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Zoning/  
Environ



OFFICE OF THE MAYOR  
CITY OF CHICAGO

BRANDON JOHNSON  
MAYOR

January 24, 2024

TO THE HONORABLE, THE CITY COUNCIL  
OF THE CITY OF CHICAGO

Ladies and Gentlemen:

At the request of the Chief Sustainability Officer, I transmit herewith, together with Aldermen Hadden and Martin, an ordinance amending the Municipal Code regarding limitation on combustion in new buildings and existing buildings with significant additions.

Your favorable consideration of this ordinance will be appreciated.

Very truly yours,

A handwritten signature in blue ink, appearing to read "BJ", with a horizontal line extending to the right.

Mayor

## ORDINANCE

**WHEREAS**, the City of Chicago (“City”) is a home rule unit of government under Article VII, Section 6(a) of the 1970 Constitution of the State of Illinois and, as such, may exercise any power and perform any function pertaining to its government and affairs, including, but not limited to, the power to regulate for the protection of the public health, safety, and welfare; and

**WHEREAS**, under the Illinois Municipal Code, 65 ILCS 5/11-30-4, the City of Chicago has the statutory authority to prescribe how buildings within the City are constructed; and

**WHEREAS**, carbon dioxide is a long-lived pollutant with higher concentrations around big cities; and

**WHEREAS**, detailed air modeling has shown that elevated carbon dioxide levels can increase local temperature, change urban water vapor and wind patterns, and stagnate the air column above big cities; and

**WHEREAS**, scientists have established that carbon dioxide emissions have local negative health impacts by increasing smog-forming, ground-level ozone and particulate matter concentrations, which can cause coughing and sore or scratchy throats, make it more difficult to breathe deeply and vigorously and cause pain when taking a deep breath, inflame and damage the airways, make the lungs more susceptible to infection, aggravate lung diseases such as asthma, emphysema, and chronic bronchitis, and increase the frequency of asthma attacks, all of which may lead to increased school absences, medication use, visits to doctors and emergency rooms, hospital admissions, and death; and

**WHEREAS**, Chicago’s frontline communities have a disproportionate prevalence of asthma and other respiratory health symptoms, which will be exacerbated by the negative health effects of exposure to carbon dioxide and from climate change unless Chicago takes action; and

**WHEREAS**, energy use in Chicago’s buildings has accounted for approximately 70% of the City’s carbon footprint; and

**WHEREAS**, the City’s Energy Transformation Code regulates the design and construction of residential and commercial buildings for the effective use and conservation of energy and for the reduction of carbon emissions caused by use and occupancy of buildings; and

**WHEREAS**, controlling combustion of substances emitting carbon dioxide from new buildings and from existing buildings with significant additions will help protect the City’s public health, welfare and safety against the damaging effects of climate change on the City, including with respect to its residents, infrastructure, and natural resources;

**WHEREAS**, the control of combustion of substances with higher carbon dioxide emissions within buildings in Chicago will provide health benefits to Chicagoans, by reducing exposure to pollutants which cause negative respiratory health impacts, including adult and child asthma, which may lead to increased school absences, medication use, visits to doctors and emergency rooms, hospital admissions, and death; and

**WHEREAS**, according to a report by the Ann & Robert H. Lurie Children’s Hospital of Chicago and the Chicago Department of Public Health in July 2020, “Voices of Child Health in Chicago,” childhood asthma is a particular concern in Chicago, with Chicago households reporting a significantly higher rate of childhood asthma in the home than the statewide level; and

**WHEREAS**, buildings that control combustion of fuel that have higher emissions of carbon dioxide will help Chicago’s building sector meet sustainability, carbon reduction, climate, and social and environmental responsibility goals, which also will generate significant economic opportunity within the City and provide opportunities for the building sector to obtain funding to support those goals; and

**WHEREAS**, the City supports the use of innovative and cost-effective approaches and techniques to achieve more energy efficient buildings and buildings that reduce greenhouse gas emissions, including carbon dioxide; and

**WHEREAS**, the City encourages economic support and financing structures for its residents and its building sector that will support the construction and occupancy of buildings that control the combustion of fuels that emit carbon dioxide; and

**WHEREAS**, in order to protect the health, safety, and welfare of those who live in, work in, and visit Chicago, to support the economy of Chicago’s building sector, and consistent with the City’s long history of using its building code for the protection of people and property, the City will use its building code to control the substances that are combusted in new buildings and in buildings with significant additions; now, therefore,

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHICAGO:**

**SECTION 1.** Section 14N-C2-C202 of the Municipal Code of Chicago is hereby amended by inserting the language underscored, as follows:

**14N-C2-C202 Definitions.**

The provisions of Section C202 of IECC-CE are adopted by reference with the following modifications:

*(Omitted text is not affected by this ordinance)*

11. Delete the definition of “code official.”

11.1. Insert the following definition:

**“COMBINED HEAT AND POWER SYSTEM.** A system that: uses the same energy source for the simultaneous or sequential generation of electrical power, mechanical shaft power, or both, in combination with the generation of steam or other forms of useful thermal energy (including heating and cooling applications); produces at least 20 percent of its total useful energy in the form of thermal energy that is not used to produce electrical or mechanical power (or combination thereof), and at least 20 percent of its total useful energy in the form

of electrical or mechanical power (or combination thereof); and has an energy efficient percentage exceeding 60 percent. The energy efficiency percentage shall be calculated in accordance with 26 U.S.C. § 48(c)(3)(C)(i)."

*(Omitted text is not affected by this ordinance)*

24. Revise the definition of "historic building" to read:

**"HISTORIC BUILDING.** As defined in Chapter 2 of the *Chicago Building Rehabilitation Code.*"

24.1. Insert the following definition:

**"INDUSTRIAL PRODUCTION.** The extraction, growth, refining, processing, production, manufacture or preparation of materials, plants, livestock, animal products, food or other products for commercial use."

*(Omitted text is not affected by this ordinance)*

**SECTION 2.** Section 14N-C6-C600 of the Municipal Code of Chicago is hereby amended by deleting the language struck through and by inserting the language underscored, as follows:

#### **14N-C6-C600 Chapter C6.**

The following is adopted as Chapter C6 of this code:

### **"CHAPTER C6 CHICAGO-SPECIFIC REQUIREMENTS – COMMERCIAL**

#### **C601 SCOPE**

##### **C601.1 General.**

The provisions of this ~~appendix chapter~~ shall be applicable to *commercial buildings*.

##### **C601.2 Implementation of certain requirements that exceed the requirements of the 2021 IECC and 2022 Illinois Energy Conservation Code.**

The provisions of Sections C603 through C605 shall be applicable to permits applied for on and after January 1, 2023, in accordance with Section 14A-1-105.9 of the *Chicago Construction Codes Administrative Provisions*. The provisions of Section C609 shall be applicable to permits applied for on and after [12 months after effective date], in accordance with Section 14A-1-105.9 of the *Chicago Construction Codes Administrative Provisions*.

*(Omitted text is not affected by this ordinance)*

**C608.1 General.**

Electric vehicle supply equipment or electric vehicle supply equipment-ready parking spaces shall be provided in accordance with Section 17-10-1011 of the *Chicago Zoning Ordinance*.

**C609 LIMITATION ON COMBUSTION.**

**C609.1 Scope.**

The provisions of this section shall apply to:

1. New construction.
2. A building system in an *addition* that is independent of building systems serving the *existing building*.
3. An *existing building* with an *addition* that increases the *conditioned floor area* of the *existing building* by the greater of 10,000 square feet or 25 percent of the *pre-addition conditioned floor area*.
4. Alteration or repair of a *building* originally constructed under this section or requirements substantially similar to this section.

**C609.2 Limitation on combustion.**

Within *buildings* and enclosed structures subject to this section, no person shall cause or allow the combustion of any substance that emits 25 kilograms or more of carbon dioxide per million British thermal units of energy. The kilograms of emission of carbon dioxide per million British thermal units of energy shall be as determined by the United States Energy Information Administration. The *building official* shall not issue a permit for *buildings* or enclosed structures with facilities or equipment that, if operated, would violate this section.

**Exceptions:**

1. Combustion for the purpose of electricity generation for resale by an entity regulated by the Federal Energy Regulatory Commission or a utility regulated by the Illinois Commerce Commission.
2. Combustion to produce emergency or standby electricity.
3. Combustion for the primary purpose of operating a crematorium for human or animal remains.
4. Combustion for the primary purpose of a construction activity or industrial production, including as part of a combined heat and power system serving industrial production.
5. Combustion for the primary purpose of operating a commercial laundry.

6. Combustion for the primary purpose of operating a research or teaching laboratory, and that is not used to supply space heating or domestic hot water.
7. Combustion for the primary purpose of operating a hospital or similar healthcare facility, and that is not used to supply space heating or domestic hot water.
8. Combustion for the primary purpose of cooking in a commercial kitchen, and that is not used to supply space heating or domestic hot water.
9. Combustion of wood in a fireplace or for cooking purposes.
10. Combustion in an internal combustion engine used for transportation purposes or from a nonroad engine or nonroad vehicle as defined in Section 216 of the U.S. Clean Air Act, 42 U.S.C. § 7550.
11. Combustion within facilities whose carbon dioxide emissions are controlled by a permit issued through the Illinois Clean Air Act Permit Program, pursuant to 415 ILCS 5/39.5.

**SECTION 3.** Section 14N-R6-R600 of the Municipal Code of Chicago is hereby amended by deleting the language struck through and by inserting the language underscored, as follows:

**14N-R6-R600 Chapter R6.**

The following is adopted as Chapter R6 of this code:

**“CHAPTER R6 CHICAGO-SPECIFIC REQUIREMENTS – RESIDENTIAL**

**R601 SCOPE**

**R601.1 General.**

The provisions of this ~~appendix~~ chapter shall be applicable to *residential buildings*.

**R601.2 Implementation of requirements exceeding the requirements of the 2021 IECC and 2022 Illinois Energy Conservation Code.**

The provisions of Sections R603 through R605 shall be applicable to permits applied for on and after January 1, 2023, in accordance with Section 14A-1-105.9 of the Chicago Construction Codes Administrative Provisions. The provisions of Section R609 shall be applicable to permits applied for on and after [12 months after effective date], in

accordance with Section 14A-1-105.9 of the *Chicago Construction Codes Administrative Provisions*.

*(Omitted text is not affected by this ordinance)*

**R608.1 General.**

Electric vehicle supply equipment or electric vehicle supply equipment-ready parking spaces shall be provided in accordance with Section 17-10-1011 of the *Chicago Zoning Ordinance*.

**R609 LIMITATION ON COMBUSTION.**

**R609.1 Scope.**

The provisions of this section shall apply to:

1. New construction.
2. A building system in an *addition* that is independent of building systems serving the *existing building*.
3. An existing building with an addition that increases the conditioned floor area of the existing building by the greater of 10,000 square feet or 25 percent of the pre-addition conditioned floor area.
4. Alteration or repair of a *building* originally constructed under this section or requirements substantially similar to this section.

**R609.2 Limitation on combustion.**

Within *buildings* and enclosed structures subject to this section, no person shall cause or allow the combustion of any substance that emits 25 kilograms or more of carbon dioxide per million British thermal units of energy. The kilograms of emission of carbon dioxide per million British thermal units of energy shall be as determined by the United States Energy Information Administration. The *building official* shall not issue a permit for *buildings* or enclosed structures with facilities or equipment that, if operated, would violate this section.

**Exceptions:**

1. Combustion to produce emergency or standby electricity.
2. Combustion of wood in a fireplace or for cooking purposes.
3. Combustion in an internal combustion engine used for transportation purposes or from a nonroad engine or nonroad vehicle as defined in Section 216 of the U.S. Clean Air Act, 42 U.S.C. § 7550.

**SECTION 4.** Section 18-28-202 of the Municipal Code of Chicago is hereby amended by inserting the language underscored, as follows:

**18-28-202 Definitions.**

*(Omitted text is not affected by this ordinance)*

CHICAGO ENERGY CONSERVATION CODE. Title 14N of the Municipal Code of Chicago. (On and after November 1, 2022, references to "Chicago Energy Conservation Code" mean "Chicago Energy Transformation Code".)

CHICAGO ENERGY TRANSFORMATION CODE. Title 14N of the Municipal Code of Chicago on and after November 1, 2022.

*(Omitted text is not affected by this ordinance)*

**SECTION 5.** Section 18-29-202 of the Municipal Code of Chicago is hereby amended by inserting the language underscored, as follows:

**18-29-202 General definitions.**

*(Omitted text is not affected by this ordinance)*

CHICAGO ENERGY CONSERVATION CODE. Title 14N of the Municipal Code of Chicago. (On and after November 1, 2022, references to "Chicago Energy Conservation Code" mean "Chicago Energy Transformation Code".)

CHICAGO ENERGY TRANSFORMATION CODE. Title 14N of the Municipal Code of Chicago on and after November 1, 2022.

*(Omitted text is not affected by this ordinance)*

**SECTION 6.** It is the intent of the City of Chicago, in passing this ordinance, to promote decarbonization of the City's new building stock and new and substantially improved buildings, recognizing, however, that additional federal, state, and utility resources will be important to meet this goal. It is, therefore, not the intent of this ordinance to impede state-mandated, utility-run energy efficiency programs from supporting building developers and owners in complying with the Municipal Code of Chicago as amended by this ordinance.

**SECTION 7. Market Segmentation Study.** The City of Chicago Chief Sustainability Officer shall conduct a market segmentation study for the purpose of characterizing the Chicago building stock and develop a local typology of buildings for purposes of addressing energy use and efficiency, including but not limited to providing voluntary and incentivized options for the properties not covered by the benchmarking ordinance (Chapter 18-14 of the Municipal Code of Chicago). In developing and



conducting such study, the Chief Sustainability Officer may engage third-party technical advisors.

**SECTION 8.** This ordinance shall take effect following its passage and approval.