



City of Charleston

Resiliency & Sustainability Advisory Committee

Agenda

August 25, 2022, 11:00am – 12:00pm
2 George St, 1st Floor Public Meeting Room & Hybrid Virtual Meeting

1. Welcome, Moment of Silence Mayor John Tecklenburg

2. Climate Action Plan Implementation Katie McKain
Progress, Next Steps & Budget Considerations

3. Strategies for Electric Vehicle Katie McKain
Infrastructure Policy in New Construction Stewart Weinberg
and Research Findings

- Committee Discussion on Next Steps

4. Review Draft Amendment Katie McKain
To Address Extra Thick Plastic Bags

5. Public Comment Period*

***Public Comment Instructions:** Please use **one** of the following methods to request to speak at the meeting or provide comments to the committee:

1. Attendees on the webinar link may “raise their hand” if they choose to speak during the public comment period and will be unmuted to provide comments live.
2. Sign-up to speak or leave comments for the Committee by completing the form at: <http://innovate.charleston-sc.gov/comments/> (due by 10am on meeting date)
3. Request to speak or submit a comment via voicemail at 843-724-3789 or email at mckaink@charleston-sc.gov. Please provide your name, phone number and address.

WEBINAR LINK: <https://us02web.zoom.us/j/87142628321>

Meeting Phone Number: Call 1 (929) 205 6099, Webinar ID: 871 4262 8321

In accordance with the Americans with Disabilities Act, people who need alternative formats, ASL (American Sign Language) Interpretation or other accommodation please contact Janet Schumacher at (843) 577-1389 or email to schumacherj@charleston-sc.gov prior to the meeting.

Findings on Electric Vehicle Infrastructure Policy Research

We are recommending that the City of Charleston modify its zoning codes to provide for Electric Vehicle (EV) charging stations as described below. Access to convenient charging is a key factor in consumers' decision to adopt an EV. The International Energy Agency (IEA) Global EV Outlook states, "The availability of chargers emerged as one of the key factors for contributing to the market penetration of EVs." It is paramount to create a conducive environment for EV adoption by putting the EV charging infrastructure in place.

Imagine that you just rented and moved into a new apartment and you're also thinking about buying a new electric vehicle (EV) because you care about helping the environment while saving money. You check your new parking lot for an electrical outlet, only to find that there isn't one. you ask the property owner/manager about installing an EV charging station in the parking lot for communal use, but the property does not have the electrical capacity and pre-wiring infrastructure (such as conduit) to support easy and low-cost installation. You're concerned that without access to home-charging, you won't have a place to charge your new EV, and so you surrender and buy another gas-powered car. This exact scenario is one of the major challenges for many consumers thinking about buying an EV, but it is solvable and can be overcome with "EV-ready codes."

There are three main categories of "EV-ready" codes:

1. **EV-Capable:** Foundational electrical capacity is installed but still lacks a conduit connected to an electrical outlet with the required voltage and amperage. There is electrical panel capacity and space to support a minimum 40-ampere, 208/240-volt branch circuit for each EV parking space, and the installation of raceways, both underground and surface mounted, to support the EVSE.
2. **EVSE-Ready Outlet:** Electrical capacity and other necessary infrastructure are installed and "ready" for charging stations when utilization is required. A designated parking space is provided with one 40-ampere, 208/240-volt dedicated branch circuit for EVSE (Electric vehicle supply equipment) servicing electric vehicles. The circuit shall terminate in a suitable termination point such as a receptacle or junction box,

and be located in close proximity to the proposed location of the EV parking spaces.

3. **EVSE-Installed:** Fully operational Level 2 EV chargers are connected to 208/240-volt charging outlets with the required electrical capacity to support them. Often predicated by a certain percentage of fully operational charging stations that are set by official government agencies or developed by private organizations that have received regulatory approval. (Forthmobility.org)

We are recommending considering EV Capable with an EV-Ready or EV-installed component.

Examples of EVSE-Ready Outlet:

Chicago: The city council approved the Electric Vehicle Supply Equipment-Ready, or EVSE-Ready, ordinance, which requires that new residential construction consisting of at least five units have at least **20 percent** of parking spaces be EVSE-ready. For commercial properties with at least 30 on-site parking spaces, **20 percent** need to be EV-ready. EV-ready includes either “EVSE Ready” or “EVSE-Installed.”

- Residential: 20% EV Ready
- Commercial/ Multi-family: 20% EV Ready or EV Installed

San Francisco: Since January 2018, the Electric Vehicle Readiness Ordinance has required all new residential and commercial buildings to configure **10 percent** of parking spaces to be “turnkey ready” for an EV charger installation, and an additional **10 percent** to be “EV flexible” for potential charger installations and other upgrades. The remaining **80 percent** of parking spaces will be “EV capable.”

- Residential: 80% EV Capable, 20% EV Ready
- Commercial/ Multi-family: 80% EV Capable, 20% EV Ready

Boulder County, CO: The Boulder Board of County Commissioners approved an amendment, Section K111.4 Electric vehicle charging receptacle outlets, to city building

codes that requires EV-ready charging receptacles for **2 percent** of parking spaces in all new commercial, industrial, and multiunit residential buildings with 20 or more parking spaces or additions or alterations to existing buildings that increase the total floor area of a building by either 50 percent or 5,000 square feet

- Residential: none
- Commercial/ Multi-family: 2% EV Ready

Honolulu: The Honolulu City Council recently passed Bill 25, which sets EV-ready requirements for all new residential multiunit buildings that have eight or more parking stalls and commercial properties with 12 or more parking stalls. Section C406.8 of the bill requires that at least **25 percent** of parking stalls at both multiunit buildings, and commercial properties are EV-ready

- Residential: none
- Commercial/ Multi-family: 25% EV Ready

Seattle, WA has been an early PEV adopter and continues to push forward with policies and initiatives to expand access to PEVs. One example is Seattle’s Electric Vehicle (EV) Readiness Ordinance

(<http://seattle.legistar.com/View.ashx?M=F&ID=7226916&GUID=734F02DC-0CF2-419F-8378-02F124F52644>). It states:

“New parking spaces provided on a lot when a new building is constructed shall be “EV-ready”...The required number of EV-ready parking spaces shall be determined by whether the parking is for a residential or nonresidential use.”

Under the above policy, private parking for individual residential units must have at least one parking space that is EV-ready. When parking is provided for residential uses, a **minimum of 20%** of those spaces must be EV-ready and when parking is provided for nonresidential uses, a **minimum of 10%** of those spaces must be EV-ready.

- Residential: one space EV Ready
- Commercial: 10% EV Ready
- Multi-family: 20% EV Ready

Atlanta, GA

Newly constructed residential buildings and public parking facilities in Atlanta must be equipped with the electrical infrastructure necessary to accommodate EVSE. At least **20%** of the spaces in all new commercial and multifamily parking structures must be PEV-ready. New single-family homes must also have EVSE-ready infrastructure. For more information, see the Atlanta City Council [Code of Ordinances](#), Section 17-0-1654.

- Residential: one space EV Ready
- Commercial/ Multi-family: 20% EV Ready

Examples of EVSE-Installed:

Hilton Head, SC: Passed in 2015 within the land management ordinances;

All ***multifamily*** and nonresidential ***development*** shall provide one **electric vehicle (EV) charging station** per **site**. If the development requires over 100 parking spaces, the electric vehicle (EV) charging station shall have a sign that states that only electric vehicles being charged can park in that particular parking space. If the square footage of an existing building on a site is being increased by more than 50% then the applicant will be required to provide an EV charging station on site.

https://library.municode.com/sc/hilton_head_island/codes/land_management_ordinance?nodeId=CH16-5DEDEST_SEC.16-5-107PALOST

- Commercial/ Multi-family: 1 station EV Installed

Middletown, CT: The city's planning and zoning commission adopted a rule change that requires new multiunit dwellings and commercial property developments with 25 or more parking spaces install a minimum of one charging station or allocate **3 percent** of parking spaces to electric vehicle charging (Level 2 or 3), whichever is greater. Developments requiring 70 or more parking spaces must install a minimum of two charging stations or allocate 3 percent of parking spaces to electric vehicle charging, whichever is greater.

- Commercial/ Multi-family: Greater of 1-2 (stations) or 3% EV Installed

Salt Lake City, UT

See Utah City Code 21A.44.050

(http://www.sterlingcodifiers.com/codebook/getBookData.php?chapter_id=49083#s928646):

“2. EV Parking: The following standards shall only apply to multi-family uses. At least one (1) parking space dedicated to electric vehicles shall be provided for every twenty five (25) parking spaces provided. EV parking spaces shall count toward the required number of parking spaces. The EV parking space shall be:

- a. Located in the same lot as the principal use;
- b. Located as close to a primary building entrance as possible;
- c. Signed in a clear and conspicuous manner, such as special pavement marking or signage, indicating exclusive availability to electric vehicles; and
- d. Outfitted with a standard EV charging station.”

- Commercial/ Multi-family: 1 (station) EV Installed per 25 spaces

City of Miami Beach, FL

The requirements for new developments are detailed in Ordinance 2016-3988

(<https://www.miamibeachfl.gov/wp-content/uploads/2017/08/2016-3988-Ordinance.pdf>):

“Except in single-family residential districts, wherever off-street parking is required pursuant to the land development regulations, a minimum of **2%** of the required off-street parking spaces, with a minimum of one parking space, shall contain electric vehicle parking spaces” equipped with Level 2 EVSE.

- Commercial/ Multi-family: 2% EV Installed

City of Coral Gables, FL

Coral Gables’ requirements may be found under Ordinance 2019-19

(<https://coralgables.legistar.com/View.ashx?M=F&ID=7158203&GUID=8FA8AEB1-FD8D-4B6E-9754-97960C55F8D6>). When 20% or more off-street parking spaces are

required at site of new construction, a minimum of: 2% of the required off-street parking spaces must be reserved for electrical EV parking and provide EVSE for each space; 3% of the required off-street parking spaces must have EV ready infrastructure; and 15% of the required off-street parking spaces must be EV Capable.

- Commercial/ Multi-family: 15% EV Capable, 3% EV Ready, 2% EV Installed

AN ORDINANCE

TO AMEND PROVISIONS OF CHAPTER 14 OF THE CODE OF THE CITY OF CHARLESTON BY AMENDING ARTICLE V– ENVIRONMENTALLY ACCEPTABLE PACKAGING AND PRODUCTS PERTAINING TO CLARIFYING THE DEFINITION OF A REUSABLE CARRYOUT BAG.

BE IT ORDAINED BY THE MAYOR AND COUNCILMEMBERS OF CHARLESTON, IN CITY COUNCIL ASSEMBLED:

Section 1. Article V, Sec. 14-53 Definitions, of Chapter 14 of the Code of the City of Charleston is hereby amended as follows (new text in **bold and underlined**):

REUSABLE CARRYOUT BAG shall mean a carryout bag that is specifically designed and manufactured for multiple reuse, and meets the following criteria:

- (1) Displays in a highly visible manner on the bag exterior language describing the bag's ability to be reused and recycled;
- (2) Has a handle **which is stitched and not heat-fused**;
- (3) Is constructed out of any of the following materials:
 - (a) Cloth, other **machine**-washable fabric, or other durable materials whether woven or non-woven capable of being cleaned and disinfected; **or**
 - (b) Plastic film with a minimum thickness of four (4.0) mils and capable of being cleaned and disinfected.
- (4) Has a minimum lifetime of 125 uses, which for purposes of this section means the capability of carrying a minimum of 22 pounds 125 times over a distance of at least 175 feet.

Section 2. Article V, Sec. 14-54 Regulations, of Chapter 14 of the Code of the City of Charleston is hereby amended by adding thereto a new subsection (h). under Regulations, which shall read as follows:

(h) While cutlery is considered exempt pursuant to Sec. 14-55(i), Food Providers in the City of Charleston shall only provide, distribute or deliver disposable to-go cutlery (i.e. forks, spoons, knives) and straws for prepared food and beverages upon the request or affirmative response of a customer or person being provided the prepared food or beverage, or in a self-service area or dispenser.

Section 3. This Ordinance shall become effective **six months** following ratification.

Ratified in City Council this ____ day of _____ in the Year of Our Lord, 2022, and in the ____th Year of the Independence of

the United States of America

John J. Tecklenburg
Mayor, City of Charleston

ATTEST: _____
Jennifer Cook
Clerk of Council

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