



Commercial Solar Study Group Final Report October 2021

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	Questions	Answers	Resources	Findings/Next Steps
1	What is the Business Model of Solar Array Farms?	<p>Solar companies look for inexpensive tracts of land for sale or lease, with solar approval processes in place and reasonable property taxes/PILOTs. They finance using NYSERDA incentives that include tax credits bartered with the banks for up-front financing as these projects require high start-up costs recouped over 20-30 years of operation. Some companies secure approvals to 'flip' to an Operator. Some are Operators that plan to manage the solar array farm for 20-30 years. Solar Farms take several years to become profitable due to the high initial investment. Operators typically ask Special Use Permits longer than 15 years, but the Manlius Planning Board has set the maximum at 15 years. If there are no problems the renewal of a Special Use permit is not onerous for the Operator.</p>	<p>https://www.townofmanlius.org/DocumentCenter/View/1805/Solar-Farm-Study-Group-Info https://www.townofmanlius.org/DocumentCenter/View/1806/54-Verona-Solar-Webinar_Deck_V1</p>	<p>The business model for commercial solar array farms includes several tax incentives from multiple levels of government.</p>
2	What is the capacity of National Grid to absorb Solar Array Farms in the Town of Manlius?	<p>It is likely that the current applicants, if approved and developed, will use up almost all the capacity National Grid has in the Town of Manlius. There may be room for one more small project. NYS is planning a solar array at Green Lakes that does not require Town approval and the Town is planning a solar array on the landfill. These projects will likely max out local capacity of the grid.</p>	<p>https://www.townofmanlius.org/DocumentCenter/View/1804/Capacity-Map https://www.townofmanlius.org/DocumentCenter/View/1803/Manlius-Hosting-Capacity</p>	<p>The Town of Manlius should keep current on the capacity of National Grid as the electrical grid is updated over time.</p>

3	Should the Town limit the number, kilowatts, proximity of Solar Array Farms to a level less than the capacity of National Grid?	Maybe, but probably a moot point given the answer to #2.	<p>Resident input at the Planning Board Public Hearing 6/28 indicated opposition to the proposed Solar Array Farm on Salt Springs Road.</p> <p>Resident input at the Town Board Public Hearing 7/28 indicated strong support for Solar Power in general.</p> <p>https://www.townofmanlius.org/DocumentCenter/View/1791/Manlius-Solar-Siting-Report</p>	Current law one mile guide has been found unhelpful; new law should find another metric, if any.
4	Do we need to change the Town of Manlius Local Law?	The current Town Law is adequate, but could use amendments/ improvements	<p>https://www.townofmanlius.org/DocumentCenter/View/1800/New-Law-ted-artvii-newpart-ijjhttps://www.townofmanlius.org/DocumentCenter/View/1802/Candace-Rossi-Follow-Uphttps://www.townofmanlius.org/DocumentCenter/View/1801/Model-Solar-Energy-Local-Law</p>	The Study Group members will propose amendments to the law that may include an Overlay District or restrictions on total number / wattage / acres as well as technical changes based on our experience with several applications.
5	What are the environmental risks posed by Solar Array Farms?	<p>Several studies have shown that the negative environmental impacts are minimal while the positive environmental impacts of solar array farms are significant.</p> <p>The SEQR process adequately addresses Solar Array Farm environmental concerns that are long-term.</p>	<p>https://www.townofmanlius.org/DocumentCenter/View/1799/How-do-inverters-cohttps://www.townofmanlius.org/DocumentCenter/View/1798/Leaching-Metals-774-Article-Text-1963-1-10-20210224invert-DC-electricity-to-AC https://www.townofmanlius.org/DocumentCenter/View/1797/Electromagnetic-Fields-</p>	While the risk is not 0%, the Study Group found that the risks are not a material issue that should impact approval of solar array siting.

			Associated-with-Commercial-Solar-Photovoltaic-Electric-Power-Generating-Facilities---PubMedhttps://www.townofmanlius.org/DocumentCenter/View/1796/Yes-Solar-Farms-Can-Produce-Noise---Acentechhttps://www.townofmanlius.org/DocumentCenter/View/1795/RSER_Fthenakis-et-al-CdTe-Update-202021https://www.townofmanlius.org/DocumentCenter/View/1794/Health-and-Safety-Impacts-of-Solar-Photovoltaics-PV	
6	Does the Town of Manlius need a Moratorium on Solar Development?	A Solar Moratorium Local Law was proposed on July 14 th . A Public Hearing was held on July 28 th and the law did not pass when the vote was held on August 11 th .	https://www.townofmanlius.org/AgendaCenter/ViewFile/Agenda/07142021-664 https://www.townofmanlius.org/AgendaCenter/ViewFile/Minutes/07282021-669 https://www.townofmanlius.org/AgendaCenter/ViewFile/Minutes/08112021-673	The Study Group proceeded with our work even though the Moratorium was not implemented.
7	What are the Economic benefits of Solar Array Farms?	<ul style="list-style-type: none"> • Land use that does NOT require infrastructure and service investment [no roads, water, sewer, students, trash etc.] • Higher property tax payments than farmland using PILOT • Some local jobs for construction 	https://www.townofmanlius.org/DocumentCenter/View/1793/Duguid-Rd-Project-Benefits	Commercial solar array farms bring new revenue to our community and resources for the landowners, many of whom are family farmers. Community solar provides lower cost electricity for Manlius residents.

8	How does the Payment In Lieu Of Taxes [PILOT] work?	A meeting with representatives from the Onondaga County Industrial Development Agency [OCIDA] was held in August with representatives from the Town and the School Districts to discuss how to administer PILOTs for solar array farms. OCIDA is allowed to offer 25-year PILOTs at \$4000 - \$7000 per megawatt [NYSERDA set the range]. The Town is limited by law to 15-year PILOTs. The Town Board passed a local law establishing that Commercial Solar Array Farms use OCIDA for their PILOTs. Prior to this law, the Town entered into some 15-year PILOT agreements directly with the Operators.	https://www.townofmanlius.org/DocumentCenter/View/1792/8421--OCIDA-SOLAR-PILOT-PPManlius-Town--School Thanks to: Nancy Lawry, OCIDA	PILOTs are designed to be a compromise for a set number of years. The Schools, Town and County receive higher property tax than they would on vacant land, while the Operators pay lower property taxes than they will when they are taxed at full assessed value.
9	What are Host Community Agreements?	Host Community Agreements are more flexible than PILOTs. They allow for a Commercial Solar developer to offset costs to a municipality and/or school district.	https://www.renewableenergy.com/public-service-commission/new-york-state-public-service-commission-establishes-host-community-benefit-program/	The Town is in the process of negotiating a Host Community Agreement with CVE. Any future solar proposals will include consideration of a Host Community Agreement.
10	How will the Comprehensive Plan impact solar development?	The Comprehensive Planning process has a strong resident and business engagement component. The planning process will result in recommendations for land use throughout the town that protects farmland and viewsheds while supporting economic development.	https://www.townofmanlius.org/245/Comprehensive-Planning-Committee	The Comprehensive Plan will be a useful guidance document for the Planning Board in the future.