Red Hook: *Farms that are within an agricultural district are general exempt from the large scale solar energy system regulations provided that the solar equipment is considered on farm equipment. Still shall obtain a site plan waiver approval or site plan approval from planning board. Exemption from requirement to obtain site plan review for systems that are for on farm use that generate 110% of farm's energy needs.*

**Construction Standards:**

Town of Goshen: *Installation on farms shall abide by rules, standards and regulations established by NYSDAM. The construction and installation of any energy system shall be designed to minimize any adverse impacts on the productivity of the soil and the farm operation.*

Access Roads**:**

Standard: *Roadways within the site shall be constructed of materials appropriate to the site and shall be designed to minimize the extent of the roadways constructed and soil compaction.*

Town of Farmington: *Access roads are to be located along the edge of agricultural fields, in areas next to hedgerows and field boundaries and in the nonagricultural portions of the site. The width of access roads across or along agricultural fields is to be no wider than 20 feet so as to minimize the loss of agricultural lands and comply with the State of New York fire access code. The surface of solar farm access roads to be constructed through agricultural fields should be level with the adjacent field surface where possible.*

Utility and Transmission Lines:

Standard: All on-site utility and transmission lines shall, to the extent feasible, be placed underground. (*Note: Burying lines can increase project costs for developers*)

Town of Farmington: *Structures for overhead collection lines are to be located upon the nonagricultural areas and along field edges where possible. Electric interconnect cables and transmission lines are to be buried in agricultural fields wherever practical. Interconnect cables and transmission lines installed aboveground shall be located outside agricultural field boundaries. When above-ground cables and transmission lines must cross agricultural fields, taller structures that provide longer spanning distances and locate poles on field edges to the greatest extent practicable. All buried electric cables in cropland, hayland and improved pasture shall have a minimum depth of 48 inches of cover. At no time is the depth of cover to be less than 24 inches below the soil surface*.

**Operation:**

Town of Rochester: Set up a registration system whereby developers must register with continuous re-registration during year 2 and 3 with written certification that all town codes are being followed (including onsite vegetative maintenance).

Town of Goshen: *Where site plan approval is required for any energy management system on a farm, a plan that prescribes the conservation and natural resource management measures for the conservation, protection and development of natural resources, the maintenance and*

*enhancement of agricultural or horticultural productivity, and the control and prevention of nonpoint pollution shall be required as part of the site plan application.*

Town of Newfield: "*Land underneath solar panels within agricultural areas should be maintained as vegetative cover.*"

Dual Use/Farm Considerations:

Town of Farmington: *In pasture areas, it is necessary to construct temporary or permanent fences around work areas to prevent livestock access, consistent with landowner agreements.*

Town of Red Hook: *"Design of ground-mounted solar energy systems shall favor concurrent use of the land for livestock grazing or similar sustainable use"*

Town of Shawangunk: "*Non-invasive, native ground cover under and between the rows of solar panels shall be low-maintenance, drought-resistant, non-fertilizer-dependent and, where required by the Planning Board, shall be pollinator-friendly to provide habitat for bees."*

**Decommissioning:**

*Note: Requiring a bond or other financial surety adds to project costs for developers. See NYSDAM Guidelines of Agricultural Mitigation for Solar Energy Projects for detailed standards.*

Language Generally Used: *The plan shall demonstrate how the removal of all infrastructure and the remediation of soil and vegetation shall be conducted to return the parcel to its original state prior to construction. Plan must ensure the site will be restored to a useful, nonhazardous condition without delay including: Restoration of the surface grade and soil after removal of equipment, Revegetation of restored soil areas with native seed mixes, excluding any invasive species.*

Town of Mexico: *All topsoil disturbed during construction, reconstruction or modification of Large Scale Energy Systems shall be stock piled and returned to the site, reseeded with grass and/or planted with low level vegetation capable of preventing soil erosion and airborne dust upon completion of the construction.*

Town of Goshen: "*Must restore the land to the condition which existed before construction, including an adequate layer of topsoil where existing topsoil has been removed or eroded…"*

Town of Farmington: *Environmental Monitor shall oversee decommissioning. Excess concrete used in the construction of the site is not to be buried or left on the surface in active agricultural areas.* (Also includes specific guidelines for decompaction, regrading, repairing drainage structures, mitigation of topsoil deficiency, and a monitoring and remediation period of no less than 2 years to ensure ability to farm the land in the future.)