

**Sec. 16a-14-102. Eligibility**

A renewable energy system, a cogeneration system, or component parts shall qualify for a sales tax exemption if in compliance with the following standards and specifications.

(a) Commercial solar equipment in solar heating and/or cooling systems sold as a package and domestic hot water systems sold as a package including equipment for converting, storing and transporting solar energy. A system shall be deemed eligible if it is in compliance with the requirements of the state of Connecticut Building Code.

(b) Solar energy collectors purchased for heating and/or cooling of domestic hot water. A collector shall be deemed eligible if it is in compliance with the requirements of the state of Connecticut Building Code.

Basic materials used in the site built and self built construction of collectors and active systems and replacement parts for any eligible renewable energy system or eligible cogeneration system.

(c) Heat transportation systems which are a part of a solar system, up to the point where the system is integrated to a conventional or supplemental system meeting the requirements of the State of Connecticut Building Code.

(d) Devices constructed for the sole purpose of storing thermal energy collected and converted by a solar system.

(e) Devices used to control the operation or functioning of a solar system.

(f) Materials used solely to mount solar equipment on a building or on the ground.

(g) Devices used to track the movement of the sun and maintain the orientation of collectors toward the sun.

(h) Photovoltaic cells

(i) Wind energy conversion systems used to generate electricity. Components of such systems eligible for exemption shall include wind rotors, including associated towers, electricity generating equipment, inverters, voltage regulators, switches, and that portion of the system's wiring connecting the generating equipment to the electricity storage equipment, or to a building if no electricity storage equipment is utilized.

(j) **Hydroelectric generating systems.** Components of such systems eligible for exemption shall include waterwheels or turbines and associated equipment such as water intakes, control gates and other flow control devices, valves, pipes or other components necessary to the system's operation, electricity generating equipment, inverters, voltage regulators, switches, and that portion of the system's wiring connecting the generating equipment to the electricity storage equipment, or to a building if no electricity storage equipment is utilized. The exemption does not apply to materials used in construction of a dam or any appurtenant structures or components for the purpose of impounding water.

(k) Parts or components of cogeneration systems which are directly attributable, an integral part, and essential to the operation of the cogeneration system may include, but are not limited to, prime movers, generators and associated equipment, electrical switch gear and paralleling equipment, primary boiler or combustor, fuel storage or pipeline interconnection, controls and performance monitoring equipment, fuel and waste handling and preparatory and disposal equipment, waste heat recovery boilers or heat exchanger, and water treatment for process.

(l) Batteries used solely to store electricity produced by photovoltaic cells or other

eligible devices.

(m) Equipment of the following types for passive systems.

(1) Glazing materials with a U value of .65 or less on a south facing wall,  $\pm 30$  degrees of true south, that is at least 75% free of shading between the hours of 9:00 AM and 3:00 PM on December 21, in fenestrating a building as part of a design for the purpose of direct or indirect solar heat gain.

(2) Equipment such as heads, sills and jambs used solely as bracing for eligible glazing, and awnings or overhangs for the purpose of shading such glazing during the cooling season.

(3) Skylights and roof glazing facing true south  $\pm 30$  degrees and are mounted at an angle of 40 degrees or greater shall be considered solar energy equipment only if such devices are used for direct or indirect solar heat gain during the heating season and if capable of reducing heat loss at night during the heating season through use of insulating devices so that such skylights or roof glazing provides a net heat gain to the building.

(4) Glass, fiberglass, or other glazing materials which are equal or less than a U value of .65 and are used to enclose south facing areas such as greenhouses, solariums, or atriums attached to a building for the purpose of isolated solar gain, provided that warmed air can circulate through the building and provisions have been made to prevent nocturnal and cold weather heat losses from the building to which the enclosed area is attached.

(5) Materials used in the construction of thermal mass walls.

(6) Materials such as brick, sand, masonry and insulation when used in constructing a floor for thermal storages for those areas capable of receiving reflected or direct light through solar glazing.

(7) Materials purchased for the construction of a thermal contact ceiling.

(8) Movable insulation used to minimize heat loss largely caused by nocturnal loss through areas used for direct, indirect or isolated solar gain during the daylight hours, provided that such insulation is tight fitting, gasketed, fully weatherstripped, or otherwise treated to limit infiltration and convective airflow around the device.

(n) Furnaces or other appliances which can use biomass as a fuel source, provided that such appliances circulate heat from a central location with ducts and pipes to provide space or water heating, or are used for the production of electricity or industrial process heat. Appliances using biomass as a fuel source which are designed to be added on to an existing central heating system shall also be eligible for exemption.

(o) Cogeneration systems which come as a packaged unit if such systems are in compliance with FERC criteria set out in 18 CFR 292.204.

(p) The following materials and equipment are not eligible for exemption:

(1) Building insulation used solely to reduce heat loss through walls, roofs, slabs and foundations. Insulation used behind the absorber surface of a site or self built collector shall be eligible for exemption.

(2) Uninsulated skylights.

(3) Bracing equipment used as structural members such as columns, beams, and studs, except as provided in (m) (2).

(4) Exterior walls and floors constructed of masonry as a means of reducing heat loss, except as provided in (m) (5).

(5) Devices such as non-insulated draperies, non-reflective venetian blinds, curtains, and

rugs except as provided in (m) (8).

(6) Heat pumps.

(7) Trees, shrubbery, and other forms of vegetation incorporated into a building or site design.

(8) Evaporative coolers or cooling towers.

(9) Devices used solely for heating swimming pools.

(10) Distribution equipment or materials which transfer electrical, mechanical or thermal energy from the cogeneration system to the point at which the energy is used, and equipment or materials which use such energy.

(11) Any materials used in construction which are not physically incorporated into the cogeneration system or small power production facility.

(12) Buildings housing small power production facilities or cogeneration systems except for structures solely enclosing such equipment.

(13) Motor vehicles used in conjunction with the cogeneration system.

(14) Cogeneration systems in which the useful electric energy generated is less than 5% of the total useful energy output.

(q) If a renewable energy system is neither specifically eligible or ineligible for exemption, the secretary shall examine the plans and specifications of such system and issue a ruling as to eligibility within ninety days.

(Effective November 6, 1986)