

## CHAPTER 8. SOLAR ENERGY SYSTEMS ORDINANCE

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### SECTION 1. TITLE

This Ordinance shall be known as the “Solar Energy Systems Ordinance” of China, Maine, hereinafter referred to as the “Ordinance”.

### SECTION 2. AUTHORITY

This ordinance is adopted pursuant to the enabling provisions of Article VIII, Part 2, Section 1 of the Maine Constitution; the provisions of Title 30-A M.R.S.A. Section 3001 (Home Rule), and the provisions of the Planning and Land Use Regulation Act, Title 30-A M.R.S.A. Section 4312 *et seq.*

### SECTION 3. PURPOSE

The purpose of this ordinance is to provide a process and a set of standards for the construction, maintenance, and decommissioning of solar energy systems in order to:

- Implement a municipal policy concerning the provision of solar energy systems for the purposes of providing electricity and energy for heating and/or cooling as an important component of the Town of China’s sustainability goals,
- Establish clear guidelines, standards, and timeframes for the municipal authority to regulate solar energy systems.
- Enable China to develop solar energy as a local, renewable and non-polluting energy resource that can reduce fossil fuel dependence and emissions. Energy generated from solar energy can be used to offset energy demands on the grid, with benefits for system owners and other electricity consumers,
- Enable China to discharge its public trust consistent with industry competition and technological developments,
- Ensure that China can continue to fairly and responsibly protect the public health, safety and welfare of the community,
- Further the goals and policies of the Comprehensive Plan, while promoting orderly development of the town with minimal impacts on existing uses,

- Protect the scenic and visual character of the community in accordance with the Comprehensive Plan, and
- Balance the need for reasonable standards and expediated and streamlined review procedures.

#### SECTION 4. APPLICABILITY

Notwithstanding the provisions of 1 M.R.S.A Section 302 or any other law to the contrary, the requirements of this ordinance shall apply to all roof-mounted and ground-mounted solar energy systems modified or installed after the date of its enactment. This local ordinance applies to the following:

- All solar energy systems shall be designed, erected, and installed in accordance with all applicable codes, regulations, and standards.
- Any upgrade, modification, or structural change that materially alters the size, placement, or output of an existing solar energy system shall comply with the provisions of this ordinance.
- Solar Energy Systems and all components are considered structures.
- For the purpose of this ordinance, the Town of China’s zoning districts, as stipulated in Chapter 2, Land Use Ordinance, Section 3, Criteria for Establishing Districts, are mapped and categorized as Resource Protection (RPD), Shoreland District (SD), Stream Protection District (SPD), and Rural Districts (RD).

#### SECTION 5. REVIEW AND APPROVAL AUTHORITY

##### 5.1. Approval Required

- Permitting shall be determined by the zoning district within China, type of solar system, and proposed size. China has designated the proper permitting process for each solar system in Table 1 below entitled “Permitting Required for Solar Energy Systems”,
- A solar energy system or device shall be installed, expanded or operated in China provided it is in compliance with this ordinance and,
- Roof-mounted solar energy systems and small-scale/medium-scale ground mounted SESs when an accessory use are subject to the dimensional standards of Section 7 of this ordinance and the additional standards outlined in Section 6 and Section 7 of this ordinance.

Table 1: Permitting Required for Solar Energy Systems

	<b>Land Use Districts</b>			
	Resource Protection District	Rural District	Shoreland District	Stream Protection District
<b>Principal Use</b>				
Medium-scale ground-mounted SES	PB	PB	NO	PB
Large-scale ground-mounted SES	PB	PB	NO	PB
<b>Accessory Use or Structure</b>				
Rooftop SES	CEO	CEO	CEO	CEO
Small-scale ground-mounted SES & medium-scale ground-mounted SES	PB	CEO	PB	PB

NO = Prohibited, PB= Site Plan Review by Planning Board,  
CEO = Code Enforcement Officer Permit Required

## 5.2. Approval Authority

In accordance with Section 5.1 above, the CEO or the Planning Board shall review applications for solar energy systems, and make written findings in accordance with Chapter 2, Section 6, Administration, of the China Land Development Ordinance on whether the proposed solar energy system complies with this ordinance.

## SECTION 6. APPROVAL PROCESS

### 6.1. Site Plan Application and Review

A public hearing shall be required for all site plan reviews, with all notification costs to be borne by the applicant.

- Roof-mounted systems and small-scale ground-mounted systems are not subject to Site Plan Review.
- Medium-scale ground-mounted solar energy systems are not subject to Site Plan Review, except in the resource protection district, shoreland protection district, and stream protection district and as may be required if conditional use permits are needed.
- Large-scale ground-mounted solar energy systems are subject to Site Plan Review.

Solar Energy Systems, including expansions of existing systems, shall comply with the application requirements of Chapter 2, Section 6, Administration, of the China Land Development Code and shall also include the following information in the site plan:

- (1) Property lines and physical features, including roads, for the project site;
- (2) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation or structures;
- (3) 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;
- (4) Documentation of the major system components to be used, including the panels, mounting system, and inverter(s);
- (5) Name, address, and contact information of the proposed system installer, the project proponent, project proponent agent, and all co-proponents or property owners, if any;
- (6) A one- or three-line electrical diagram detailing the solar photovoltaic installation, associated components, and electrical interconnection methods;
- (7) Locations of important plant and animal habitats identified by any one of the following: the Maine Department of Inland Fisheries and Wildlife, the Town of China, and the Maine Natural Areas Program;
- (8) Locations of wetlands and waterbodies and other protected areas;
- (9) Locations of “Prime Farmland” and “Farmland of Statewide Importance”;
- (10) Locations of floodplains; and
- (11) Locations of local or National Historic Districts.

## 6.2. Submission Waiver

The CEO or Planning Board, as appropriate may waive any of the submission requirements based upon a written request of the applicant submitted at the time of application. A waiver of any submission requirement may be granted only if the CEO or Planning Board finds in writing in accordance with Chapter 2, Section 6, Administration, of the China Land Development Code that due to special circumstances of the application, the information is not required to determine compliance with the standards of this ordinance.

### 6.3. Fees

#### A. CEO Application Fee

An application for CEO approval shall include payment of an application fee as designated by the Board of Selectman. The application shall not be considered complete until this fee is paid. The applicant is entitled to a refund of the application fee if the application is withdrawn within fifteen (15) days of date of filing, less all expenses incurred by the Town of China to review the application.

#### B. Planning Board Application Fee

An application for Planning Board approval shall include payment of an application fee as designated by the Board of Selectman. The application shall not be considered complete until this fee is paid. The applicant is entitled to a refund of the application fee if the application is withdrawn within fifteen (15) days of date of filing, less all expenses incurred by the Town of China to review the application.

An applicant for approval by the Planning Board shall pay all reasonable and customary fees incurred by the municipality that are necessary to review the application. All fees shall be paid in full prior to Planning Board review for approval.

## SECTION 7. STANDARDS FOR REVIEW

To obtain approval from the CEO or Planning Board, an application must comply with the standards in this section.

### 7.1. Review Processes

- (a) For projects that are subject to permitted uses, the CEO or their designee will review the application and make final determination within thirty (30) calendar days of receipt of a completed application.
- (b) For all projects that require a Site Plan Review, the following administrative procedures shall take effect:
  - (i) Prior to submitting an application and the start of the review process, a pre-application conference is recommended. The conference is initiated by the Applicant and is scheduled with the Applicant and the CEO to discuss pertinent requirements.
  - (ii) The Applicant shall submit the required number of copies of their application at least 10 (10) calendar days in advance of the meeting when the project is scheduled for review by the Planning Board. The number of copies shall be

enough to accommodate the Planning Board Members, CEO, and Planning Board Secretary.

- (iii) Applications are processed in the order in which they are received.
- (iv) Within ten (10) calendar days of receipt of the application, the Applicant will be notified if their application is complete or incomplete. If it is incomplete, a list of outstanding items will be included in the notification letter. Each time revisions are submitted on an incomplete application; the Town has another ten (10) calendar days to review the revised materials to make a determination of completeness.
- (v) Once an application is deemed to be complete, the project will be reviewed by the CEO for compliance with the ordinance standards. The Applicant will be notified by the CEO regarding the project and the Applicant may make revisions to address these comments.
- (vi) When the project is scheduled for a decision by the Planning Board, the planning staff will prepare a written report that discusses the project and makes a recommendation to the Planning Board as to a decision.

## 7.2. CEO Approval Standards

### Standards for Accessory Use or Structure. Roof-Mounted and Accessory Ground-Mounted Solar Energy Systems

- (a) Roof-mounted and building-mounted solar energy systems and equipment are permitted by right, unless they are determined by the Code Enforcement Officer, and the appropriate Fire Chief to present one or more unreasonable safety risks, including, but not limited to, the following:
  - (i) Weight load;
  - (ii) Wind resistance;
  - (iii) Ingress or egress in the event of fire or another emergency; or
  - (iv) Proximity of a ground-mounted system relative to buildings.
- (b) All solar energy system installations shall be installed in compliance with the photovoltaic systems standards of the latest edition of the National Fire Protection Association (NFPA) adopted by the MUBEC.
- (c) All wiring shall be installed in compliance with the photovoltaic systems standards of the latest edition of the National Electrical Code (NEC) adopted by the MUBEC.

- (d) Prior to operation, electrical connections must be inspected and approved by an Electrical Inspector, including providing documentation to the CEO

### 7.3. Planning Board Approval Standards

#### A. Standards for Principal Use: Medium- and Large-Scale Ground-Mounted Solar Energy Systems

In addition to the standards set forth above, medium- and large-scale ground-mounted solar energy systems shall comply with the following:

1. Utility Connections: Overhead or pole-mounted electrical wires shall be avoided to the extent possible within the facility.
2. Safety: The solar system owner or project proponent shall provide a copy of the Site Plan Review application to the appropriate Fire Chief for review and comment. The appropriate Fire Chief shall base any recommendation for approval or denial of the application upon review of the fire safety of the proposed system.
3. Visual Impact: Reasonable efforts, as determined by the Planning Board, shall be made to minimize undue visual impacts by preserving native vegetation, screening abutting properties, or other appropriate measures, including adherence to height standards and setback requirements. .
4. Land Clearing, Soil Erosion, and Habitat Impacts: 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. Ground-mounted facilities shall minimize mowing to the extent practicable. Removal of mature trees shall be avoided to the extent possible. Native, pollinator-friendly seed mixtures shall be used to the extent possible. Herbicide and pesticide use shall be minimized. Removal of prime agricultural soil or any significant volume of topsoil shall be avoided to the greatest extent possible from the site for installation of the system. If vegetation has been previously removed, restoration of native vegetation will be a condition of the permit approval.
5. Fencing: Where fencing is used, fences should be elevated by a minimum of 5 inches to allow for passage of small terrestrial animals.
6. Removal: Solar energy systems that have reached the end of their useful life or that has been abandoned consistent with this ordinance shall be removed. The owner or operator shall physically remove the installation no more than 365 days after the date of discontinued operations. The owner or operator shall notify the Code Enforcement Officer by certified mail of the proposed date of discontinued operations and plans for removal.
7. Decommissioning shall consist of:

- (a) Physical removal of all components of the solar energy system, including but not limited to supports, structures, equipment, batteries, security barriers, and transmission and/or distribution 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 through an Erosion Control Plan based on Department of Environmental Protection's Best Management Practices and approved by the CEO. Native, pollinator-friendly seed mixtures shall be used to the maximum extent possible.
- (d) Final Site Review and permittee release by the CEO.

B. Additional Standards for Large-Scale Solar Energy Systems

1. Large-scale ground-mounted solar energy systems shall not be considered accessory uses.
2. Operations and Maintenance Plan: The project proponent shall submit a plan for the operation and maintenance of the large-scale ground-mounted solar energy system, which shall include measures for maintaining safe access to the installation as well as other general procedures for operational maintenance of the installation.
3. 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.
4. Emergency Services: The large-scale ground-mounted solar energy system owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Fire Chief. Upon request, the owner or operator shall cooperate with the Fire Department in developing an emergency response plan. All means of shutting down the system shall be clearly marked. The owner or operator shall provide to the Code Enforcement Officer the name and contact information of a responsible person for public inquiries throughout the life of the installation.
5. Dimensional Standards
  - (a) Setbacks for Ground-Mounted Solar Energy Systems
    - (i) Notwithstanding any other provision of this ordinance to the contrary, the setbacks for ground-mounted solar energy systems shall meet all prescribed



setbacks for structures as specified elsewhere in the China Land Use Ordinance.

(ii) Additional setbacks may be required to mitigate visual and functional impacts.

(b) Height standards for ground-mounted solar energy systems are dependent on location and subdistrict:

**Table 2: Dimensional Standards**

Setback	Array Height
10 to 20 feet	12 feet
30 feet	18 feet
30+ feet	24 feet

In all other zoning districts, such systems shall conform to the building height requirements of the subdistricts in which they are located.

### **C. Lot Coverage**

Solar Arrays shall be considered “structures” for purposes of calculating maximum lot coverage pursuant to Section 5(A)(I) of Chapter 2, the Town of China Land Use Ordinance, based on the drip edge with the panel at its minimum tilt.

## **SECTION 8. AMENDMENT TO AN APPROVED APPLICATION**

Any changes to an approved application must be approved by the CEO or the Planning Board, in accordance with Section 5 of this ordinance.

## **SECTION 9. ABANDONMENT**

A large-scale ground-mounted solar energy system that is not operated for a continuous period of twelve months shall be considered abandoned. The CEO shall notify the owner of an abandoned solar energy system in writing and order the removal of the system within ninety (90) days of receipt of the written notice. The owner of the solar energy system shall have thirty (30) days from the receipt of the notice to demonstrate to the CEO that the facility has not been abandoned.

If the owner fails to show that the solar energy system is in active operation, the owner shall have sixty (60) days to remove the solar energy system. If the solar energy system is not removed within this time period, the municipality may remove the solar energy system at the owner’s expense. The owner of the facility shall pay all site reclamation costs deemed necessary and reasonable to return the site to its pre-construction condition, including the removal of roads, and reestablishment of vegetation according to a surety bond issued at the time of permitting. If the owner or operator of

the solar energy system fails to resume operations or remove the installation within 365 days of abandonment or the proposed date of decommissioning, the Town of China retains the right to use all available means to cause an abandoned, hazardous, or decommissioned large-scale ground-mounted solar energy system to be removed.

## SECTION 10. APPEALS

Any person aggrieved by a decision of the CEO or the Planning Board under this ordinance may appeal the decision to the Board of Appeals, as provided by Chapter 9 of the China Land Development Code. Written notice of an appeal must be filed with the Board of Appeals within thirty (30) days of the decision. The notice of appeal shall clearly state the reasons for the appeal.

## SECTION 11. ADMINISTRATION, ENFORCEMENT AND PENALTIES

Administration, enforcement, and penalties under this ordinance shall be consistent with Chapter 10 of the China Land Development Code.

## SECTION 12. CONFLICT AND SEVERABILITY

### 12.1 Conflicts with other Ordinances

Whenever a provision of this ordinance conflicts with or is inconsistent with another provision of this ordinance or of any other ordinance, regulation, or statute, the more restrictive provision shall apply. Consult Chapter 1, Purpose and Administration, of the China Land Development Code for guidance.

### 12.2 Severability

The invalidity of any part of this ordinance shall not invalidate any other part of this ordinance.

## SECTION 13. EFFECTIVE DATE

The Ordinance becomes effective on (insert date)