

AN ORDINANCE TO AMEND CHAPTER 55 (ZONING ORDINANCE) OF TITLE V OF THE CODE OF THE CITY OF ANN ARBOR BY ADDING SECTION 5:83 (SOLAR ENERGY)

**The City of Ann Arbor ordains:**

Section 1. That Section 5:83 (SOLAR ENERGY SYSTEMS) be added to Chapter 55 of Title V of the Code of the City of Ann Arbor as follows:

**Chapter 55, SECTION 5:83 – SOLAR ENERGY SYSTEMS**

(1) *Intent*

The City of Ann Arbor promotes the effective and efficient use of solar energy systems. It is the intent of the City to permit these systems by regulating their siting, design, and installation to protect public health, safety, and welfare, and to ensure their compatibility with adjacent land uses. Solar energy systems shall comply with the provisions of this section and are only permitted as authorized by this section.

(2) *Definitions*

The following words and phrases shall have the following definitions when used in this section.

(a) *Ancillary solar equipment* shall mean any accessory part or device of a solar energy system that does not require direct access to sunlight, such as batteries, electric meters, converters, racking/supports, plumbing, or water heater tanks.

(b) *Solar collector surface* shall mean any part of a solar energy system that absorbs solar energy for use in the system's transformation process. The collector surface consists of the front of the SES, and does not include frames, supports, and mounting hardware.

(c) *Solar energy* shall mean radiant energy received from the sun that can be collected in the form of heat or light by a solar energy system.

(d) *Solar energy system (SES)* shall mean a system (including solar collector surfaces and ancillary solar equipment) either affixed to a permanent principal or accessory building or functioning as a freestanding structure, that collects, stores, and distributes solar energy for heating or cooling, generating electricity, or heating water. Solar energy systems include, but are not limited to, photovoltaic (PV) power systems and solar thermal systems.

(e) *Personal-scale SES* shall mean a ground-mounted or building-mounted SES that is accessory to the principal residential use on the parcel. The sale and distribution of excess available energy to an authorized public utility for distribution, if permitted, shall be incidental to this type of system, and not its primary purpose.

(f) *Ground-mounted SES* shall mean a freestanding solar energy system that is not attached to and is separate from any building on the same parcel on which the solar energy system is located.

(g) *Building-mounted SES* shall mean a solar energy system that is attached to a building on a parcel as the principal method of physical support.

### (3) *Standards for SES*

In zoning districts other than R1 or R2, or on single-family use parcels in the R3 and R4 Districts, an SES is permitted subject to the standards of accessory buildings, Section 5:59.

In R1 and R2 zoning districts, and single-family uses in the R3 and R4 zoning districts, a personal-scale SES is permitted subject to the following standards:

#### (a) *Application for zoning compliance permit of personal-scale SES*

A personal-scale SES requires a zoning compliance permit, and additional permits may be required as stated in Section 5:83(3)(b) and (c) below. An application for a zoning compliance permit shall include the following:

- i. Renderings and/or specifications of the proposed solar energy system.
- ii. A plot plan or survey to indicate where the SES is to be installed on the property, including property setbacks and the total solar collector surface area, and total footprint of the SES.
- iii. Elevations showing the height of the SES.
- iv. A description of the screening to be provided for ground-mounted SES.

#### (b) *Ground-mounted SES*

Ground-mounted, personal-scale SES shall be subject to the following additional standards:

- i. *Setbacks:* A ground-mounted SES may be located in the rear or side yard and shall be located at least three feet from the property line.

A ground-mounted SES is permitted in the front yard, but not in the required front setback area. The SES and all related equipment shall cover no more than 35% of the front yard area outside of the required front setback area. Within the front yard, the SES shall adhere to side setback requirements for the zoning district.

- ii. *Height:* A ground-mounted SES shall not exceed six feet in height in the front yard and shall not exceed 21 feet in height in the rear or side yard, measured from the ground at the base of such equipment to the highest point of the system.
- iii. *Screening:* A ground-mounted SES shall be screened when located in the front yard. SES screening shall be a minimum of 80% opaque and installed on all sides or rear of a SES visible from a public right-of-way. Screening shall consist of fencing, wall, evergreen vegetation, berm or combination thereof. Plant material used for screening shall be a minimum of 24 inches tall and of a size, quantity and spacing to achieve 50% year-round opacity at the time of planting. Diversity and native species are encouraged. Plant material shall comply with ANSI American Standard for Nursery Stock, as amended.
- iv. *Installation and maintenance:* A ground-mounted SES shall be installed, maintained and used only in accordance with the manufacturer's specifications.
- v. *Compliance with additional codes:* A ground-mounted SES, and the installation and use thereof, shall comply with the building code, the electrical code and any other applicable State codes. Installation of a ground-mounted SES shall not commence until all necessary permits have been issued.
- vi. *Lot coverage:* Solar energy systems shall not occupy greater than 35% of the required rear setback area.

(c) *Building-mounted SES*

Building-mounted, personal-scale SES shall be subject to the following additional standards:

- i. *Setbacks:* A building-mounted SES shall comply with all applicable area, height, and placement requirements for principal buildings or accessory buildings.
  - ii. *Installation and maintenance:* A building-mounted SES shall be installed, maintained and used only in accordance with the manufacturer's specifications.
  - iii. *Compliance with additional codes:* A building-mounted SES, and the installation and use thereof, shall comply with the building code, the electrical code and any other applicable State codes. Installation of a building-mounted SES shall not commence until all necessary permits have been issued.
- (d) *Ancillary solar equipment:* Ancillary solar equipment shall be located inside of a building or screened from public view from a public right-of-way. All ancillary solar equipment shall be screened consistent with this section, without compromising the effectiveness of the solar collectors. Solar storage batteries that are included as part of the solar collector system shall be placed in a secure container or enclosure that complies with the requirements of the building code, and when no longer in use shall be disposed of in accordance with applicable laws and regulations.

Section 2. This ordinance shall take effect and be in force on and after ten days from legal publication.