#### 111-0-23

#### **AN ORDINANCE**

## Amending Title 4, Chapters 2 and 9 of the City of Evanston City Code to Include Electrification Requirements for New Construction

WHEREAS, the city of Evanston is a home-rule unit of government under Article VII, Section 6(a) of the Constitution of the State of Illinois and, as such, may regulate for the protection of the public welfare; and

WHEREAS, human activities releasing greenhouse gasses into the atmosphere cause increases in worldwide average temperature and rising sea levels, and contribute to environmental repercussions including increased erosion, extreme heat events, rising sea levels, more frequent and devastating storms, and extinction of animal and plant species; and

WHEREAS, negative environmental repercussions are likely to continue unless there are ambitious actions to curb greenhouse gas emissions; and

WHEREAS, natural gas combustion is a major source of indoor air pollution that further exacerbates the effects of regional pollution for the City's residents and can be particularly acute in smaller dwelling units;

WHEREAS, in October 2018, the United Nations Intergovernmental Panel on Climate Change (IPCC), the largest collaborative and consensus-based effort among the world's scientific community, conservatively estimated that global net greenhouse gas emissions must reach net zero no later than 2040 in order to avoid a dangerous increase in global temperatures that results in long-lasting and/or catastrophic and irreversible climate impacts; and

WHEREAS, the City of Evanston has a history of climate action and a track record of making consistent reductions in carbon emissions, beginning in 2006 when Mayor Lorraine Morton signed the U.S. Mayors' Climate Protection Agreement, followed by the 2008 Evanston Climate Action Plan and the 2018 Climate Action & Resilience Plan (CARP), which calls for 80% reduction in emissions by 2035 and carbon neutrality by 2050; and

WHEREAS, in 2022 the Evanston City Council passed Resolution 32-R-22, "Declaring a Climate Emergency and an Immediate Mobilization Effort to Restore Climate Stability," in which it recognized and acknowledged that "the impacts of climate change pose a life-altering threat to our city and the region, now and increasingly in the future, as well as the state, our nation, and all life on the planet" and directed City staff to "ensure that they prioritize decisions and actions that reduce greenhouse gas emissions over those that do not, including emissions from all residences, businesses, and other community buildings and activities as well as the City's own buildings and activities"; and

WHEREAS, from 2005-2022, natural gas consumption is responsible for approximately 31% of community wide emissions, over six million metric tons of carbon dioxide equivalents have been released into the atmosphere from Evanston accounts, and natural gas use has remained approximately constant in consumption; and

[WHEREAS, the City values the diverse restaurant community that makes the City a vibrant center of both culinary innovation and traditional cuisines that are critical to the cultural integrity, identity, and economic vitality of Evanston. While electric cooking technology is widely and increasingly available, the potential for deleterious

impacts to restaurant enterprises is sufficiently present, particularly in light of the severe economic disruption posed by the COVID-19 pandemic, that an additional transition period and current exception for such enterprises that may be included in a new construction project is prudent, appropriate, and necessary for the public welfare.]

# BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EVANSTON, COOK COUNTY, ILLINOIS:

**SECTION 1:** The foregoing recitals are hereby found as fact and incorporated herein by reference.

**SECTION 2:** Title 4, Chapter 2, Section 2 shall be amended by adding: The following addition(s) shall be made to the IBC:

#### APPENDIX P

#### ELECTRIFICATION FOR NEW BUILDINGS

SECTION P101- Administration

P101.1 Purpose. The purpose of this appendix is to provide minimum requirements for enhanced environmental features in all new buildings regulated by this code.

P101.2 Objectives. The objective of this appendix is to reduce production of greenhouse gasses

#### SECTION P102- Definitions

P102.1 General The following words and terms shall for the purpose of this appendix have the meaning set forth below.

ALL ELECTRIC BUILDING	A building that uses electricity as the source of energy for all space heating and cooling, water heating, cooking, and clothes drying appliances
COMMERCIAL KITCHEN	A kitchen for food preparation intended to service commercial restaurants, institutional uses, cafeterias and other similar dining or food preparation facilities

FOSSIL FUELS	Fuels made from decomposing plants and animals that contain carbon, including but not limited to coal, crude oil, and natural gas
<u>LABORATORY USE</u>	A facility that provides controlled conditions in which scientific or technological research, experiments, and measurement may be performed
NEW BUILDING	A building to which the International Building Code requirements for new construction apply

## <u>SECTION P103- ELECTRIFICATION REQUIREMENTS FOR NEW BUILDINGS</u> <u>P103.1 General. New buildings shall be ALL ELECTRIC BUILDINGS and shall be constructed as follows:</u>

- 1 Energy from fossil fuels may only be used by: generators for emergency backup power; commercial kitchens; laboratory use.
- 2. Where heat pumps are utilized for space conditioning, they shall be rated for cold climates.
  - 3. A building shall contain an energy recovery ventilation system.
- 4. A building design shall include Manuals D, J, and S calculations, or an equivalent design by a licensed design professional.

**SECTION 3:** Title 4, Chapter 9, Section 2 shall be amended by adding the

following:

The following addition(s) shall be made to the IRC:

#### APPENDIX AX

#### ELECTRIFICATION FOR NEW RESIDENTIAL BUILDINGS

SECTION AX101- Administration

AX101.1 Purpose. The purpose of this appendix is to provide minimum requirements for enhanced environmental features in all new residential buildings regulated by this code.

AX101.2 Objectives. The objective of this appendix is to reduce production of greenhouse gasses

**SECTION AX102- Definitions** 

AX102.1 General. The following words and terms shall for the purpose of this appendix have the meaning set forth below.

ALL ELECTRIC BUILDING	A building that uses electricity as the source of energy for all space heating and cooling, water heating, cooking, and clothes drying appliances
FOSSIL FUELS	Fuels made from decomposing plants and animals that contain carbon, including but not limited to coal, crude oil, and natural gas
NEW RESIDENTIAL BUILDING	A building to which the International Residential Code requirements for new construction apply

### <u>SECTION AX103- ELECTRIFICATION REQUIREMENTS FOR NEW RESIDENTIAL</u> BUILDINGS

AX103.1 General. New residential buildings shall be ALL ELECTRIC BUILDINGS and shall be designed and constructed as follows:

- 1. Energy from fossil fuels may only be used by generators for emergency backup power.
- 2. Where heat pumps are utilized for space conditioning, they shall be rated for cold climates.
  - 3. A building shall contain an energy recovery ventilation system.
- 4. A building design shall include Manuals D, J, and S calculations, or an equivalent design by a licensed design professional.

**SECTION 4:** All ordinances or parts of ordinances in conflict herewith are hereby repealed.

**SECTION 5:** If any provision of this Ordinance 111-O-23 or application thereof to any person or circumstance is held unconstitutional or otherwise invalid, such invalidity shall not affect other provisions or applications of this Ordinance that can be given effect without the invalid application or provision, and each invalid application of

this Ordinance is severable.

**SECTION 6:** Ordinance 111-O-23 shall be in full force and effect beginning June 1, 2024.

Introduced:, 2023	Approved:
Adopted:, 2023	, 2023
	Daniel Biss, Mayor
Attest:	Approved as to form:
Stephanie Mendoza, City Clerk	Alexandra Ruggie, Interim Corporation Counsel