



Kate Harrison  
Councilmember District 4

ACTION CALENDAR  
June 25, 2024

To: Honorable Mayor and Members of the City Council  
From: Councilmember Harrison  
Subject: Adopt an Ordinance Adding a New Chapter 12.01 to the Berkeley Municipal Code Establishing Emergency Greenhouse Gas Limits, Process for Updated Climate Action Plan, Monitoring, Evaluation, Reporting and Regional Collaboration

RECOMMENDATION

1. Adopt an ordinance adding a new Chapter 12.01 to the Berkeley Municipal Code (BMC) establishing Emergency Greenhouse Gas Limits with an effective date of [redacted], 2022.
2. Refer to the FY23-24 Budget Process \$[redacted] consistent with implementing the requirements of Sections 12.01.040, 12.01.050, 12.01.060.

POLICY COMMITTEE RECOMMENDATION

No final action was taken by the Facilities, Infrastructure, Transportation, Environment & Sustainability Committee. Item is automatically returning to the Council agenda pursuant to the time limit for items referred to policy committees.

CURRENT SITUATION, EFFECTS, AND RATIONALE FOR RECOMMENDATION

Scientific evidence indicates that between the industrial period of 1850 and 2021, economic systems, namely state and free-market forms of capital accumulation and economic growth have increased global atmospheric carbon dioxide levels to a staggering 418 parts per million (ppm), beyond the established planetary boundary of 350 ppm, and warmed global average temperature by approximately 1.1 degrees Celsius. Available scientific evidence indicates there is no 'safe' level of warming beyond 350 ppm, only gradations of risk with respect to habitability.

Berkeley is already experiencing unprecedented negative effects of warming associated with 1 degree of warming, and current global growth trends and policies could push humanity past 1.5 degrees by mid-century, leading to a devastating 2-4 degrees by the

2180 Milvia Street, Berkeley, CA 94704 • Tel: (510) 981-7140 • TDD: (510) 981-6903 • Fax: (510) 981-6903 E-Mail: KHarrison@cityofberkeley.info

end of the century. The ‘Global North,’ which includes Berkeley, has far exceeded its fair share of the emissions comprising and exceeding the boundary, and must reduce its emissions rapidly and justly.

The City of Berkeley has engaged with the issue of global warming for at least three decades and has unquestionably been a leader in certain climate actions. Yet, in light of the current gravity of the climate emergency, current strategies and targets are not adequate. Exceptionally risky “mitigation” strategies, namely midcentury ‘net-zero’ pledges have provided for unbridled economic and emissions growth and thus severely dwindled carbon budgets, effectively rendering Berkeley’s gradual reduction goals: 80% by 2050 (Measure G, 2005 and Resolution 64,480-N.S., 2009) and net-zero by 2045 (Resolution 69,852–N.S., 2021), untenable. The majority of risk associated with each additional ton of greenhouse gas emitted will be borne by generations who will have not consented to current reduction goals and strategies. Current policies could exacerbate or lead to exceedingly dangerous new tipping points.

This item is timely in light of ongoing reports that national “pledges” under Paris Agreement could lead to at least 3 degrees of catastrophic warming, the inability for Congress to pass meaningful domestic and international climate policies and legislation, and the failure of world leaders to reach an effective and substantive agreement at the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow.

### BACKGROUND

The ordinance establishes emergency greenhouse gas limits aimed at reducing sector-based greenhouse gas emissions 90% below 2000 levels and consumption-based emissions 90% below 2013 levels by 2030. These limits would bring Berkeley closer to its global ‘fair share’ and science-based reduction obligations, and could help achieve reductions at scale as part of a program of regional coordination and collaboration.

While such targets are ambitious, mitigating and minimizing global warming risk and maximizing adaptation, resilience and adherence to planetary boundaries earlier in the century rather than later will likely result in less disruption to society over the long term, and will generate opportunities for more inclusive and sound democratic decision making as compared to waiting until atmospheric carbon levels reach increasingly catastrophic levels.

These limits are consistent with the City’s 2006 “precautionary principle” established by BMC 12.29, and which states:

“The purpose of this chapter is to promote the health, safety, and general welfare of the community by minimizing health risks, improving air quality, protecting the quality of ground and surface water, minimizing consumption of resources, and minimizing the City’s contribution to global climate change by implementing in a phased manner, as provided in this chapter, the City’s use of a precautionary principle approach in its decisions.”

As enacted by Council, BMC 12.29 requires the City to apply the following precautionary principle tenets in the course of action and decision-making:

1. **Anticipatory Action:** Anticipatory action may prevent harm. Government, business, community groups, and the public share this responsibility.
2. **Right to Know:** The community has a right to know complete and accurate information on potential health and environmental impacts associated with the selection of products, services, operations or plans.
3. **Alternatives Assessment:** Examine a full range of alternatives and select the alternative with the least potential impact on health and the environment including the alternative of doing nothing.
4. **Consideration of Significant Costs:** Consider significant short-term and long-term costs in comparing product alternatives, when feasible. This includes evaluation of significant costs expected during the lifetime of a product, (e.g. raw materials, manufacturing and production, transportation, use, clean-up, acquisition, extended warranties, operation, supplies, maintenance, disposal costs, long and short-term environmental and health impacts); and that expected lifetime compared to other alternatives.
5. **Participatory Decision Process:** Decisions applying the Precautionary Principle should be transparent, participatory by including community input, and informed by the best available information.

The ordinance requires the City to develop a new Climate Action Plan and consistent with these GHG limits and precautionary principle tenets, and to establish relevant legislative and budgetary timelines to help the City reach its objectives.

In addition, the ordinance requires the City to consider post-growth climate mitigation strategies and policies as potential alternatives to the growth and market-based and other policies that created the crisis and remain a persistent obstacle to meaningful action. The City's policies and programs *must not* aim to merely increase economic growth for growth's sake, but rather to support the provision of basic human needs and happiness.

It also provides an institutional framework to build solidarity with neighboring Bay Area communities and jurisdictions to achieve collective limits that could change rate of global warming while simultaneously providing sister cities in other countries precious time to improve living standards and pursue decarbonization.

#### ENVIRONMENTAL SUSTAINABILITY

This item is consistent with the latest climate science and the precautionary principle established by BMC 12.29.

**ATTACHMENTS**

1. Proposed Ordinance adding a new Chapter 12.01.

**FINANCIAL IMPLICATIONS**

Staff time will be necessary to implement the new ordinance. This item refers \$[ ] to the FY23-24 Budget Process consistent with implementing the requirements of Sections 12.01.040, 12.01.050, 12.01.060.

**CONTACT PERSON**

Councilmember Kate Harrison, Council District 4, (510) 981-7140

ORDINANCE NO. –N.S.

ADDING CHAPTER 12.01 TO THE BERKELEY MUNICIPAL CODE TO ESTABLISH  
EMERGENCY GREENHOUSE GAS EMISSIONS LIMITS

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. That Chapter 12.01 of the Berkeley Municipal Code is added to read as follows:

**Chapter 12.01**

**EMERGENCY GREENHOUSE GAS EMISSIONS LIMITS**

**Sections:**

**12.01.010 Findings and purpose.**

**12.01.020 Definitions.**

**12.01.030 Greenhouse Gas Emissions Limits.**

**12.01.040 Climate Action Plan.**

**12.01.050 Monitoring, Evaluation, And Reporting.**

**12.01.060 Regional Collaboration.**

**12.01.070 Severability.**

**12.01.080 Construction.**

**12.01.090 Effective date.**

**12.01.010 Findings and purpose.**

The Council of the City of Berkeley finds and declares as follows:

- A. Available scientific evidence indicates that between the industrial period of 1850 and 2021 economic systems, namely state and free-market forms of capital accumulation and economic growth, have increased global atmospheric carbon dioxide levels to a staggering 418 parts per million (ppm) beyond the established planetary boundary of 350 ppm, and warmed global average temperature by approximately 1.1 degrees Celsius. The 'Global North,' which includes Berkeley, has far exceeded its fair share the emissions comprising and exceeding the boundary, and must reduce its emissions rapidly and equitably.
- B. Available scientific evidence indicates there is no 'safe' level of warming beyond 350 ppm, only gradations of risk with respect to habitability. Berkeley, California, the United States, and the world is already experiencing unprecedented negative effects of warming associated with 1 degree of warming, and current global growth trends and policies will push humanity past 1.5 degrees as early as the 2030s and 3 to 4 degrees by the end of the century. Global warming between 1.5 to 2 degrees Celsius is expected to further accelerate existential risks to health and safety including but not limited to, extreme weather, mass extinction, water and food shortages, violent conflict, fire, forced migration, economic collapse, disease, heat stress, and sea level rise. The majority of risk associated with each additional ton of greenhouse gas emitted will be borne by generations who will have not consented to current reduction strategies.
- C. In the twenty-first century, Berkeley, California, and the United States have largely and irresponsibly relied on ineffective market-based mechanisms, unrealistic expectations of absolutely decoupling GDP growth from energy use, speculative mass deployment of negative emission reduction technologies and 'net-zero' practices to offset continued fossil fuel production and consumption, and underappreciation of irreversible tipping points, aerosol masking, and non-carbon greenhouse gasses. In light of the current gravity of the climate emergency, these strategies have unequivocally failed; between Measure G and 2018, each jurisdiction only reduced greenhouse gasses by a respective 10%, 12%, and 26%, while at the same time globally, nearly a third of all anthropogenic carbon dioxide was emitted. Exceptionally risky strategies pursued by the Global North, namely midcentury 'net-zero' pledges have provided for unbridled economic and emissions growth and thus severely dwindled carbon budgets, effectively rendering Berkeley's gradual reduction goals: 80% by 2050 (Measure G, 2005 and Resolution 64,480-N.S., 2009) and net-zero by 2045 (Resolution 69,852-N.S., 2021), untenable.
- D. It is the intent of the Council to adopt stringent and equitable science-based greenhouse gas emissions limits and related action plans and reports, consistent with the precautionary principle approach established by Chapter 12.29, for the purpose of achieving the rapid, far-reaching, unprecedented and just changes in all aspects of society associated with mitigating and minimizing global warming risk and maximizing adaptation, resilience and adherence to planetary boundaries.
- E. The Council further intends to endeavor to build solidarity with neighboring communities and jurisdictions to achieve collective limits that could change rate of global warming while simultaneously providing sister cities in other countries precious time to improve living standards and pursue decarbonization.

**12.01.020 Definitions.**

A. "Climate Action Plan" means the document required under Section 12.01 outlining the specific actions the City will endeavor to take to reduce Greenhouse gas emissions and to mitigation, resilience and adaptation efforts with respect to climate impacts.

B. "Consumption-Based Greenhouse Gas Emissions" means all the Greenhouse Gas emissions associated with producing, transporting, using, and disposing of products and services consumed by a particular community or entity in a given time period, including emissions generated outside the boundaries of the community or the geographic area where the entity is located.

C. "Greenhouse Gas" means any and all of the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride.

D. "Sector-Based Greenhouse Gas Emissions" means all of the Greenhouse Gas emissions generated within the geographic boundaries of the City in a given time period.

E. "Responsible Production and Consumption" means improving how materials and products are extracted, manufactured, delivered, acquired, used, reused, recycled, and disposed of to ensure that the production and consumption of materials and products promote basic human needs, are distributed in a socially equitable manner, and carried out in a way that minimizes environmental impacts over the lifecycle of those materials and products while matching the carrying capacity of the earth's resources and adding value so as not to jeopardize present and future generations. "Lifecycle" means the complete material life of a product, good, or service, including resource extraction, manufacture, assembly, construction, maintenance, transportation, operations or use, and end of life (reuse, recycling/composting, and disposal). "Carrying capacity" means the number or amount of people, plants, and other living organisms that an ecosystem can support indefinitely without causing environmental degradation.

F. "Post-Growth Emissions Mitigation" means Greenhouse Gas mitigation strategies and policies that acknowledge and support the following:

- (1) rapid emissions reductions may not be compatible with economic policies that support limitless growth, especially growth in the production and consumption of commodities that do not support basic human needs,
- (2) in jurisdictions with high aggregate wealth there may be a disassociation between additional capital accumulation, economic growth, and GDP, and key social outcomes, to include but not limited to, health, social wellbeing, happiness and equity,
- (3) fairer distribution of income and wealth, and guaranteed access to universal public services.

**12.01.030 Emergency Greenhouse Gas Emissions Limits.**

A. The following Greenhouse Gas emissions limits are hereby established:

- (1) By 2030, reduce Sector-Based Greenhouse Gas Emissions [90%] below 2000 levels.
- (2) By 2030, reduce Consumption-Based Greenhouse Gas Emissions to [5] mtCO<sub>2</sub>e per household or less, equivalent to a [90%] reduction compared to 2013 levels.
- (3) By 2026, the Council shall determine an appropriate deadline for achieving 100% zero emissions across both Sector and Consumption-Based inventories.

**12.01.040 Climate Action Plan.**

A. By [ ], 2022, the City Manager or designee shall prepare and submit for relevant Council policy committee and Council approval a Climate Action Plan (CAP) which shall

do all of the following:

- (1) Align with the emissions limits established in Section 12.01.030.
  - (2) Consider equitable Post-growth Climate Mitigation strategies and policies.
  - (3) Incorporate an equity framework that addresses historic racial, class-based, and social inequalities; prioritizes social, economic, and environmental benefits derived from implementing the CAP; and ensures an equitable distribution of those benefits. This framework shall consider:
    - (a) The engagement and prioritization of those who are most impacted by climate change and have historically had the least influence in decision-making processes, including low-income communities of color, communities with disabilities, and other impacted populations;
    - (b) Burdens and/or unintended consequences of related actions, especially for low-income communities of color, communities with disabilities, and other vulnerable populations; and
    - (c) Social interventions needed to secure workers' rights and livelihoods when economies are shifting to responsible production and consumption, collectively referred to as a "just transition" framework, and other impacts on workforce and job opportunities.
  - (4) Include, but not be limited to, the following elements: energy supply; transportation and land use; building operations; housing; Responsible Production and Consumption; carbon sequestration and water conservation.
  - (5) Identify strategies and/or make recommendations to achieve emissions limits for all elements. The CAP shall recommend approaches on goals and principles. Each strategy or recommendation shall:
    - (a) Identify parties responsible for implementation;
    - (b) Incorporate an estimated cost; and
    - (c) Incorporate estimated legislative and budgetary timelines based consistent with Section 12.01.030; and
    - (d) Contain key performance indicators and explicit equity metrics to measure progress.
- B. The City Manager or their designee shall update the Climate Action Plan at least every two years.

#### **12.01.050 Monitoring, Evaluation, And Reporting.**

- A. The City shall demonstrate its long-term commitment to reducing Greenhouse Gas emissions and advancing racial and social equity by measuring and reporting emissions, tracking key performance indicators and equity metrics, and monitoring the City's progress on meeting its climate action goals and commitments.
- B. The City Manager or their designee shall, with the assistance from relevant City agencies:
- (1) Measure and monitor Sector-Based Greenhouse Gas Emissions, including municipal emissions, using best available global protocols for preparing Citywide Greenhouse Gas emission inventories.
  - (2) Measure production and consumption emissions using best available global methodologies for preparing consumption-based emission inventories.
  - (3) Evaluate Sector-Based Greenhouse Gas Emissions against set limits, document production and consumption emissions, and produce an annual Greenhouse Gas emissions report.
  - (4) Establish a monitoring and reporting process for the implementation of the CAP that:
    - (a) Tracks key performance indicators and equity metrics for strategies to help

monitor their progress and implementation;

(5) Request and receive data from City departments to support:

(a) The annual Greenhouse Gas emissions inventory. City departments may be asked to provide data on, but not limited to, the following: their energy use; types of fuels used for their operations; fuel volume; vehicle-miles travelled (if applicable) within their jurisdictions; and private sector Greenhouse Gas emission sources regulated by the department. Departments may also be requested to verify emission estimates and assumptions and review resulting reports;

(b) Monitoring and reporting of Climate Action Plan implementation. City departments may be asked to provide data on key performance indicators and equity metrics related to adopted strategies and actions; and

(6) Coordinate with other City agencies to monitor, track, and report on climate action progress to local, state, national, and global partners.

(7) Report its findings in a progress report to the Council and public every year.

(8) Report on at least a biannual basis to relevant Council policy committees and commissions to support policy and budget development consistent with reduction limits established in Section 12.01.030.

#### **12.01.060 Regional Collaboration.**

The Council and City staff, working alongside the public, shall endeavor to build solidarity and coalitions with neighboring communities, jurisdictions, and agencies to achieve equitable collective Greenhouse Gas limits and observe planetary boundaries.

#### **11.63.070 Severability.**

If any word, phrase, sentence, part, section, subsection, or other portion of this Chapter, or any application thereof to any person or circumstance is declared void, unconstitutional, or invalid for any reason, then such word, phrase, sentence, part, section, subsection, or other portion, or the prescribed application thereof, shall be severable, and the remaining provisions of this Chapter, and all applications thereof, not having been declared void, unconstitutional or invalid, shall remain in full force and effect. The City Council hereby declares that it would have passed this title, and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases had been declared invalid or unconstitutional.

#### **12.01.080 Construction.**

This Chapter is intended to be a proper exercise of the City's police power, to operate only upon its own officers, agents, employees and facilities and other persons acting within its boundaries, and not to regulate inter-city or interstate commerce. It shall be construed in accordance with that intent.

#### **12.01.090 Effective date.**

The provisions in this ordinance are effective [ ], 2022.

Section 2. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be

filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.