Introduced by: Ms. Durham  
Date of introduction: September 28, 2021

ORDINANCE NO. 21-116

TO AMEND NEW CASTLE COUNTY CODE CHAPTER 6 (“BUILDING CODE”), ARTICLE 3 (“ADMINISTRATION”) AND ARTICLE 10 (“ENERGY CONSERVATION CODE”) RELATING TO NEW RESIDENTIAL CONSTRUCTION, ELECTRIC VEHICLES, AND CHARGING INFRASTRUCTURE

WHEREAS, New Castle County recognizes the importance of the natural environment and ecological protection in creating a high quality of life, and for building and maintaining great neighborhoods; and

WHEREAS, motor vehicles with diesel- and gas-powered engines significantly contribute towards pollution and environmental degradation; and

WHEREAS, electric vehicles are less complex to build, cheaper to maintain, last longer, are more environmentally friendly in terms of both tailpipe emissions and noise pollution than diesel- and gas-powered vehicles; and

WHEREAS, many vehicle manufacturers in the United States and around the world, including General Motors, Volvo, and Jaguar, have announced their intention to end the production of diesel- and gas-powered motor vehicles and entire jurisdictions, such as California and the United Kingdom, have set dates for banning the sale of non-electric vehicles, which will likely increase the supply and lower the cost of electric vehicles; and

WHEREAS, President Biden has issued an Executive Order in furtherance of his Administration’s goal that at least 50% of all new vehicle sales shall be electric vehicles by 2030; and

WHEREAS, the U.S. Senate recently passed the Infrastructure Investment and Jobs Act that will, among other things, provide $7.5 billion dollars to build half a million electric charging stations in public spaces, such as highway rest stops, convenience stores, restaurants, and hotels in an effort to make recharging as easy as refueling; and

WHEREAS, residents of New Castle County will increasingly demand that our housing stock be outfitted with the equipment necessary to re-charge electric vehicles; and

WHEREAS, retrofitting existing homes to install electric vehicle charging stations is both time consuming and expensive, unless the home was initially designed and constructed to facilitate the easy installation of such charging stations; and

WHEREAS, providing the basic infrastructure at the time of construction is a nominal increase in the design, construction, and cost of new construction; and
WHEREAS, several jurisdictions, such as Howard and Montgomery Counties in Maryland, the City of Atlanta, and the entire State of California currently require that all new construction either provide for the installation of electric vehicle charging stations and/or that all new construction be “EV-ready”; and

WHEREAS, New Castle County has an interest in making the future installation of electric vehicle charging stations as inexpensive and simple as possible; and

WHEREAS, New Castle County Council finds that the provisions of this Ordinance are rationally and reasonably related to, substantially advance, and are narrowly tailored to achieve its goal of protecting and preserving legitimate government interests, including the protection and preservation of the public health, safety, prosperity, general welfare, and quality of life.

NOW, THEREFORE, THE COUNTY OF NEW CASTLE HEREBY ORDAINS:

Section 1. New Castle County Code Chapter 6 (“Building Code”), Article 3 (“Administration”), Section 6.03.013. (“Submittal documents”) is hereby amended by adding the underlined language as set forth below.

Sec. 6.03.013. Submittal documents.

A. General…

B. Construction documents…

1. Information. . .

2. Site plan. The construction documents submitted with the application for permit shall be accompanied by three (3) sets of a site plan, or in an electronic format as required by the Code Official, showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, location of electric vehicle supply equipment (EVSE), EV-capable parking spaces, EV-ready parking spaces, and EV-installed parking spaces, the established street grades and the proposed finished grades; and any other information or data required by the New Castle County Drainage Code and the Department's plan content check list. The site plan shall be drawn...


The following sections of the International Energy Conservation Code, 2018 Edition, are revised as follows. Note: To avoid any confusion, commercial provisions are provided with a “C” designation and residential provisions are provided with an “R” designation.

IECC – COMMERCIAL PROVISIONS
CHAPTER 2. DEFINITIONS

Section C202, General Definitions, is amended by adding the following:

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current. Plug-in hybrid electric vehicles are electric vehicles having a second source of motive power. Off-road, self-propelled electric mobile equipment, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats and the like, are not considered electric vehicles.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). The conductors, including the ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle. At a minimum, EVSE covered in this Chapter shall meet the standards set forth by the National Electrical Manufacturer’s Association (“NEMA”) for Level 2 EVSE.

EV-INSTALLED PARKING SPACE. A designated parking space with dedicated electric vehicle supply equipment, installed in accordance with the current adopted electrical code in the State of Delaware, capable of charging an electric vehicle located within three (3) feet of the parking space.

EV-CAPABLE PARKING SPACE. A parking space that can be converted to an EV-Ready Parking Space or an EV-Installed Parking Space and is provided with a conduit that meets the following requirements:

1. The conduit shall be continuous between a junction box or receptacle located within three (3) feet of the parking space and an electrical panel serving the area of the parking space. The junction box or receptacle must be identified as “For electric vehicle charging.”

2. The conduit shall be sized and rated to accommodate a branch circuit of sufficient size to the future electrical charging facility.

3. The electrical panel shall reserve sufficient dedicated physical space for the breaker required to supply the future electrical charging facility and shall be identified as “For electric vehicle charging.”
EV-READY PARKING SPACE. A parking space that meets the requirements for an EV-Capable Parking Space, which also includes an electrified outlet dedicated for a Level 2 EVSE that is placed within three (3) feet of the parking space.

CHAPTER 4. COMMERCIAL ENERGY EFFICIENCY…

Section C405, Electrical Power and Lighting Systems, is amended by adding the following subsection:

C405.10 Electric vehicle charging infrastructure. Electric infrastructure for the current and future charging of electric vehicles shall be installed in accordance with this section and the most recently adopted electrical code in the State of Delaware. Parking spaces intended for electric vehicle charging shall be in accordance with the Unified Development Code. This chapter shall apply to Group R-2 occupancies for which a building permit is applied for on or after January 1, 2022.

C405.10.1 Residential occupancies. Parking facilities serving Group R-2 occupancies shall comply with Section C405.10.1.1.

C405.10.1.1 Parking spaces provided. For all Group R-2 occupancies, fifty percent (50%) of the total available designated parking spaces must be EV-capable parking spaces. The calculations for the required number of EV-capable parking spaces must be rounded up to the nearest whole number.

C405.10.2 Charging stations. If EV-installed parking spaces are provided, they shall be inspected by a licensed electrical inspection agency approved by the State of Delaware’s Board of Electrical Examiners and must be identified with permanent markings or signage in accordance with the Unified Development Code.

C405.10.3 Construction documents. Construction documents must indicate the location of all proposed electric vehicle parking spaces, whether they be EV-capable, EV-ready, or EV-installed parking spaces.

IECC – RESIDENTIAL PROVISIONS

CHAPTER 2. DEFINITIONS…

Section R202, General Definitions, is amended by adding the following:
**ELECTRIC VEHICLE (EV)**. An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current. Plug-in hybrid electric vehicles are electric vehicles having a second source of motive power. Off-road, self-propelled electric mobile equipment, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats and the like, are not considered electric vehicles.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE)**. The conductors, including the ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle. At a minimum, EVSE covered in this Chapter shall meet the standards set forth by the National Electrical Manufacturer’s Association (“NEMA”) for Level 2 EVSE.

**EV-INSTALLED PARKING SPACE**. A designated parking space with dedicated electric vehicle supply equipment, installed in accordance with the current adopted electrical code in the State of Delaware, capable of charging an electric vehicle located within three (3) feet of the parking space.

**EV-CAPABLE PARKING SPACE**. A parking space that can be converted to an EV-Ready Parking Space or an EV-Installed Parking Space and is provided with a conduit that meets the following requirements:

1. The conduit shall be continuous between a junction box or receptacle located within three (3) feet of the parking space and an electrical panel serving the area of the parking space. The junction box or receptacle must be identified as “For electric vehicle charging.”

2. The conduit shall be sized and rated to accommodate a branch circuit of sufficient size to the future electrical charging facility.

3. The electrical panel shall reserve sufficient dedicated physical space for the breaker required to supply the future electrical charging facility and shall be identified as “For electric vehicle charging.”

**EV-READY PARKING SPACE**. A parking space that meets the requirements for an EV-Capable Parking Space, which also includes an electrified outlet dedicated for a Level 2 EVSE that is placed within three (3) feet of the parking space.
CHAPTER 4. RESIDENTIAL ENERGY EFFICIENCY…

Section R404, Electrical Power and Lighting Systems, is amended by adding the following subsection:

*R404.2 Electric vehicle charging infrastructure.* Electric infrastructure for the current and future charging of electric vehicles shall be installed in accordance with this section and the most recent adopted electrical code in the State of Delaware. Parking spaces intended for electric vehicle charging shall be in accordance with the Unified Development Code. This chapter shall apply to one- and two- family dwellings and townhouses for which a building permit is applied for on or after January 1, 2022.

*R404.2.1 One- and two-family dwellings and townhouses.* If the electrical panel for a one- and two-family dwelling and townhouse is not located in the garage for that dwelling unit, then the unit shall be provided with at least one (1) dedicated EV-capable space. If an EV-ready parking space or an EV-installed parking space is provided, the wiring for the branch circuit shall be installed in accordance with the most recent adopted electrical code in the State of Delaware and inspected by a licensed electrical inspection agency approved by the State of Delaware’s Board of Electrical Examiners.

*R404.2.1.1 Garages.* When the one- or two-family dwelling or townhouse includes an attached or detached garage but the electrical panel is not located in the garage, the EV-capable parking space must be located in the attached or detached garage. When the one- or two-family dwelling or townhouse does not include an attached or detached garage, an EV-capable parking space must be provided in the driveway or assigned parking space, where applicable, and the EV-capable parking space infrastructure must be sealed and labeled for future use.

*R404.2.1.2 Required Options.* When a one- or two-family dwelling or townhouse is being constructed for a particular buyer, the builder shall offer the buyer the option of upgrading the required EV-capable parking space into an EV-ready parking space or an EV-installed parking space for an additional cost of no more than the goods and labor required to provide the upgrade.

Section 3. This Ordinance shall become effective on January 1, 2022, after its adoption by County Council and approval by the County Executive, or as otherwise provided in 9 Del. C. § 1156.
SYNOPSIS: This Ordinance, if enacted, would require that new residential buildings in New Castle County for which a building permit is applied for on or after January 1, 2022 be built with the basic infrastructure necessary for future property owners to easily and cost effectively install electric vehicle charging stations at a future date.

FISCAL NOTE: There is no discernible fiscal impact.