

Community-Scale Solar Energy
System & Large-Scale Solar Energy
Systems Ordinance

**FOR THE MUNICIPALITY
OF ASHLAND**

Enacted: April 23, 2024

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Community-Scale Solar Energy System & Large-Scale Solar Energy System

A. Applicability & Exempt Arrays

1. The requirements set forth in this section shall govern the approval, development, siting, operation and decommissioning of commercial solar energy facilities used to generate electricity for sale which meets the definition of a Community-Scale Solar Energy Systems or Large-Scale Solar Energy System.
2. The conditional use permit shall be binding on any successors, assignees, current or future lessees or owner of the facility and is granted solely for the construction and operation of a commercial solar energy facility.
3. The following are exempt from this Section provided they meet all other requirements of this Ordinance:
 - a. Roof-mounted on any legally permitted residential or residential accessory structure.
 - b. Building integrated solar (i.e., shingle, hanging solar, canopy, etc.).
 - c. Repair or replacement of array components that do not enlarge the area of the existing array.
 - d. Ground-mounted for residential only.
4. Arrays legally permitted to the effective date of this section shall not be required to meet the requirements of this Article, unless they expand.

B. Conditional Use Required

All non-exempt arrays must be approved by the Ashland Planning Board through the Town of Ashland Conditional Use process as found in Article II section Hof this Ordinance. The following requirements are additional to all other requirements of this Ordinance for Site Plan and Conditional Use.

1. A description of the owner of the array, the operator if different, and detail of qualifications and technical ability to develop and maintain the facility.
2. The Applicant must provide proof that it has authorization to construct, use and maintain the property and any access drive for the life of the project and including the decommissioning of the project.
3. If the operator will be leasing the land, a copy of the agreement (minus financial compensation) clearly outlining the relationship inclusive of the rights and responsibilities

of the operator, landowner and any other responsible party with regard to the Solar Energy System and the life of the agreement.

4. A copy of the agreement and schematic details of the connection arrangement with the transmission system (e.g. Versant), clearly indicating which party is responsible for various requirements and how they will be operated and maintained.
5. Applicant shall notify abutting landowners; by certified mail; of the intent to develop a solar energy system. A statement on how the Applicant will inform or notify abutting landowners of the intent to develop with a solar energy system.
6. Applicant shall submit a site plan, stamped and certified by a Maine registered engineer, showing the following supplemental information as part of a site plan application:
 - a. Property lines and physical features, including roads, for the project site.
 - b. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation or structures.
 - c. Blueprints or drawings of the solar energy system showing the proposed layout of the system, any potential shading from nearby structures, the distance between the proposed solar collector and all property lines and existing on-site buildings and structures, and the tallest finished height of the solar collector.
 - d. Documentation of the major system components to be used, including the panels, mounting system, and inverter(s).
 - e. Name, address, and contact information of the proposed system installer, the owner, project agent, and property owner.
 - f. A one- or three-line electrical diagram detailing the solar photovoltaic installation, associated components, and electrical interconnection methods.
 - g. Locations of important plant and animal habitats identified by the Maine Department of Inland Fisheries and Wildlife or rare and irreplaceable natural areas, such as rare and exemplary natural communities and rare plant habitat as identified by the Maine Natural Areas Program.
 - h. Locations of wetlands and waterbodies.
 - i. Locations of “Prime Farmland” and “Farmland of Statewide Importance”.
 - j. Locations of floodplains.
 - k. Locations of local or National Historic Districts.
7. The applicant shall identify the watershed in which a facility is located and provide a phosphorus allocation study to the town based on the most recent Maine Department of Environmental Protection (DEP) Phosphorus Allocation load for the watershed.
8. A full site analysis of the undeveloped habitat located within the site shall be conducted by a Wildlife Biologist and an analysis of impacts based on the proposed development.
9. A full view shed analysis study shall be provided of the proposed arrays from all potential North, East, South & West locations visible to existing roadways & residence.

10. The applicant shall submit a copy of the Site Plan Review application for the fire chief to review and comment. The fire chief shall base any recommendation for approval or denial of the application upon review of the fire safety of the proposed system.
11. A revegetation plan for any cleared areas with appropriate plantings that are native to the region when the facility is decommissioned unless requested in writing by the owner of the real estate to not re-vegetate due to plans for agricultural planting or other development subject to site plan review by the planning board.
12. A decommissioning plan signed by the party responsible for decommissioning and the landowner (if different) whose minimum requirements meet the standards in Section D, below.

C. General Performance Standards for All Arrays

1. The owner or operator of the array shall build and maintain it in compliance with all relevant Federal, State and Local Laws, Regulations, and Ordinances. The Applicant must notify in writing the Code Enforcement Officer of any change of ownership.
2. An array shall not be constructed until the conditional use application has been approved by the Planning Board and a Building Permit has been issued by the Planning Board.
3. All arrays shall be operated and located such that no disruptive electromagnetic interference with signal transmission or reception is caused beyond the site. If it has been demonstrated that the system is causing disruptive interference to the code enforcement officer beyond the site, the system operator shall promptly eliminate the disruptive interference or cease operation of the system.
4. All on-site electrical wires or piping associated with the system shall be installed underground except for “tie-ins” from above-ground mounted installations and to public-utility company transmission poles, towers and/or lines. This standard may be waived by the Planning Board if the project terrain is determined to be unsuitable for underground installation.
5. Array placement must be designed to minimize or negate any solar glare onto nearby properties, airports or roadways.
6. If lighting is provided at site, lighting shall be shielded and downcast such that the light does not spill onto the adjacent parcel or into the night sky. Motion sensor control is preferred.
7. Signage: A sign shall be placed on the large-scale solar energy system to identify the owner and provide a 24-hour emergency contact phone number.

8. The use of pile driving equipment is prohibited within 600 feet of any structure or private or public water system unless pile driving monitoring equipment to evaluate vibration is utilized.
9. Any point of potential contact of people or animals with generated electric current must be secured.
10. Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of ground-mounted solar energy systems or as otherwise prescribed by applicable laws, regulations, and bylaws/ordinances.
11. The boundaries of any array shall consist of a vegetated buffer adequate to block the view along the border of the property or any residential structure. No vegetation or fence shall interfere with a required clear sight triangle at a driveway or road intersection. Where fencing is used, the fencing shall be reviewed and approved by the Maine Department of Inland Fisheries and Wildlife.
12. If electric storage batteries are included as part of any array system, they must be installed according to all requirements set forth in the National Electric Code and State Fire Code when in operation. When no longer in operation, the batteries shall be disposed of in accordance with the laws and regulations of the Town of Ashland and any other applicable laws and regulations relating to solid, special, or hazardous waste disposal.
13. Utility Connections: Overhead or pole-mounted electrical wires shall be avoided to the extent possible within the facility.
14. Prior to construction, the applicant must file a performance guarantee with the Town of Ashland equal to 100% of the cost of completing the following improvements which shall be renewed on a yearly basis for the life of the facility:
 - a. The construction of any drainage systems involving piping, culverts, or retention or detention facilities;
 - b. The construction of erosion and sedimentation control measures or landscaping required to meet the standards of this section; and
 - c. Other site improvements required by the Board to meet the standards of this section.

The applicant is responsible for legal fees the Town incurs to review the performance guarantee.

15. Prior to operation, the applicant shall provide for and maintain reasonable means of access for emergency services. Lock boxes and keys shall be provided at locked entrances for emergency personnel access. A sign shall be required to identify the owner/operator and provide a 24-hour emergency contact phone number. Arrays shall not be used for displaying any advertising. A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on any fence surrounding the array informing individuals of potential voltage hazards.

16. Prior to operation, the applicant/owner shall provide emergency response information to include schematics of fire, electric and hazard materials; to all of the abutting town Fire Departments prior to the facility becoming operational.

D. Decommissioning Requirements

1. All solar energy systems covered by this ordinance are subject to the decommissioning requirements contained in 35-A M.R.S.A. §§ 3491-3496.
2. Prior to construction, decommissioning shall be guaranteed by cash, letter of credit, or other form of surety, at the discretion of the Town Council.
3. Prior to operation the decommissioning plan must be filed in the Aroostook County Registry of Deeds.
4. The lessee or owner of the facility must notify the Code Enforcement Officer within 30 days of the following events:
 - a. The land lease ends; or
 - b. The system does not function for 12 months; or
 - c. The system is damaged and will not be repaired or replaced.
5. Abandonment will occur as a result of any of the following conditions unless the lessee or owner of the facility or of the parcel notifies the Code Enforcement Officer of the intent to maintain and reinstate the operation of the facility within 30 days of the following events:
 - a. The land lease ends; or
 - b. The system does not function for 12 months; or
 - c. The system is damaged and will not be repaired or replaced.

A notice of the intent to maintain and reinstate the operation of the facility shall be updated every 6 months with a statement of the progress made towards that goal, delivered to the code enforcement officer.

If the facility has not returned to operational condition within two years from the date of the first notice of the intent to maintain and reinstate the operation of the facility the Code Enforcement Officer shall find the facility has been abandoned unless there is documentable evidence of significant progress and in the Code Enforcement Officer's opinion the decommissioning is likely to be completed in a timely manner.

6. Upon determination of abandonment based on the foregoing, the Code Enforcement Officer will notify the party (or parties) responsible by certified mail or by hand delivery with signed receipt that they must remove the facility and restore the site to its condition prior to development within 12 months of notice by the Code Enforcement Officer. A

copy of the notice shall be forwarded by the Code Enforcement Officer to the Town Council.

7. In the event the landowner fails to remove the facility as stated above, the Town of Ashland shall have the facility removed using the funds secured by the guaranteed surety or at the expense of the landowner. Any unpaid costs associated with the removal after one year of removal shall be enforced as a lien placed on the real estate of the array site.
8. Upon decommissioning the owner/operator of the facility shall return the land to its original natural state, including tree replanting wherever tree cutting occurred during the construction of the facility. Decommissioning shall consist of:
 - a. Physical removal of all solar energy systems, structures, equipment, security barriers, and transmission lines from the site.
 - b. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
 - c. Stabilization or re-vegetation of the site as necessary to minimize erosion. Native, pollinator-friendly seed mixtures shall be used to the maximum extent possible.
9. If a solar energy system is abandoned or decommissioned, the owner of the system shall notify the respective power company to enable the power company to remove the facility from its system.

E. Definitions

1. **Abutting property:** With respect to a parcel of land, another parcel of land that shares a common property border to include a parcel of land separated from another parcel by a public road or highway.
2. **Community solar- (Net Energy Billing)** are solar projects that receive credit for each kWh of electricity generated. Utility customers sign up with the owner of a solar project to receive a share of these credits generated by the project.
3. **Electrical Equipment:** Any device associated with a solar energy system, such as an outdoor electrical unit/control box, that transfers the energy from the solar energy system to the intended location.
4. **Electricity Generation (production, output):** The amount of electric energy produced by transforming other forms of energy, commonly expressed in kilowatt-hours (kWh) or megawatt-hours (MWh).
5. **Height of building:** The vertical measurement from grade to the highest point of the building, except that utility structures such as chimneys, TV antennae, HVAC systems,

and roof-mounted solar energy systems shall not be included in this measurement, nor shall any construction whose sole function is to house or conceal such structures.

6. Kilowatt (kW): a unit for measuring power that is equivalent to 1,000 watts.
7. Megawatt (MW): a unit for measuring power that is equivalent to one million watts, or 1,000 kilowatts.
8. Megawatt Hour (MWh): A megawatt hour is equal to 1,000 Kilowatt hours (Kwh). It is equal to 1,000 kilowatts of electricity used continuously for one hour.
9. Mounting: The manner in which a solar PV system is affixed to the roof or ground (i.e., roof mount, or ground mount).
10. Power: The rate at which work is performed (the rate of producing, transferring, or using energy). Power is measured in Watts (W), kilowatts (kW), Megawatts (MW), etc. in Alternative Current (AC).
11. Pure Tone. The simplest periodic sound: a constant sound created as a pressure disturbance that fluctuates sinusoidally as a fixed frequency.
12. Rated Nameplate Capacity. The maximum rated output of electric power production of the photovoltaic system in watts of Direct Current (DC).
13. Solar Array: Multiple solar panels combined together to create one system.
14. Solar Collector: A solar PV cell, panel or array, or solar thermal collector device, that relies upon solar radiation as an energy source for the generation of electricity or transfer of stored heat.
15. Solar Energy System: A solar energy system whose primary purpose is to harvest energy by transforming solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical, or chemical means. It may be roof-mounted or ground-mounted, and may be of any size as follows:
 - a. Small-scale Solar Energy System is one whose physical size based on total airspace projected over a roof or the ground is less than 15,000 square feet (approximately one-third of an acre);
 - b. Medium-scale Solar Energy System is one whose physical size based on total airspace projected over a roof or the ground is equal to or greater than 15,000 square feet but less than 87,120 square feet (two acres); and
 - c. Large-scale Solar Energy System is one whose physical size based on total airspace projected over a roof or the ground is equal to or greater than 87,120 square feet (two acres).

16. Solar Energy System: a solar photovoltaic cell, module, or array, or solar hot air or water collector device, including all Solar Related Equipment, which relies upon solar radiation as an energy source for collection, inversion, storage, and distribution of solar energy for electricity generation or transfer of stored heat.
17. Solar Energy System, Ground-Mounted. A Solar Energy System that is structurally mounted to the ground and is not roof-mounted; may be of any size (small, medium, or largescale).
18. Solar Energy System, Roof-Mounted: A Solar Energy System that is mounted on the roof of a building or structure; may be of any size (small-, medium- or large-scale). Tilt. The angle of the solar panels and/or solar collector relative to horizontal.
19. Solar Energy. Radiant energy (direct, diffuse and/or reflective) received from the sun.
20. Solar Array. A grouping of multiple solar modules with the purpose of harvesting solar energy.
21. Solar Farm. See Solar Energy System.
22. Solar Related Equipment. Items including a solar photovoltaic cell, module, or array, or solar hot air or water collector device panels, lines, pumps, batteries, mounting brackets, framing, fencing, foundations or other structures used or intended to be used for collection and management of solar energy.
23. Tilt is often between 5 and 40 degrees. Solar energy systems can be manually or automatically adjusted throughout the year. Alternatively, fixed-tilt systems remain at a static tilt year-round.