

This document has been prepared as part of the implementation project of Legal Pathways to Deep Decarbonization (Michael B. Gerrard and John C. Dernbach, eds. Environmental Law Institute [2019]) (LPDD). For background information on the project, see <https://lpdd.org>

EV Ready Building Code for Commercial, Industrial and Multiple-Family Residential Buildings¹

To be used by municipalities and adjusted to fit their respective codes and other legislation.

Section 1. Findings.

The [*Legislative Body of the City/Town/Village of ____*] hereby finds as follows:

1. The sale and use of electric vehicles are proliferating in the United States, the State of [*insert name of state*], and the [*city, town, village*].

2. Electric vehicles provide a wide range of environmental benefits, including the reduction of emissions of greenhouse gases and other air pollutants that adversely affect public health and welfare.

3. Electric vehicles also have the potential to provide significant economic benefits to the citizens of [*insert name of municipality*] by lowering fuel costs and the costs for vehicle maintenance.

4. Such benefits, and public welfare and convenience, can be enhanced by assuring that the infrastructure needed to support the charging of electric vehicles is readily available in new or substantially altered commercial, industrial, and multiple-family residential buildings in the [*city, town, village*].

5. New building construction and the significant alteration of existing commercial, industrial, and multiple-family residential buildings provide opportunities for the cost-effective installation of electric vehicle charging stations that are more readily available than when existing buildings are retrofitted.

Note: *This ordinance assumes a definition of multiple-family building in a separate provision of the building code that is similar to the following: “A ‘multiple-family residential building’ is a residential building that is constructed to be occupied, or is occupied as the residence of __ or more families or persons living independently of each other in individual dwellings within such building, which dwellings are leased, subleased or owned by one or more such families or*

¹ Among other contributors who wish to remain anonymous, this new model law received drafting from James Goldberg and peer review from Richard Wallsgrave at the University of Hawaii Law School.

persons. Such buildings include, but are not limited to apartment houses, cooperative buildings, condominium buildings, attached town houses and garden-type dwelling projects.”

Section 2. Definitions.

As used in this ordinance, the following terms have the following meanings:

(1) The term “covered building” means a commercial, industrial, or multiple-family residential building.

Note: *The municipality should determine whether to adopt a size threshold for the applicability of the requirements of the ordinance. If so, the definition of “covered building” should set forth the threshold in square feet.*

For a municipality that adopts a size threshold, the definition of “covered building” would read as follows:

(1) The term “covered building” means a commercial, industrial, or multiple-family residential building with a gross floor area in excess of [__] square feet.

(2) The term “covered parking facility” means a parking facility that is—

(A) new construction and consists of more than __ parking spaces;

(B) substantially altered.

(C) attached to or incorporated within a covered building;

(3) The term “electric vehicle supply equipment” means the conductors, including the ungrounded, grounded, and equipment grounding conductors, electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatuses installed specifically for the purpose of delivering energy from the premises wiring to an electric vehicle.

(4) The term “electric vehicle energy management system” means a system used to control electric vehicle supply equipment loads through the process of connecting, disconnecting, increasing, or reducing electric power to the loads and consisting of any of the following: a monitor(s), communications equipment, a controller(s), a timer(s), and other applicable device(s).

(5) The term “EVSE space” means a parking space in a covered parking facility with access to Level 2 or Level 3 electric vehicle supply equipment.

(6) The term “Level 2 charger” means equipment that is serviced by an electrical room equipped to provide 208/240 V 40-amp electric service and is designed and installed to supply such electrical energy to a plug-in electric vehicle.

(7) The term “make-ready space” means a parking space in a covered parking facility with the infrastructure needed for the future connection of Level 2 electric vehicle supply equipment, including conduit pulled within a raceway terminating at the space, and all excavation, concrete, and other work needed for the installation of such infrastructure. A parking space located more than 4 feet from a building is a make-ready space if the raceway and conduit is extended below grade to a pull box in the vicinity of the space or stub above grade in the vicinity of the space and protected from vehicles by a curb or other device.

(8) The term “new construction” means the construction of one or more new structures on a site.

(9) The term “substantially altered” means: (i) with respect to the alteration of an existing building, to increase the total floor area by more than fifty percent, or [___] square feet; or (ii) with respect to the alteration of a parking facility, to add more than [___] parking spaces.

Note: *For a size threshold municipality, this definition would read as follows:*

(8) The term “substantially altered” means: (i) with respect to the alteration of a building, to increase the total floor area of an existing building consisting of at least ___ feet of floor area by more than fifty percent, or [___] square feet; and (ii) with respect to the alteration of a parking facility, to add more than [___] parking spaces.

Section 3. Requirements.

(a) For any covered parking facility that is new construction or attached to or incorporated within a covered building that is new construction:

(1) The electrical room serving the covered parking facility shall be equipped to provide 208/240 V 40-amp (“Level 2”) electric service to a minimum of 70 percent of the total parking spaces within the covered parking facility. An electric vehicle energy management system allowing for load sharing for simultaneous or staggered charging may be used to meet this requirement.

(2) At least 30 percent² of the total number of parking spaces within the covered parking facility shall be EVSE spaces.

(3) At least 40 percent of the total number of parking spaces within the covered parking facility shall be make-ready spaces.

² **Note to drafters:** The percentages included in this model are recommendations. It is assumed that the municipality will make its own determination with respect to the minimum number of EVSE and EV Ready parking spaces, keeping in mind the environmental and economic benefits such spaces will provide.

(4) At least [__]³ percent of EVSE spaces and [__] percent of make-ready spaces shall be accessible parking spaces. The electric vehicle charging infrastructure serving such accessible parking spaces may also serve adjacent parking spaces not designated as accessible parking.

(b) For any parking facility that is a covered facility because it or the covered building it serves has been substantially altered:

(1) The electrical room serving the covered parking facility shall be equipped to provide 208/240 V 40-amp (“Level 2”) electric service to all new parking spaces. An electric vehicle energy management system allowing for load sharing for simultaneous or staggered charging may be used to meet this requirement.

(2) At least 30 percent⁴ of the total number of new parking spaces within the covered parking facility shall be EVSE spaces.

(3) At least 40 percent of the total number of new parking spaces within the covered parking facility shall be make-ready spaces.

(4) At least [__]⁵ percent of EVSE spaces and [__] percent of make-ready spaces shall be accessible parking spaces. The electric vehicle charging infrastructure serving such accessible parking spaces may also serve adjacent parking spaces not designated as accessible parking.

(c) When the calculation of the percentage of parking spaces necessary to comply with subsection (a) or (b) results in a fraction, the number of EVSE and make-ready spaces required under subsection (a) or (b) shall be rounded up to the next whole number.

(d) All work required under this ordinance shall be performed in accordance with [*insert applicable electric code.*]

Section 4. Effective Date.

This ordinance takes effect [*number of days*] after its [*adoption/publication*].

³ **Note to Drafters:** The percentage of accessible EVSE spaces will be determined by the municipality taking into account legal requirements and other factors.

⁴ **Note to drafters:** The percentages included in this model are recommendations. It is assumed that the municipality will make its own determination with respect to the minimum number of EVSE and EV Ready parking spaces, keeping in mind the environmental and economic benefits those spaces will provide.

⁵ **Note to Drafters:** The percentage of accessible EVSE spaces will be determined by the municipality taking into account legal requirements and other factors.