Resolution Recommending a Carbon Impact User Fee for New Construction

WHEREAS, in November 2019, Ann Arbor City Council unanimously adopted a Climate Emergency Declaration committing to a path to carbon neutrality by the year 2030;

WHEREAS, in June 2020, City Council unanimously adopted the A2ZERO Carbon Neutrality Plan, a document that lays out seven strategies for our community to achieve carbon neutrality;

WHEREAS, buildings account for 65% of Ann Arbor's total emissions, with fossil gas combustion accounting for roughly half that amount;

WHEREAS, Strategy 2, Action 1 of the A2ZERO plan includes the following assumption: "All new residential and commercial buildings are designed and built to operate without the use of natural gas, reducing the increased cost associated with retrofitting existing systems."

WHEREAS, Strategy 3, action 2 of the A2ZERO plan includes the following assumption: "All new construction from 2022 through 2030 (and beyond) is built to net zero energy standards, which includes no natural gas consumption and all electricity usage offset through the CCA";

WHEREAS, since A2ZERO plan adoption and despite the plan's stated strategies, the city has approved 25 separate development projects using gas heating, totaling 2,063,343 square feet;

WHEREAS, these buildings, collectively, when complete, will emit from fossil gas combustion approximately 17,663 metric tons CO2e emissions annually for their useful life, or will require retrofitting at substantial expense;

WHEREAS, these emissions will, on an annual basis, cancel out the combined emissions averted through the city's Solarize program to date and the planned Solar at City Facilities and parks solar projects by more than a factor of two;

WHEREAS, there exist no statutory or administrative restrictions on new construction in Ann Arbor using fossil gas infrastructure, and such buildings continue to be proposed and to receive city approval on a regular basis;

WHEREAS, greenhouse gas emissions from these buildings are not in any way factored into construction costs, with the atmosphere serving as an unregulated open sewer for these emissions;

WHEREAS, those costs, in the form of loss of income, well-being, and human life, and mass forced migration, are instead borne by those most impacted by the effects of global heating, predominantly low income individuals and residents of the global South;

WHEREAS, the 2021 IECC Zero Code Appendix sets out standardized energy use intensity (EUI) estimates for various building types according to climate zone;

WHEREAS, a conversion factor of 13kg CO23 per therm (100 kBtu) from fossil gas combustion is recommended by NASA climate scientist Peter Kalmus, taking into account upstream losses from gas extraction, flaring and leakage as well as direct emissions from combustion;

WHEREAS, the EPA has proposed a social cost of carbon of \$190 per ton, taking into account recent scientific and methodological advances in estimating the collective societal burden of emissions;

RESOLVED, that the Ann Arbor Energy Commission recommends that City Council approve, by ordinance, modification of City Code chapter 55, article V, Administrative Bodies and Procedures, by adding the following subsection to section 5.28.1D (Fees):

The following fees are authorized by this chapter and shall be by resolution of the City Council upon the recommendation of the City Administrator.

... ...

5. Carbon Pollution Impact Fee

A fee reflecting the social cost of carbon shall be assessed for all newly approved buildings with a connection to natural gas lines that serve the building's primary heating system.

- 1. The fee shall be assessed based on total building square footage according to building type energy use, as specified by table CC103.1 of the 2021 International Energy Conservation Code Zero Code Appendix.
- 2. A conversion factor of 13kg CO2e (CO2 equivalents) per 100 kBtu shall be applied.
- 3. The fee shall be in the amount of \$190 per metric ton CO2e.
- 4. The fee shall be paid prior to the issuance of a certificate of occupancy, then each subsequent year on or before that date, in the absence of retrofitting to eliminate the gas connection for primary heating purposes.