CITY OF ALAMEDA RESOLUTION NO.

LIMITING NATURAL GAS INFRASTRUCTURE FOR NEW RESIDENTIAL CONSTRUCTION ON CITY OWNED PROPERTY

WHEREAS, the Intergovernmental Panel on Climate Change (IPCC) issued a report in 2018, finding that human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, with a likely range of 0.8°C to 1.2°C; and that global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate; and that climate-related risks for natural and human systems are higher for global warming of 1.5°C than at present, but lower than at 2°C; and that pathways to limiting global warming to 1.5°C with no or limited overshoot would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems; and that these systems transitions are unprecedented in terms of scale, but not necessarily in terms of speed, and imply deep emissions reductions in all sectors, a wide portfolio of mitigation options and a significant upscaling of investments in those options; and

WHEREAS, the federal government issued the Fourth National Climate Assessment, finding that climate change creates new risks and exacerbates existing vulnerabilities in communities across the United States, presenting growing challenges to human health and safety, quality of life, and the rate of economic growth; and that without substantial and sustained global mitigation and regional adaptation efforts, climate change is expected to cause growing losses to American infrastructure and property and impede the rate of economic growth over this century; and that communities, governments, and businesses are working to reduce risks and costs associated with climate change by taking action to lower greenhouse gas (GHG) emissions and implement adaptation strategies; and that while mitigation and adaptation efforts have expanded substantially in the last four years, they do not yet approach the scale considered necessary to avoid substantial damages to the economy, environment, and human health over the coming decades; and

WHEREAS, the State of California issued California's Fourth Climate Assessment, finding that by 2100 average annual maximum daily temperature is projected to increase by 5.6°F-8.8°F, with heat waves in cities causing 2-3 times more heat related deaths (by 2050), and hotter temperatures increasing electrical demand; water supply from snowpack is projected to decline by two-thirds potentially causing water shortages up to 16% (by 2050); the average area burned by wildfires could increase by 77%; 31-67% of Southern California beaches may completely erode and make hundreds of miles of coastal highways susceptible to flooding; and

WHEREAS, in March 2019, the City Council declared a climate emergency and joined a global effort to get to net zero emissions as soon as possible; and

WHEREAS, in September 2019, the City Council adopted an updated and revised Climate Action and Resiliency Plan (CARP) for the City of Alameda with the goal of

lowering citywide GHG emissions 50% below 2005 baseline by 2030 and achieving the vision of net zero emissions as soon as possible; and

WHEREAS, natural gas and the infrastructure needed to transport it to Alameda homes and businesses is a leading source of GHG emissions in Alameda, responsible for 25% of the GHGs released in the City. The only source sector with more local GHG emissions is the transportation sector.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL, THAT:

- 1. Climate Change is a threat to Alameda. As a coastal city, Alameda is vulnerable to sea level rise. Carbon dioxide and methane gas released into the atmosphere causes increases in worldwide average temperature, the melting of glaciers, and the thermal expansion of ocean water, which all contribute to rising sea levels.
- 2. Natural Gas Infrastructure contributes to Climate Change. Scientific evidence has established that natural gas infrastructure and combustion contributes significant GHG emissions to global warming and climate change. Burning natural gas generates carbon dioxide, a greenhouse gas. Significant additional carbon emissions are caused by methane gas leaks in the natural gas infrastructure. Methane (CH4) is leaked into the atmosphere from leaks in the natural gas infrastructure. According to the U.S. Environmental Protection Agency, "[p]ound for pound, the comparative impact of CH4 [methane] is more than 25 times greater than CO2 [carbon dioxide] over a 100-year period." During the first 20 years after it is release, methane has a global warming potential 84 times that of carbon dioxide. The Environmental Defense Fund estimates that "[a]bout 25% of the manmade global warming we're experiencing is caused by emissions." (Sources: "Overview of Greenhouse methane Gases." https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane and "Methane: The other important greenhouse gas," Environmental Defense Fund, https://www.edf.org/climate/methane-other-important-greenhouse-gas).
- 3. Natural Gas Infrastructure contributes to the loss of homes and property in the event of a natural disaster. Fires resulting from natural gas infrastructure resulted in significant loss of homes and property after the Loma Prieta earthquake in 1989, the Northridge earthquake in 1994, and the San Bruno disaster in 2010. A 2017 report by the U.S. Geological Survey evaluating a 7.0 quake on the Hayward fault line with the epicenter in Oakland predicted that the resulting fires would result in a loss of "residential and commercial building floor area equivalent to more than 52,000 single family homes and cause property (building and content) losses approaching \$30 billion." The report identified ruptured gas lines as a key fire risk factor. (Source: "The HayWired earthquake scenario—Engineering implications," U.S. Geological Survey, April 18, 2018, https://pubs.er.usgs.gov/publication/sir20175013v2).
- 4. Climate Change is an emergency in Alameda. Rapid, far-reaching and unprecedented changes in all aspects of society are required to limit global warming and the resulting environmental threat posed by climate change, including the prompt

phasing out of natural gas as a fuel for heating and cooling infrastructure in new buildings. Use of electric heating and cooling infrastructure in new buildings will result in a reduction of 14,396 million tonnes of CO2 emissions by 2050, and thus decrease GHG emissions in Alameda.

5. **Public health safety and welfare**. Minimizing the expansion of the natural gas infrastructure and use of natural gas in Alameda will benefit the public health, safety and welfare; and

BE IT FURTHER RESOLVED, that it is the intent of the City Council of Alameda to minimize the expansion and use of natural gas infrastructure in newly constructed buildings in Alameda; and

BE IT FURTHER RESOLVED, that the City Council shall ensure that all future leases, sales and purchase agreements, development agreements, and disposition and development agreements for City-owned land shall limit natural gas infrastructure in newly constructed residential buildings; and

BE IT FURTHER RESOLVED, that for the purposes of this resolution, "Natural Gas" shall have the same meaning as "Fuel Gas" as defined in California Plumbing Code and Mechanical Code. "Natural Gas Infrastructure" shall be defined as fuel gas piping, other than service pipe, in or in connection with a building, structure or within the property lines of premises, extending from the point of delivery at the gas meter as specified in the California Mechanical Code and Plumbing Code. "Newly Constructed Building" shall be defined as a building that has never before been used or occupied for any purpose. "City owned land" shall mean any land that it owned by the City and offered for lease or purchase.

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I, the undersigned, hereby certify that the foregoing Resolution was duly and regularly adopted and passed by the Council of the City of Alameda in regular meeting assembled on the 5th day of November 2019, by the following vote to wit:
AYES:
NOES:
ABSENT:
ABSTENTIONS:
IN WITNESS, WHEREOF, I have hereunto set my hand and affixed the official seal of said City this 6th day of November 2019.
Lara Weisiger, City Clerk City of Alameda
APPROVED AS TO FORM:
Yibin Shen, City Attorney City of Alameda