CITY OF MILWAUKIE

COUNCIL RESOLUTION No. 80-2022

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILWAUKIE, OREGON, TO DECARBONIZE THE BUILDING SECTOR AND TO ACCELERATE THE TRANSITION TO DECARBONIZED CITY-OWNED AND CITY-FINANCED BUILDINGS TO PROMOTE CLIMATE, PUBLIC HEALTH, AND RESILIENCY BENEFITS.

WHEREAS decarbonization is the reduction of carbon dioxide and other greenhouse gas emissions that are created through the burning of fossil fuels and contribute to climate change, and

WHEREAS climate change is an existential crisis posing one of the most serious threats to the existence of humanity and all species on the planet; a threat that intersects and compounds multiple other crises facing humanity and our Earth, and

WHEREAS the 11th United Nations Intergovernmental Panel on Climate Change ("IPCC") report from October 2018 states that we must cut greenhouse gas emissions in half by 2030 to limit global warming and avoid a climate catastrophe¹, and

WHEREAS in 2021, the United States and other leading economies agreed to the Global Methane Pledge to reduce methane emissions 30 percent by 2030², and

WHEREAS in Oregon, homes and buildings are the second highest source of Oregon's greenhouse gas emissions³, and

WHEREAS the transportation and combustion of "natural" methane gas creates significant harms to public health and safety⁴, and

WHEREAS leaks during the production, processing, transmission, and distribution of "natural" methane gas are substantial,⁵ releasing a potent greenhouse gas with approximately 86 times the global warming potential of carbon dioxide over a 20-year period⁶, and

WHEREAS methane gas stoves emit hazardous air pollutants such as nitrogen dioxide and carbon monoxide, which compromise indoor air quality and the respiratory health of vulnerable populations, including low-income households, children, the elderly, and those with existing health conditions, and

¹ See, e.g., IPCC report: 'now or never' if world is to stave off climate disaster | Climate crisis | The Guardian.

² See Joint US-EU Press Release on the Global Methane Pledge - The White House.

³ See Figure 5 at <u>State of Oregon: Energy in Oregon - Greenhouse Gas Emissions Data</u>.

⁴ See, e.g., "Methane Gas: Health, Safety, and Decarbonization" at <u>Methane Gas: Health, Safety, and Decarbonization</u> (<u>powerpastfrackedgas.org</u>); See also US Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA), "Gas Distribution Significant Incidents 20 Year Trend," (data as of July 12, 2021). Available at:

https://portal.phmsa.dot.gov/analytics/saw.dll?Portalpages&PortalPath=%2Fshared%2FPDM%20Public%20Websit

<u>e%2F portal%2FSC%20Incident%20Trend&Page=Significant;</u> See also Oregon & Washington Physicians for Social Responsibility, "Fracked Gas Infrastructure: A Threat to Healthy Communities," (2019). Available at: <u>https://www.oregonpsr.org/fracked gas a threat to healthy communities;</u>

WHEREAS children who grow up in homes with methane gas cooking appliances have a 42% higher risk of asthma symptoms⁷, and

WHEREAS methane gas for heating in buildings leads to increases in outdoor air pollution⁸, and

WHEREAS historically marginalized communities including low-income and Black, Indigenous and People of Color (BIPOC) households are disproportionately impacted by outdoor air pollution⁹, and

WHEREAS methane gas pipelines are prone to leaks and explosions and endanger the health and safety of communities¹⁰, and

WHEREAS methane gas infrastructure poses a significant threat to Oregon residents in the event of a major earthquake¹¹, and

WHEREAS "renewable natural" methane gas still poses the same health and safety risks to communities as traditional "natural" gas¹², and

WHEREAS NW Natural, the state's largest methane gas utility which serves Milwaukie customers, is expected to cumulatively increase bills approximately 42 percent between October 2021 and November 2022¹³, and

WHEREAS gas utility ratepayers are at significant risk of incurring additional costs and rate increases due to methane gas price volatility and utility business practices¹⁴, and

⁹ See <u>Air pollution exposure disparities across US population and income groups</u> | <u>Nature</u>; See also <u>Low-income</u>, <u>black</u> <u>neighborhoods still hit hard by air pollution -- ScienceDaily</u>.

¹⁰ See, e.g., Ahrens, M. and Evarts, B., "Natural Gas and Propane Fires, Explosions and Leaks Estimates and Incident Description," National Fire Protection Association Research (NFPA), (October 2018). Available at: <u>https://www.nfpa.org/-</u> /media/Files/News-and-Research/Fire-statistics-and-reports/Hazardo us- materials/osNaturalGasPropaneFires.ashx.

⁵ See, e.g., <u>Assessment of methane emissions from the U.S. oil and gas supply chain | Science</u> (quantifying methane leaks in the gas supply chain and finding that in 2015, supply chain emissions were ~60% higher than the U.S. Environmental Protection Agency inventory estimate).

⁶ See <u>Methane is like 'CO2 on Steroids' When It Comes to Trapping Heat (sightline.org)</u> (Citing IPCC 2018 Report WG1AR5 Chapter08 FINAL.pdf (jpcc.ch) at 731).

⁷ See Meta-analysis of the effects of indoor nitrogen dioxide and gas cooking on asthma and wheeze in children | International Journal of Epidemiology | Oxford Academic (oup.com).

⁸ See Effects of Residential Gas Appliances on Indoor and Outdoor Air Quality and Public Health in California – Center for Occupational & Environmental Health (ucla.edu).

¹¹ See Wang, Y. et al, "Earthquake Risk Study for Oregon's Critical Energy Infrastructure Hub," State of Oregon Department of Geology and Mineral Industries," (2013). Available at: <u>https://www.oregon.gov/energy/safety-resiliency/Documents/2013%20Earthquake%20Risk%20Study%20in%20Oregon%E2%80%99s%20Critical%20Energy%20Infrastructure%20Hub.pdf.</u>

¹² See, e.g., <u>Report Building-Decarbonization-2020.pdf (earthjustice.org)</u>.

¹³ See Natural Gas Prices Are Going Up Before Winter | Blog | News | Oregon CUB.

¹⁴ See, e.g., "U.S. natural gas price saw record volatility in the first quarter of 2022" at <u>U.S. Energy Information Administration - EIA</u> - Independent Statistics and Analysis.

WHEREAS in 2021, the Oregon House of Representatives passed House Bill (HB) 2021, which sets milestones for electric utilities to transition to 100% clean electricity by 2040¹⁵, and

WHEREAS in 2018, the city approved a Community Climate Action Plan (CAP) that established ambitious decarbonization, and

WHEREAS in 2020, the city declared a climate emergency and accelerated the goals in the CAP by five years which made them: carbon-free electricity powering the city by 2030; net zero emissions from all buildings by 2035; carbon neutral city by 2045; and

WHEREAS electrification is widely recognized as a powerful decarbonization strategy to address both climate change and poor air quality in frontline communities most vulnerable to climate impacts¹⁶, and

WHEREAS in 2022, the United States passed the Inflation Reduction Act, which among other things, will provide billions of dollars to homeowners and businesses for increasing energy efficiency and installing high-efficiency electric appliances like heat pumps¹⁷, and

WHEREAS electric heat pumps provide both heating and cooling while providing significant operational greenhouse gas reduction benefits compared to gas furnaces¹⁸, and

WHEREAS electrification will improve indoor air quality and overall health, by eliminating natural gas combustion inside homes that produces harmful indoor air pollution¹⁹, and

WHEREAS every new building constructed with high-efficiency electric appliances will have climate, public health, and cost savings benefits for decades to come²⁰, and

WHEREAS the city has the opportunity to lead by example to make decisive, transformative, and sustainable changes in its municipal energy consumption, and can significantly lower the city's greenhouse gas emissions and overall carbon impact, and

WHEREAS citywide, rapidly reducing methane gas use in buildings will help achieve Milwaukie's Community CAP targets, and such actions will also improve public health and increase the quality of life throughout the city.

¹⁵ HB2021 2021 Regular Session - Oregon Legislative Information System (oregonlegislature.gov).

¹⁶ See, e.g., Equitable Building Electrification: A Framework for Powering Resilient Communities (greenlining.org).

¹⁷ See, e.g., <u>https://www.forbes.com/sites/energyinnovation/2022/08/30/inflation-reduction-act-benefits-millions-of-efficient-electrified-buildings/</u>.

¹⁸ See <u>Heat Pumps: A Path to Health and Climate Benefits - Energy Foundation; see also Rapid Electric Heat Transition Will Save</u> <u>Oregon \$1.7 Billion, Report Finds - DeSmog.</u>

¹⁹ See, e.g., Eight Benefits of Building Electrification for Households, Communities, and Climate - RMI.

²⁰ See, e.g., <u>The New Economics of Electrifying Buildings - RMI</u>.

NOW, THEREFORE, be it resolved by the City Council of the City of Milwaukie, Oregon, that the city recognizes the global and local benefits of decarbonizing homes and buildings and accelerating the transition to decarbonized homes and buildings throughout the city, and

BE IT FURTHER RESOLVED as follows:

Resolution – Decarbonize City-Owned and City-Financed Buildings

Section 1. Effective immediately, the city manager is directed to require that all building using natural gas-consuming assets and related system components be replaced with electric assets when the system has lost functionality and repair is not an option, or when the repair and/or associated continuing servicing to maintain functionality over the remaining expected lifetime of the asset exceeds 50% of the value of the asset. Public buildings which offer key services to the community may be permitted to maintain emergency generators.

Section 2. Effective July 1, 2024, replacement of existing city-building natural gas consuming assets with electric assets are required when:

- When the system has lost functionality at the required level and repair is not an option.
- The city finances a building and invests \$500,000 or more in the transaction.
- The city performs major renovations resulting in expenditure of \$200,000 or more. If building energy assets are already scoped for replacement in the renovation, electric assets must be prioritized for replacement options other than emergency generators.
- The city donates a property with an appraised market value of \$500,000 or more.
- The city sells a city-owned property and the difference between the appraised value and sale price is \$200,000 or more.

Section 3. The city manager may request approval from Council to exempt or delay retrofit requirements. Any exemption or extension granted by the Council will be narrowly tailored to maximize decarbonization efforts within given cost constraints. Council may approve the following alternatives:

- A full exemption from performing required retrofit actions.
- A partial exemption to exclude specific asset replacements required.
- An extension to allow for required asset replacement at future defined date.
- A modification to allow equivalent asset replacement or equivalent financial investment in a different city building if the emission reduction potential or environmental benefit is the same or greater than the otherwise required improvement.

Section 4. The city manager is directed to inventory city-owned facilities that currently use natural gas and evaluate the feasibility of retrofitting those facilities to cease using natural gas, with a priority of decarbonization where feasible. The inventory and evaluation will make use of existing reports and data to prepare preliminary feasibility recommendations by June 30, 2024.

Introduced and adopted by the City Council on December 6, 2022.

This resolution is effective immediately.

Mark F. Gamba, Mayor

APPROVED AS TO FORM:

massaile

ATTEST:

Scott S. Stauffer, City Recorder

Justin D. Gericke, City Attorney