

BOARD of SUPERVISORS



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## MEMORANDUM

TO: Dr. Grant Colfax, Director, Department of Public Health  
Deborah Raphael, Director, Department of the Environment  
Brian Strong, Program Director, Office of Resilience and Capital Planning  
Michael Carlin, Acting General Manager, Public Utilities Commission  
Patrick O'Riordan, Director, Department of Building Inspection  
Rich Hillis, Director, Planning Department  
Alaric Degrafinried, Interim Director, Public Works  
Jeffrey Tumlin, Executive Director, Municipal Transportation Agency  
Tilly Chang, Executive Director, San Francisco County Transportation Authority

FROM: Erica Major, Assistant Clerk, Land Use and Transportation Committee

DATE: May 21, 2021

SUBJECT: LEGISLATION INTRODUCED

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The Board of Supervisors' Land Use and Transportation Committee has received the following proposed legislation, introduced by Mayor Breed on May 18, 2021:

**File No. 210563**

**Ordinance amending the Environment Code to update the City's climate action goals and planning process, and establish departmental roles and responsibilities.**

If you have comments or reports to be included with the file, please forward them to me at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102 or by email at: [erica.major@sfgov.org](mailto:erica.major@sfgov.org).

cc: Greg Wagner, Department of Public Health  
Dr. Naveena Bobba, Department of Public Health  
Sneha Patil, Department of Public Health  
Arielle Fleisher, Department of Public Health  
Peter Gallotta, Department of the Environment  
Charles Sheehan, Department of the Environment  
Masood Ordikhani, Public Utilities Commission  
Donna Hood, Public Utilities Commission  
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John Murray, Department of Building Inspection  
Scott Sanchez, Planning Department  
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Devyani Jain, Planning Department  
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Janet Martinsen, Municipal Transportation Agency  
Joel Ramos, Municipal Transportation Agency  
Angela Tsao, San Francisco County Transportation Authority  
Jen Shader, San Francisco County Transportation Authority  
Cynthia Fong, San Francisco County Transportation Authority

1 [Environment Code - Climate Action Plan]

2

3 **Ordinance amending the Environment Code to update the City’s climate action goals**  
4 **and planning process, and establish departmental roles and responsibilities.**

5 NOTE: **Unchanged Code text and uncodified text** are in plain Arial font.  
6 **Additions to Codes** are in *single-underline italics Times New Roman font*.  
7 **Deletions to Codes** are in *strikethrough italics Times New Roman font*.  
8 **Board amendment additions** are in double-underlined Arial font.  
9 **Board amendment deletions** are in ~~strikethrough Arial font~~.  
10 **Asterisks (\* \* \* \*)** indicate the omission of unchanged Code  
11 subsections or parts of tables.

12 Be it ordained by the People of the City and County of San Francisco:

13

14 Section 1. Chapter 9 of the Environment Code is hereby amended by revising  
15 Sections 900, 901, and 902, repealing existing Sections 903, 904, 905, and 907, and adding  
16 new Sections 903, 904, 905, and 907, all to read as follows:

17 **SEC. 900. FINDINGS AND PURPOSE.**

18 The Board of Supervisors finds that:

19 *(a) In 2016, the Paris Climate Agreement committed national governments to pursue efforts to*  
20 *limit temperature rises to 1.5 degrees Celsius. In 2018, the Intergovernmental Panel on Climate*  
21 *Change (IPCC) issued a special report on the impacts of global warming and the need to significantly*  
22 *reduce global greenhouse gas emissions well before 2030 to reduce the most detrimental impacts to*  
23 *ecosystems and to human health.*

24 *(b) In 2018, the United States’ Fourth National Climate Assessment made clear that climate*  
25 *change will wreak havoc across the United States, and that the current pace and scale of national*  
*climate action are not sufficient to avert substantial damage to the environment, human health, and*  
*economy. According to the San Francisco Department of Public Health’s Climate and Health*

1 Adaptation Framework (2017), the direct and indirect impacts of climate change will  
2 disproportionately affect San Francisco communities least able to prepare for, cope with, and recover  
3 from those impacts. Those communities include communities of color, low income communities, and  
4 other vulnerable populations.

5 (c) San Francisco, the Bay Area, and the State of California are already suffering the effects of  
6 climate change in the form of droughts, air pollution, extreme heat, frequent wildfires, flooding, and  
7 much more.

8 (d) At the 2018 Global Climate Action Summit, San Francisco committed to meet the Paris  
9 Agreement by achieving a net zero city by 2050. The City joined in a Climate Equity Pledge to ensure  
10 that the City's 2020 Climate Action Strategy update achieves the dual goals of advancing racial equity  
11 and decreasing carbon emissions.

12 (e) San Francisco's climate commitments and climate action strategy are framed by the City's  
13 "0-80-100-Roots" framework, which defines climate and sustainability goals in four key areas: zero  
14 waste ("0% zero waste"), transportation ("80% low-carbon trips"), energy ("100% renewable  
15 energy"), and carbon sequestration ("Roots").

16 (f) One of the City's fundamental goals in implementing the 0-80-100-Roots Climate Action  
17 Framework is to promote equity by ensuring that implementation reflects and responds to the  
18 economic, political, and social needs of different San Francisco vulnerable communities.

19 (g) Achieving the "0-80-100-Roots" goals in the City will mean cleaner air, fewer vehicles on  
20 the road, more reliable transit systems, more bike lanes and pedestrian-friendly networks, highly  
21 efficient homes and businesses powered by 100% clean electricity, a robust urban tree canopy, plentiful  
22 green spaces, improved soil health, and a regenerative ecosystem.

23 (h) Meaningful climate solutions will require increasing supplies of high-quality housing  
24 affordable to households at all income levels and located near local and regional transit service. These  
25 solutions will also require well-coordinated land use and transportation planning and investments to

1 support low-carbon trips using efficient travel modes such as transit, walking, and biking, in order to  
2 reduce vehicle miles traveled and associated emissions.

3 (i) The success of the City in achieving its climate goals thus far has been clear: in 2019, San  
4 Francisco achieved a 41% reduction in greenhouse gas emissions below 1990 levels, surpassing the  
5 target reduction of 25% established by the Board of Supervisors. This success has been driven by the  
6 continued replacement of fossil fuel power generation with renewable sources, a cleaner electric grid,  
7 increased building energy efficiency, a transition to low-carbon transportation fuels, and a leading  
8 zero waste system.

9 (j) In 2019, the Board of Supervisors unanimously adopted Resolution No. 160-19, declaring a  
10 climate emergency in San Francisco and requesting immediate action to address the climate crisis,  
11 limit global warming to 1.5 degrees Celsius, and eliminate greenhouse gas emissions.

12 (k) The Department of the Environment's 2019 report titled "Focus 2030: A Pathway to Net  
13 Zero Emissions" shows that achieving accelerated emissions reductions by 2050 will require an  
14 ongoing commitment that builds upon and surpasses San Francisco's past successes and increases  
15 resources accordingly to continue to reduce emissions all the way to net zero.

16 ~~(a) In 2002, the Board of Supervisors adopted Resolution 158-02 that called for the City to~~  
17 ~~develop plans to reduce its greenhouse gas emissions to 20 percent below 1990 levels by the year~~  
18 ~~2012.~~

19 ~~(b) In 2004, the Department of the Environment and the San Francisco Public Utilities~~  
20 ~~Commission issued "The Climate Action Plan For San Francisco," which included an accounting of~~  
21 ~~greenhouse gas emissions associated with City activities, an accounting of greenhouse gas emissions~~  
22 ~~within the City and County of San Francisco but not associated with City operations, and emission~~  
23 ~~reduction recommendations for transportation, energy efficiency, renewable energy and solid waste~~  
24 ~~management sectors.~~

1           ~~(c) City Departments, under the leadership of the Department of the Environment and on their~~  
2 ~~own initiative, are engaged in various undertakings to implement the recommendations in "The Climate~~  
3 ~~Action Plan," and are making steady progress in certain areas toward the 2012 goal.~~

4           ~~(d) In 2005, Governor Schwarzenegger issued Executive Order S-3-05 which established~~  
5 ~~Statewide greenhouse gas emissions reduction targets for California as follows: by 2010, reduce~~  
6 ~~greenhouse gas emissions to 2000 levels; by 2020, reduce greenhouse gas emissions to 1990 levels, and~~  
7 ~~by 2050 reduce greenhouse gas emissions to 80 percent below 1990 levels.~~

8           ~~(e) In 2006, California enacted AB 32, the California Global Warming Solutions Act of 2006.~~  
9 ~~(CA Health and Safety Code Section 38.500 et seq.) which requires the California Air Resources Board~~  
10 ~~to determine the statewide greenhouse gas emissions level in 1990, set that 1990 level as the statewide~~  
11 ~~greenhouse gas emissions level to be achieved by 2020, and to adopt and implement statewide plans,~~  
12 ~~protocols, rules and regulations to achieve and exceed the 2020 goals.~~

13           ~~(f) It is the intent of the Mayor and the Board of Supervisors to protect the health and welfare~~  
14 ~~in a manner that compliments state and federal efforts to improve air quality by exercising a leadership~~  
15 ~~role in mandating local actions to reduce global warming, and, in particular, to call upon City~~  
16 ~~departments and the private sector to integrate emission reduction measures into their standard~~  
17 ~~operating procedures in order that the City meets and exceeds the greenhouse gases emissions~~  
18 ~~established in this Ordinance.~~

19  
20 **SEC. 901. DEFINITIONS.**

21           ~~"0-80-100-Roots" means the City's climate action framework, where "0" refers to a goal of~~  
22 ~~zero waste, "80" refers to a goal of 80% low-carbon trips, "100" refers to a goal of 100% renewable~~  
23 ~~energy, and "Roots" refers to sequestering carbon through natural systems.~~

24           ~~(a) "CARB" means the California Air Resources Board.~~

1           ~~(b) "Carbon Dioxide Equivalent" means the amount of carbon dioxide by weight that would~~  
2 ~~produce the same global warming impact as a given weight of another greenhouse gas, based on the~~  
3 ~~best available science, as determined by the Department of the Environment.~~

4           ~~(c) "Climate Action Plan" means the document required under Section 904 outlining the~~  
5 ~~specific actions the City will take to reduce Greenhouse Gas emissions and offset negative climate~~  
6 ~~impacts. "The Climate Action Plan For San Francisco" issued in 2004 by the Department of the~~  
7 ~~Environment and the San Francisco Public Utilities Commission.~~

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

12           ~~(d) "GHG emission reduction measure" means programs, measures, standards, and alternative~~  
13 ~~compliance mechanisms authorized pursuant to Section 903, applicable to sources or categories of~~  
14 ~~sources that are designed to reduce emissions of greenhouse gases.~~

15           ~~(e) "GHG", "Greenhouse gas" or "greenhouse gases" means and includes any and all of the~~  
16 following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons,  
17 perfluorocarbons, and sulfur hexafluoride.

18           ~~(f) "San Francisco Greenhouse Gas Emissions limit" means the combined level of greenhouse~~  
19 ~~gas emissions, expressed in tons of carbon dioxide equivalents, from all sources within the geographic~~  
20 ~~limit of the City and County of San Francisco, whether or not such source is subject to regulation by~~  
21 ~~local law.~~

22           ~~"Hazards and Climate Resilience Plan" means the plan prepared by the Office of Resilience~~  
23 ~~and Capital Planning (ORCP) to increase the resilience of all components that keep the City~~  
24 ~~functioning: buildings, infrastructure, utilities, transportation, communication systems, and the people~~  
25 ~~who live and work in San Francisco.~~

1 “Low-Carbon Trips” mean trips into, out of, and within the City’s boundaries which generate  
2 zero or low greenhouse gas emissions.

3 “Net Zero Sector-Based Greenhouse Gas Emissions” means Sector-Based Greenhouse Gas  
4 Emissions after first eliminating emissions from fossil fuels and other sources, and then, for each ton of  
5 emissions that cannot be eliminated, removing a ton of carbon dioxide equivalent from the atmosphere.

6 “Renewable Energy” means energy qualifying as renewable pursuant to California Public  
7 Resources Code Chapter 8.6, Section 25741(a), and California Public Utilities Code Chapter 2.3,  
8 Article 16, Section 399.16(b)(1) or (2), as amended from time to time, or provided by a local publicly  
9 owned electric utility subject to California Public Utilities Code Chapter 2.3, Article 16,  
10 Section 399.30(j), as amended from time to time.

11 “Responsible Production and Consumption” means improving how materials and products are  
12 extracted, manufactured, delivered, acquired, used, reused, recycled, and disposed of to ensure that the  
13 production and consumption of materials and products promote basic human needs, are distributed in  
14 a socially equitable manner, and carried out in a way that minimizes environmental impacts over the  
15 lifecycle of those materials and products while matching the carrying capacity of the earth’s resources  
16 and adding value so as not to jeopardize present and future generations. (See United Nations’  
17 Sustainable Development Goal 12.) “Lifecycle” means the complete material life of a product, good,  
18 or service, including resource extraction, manufacture, assembly, construction, maintenance,  
19 transportation, operations or use, and end of life (reuse, recycling/composting, and disposal).

20 “Carrying capacity” means the number or amount of people, plants, and other living organisms that an  
21 ecosystem can support indefinitely without causing environmental degradation.

22 “Sector-Based Greenhouse Gas Emissions” means all of the Greenhouse Gas emissions  
23 generated within the geographic boundaries of the City in a given time period.

24 ~~(g) “SFPUC” mean the San Francisco Public Utilities Commission.~~

25



1 **SEC. 902. CLIMATE ACTION GOALS GREENHOUSE GAS EMISSIONS LIMIT.**

2 (a) The City adopts the following targets for reducing San Francisco Greenhouse Gas  
3 emissions greenhouse gas emissions limits are hereby established:

4 (1) By 2030, a reduction in Sector-Based Greenhouse Gas Emissions of at least 61%  
5 compared to 1990 levels;

6 (2) By 2030, a reduction in Consumption-Based Greenhouse Gas Emissions to  
7 30 mtCO<sub>2</sub>e per household or less, equivalent to a 40% reduction compared to 1990 levels;

8 (3) By 2045, achievement of Net Zero Sector-Based Greenhouse Gas Emissions by  
9 reducing such emissions by at least 90% compared to 1990 levels and sequestering any residual  
10 emissions; and

11 (4) By 2050, a reduction in Consumption-Based Greenhouse Gas Emissions to  
12 10 mtCO<sub>2</sub>e per household or less, equivalent to an 80% reduction compared to 1990 levels.

13 For purposes of this Section 902, “residual emissions” means any carbon dioxide or other  
14 Greenhouse Gas emissions remaining after all technically and economically feasible mitigation  
15 measures have been implemented, and “sequestering” means removing those residual emissions from  
16 the atmosphere and storing them in natural systems that support soil fertility or through other carbon  
17 farming practices.

18 (i) By 2008, determine 1990 City greenhouse gas emissions as provided in  
19 Section 902(c) below;

20 (ii) By 2017, reduce greenhouse gas emissions by 25 percent below 1990 levels;

21 (iii) By 2025, reduce greenhouse gas emissions by 40 percent below 1990 levels; and

22 (iv) By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels. These  
23 targets shall remain in effect unless otherwise amended or repealed.

24 (b) In order to meet the emissions reduction targets set out in subsection (a), the City shall  
25 pursue the sustainability goals of the 0-80-100-Roots Climate Action Framework, as follows:

1                   (1) Zero Waste. By 2030, a reduction in the generation of solid waste of at least 15%  
2 below 2015 levels and a reduction in the amount of solid waste disposed of by incineration or deposit  
3 in landfill of at least 50% below 2015 levels;

4                   (2) Transportation. By 2030, an increase in low-carbon trips to at least 80% of all trips  
5 measured and an increase in the level of electrification of vehicles to at least 25% of all private  
6 vehicles registered, and by 2040, an increase in the level of electrification of vehicles to 100% of all  
7 private vehicles registered;

8                   (3) Energy. By 2025, supplying 100% renewable electricity, and by 2045, supplying  
9 100% renewable energy;

10                  (4) Housing. Building 5,000 new housing units per year, including 30% affordable  
11 units;

12                  (5) Buildings. By 2021, requiring zero onsite fossil fuel emissions from all new  
13 buildings, and by 2035, requiring zero onsite fossil fuel emissions from all large existing commercial  
14 buildings; and

15                  (6) Roots. Sequestering carbon through ecosystem restoration, including increased  
16 urban tree canopy, green infrastructure, and compost application.

17                  (c) All climate action goals set out in subsection (b) shall also include the complementary goals  
18 of advancing racial and social equity, protecting public health (including the health needs of  
19 vulnerable populations), increasing community resilience, and fostering a more just economy.

20                  ~~(b) All City departments shall consider the effect of all decisions and activities within their~~  
21 ~~jurisdiction on green house gas emissions and undertake their responsibilities to the end that the City~~  
22 ~~achieves the greenhouse gas emissions limits set forth in this Ordinance.~~

23                  ~~(c) No later than January 1, 2009, the Commission on the Environment, shall, after one or~~  
24 ~~more public hearings, determine what the greenhouse gas emissions level within the City and County of~~  
25 ~~San Francisco for City and private enterprise activities was in 1990. Such determination shall be the~~

1 ~~baseline level for determining the greenhouse gas emission limits to be achieved in 2017 and 2050,~~  
2 ~~under subsection (a), above. In determining the 1990 level, the Department of the Environment shall~~  
3 ~~take into consideration the inventory identified in the Climate Action Plan, the methodology adopted by~~  
4 ~~the State Air Board under AB 32, and the best available scientific, technological, and economic~~  
5 ~~information and shall make reasonable efforts, where appropriate, to promote consistency between its~~  
6 ~~methodology and the methodology used by other international, federal and state greenhouse gas~~  
7 ~~emission measurement and reporting programs.~~

8 ~~(d) The Department of the Environment is urged to promulgate interim greenhouse gas~~  
9 ~~emissions goals to facilitate the City's achievement of the 2017 and 2050 greenhouse gas emissions~~  
10 ~~limits set forth in Subsection (a), above, provided, however, that such interim goals shall be for~~  
11 ~~purposes of measuring the City's progress toward achieving the targets set forth in subsection (a),~~  
12 ~~above and shall not be independently binding.~~

13 ~~(e) The Department of the Environment shall, where appropriate and to the maximum extent~~  
14 ~~feasible, work with other local, State And federal governmental agencies, including but not limited to~~  
15 ~~the CARB, and non-profit entities to develop uniform standards and protocols for measuring, verifying~~  
16 ~~and reporting on greenhouse gas emissions.~~

17  
18 **~~SEC. 903. GREENHOUSE GAS EMISSIONS REDUCTION PLAN.~~**

19 ~~(a) Consistent with its Charter duty regularly to produce an assessment of San Francisco's~~  
20 ~~environmental condition, the Department of the Environment shall coordinate all departmental action~~  
21 ~~plans, reports of actions taken, and their effectiveness in achieving the greenhouse gas emissions limits~~  
22 ~~provided herein.~~

23 ~~(b) The Department of the Environment, in cooperation with the SFPUC, shall manage the~~  
24 ~~City's monitoring and reporting obligations imposed, from time to time, by Federal or State law,~~  
25 ~~including but not limited to requirements imposed by the CARB under AB32.~~

1           ~~(c) On or before January 30, 2009, all City departments shall assess GHG emissions~~  
2 ~~associated with their activities and submit, in a format specified by the Department of the Environment,~~  
3 ~~a written action plan that identifies and makes recommendations on GHG emission reduction measures~~  
4 ~~applicable to-~~

5                     ~~(i) operations of the department and other City greenhouse gas emission sources within~~  
6 ~~its jurisdiction, and~~

7                     ~~(ii) private sector greenhouse gas emission sources regulated by the department. Such~~  
8 ~~Plan shall identify the potential costs of identified measures and the estimated potential benefits of~~  
9 ~~elements in the plan for reducing greenhouse gases, and may also identify other economic and non-~~  
10 ~~economic impacts to the City's economy and environment~~

11           ~~(d) In addition to the requirement set forth in subsection (d), above, the following requirements~~  
12 ~~apply to the following City departments:-~~

13                     ~~(i) The San Francisco Planning Department shall:-~~

14                             ~~(A) Review the City's General Plan, including but not limited to the~~  
15 ~~environmental protection, air quality, urban design and transportation elements, for consistency with~~  
16 ~~this Ordinance and, as appropriate, urge the Planning Commission to recommend to the Board of~~  
17 ~~Supervisors amendments to the General Plan to add the greenhouse gas emissions limits in this~~  
18 ~~Ordinance and policies to achieve those targets;-~~

19                             ~~(B) Include consideration of a project's impact on the San Francisco greenhouse~~  
20 ~~gas emissions limits in this Ordinance as part of its review under the California Environmental Quality~~  
21 ~~Act (CEQA); and~~

22                             ~~(C) In consultation with the Executive Director of the Municipal Transportation~~  
23 ~~Agency, Department of Public Health, San Francisco County Transportation Authority, the Department~~  
24 ~~of the Environment and other affected City departments, review City transit, pedestrian, bicycle,~~  
25 ~~parking, and transportation demand management programs and requirements within their jurisdiction~~

1 ~~and, as appropriate, recommend legislation to the Board of Supervisors that will enhance the City's~~  
2 ~~"transit first" policy, encourage a shift to sustainable transportation modes for trips to, from, and~~  
3 ~~within the City, and reduce transportation-related emissions to achieve City greenhouse gas emissions~~  
4 ~~targets set forth in this Ordinance.~~

5 ~~(ii) The San Francisco Department of Building Inspection shall review and, as~~  
6 ~~appropriate, recommend to the Board of Supervisors amendments to the Building Code or other local~~  
7 ~~laws (A) to improve energy efficiency in new construction and in repairs and alterations to existing~~  
8 ~~buildings, (B) to optimize energy efficiency of HVAC, lighting, and other building systems, and (C) to~~  
9 ~~mandate retrofitting of buildings at time of sale.~~

10 ~~(iii) The Department of Public Works shall:~~

11 ~~(A) Review maintenance and construction standards, programs and~~  
12 ~~requirements within its jurisdiction and, as appropriate, develop orders, regulations, or amendments to~~  
13 ~~the Department's Standard Plans and Specifications to address the policies of this Ordinance and/or~~  
14 ~~recommend legislation to the Board of Supervisors, including amendments to the Public Works Code or~~  
15 ~~other City codes or ordinances, to achieve the greenhouse gas emissions limits set forth in this~~  
16 ~~Ordinance; and~~

17 ~~(B) in consultation with the SFPUC and other affected City Departments,~~  
18 ~~review, and as appropriate recommend changes to street and other public lighting standards to~~  
19 ~~enhance energy efficiency and thereby reduce City greenhouse gas emissions.~~

20 ~~(iv) The City Administrator shall:~~

21 ~~(A) review, in consultation with the SFPUC, the energy efficiency of City~~  
22 ~~buildings and city occupied leaseholds, and, as necessary, recommend cost effective steps to increase~~  
23 ~~their efficiency, and~~

24 ~~(B) in collaboration with the Department of the Environment and other affected~~  
25 ~~City departments, review, and, as appropriate, recommend amendments to City procurement laws and~~

1 *practices, including but not limited to Chapter 2 of this Code (Environmentally Preferable Purchasing*  
2 *Ordinance), to include the impact of City procurement decisions on greenhouse gas emissions.*

3  
4 **SEC. 903. FUTURE CLIMATE ACTION GOALS.**

5 *(a) The San Francisco Public Utilities Commission, in consultation with relevant City*  
6 *departments, community stakeholders, and technical experts, shall identify water conservation targets*  
7 *that include sustainable use practices, water recycling, and water reuse.*

8 *(b) The Office of Resilience and Capital Planning, in consultation with the San Francisco*  
9 *Public Utilities Commission, the Department of the Environment, relevant City departments,*  
10 *community stakeholders, and technical experts, shall identify energy resilience targets that will help the*  
11 *City prepare for and recover from energy disruptions with the minimum use of additional fossil fuels.*

12  
13 **~~SEC. 904. MANDATORY ANNUAL GREENHOUSE GAS EMISSIONS REPORTING.~~**

14 *(a) Beginning at the close of fiscal year 2008-2009, no later than 90 days after the close of*  
15 *each fiscal year, all City departments shall submit, in a format specified by the Department of the*  
16 *Environment, a written update of the plans, status of any recommendation required by Section 903, and*  
17 *the GHG emission reductions from actions taken to the Department of the Environment. Such updates*  
18 *shall, to the extent feasible, provide information to enable the Department of the Environment to*  
19 *calculate the City's progress toward meeting the greenhouse gas emissions limits set forth in this*  
20 *Ordinance.*

21 *(b) Beginning in January 2010, and annually thereafter, and based on the written reports*  
22 *required in Section 904(a) and such other reliable data as the Department of the Environment shall*  
23 *compile, the Department of the Environment shall report to the Board of Supervisors on the City's*  
24 *progress toward achieving the San Francisco greenhouse gas emissions limits of this Ordinance. Such*  
25 *annual report shall be consistent with the methodology established by the Department of the*

1 ~~Environment under Section 903(c), except that the Department of the Environment may revise such~~  
2 ~~methodology to conform to recognized protocols.~~

3  
4 **SEC. 904. CLIMATE ACTION PLAN.**

5 (a) By December 31, 2021, the Department of the Environment shall prepare and submit for  
6 the Mayor's approval a Climate Action Plan (CAP) which shall do all of the following:

7 (1) Align with the Paris Climate Agreement to limit global warming to 1.5 degrees  
8 Celsius, and with the emissions reduction targets established in Section 902.

9 (2) Incorporate an equity framework that addresses historic racial and social  
10 inequities; prioritizes social, economic, and environmental benefits derived from implementing the  
11 CAP; and ensures an equitable distribution of those benefits. This framework shall consider:

12 (A) The engagement and prioritization of those who are most impacted by  
13 climate change and have historically had the least influence in decision-making processes, including  
14 low-income communities of color and other impacted populations;

15 (B) Burdens and/or unintended consequences of related actions, especially for  
16 low-income communities of color and other vulnerable populations; and

17 (C) Social interventions needed to secure workers' rights and livelihoods when  
18 economies are shifting to responsible production and consumption, collectively referred to as a "just  
19 transition" framework, and other impacts on workforce and job opportunities.

20 (3) Identify and leverage synergies, where feasible, with the City's existing or proposed  
21 climate adaptation and mitigation measures set out in the Hazards and Climate Resilience Plan.

22 (4) Incorporate a health and vulnerable populations framework that shall consider:

23 (A) Climate and health co-benefits, especially targeted to populations and  
24 communities disproportionately impacted by climate change; and

1 (B) Potential negative health impacts to individual and communities, especially  
2 vulnerable populations.

3 (5) Include, but not be limited to, the following elements: energy supply; transportation  
4 and land use; building operations; housing; responsible production and consumption; and carbon  
5 sequestration. No later than one year after the adoption of the ordinance in Board File No. \_\_\_\_\_  
6 enacting this Section 904, the Department of the Environment in coordination with the Public Utilities  
7 Commission shall prepare a water element for the CAP.

8 (6) Identify strategies and/or make recommendations to achieve emissions reduction  
9 targets for all elements. If targets have not been established in Section 902, the CAP shall recommend  
10 approaches on goals and principles. Each strategy or recommendation shall:

11 (A) Identify parties responsible for implementation;

12 (B) Incorporate an estimated cost; and

13 (C) Contain key performance indicators and explicit equity metrics to measure  
14 progress.

15 (b) The Department of the Environment shall update the Climate Action Plan every five years.

16  
17 **SEC. 905. ENFORCEMENT.**

18 ~~*The Department of the Environment shall report any non-compliance with the reporting*~~  
19 ~~*requirements of this Ordinance to the Mayor and the Board of Supervisors.*~~

20  
21 **SEC. 905. CITY DEPARTMENT ROLES AND RESPONSIBILITIES.**

22 (a) The Department of the Environment shall be the lead agency for developing and publicizing  
23 the Climate Action Plan, including updates. The Department shall:

24 (1) Lead the development of strategies, key performance indicators, and equity metrics  
25 to be included in the CAP;



1                   (2) Coordinate an interagency effort with the Planning Department, Municipal  
2 Transportation Agency, Department of Public Works, Department of Public Health, Department of  
3 Building Inspection, City Administrator’s Office, Office of Resilience and Capital Planning, San  
4 Francisco Public Utilities Commission and other relevant City agencies to develop and adopt updates  
5 to the CAP; and

6                   (3) Work with relevant agencies, key stakeholders, and community members to develop,  
7 adopt, and monitor the implementation of the CAP.

8                   (b) The Planning Department shall:

9                   (1) Review the City’s Planning Code to ensure that Area Plans and development  
10 projects are consistent with the targets and aims set out in the CAP and this Chapter 9;

11                   (2) Review the City’s General Plan for consistency and support of the City’s  
12 Greenhouse Gas emissions targets and climate action goals, with guidance from the State’s Office of  
13 Planning and Research on incorporating climate change and resilience into land use planning, and, as  
14 needed, update and amend relevant elements through the support of the Planning Commission and  
15 Board of Supervisors;

16                   (3) Continue to implement State, regional, and/or local requirements to consider a  
17 project’s Greenhouse Gas impacts as part of its review under the California Environmental Quality Act  
18 (CEQA) regarding San Francisco’s emissions targets in this Chapter 9; and

19                   (4) Advance plans, policies, and projects that support increased housing production for  
20 all income levels, especially in proximity to public transit, and that preserve affordable housing at low-  
21 and moderate-income levels.

22                   (c) The Department of Public Health shall:

23                   (1) In consultation with the Department of the Environment, develop an element of the  
24 CAP addressing climate impacts on health and vulnerable populations, including:

25                   (A) Analyzing climate change as a public health threat;

1 (B) Identifying inequalities in the distribution of public health impacts; and

2 (C) Connecting climate action strategies to associated health and equity co-  
3 benefits.

4 (2) Develop a health and vulnerable populations framework for evaluating proposed  
5 climate action strategies to inform the implementation of those strategies; and

6 (3) Monitor and evaluate climate, health, and equity metrics in cooperation with public  
7 agencies and key stakeholders, including the San Francisco Health Improvement Partnership; share  
8 data with City departments and the public; and use the data to continually improve strategic actions  
9 and address emerging issues, gaps, and unintended consequences impacting health and vulnerable  
10 populations.

11 (d) The Department of Building Inspection shall:

12 (1) Support the development and implementation of high-performance green building  
13 codes to achieve higher levels of energy efficiency and the eventual elimination of the use of fossil fuels  
14 in buildings to achieve San Francisco's emissions targets set forth in Section 902; and

15 (2) Work with the Department of the Environment on the development of strategies,  
16 actions, key performance indicators, and equity metrics to be included in the buildings element of the  
17 CAP.

18 (e) The Department of Public Works shall:

19 (1) Consider San Francisco's emissions targets set forth in Section 902 in updates  
20 related to the Department's Standard Plans and Specifications and in the design, construction,  
21 maintenance and management of public buildings and infrastructure projects;

22 (2) Work with City departments and stakeholders to ensure that the public right-of-way  
23 allows for electrification of buildings and transportation; and

1                   (3) Work with the Department of the Environment on the carbon sequestration element  
2 of the CAP, including consideration of the climate and resilience benefits of planting and maintaining  
3 street trees, median landscaping, and pocket parks.

4                   (f) The San Francisco Municipal Transportation Agency shall:

5                   (1) Work with the Department of the Environment, the Planning Department, the San  
6 Francisco County Transportation Authority and the Department of Public Health to develop and  
7 implement projects, strategies, actions, key performance indicators, and equity metrics to be included  
8 in the transportation and land use element of the CAP, with an emphasis on advancing projects that  
9 shift single-occupant automobile trips to other modes of transportation (“mode shift”) by prioritizing  
10 the right-of-way for low-carbon and efficient modes through efforts such as improved parking  
11 management, utilization of pricing, development of local and regional transit and active mobility  
12 networks, and electrifying gas-powered vehicles.

13                   (2) Act as the lead agency on coordinating with other relevant departments and other  
14 key stakeholders to ensure that the transportation and land use element reflects the City's policy and  
15 programmatic priorities in this area, including the integration of existing Citywide transportation  
16 planning efforts, goals, data sources, and other considerations into the CAP.

17                   (g) The San Francisco Public Utilities Commission shall:

18                   (1) Lead the development of strategies, actions, key performance indicators, and equity  
19 metrics to be included in the energy element of the CAP, including proposals for meeting the City’s  
20 Renewable Energy goals and for developing community programming that reduces Greenhouse Gas  
21 emissions and incentivizes electrification.

22                   (2) Maintain energy supply portfolios for its energy-providing programs that align with  
23 the Greenhouse Gas emission targets set forth in Section 902.

24                   (h) The Office of Resilience and Capital Planning under the City Administrator shall:  
25

1                   (1) Collaborate with the Department of the Environment and other City departments to  
2 align long-term funding needs with climate adaptation or mitigation strategies and to reflect those  
3 priorities in the 10-year capital plan and in agency capital plans; and

4                   (2) Work with the Department of the Environment and other departments to coordinate  
5 and prioritize climate adaptation and mitigation strategies articulated in the Office's Hazards and  
6 Climate Resilience Plan and the CAP.

7                   (i) The Purchasing Department under the City Administrator shall work with the Department of  
8 the Environment and other departments to review, and, as appropriate, recommend amendments to  
9 City procurement laws and practices, including but not limited to Chapter 2 of this Code  
10 (Environmentally Preferable Purchasing Ordinance), to include the impact of City procurement  
11 decisions on achieving City emissions reduction targets and achieving other environmental and health  
12 benefits.

13                   (j) All City agencies shall, as needed:

14                   (1) Provide data, information, and feedback to the Department of the Environment in  
15 developing the CAP;

16                   (2) Consider the effect of decisions and activities under their jurisdiction on the goals of  
17 reducing Greenhouse Gas emissions and at the same time promoting racial and social equity,  
18 consistent with the CAP and the goals set forth in Section 902;

19                   (3) Streamline the review and approval processes for housing projects, particularly  
20 those projects with 100% affordable housing and development agreement projects;

21                   (4) Coordinate with other City departments on the development and implementation of  
22 climate-related regulations;

23                   (5) Improve interagency coordination and communication, and coordinate funding  
24 where feasible, to advance ongoing City initiatives with co-benefits for climate change, health and  
25 equity, including Vision Zero, Transit First, and City targets for affordable housing development; and

1                    (6) Support community engagement efforts for the CAP.

2  
3        **SEC. 907. LOCAL ENERGY GENERATION.**

4                    ~~The Board of Supervisors urges the SFPUC to develop and to implement an energy action plan~~  
5 ~~that includes at least the following:~~

6                    ~~(a) In coordination with the Department of the Environment, develop a plan to achieve the goal~~  
7 ~~of San Francisco becoming fossil fuel free by 2030;~~

8                    ~~(b) In coordination with the Department of the Environment, setting annual goals for~~  
9 ~~generating electricity locally through renewable generation; and~~

10                    ~~(c) Integrating the greenhouse gas emissions targets and policies of this Ordinance into the~~  
11 ~~Sewer Master Plan.~~

12  
13        **SEC. 907. MONITORING, EVALUATION, AND REPORTING.**

14                    (a) The City shall demonstrate its long-term commitment to reducing Greenhouse Gas  
15 emissions and advancing racial and social equity by measuring and reporting emissions, tracking key  
16 performance indicators and equity metrics, and monitoring the City’s progress on meeting its climate  
17 action goals and commitments.

18                    (b) The Department of the Environment shall, with the assistance from relevant City agencies:

19                    (1) Measure and monitor Sector-Based Greenhouse Gas Emissions, including  
20 municipal emissions, using best available global protocols for preparing Citywide Greenhouse Gas  
21 emission inventories.

22                    (2) Measure production and consumption emissions using best available global  
23 methodologies for preparing consumption-based emission inventories.

24                    (3) Evaluate Sector-Based Greenhouse Gas Emissions against set targets, document  
25 production and consumption emissions, and produce a Greenhouse Gas emissions report.

1                   (4) Establish a monitoring and reporting process for the implementation of the CAP

2 that:

3                   (A) Tracks key performance indicators and equity metrics for strategies to help  
4 monitor their progress and implementation;

5                   (B) Reports progress against the Paris Agreement and its goal of limiting global  
6 warming to 1.5 degrees Celsius.

7                   (5) Request and receive data from City departments starting August of every year to  
8 support:

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

14                   (B) Monitoring and reporting of CAP implementation. City departments may be  
15 asked to provide data on key performance indicators and equity metrics related to adopted strategies  
16 and actions; and

17                   (C) The development and delivery of annual municipal building energy  
18 benchmarking reports.

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

21                   (7) Report its findings in a progress report to the public every two years.

22  
23                   Section 2. Effective Date. This ordinance shall become effective 30 days after  
24 enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the

1 ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board  
2 of Supervisors overrides the Mayor's veto of the ordinance.

3  
4 Section 3. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors  
5 intends to amend only those words, phrases, paragraphs, subsections, sections, articles,  
6 numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal  
7 Code that are explicitly shown in this ordinance as additions, deletions, Board amendment  
8 additions, and Board amendment deletions in accordance with the "Note" that appears under  
9 the official title of the ordinance.

10  
11  
12 APPROVED AS TO FORM:  
13 DENNIS J. HERRERA, City Attorney

14  
15 By:           /s/ Thomas J. Owen            
16 THOMAS J. OWEN  
17 Deputy City Attorney

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19  
20  
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## **LEGISLATIVE DIGEST**

[Environment Code - Climate Action Plan]

### **Ordinance amending the Environment Code to update the City's climate action goals and planning process, and establish departmental roles and responsibilities.**

#### **Existing Law**

Chapter 9 of the Environment Code, adopted in 2008, addresses the City's targets for reducing greenhouse gas emissions and departmental action plans for achieving those reductions. The Chapter sets the following specific targets:

- By 2017, reduce greenhouse gas emissions by 25% below 1990 levels;
- By 2025, reduce greenhouse gas emissions by 40% below 1990 levels; and
- By 2050, reduce greenhouse gas emissions to 80% below 1990 levels.

All City departments, with the assistance of the Department of the Environment, must assess their greenhouse gas emissions and prepare written action plans to reduce those emissions, and update those assessments and plans annually. The Chapter also imposes department-specific duties on the Planning Department, the Department of Building Inspection, the Department of Public Works, the Department of Public Works, and the City Administrator. The Department of the Environment must prepare an annual report to the Board of Supervisors on the City's progress towards achieving the targeted reductions in greenhouse gas emissions.

And the Chapter urges the San Francisco PUC to develop and to implement an energy action plan that includes: becoming fossil fuel free by 2030; generating electricity locally through renewable generation; and integrating the greenhouse gas emissions targets into the Sewer Master Plan.

#### **Amendments to Current Law**

The proposed legislation is an ordinance that would amend the Environment Code to update and revise Chapter 9. The ordinance would adopt new targets for reducing San Francisco greenhouse gas emissions:

- By 2030, reduce Sector-Based Greenhouse Gas Emissions by 61% below 1990 levels;
- By 2030, reduce Consumption-Based Greenhouse Gas Emissions by 40% below 1990 levels;
- By 2045, reach Net Zero Sector-Based Greenhouse Gas Emissions by reducing such emissions by 90% below 1990 levels and sequestering any residual emissions; and



- By 2050, reduce Consumption-Based Greenhouse Gas Emissions by 80% below 1990 levels.

Under the ordinance, “Sector-Based Greenhouse Gas Emissions” are all of the Greenhouse Gas emissions generated within the City in a given time period. “Consumption-Based Greenhouse Gas Emissions” are all the Greenhouse Gas emissions associated with producing, transporting, using, and disposing of products and services consumed by the City in a given time period, including emissions generated outside the City. “Net Zero Sector-Based Greenhouse Gas Emissions” means Sector-Based Greenhouse Gas Emissions after first eliminating emissions from fossil fuels and other sources, and then, for each ton of emissions that cannot be eliminated, removing a ton of carbon dioxide equivalent from the atmosphere.

The ordinance also would incorporate a “0-80-100-Roots” climate action framework, where “0” refers to a goal of zero waste, “80” refers to a goal of 80% low-carbon trips, “100” refers to a goal of 100% renewable energy, and “Roots” refers to sequestering carbon through natural systems. To reach the emissions reduction targets of Chapter 9 and the sustainability goals of the 0-80-100-Roots framework, the City would adopt the following climate action goals:

- **Zero Waste.** By 2030, a reduction in the generation of solid waste of at least 15% below 2015 levels and a reduction in the amount of solid waste disposed of by incineration or deposit in landfill of at least 50% below 2015 levels;
- **Transportation.** By 2030, an increase in low-carbon trips to at least 80% of all trips measured and an increase in the level of electrification of vehicles to at least 25% of all private vehicles registered, and by 2040, an increase in the level of electrification of vehicles to 100% of all private vehicles registered;
- **Energy.** By 2025, supplying 100% renewable electricity, and by 2045, supplying 100% renewable energy;
- **Housing.** Building 5,000 new housing units per year, including 30% affordable units;
- **Buildings.** By 2021, requiring zero onsite fossil fuel emissions from all new buildings, and by 2035, requiring zero onsite fossil fuel emissions from all large existing commercial buildings; and
- **Roots.** Sequestering carbon through ecosystem restoration, including increased urban tree canopy, green infrastructure, and compost application.

All of these climate action goals would also include complementary goals of advancing racial and social equity, protecting public health (including the health needs of vulnerable populations), increasing community resilience, and fostering a more just economy.

The ordinance would require the City to prepare a Climate Action Plan by the end of 2021 and submit the Plan to the Mayor for the Mayor’s approval. The ordinance would set out the required elements of the Plan, including an equity framework that would address historic racial and social inequities; prioritize social, economic, and environmental benefits derived from implementing the Plan; and ensure an equitable distribution of those benefits.

Elements of the Plan would include: energy supply; transportation and land use; building operations; housing; responsible production and consumption; and carbon sequestration. (The Department of the Environment would add a water element within one year.) The Plan would identify strategies and make recommendations to meet emissions reduction targets for all elements. Each strategy or recommendation would identify parties responsible for implementation, incorporate an estimated cost; and list key performance indicators and explicit equity metrics to measure progress. The Department of the Environment would be required to update the Climate Action Plan every five years.

The ordinance would establish roles and responsibilities related to climate action planning and implementation for individual City departments, including Planning, Public Health, Building Inspection, Public Works, the San Francisco Municipal Transportation Agency, the San Francisco Public Utilities Commission, the Office of Resilience and Capital Planning, and Purchasing. The Department of the Environment, with assistance from relevant City agencies, would be responsible for 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.

#### Background Information

Existing Section 906 ("Market-Based Compliance Mechanisms"), Section 908 ("Miscellaneous"), and Section 909 ("Implementation of All-Electric Building Standard") of Chapter 9 would not be affected by this legislation.

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