CURRENT

SUBJECT: ZERO EMISSIONS MUNICIPAL BUILDINGS AND

OPERATIONS POLICY

POLICY NO.: 900-03

EFFECTIVE DATE: December 19, 2024

BACKGROUND:

I. California Law and Policy

Since 2006, the State of California has enacted laws and adopted policies designed to reduce *Greenhouse Gas (GHG) Emissions* within the state to prevent global warming. Among them:

- The Global Warming Solutions Act of 2006, Assembly Bill 32 (2018-2019 Reg. Sess.) (A.B. 32), requires a reduction in GHG Emissions to 1990 levels by 2020 and beyond.
- The Energy Efficiency Strategic Plan was adopted by the California Public Utilities Commission in response to A.B. 32. It requires all new commercial construction to be Zero Net Energy by 2030, and 50% of existing buildings to be Zero Net Energy by 2030.
- The Clean Energy and Pollution Reduction Act, Senate Bill 350 (2015-2016 Reg. Sess.) (S.B. 350), requires California to set a renewable electricity procurement goal of 50% by 2030, and double energy efficiency savings in electricity and natural gas end uses by 2030.
- The 100% Clean Energy Act of 2018, Senate Bill 100 (2017-2018 Reg. Sess.) (S.B. 100), sets a world-leading precedent by committing to 100% renewable and zero-carbon electricity in California by 2045, speeding up the state's timeline for moving to carbon-free power sources.
- The Zero Emissions Buildings and Sources of Heat Energy Act of 2018, Assembly Bill 3232 (2017-2018 Reg. Sess.) (A.B. 3232), required the California Energy Commission to assess, by January 1, 2021, how to reduce GHG emissions from the state's building stock by 40% below 1990 levels by 2030.
- The California Building Standards Code (California Code of Regulations, Title 24) sets prescriptive requirements and performance standards for building energy efficiency, use of electric appliances, provision of circuits and panel capacity to support electric appliances, onsite solar panels, onsite battery storage systems, and provision of electric vehicle chargers at nonresidential buildings.

CURRENT

- Executive Order N-79-20, issued by Governor Newsom on September 23, 2020, declared that by 2035, all new cars and passenger trucks sold in California must be zeroemission vehicles.
- The Advanced Clean Truck regulation issued by the California Air Resources Board in 2020 requires a steadily increasing share of medium and heavy trucks sold in California from 2024 onward to be zero emissions vehicles.

II. City of San Diego Policy

In 2014, the City Council (Council) of the City of San Diego (City) adopted Council Policy 900-14, the Sustainable Buildings Policy, which sets forth the City's commitment to follow green building practices in City facilities and provide leadership and guidance in promoting, facilitating, and instituting such practices in the community. In 2022, Council adopted the Climate Action Plan update (CAP), which calls for eliminating all GHG Emissions in the City and aims for all electricity to be generated from zero carbon sources by 2035. The CAP states that natural gas consumption at City facilities will be reduced by 50% by 2030 and eliminated by 2035. The CAP further states that 50% of all light, medium, and heavy-duty municipal fleet vehicles will be zero emissions vehicles by 2030, and that 100% of light duty and 75% of medium and heavy-duty municipal fleet vehicles will be zero emissions vehicles by 2035.

PURPOSE:

This Policy establishes a framework for achieving the goal of portfolio-wide zero *GHG Emissions* in City-owned and leased buildings and operations by 2035 by prioritizing proven energy efficiency strategies, eliminating the use of non-emergency *Fossil Fuel Systems*, requiring *Electric Vehicle* charging, and requiring the generation, or procurement of, renewable or zero carbon energy to power municipal building operations.

POLICY:

I. Definitions

- A. Automated Load Management System: A system designed to manage load across one or more Electric Vehicle Supply Equipment (EVSE) to share electrical capacity and/or automatically manage power at each connection point.
- B. Battery Energy Storage System: A technology developed for storing electric charge by using specially developed batteries. Stored energy can be discharged from the battery to supply building end uses at a later time.

- C. Cost Effective: The economic analysis indicates that the cost of installation of renewable electricity generation plus energy storage equipment at the site could be recouped through savings, revenue under Net Energy Metering, or other available utility programs using a 20-year time horizon, or within the term of a third-party ownership agreement, such as a Power Purchase Agreement Energy Management Services Agreement or similar agreement, which shall not exceed 20 years.
- D. Design Target: The annual energy use intensity calculated for a Proposed Design.
- E. Direct Current Fast Charger (DCFC): A device capable of charging an electric car with direct current electricity at a rate of at least 50 kilowatts and meeting the definition and requirements of a DCFC stated in the California Code of Regulations, Title 24.
- F. *Electric Vehicle* (*EV*): A vehicle whose drivetrain is powered exclusively by electricity.
- G. Electric Vehicle Supply Equipment (EVSE): The conductors, including the ungrounded, grounded, and equipment grounding conductors, and the Electric Vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the Electric Vehicle.
- H. *Energy Retrofit*: Any construction, retrofit, renovation, or equipment replacement to an existing building other than a *Major Renovation*, that alters, reconfigures, or replaces the *Thermal Envelope* of a building, its *Fossil Fuel Systems*, or other energy-consuming systems and equipment.
- I. Energy Use Intensity (EUI): A measurement that quantifies a building's site energy use relative to its size. A building's energy use intensity is calculated by dividing the total net energy consumed in one year by the gross floor area of the building, excluding the parking garage. EUI is reported as a value of thousand British thermal units per square foot per year (kBtu/sq.ft./yr).
- J. *EV Ready Space*: An automotive parking space that is provided with one dedicated branch circuit for *Electric Vehicle Supply Equipment* that is terminated at a receptacle, junction box, or *Electric Vehicle Supply Equipment* within the parking space.
- K. *EVSE Space*: An automotive parking space equipped with a dedicated branch circuit and installed *Electric Vehicle Supply Equipment*. Level 2 *EVSE* shall be capable of supplying at least 30 amperes at 208/240 volts.

- L. Fossil Fuel: For the purposes of this Policy, Fossil Fuel refers to any solid, liquid, or gaseous fuel consumed in buildings, generators, equipment, or vehicles, other than those that are sourced exclusively from a verified renewable source accepted for credit under the California Renewables Portfolio Standard. Fossil fuels include, but are not limited to, coal, natural gas (methane), gasoline, diesel, kerosene, and propane. All fuels are presumed to be fossil fuels unless proven otherwise.
- M. *Fossil Fuel System*: a combination of equipment and auxiliary devices by which fossil fuel energy is transformed so it performs a specific function, such as heating, ventilation, and air conditioning (HVAC) and service water heating.
- N. Global Warming Potential (GWP): The equivalent amount of carbon dioxide associated with the warming effect of a given quantity of a GHG expressed as CO2-equivalent (CO2e).
- O. Greenhouse Gas (GHG) Emissions: A measure used to determine and compare the emissions of various greenhouse gases based upon their Global Warming Potential. Carbon dioxide equivalent (CO2e) emissions from carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O) are included. The CO2e for a gas is calculated by multiplying the weight of the gas by its associated GWP.
- P. *Heavy Duty Vehicle*: A road vehicle with a gross vehicle weight rating of greater than 26,000 pounds.
- Q. Light Duty Vehicle: A road vehicle with a gross vehicle weight rating of 10,000 pounds or less, such as a sedan, sport utility vehicle, pickup truck, or utility van.
- R. Level 1 Electric Vehicle Space: A parking space, which is either EV Ready, or has an EVSE installed and which has or is designed to receive a dedicated 120 volt branch circuit with 16 or 20 ampere capacity.
- S. Level 2 Electric Vehicle Space: A parking space, which is either EV Ready, or has an EVSE installed and which has or is designed to receive a dedicated 208/240 volt, 40 ampere branch circuit.
- T. *Major Renovation*: A *Major Renovation* shall mean:
 - 1. Any repaving, alteration, addition, or improvement of a parking lot or parking garage where the work area exceeds 50% of the parking area; or
 - 2. Any repair, alteration, addition, or improvement of a building, which includes replacement of two or more of the following:

- a) HVAC unitary systems or HVAC central heating or cooling equipment serving the alteration area.
- b) 50% or more of the internal lighting fixtures in the building.
- c) 50% or more of the external lighting fixtures on the building exterior and in the parking lot.
- d) 50% or more of the area of interior surfaces in the building.
- e) 50% or more of the area of the building's exterior wall envelope.
- U. *Medium Duty Vehicle*: A road vehicle with a gross vehicle weight rating of between 10,001 and 26,000 pounds.
- V. *New Construction*: Any newly constructed building, facility, or parking lot that has never been previously used or occupied for any purpose.
- W. *On-Site Renewable Energy System*: Photovoltaic, solar thermal, geothermal, wind, hydroelectric, landfill gas, and digester gas systems used to generate energy and located on any of the following:
 - 1. The building;
 - 2. The property upon which the building is located;
 - 3. An adjacent property that shares a boundary with and is under the same ownership or control as the property on which the building is located; or
 - 4. A property that is under the same ownership or control as the property on which the building is located and is separated only by a public right-of-way from the property on which the building is located.
- X. Prescriptive Energy Efficiency Measure Menu for Major Renovation Projects: A menu consisting of prescriptive energy efficiency measures for a major renovation project to an existing building that must meet the requirements set forth in this Policy, as an alternative to demonstrating compliance by way of conducting a Title 24 Part 6 energy model and/or calculating an EUI.
- Y. *Proposed Design*: A description of the proposed building, or portion thereof, used to estimate annual energy use and *Fossil Fuel* combustion, used as the basis for calculating the *Design Target*.

CURRENT

- Z. *Renewable Energy System*: Photovoltaic, solar thermal, geothermal, wind, hydroelectric, landfill gas, and digester gas systems used to generate energy.
- AA. *Thermal Envelope*: The basement walls, exterior walls, floors, ceilings, roofs, windows, and any other building element assemblies that enclose conditioned space or provide a boundary between conditioned space and exempt or unconditioned space.

II. Scope

- A. Commencing with this Policy, all managers of City-owned and occupied buildings and facilities must take action as provided in this Policy to achieve net zero emissions. This shall be achieved in *New Construction, Major Renovation, and Energy Retrofit* projects by implementing the following strategies:
 - 1. Prioritizing energy efficiency by achieving appropriate site *Energy Use Intensity (EUI)* or *Prescriptive Energy Efficiency Measure Menu for Major Renovation Projects* targets;
 - 2. Specifying electric sources for space conditioning, water heating, cooking, lighting, and all other non-emergency functions;
 - 3. Offsetting building operational energy use with *Renewable Energy Systems*; and
 - 4. Providing parking spaces equipped to charge *Electric Vehicles*.
- B. Additionally, City departments shall develop plans for the elimination of all sources of *Fossil Fuel* combustion within their existing buildings and facilities and for the provision of vehicle chargers for all *Light Duty Vehicles* in their fleets by 2035.
- C. Additionally, all new leases, and lease renewals of City-owned buildings and land (i.e., leases where the City is the landlord) that require Council approval shall incorporate portions of this Policy into the lease terms.

III. Implementation

A. Building Efficiency

CURRENT

1. All *New Construction* projects of buildings larger than 1,000 square feet shall use energy modeling to demonstrate that the *Proposed Design* yields energy consumption which is either no greater than the applicable site *EUI* targets specified in Table 1 or at least 10% lower than the Standard Design annual time dependent value energy use calculated by the methodology established in the California Code of Regulations, Title 24 Part 6.

Table 1: Proposed Site EUI Targets for New Construction Projects

Building Type	Site EUI Target for New Construction (kBtu/sq.ft./year)
Community Center	20
Fire Station	28
Laboratory	160
Library	28
Medium Office (≤100,000 Sq. Ft)	20
Museum	18
Non-refrigerated Warehouse	8
Operations Yard (Vehicle service)	25
Police	45
Recreation Center	20
Refrigerated Warehouse	15
Restaurant	150
Senior Center	30
Theater	20

Industrial facilities such as landfills, pump stations, and treatment plants are exempt from this requirement because their energy consumption is determined by industrial process factors which are not proportional to their floor area. Where an industrial facility includes onsite office buildings, laboratories, warehouses, or other uses listed in Table 1, which are larger than 1,000 square feet, this requirement applies to those portions of the buildings or areas with those uses.

CURRENT

2. All *Major Renovation* projects to buildings larger than 1,000 square feet shall use energy modeling to demonstrate that the *Proposed Design* yields energy consumption which is either no greater than the applicable site *EUI* targets specified in Table 2 or no greater than the Standard Design annual time dependent value energy use for new buildings calculated by the methodology established in the California Code of Regulations, Title 24 Part 6.

Table 2: Proposed Site EUI Targets for Major Renovation Projects

Building Type	Site EUI Target for Major Renovation (kBtu/sq.ft./yr)
Fire Station	35
Library	35
Medium Office (≤50,000 Sq. Ft)	27
Non-refrigerated Warehouse	12
Operations Yard (Vehicle service)	35
Police	55
Recreation Center	25
Refrigerated Warehouse	25
Restaurant	200

If the project team does not include an energy designer/consultant and an energy model is not being produced, selecting energy efficiency measures that add up to 25 points on the *Prescriptive Energy Efficiency Measure Menu for Major Renovation Projects* can also meet this requirement.

Industrial facilities such as landfills, pump stations, and treatment plants are exempt from this requirement because their energy consumption is determined by industrial process factors which are not proportional to their floor area. Where an industrial facility includes onsite office buildings, laboratories, warehouses, or other uses listed in Table 2, which are larger than 1,000 square feet, this requirement applies to those portions of the buildings or areas with those uses.

CURRENT

B. Zero Emission Buildings

1. All *New Construction* and *Major Renovation* projects shall be designed and operated with exclusively electric systems or appliances for space conditioning, water heating, cooking, and lighting, and without using any *Fossil Fuel* energy source for non-emergency electricity generation or any other non-emergency functions. In the case of *Major Renovation* projects, this requirement shall apply to the entirety of the building or facility being renovated.

a) Exceptions:

- Facilities which use an onsite source of renewable gas
 (limited to landfill gas and wastewater treatment plant
 digester gas) for digester heating, renewable electricity
 generation, or other essential functions may use
 nonrenewable gas at times when the supply of renewable
 gas is disrupted.
- ii. Flares at landfills, wastewater plants, and similar facilities may use supplemental natural gas to the extent necessary to meet air quality regulations.
- 2. All New Construction and Major Renovation projects of buildings larger than 1,000 square feet shall install onsite renewable electricity generation and storage. Sizing of renewable energy generation equipment shall be sized to *match* the annual average building electricity consumption. If a Fleet Charging Plan has been adopted, renewable energy generation equipment sizing shall also consider the annual average light-duty vehicle consumption. This equipment shall be installed either as part of the construction or renovation project or separately within two years of final inspection on the facility construction or renovation. Sizing of Battery Energy Storage Systems shall be evaluated based on their economic impact to facility operations, reliability benefits, and availability of physical space for BESSBESS. The generation and storage equipment may be City-owned or third party-owned. Facility designs shall anticipate the addition of solar panels or other renewable generation and energy storage.

CITY OF SAN DIEGO, CALIFORNIA COUNCIL POLICY

- a) Solar Ready:
 - i. New Construction and Major Renovation projects planning to install solar separately within two years of final inspection will be designed solar-ready and meet the following requirements:
 - a. The solar zone total area shall be comprised of areas that have no dimension less than five feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet.
 - b. The solar zone shall comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9, other Parts of Title 24, or in any requirements adopted by the City of San Diego.
- b) Exceptions:
 - i. The generation and storage requirement may be reduced or avoided if economic analysis indicates that the project is not *Cost Effective*.
 - ii. The generation requirement may be reduced or avoided if existing or planned tree canopy cover makes a location unsuitable for solar power. Due to the availability of clean grid power through San Diego Community Power, opportunities for establishment of new tree canopy shall be prioritized above establishment of new onsite solar power at City facilities in cases of conflict.
- 3. All *New Construction* and *Major Renovation* projects shall obtain 100% of their energy, except for emergency generation, from zero-carbon or renewable sources, using one of more of the following acceptable sources:
 - i. *Onsite Renewable Energy System*;
 - ii. Directly owned off-site *Renewable Energy System*;

- iii. Power purchase agreement;
- iv. Zero-carbon or renewable fuel purchase agreement; or
- v. 100% zero-carbon electricity rate options offered by the facility's community choice aggregator (San Diego Community Power (SDCP)) or electric utility.
- a) *Onsite Renewable Energy Systems* are preferred over other acceptable zero-carbon or renewable sources.
- b) Energy sources used must be 100% zero-carbon or renewable on an annual net basis. Sources for which the zero-carbon or renewable energy generation is matched to the time of consumption are preferred.
- c) The zero-carbon or renewable energy generating source shall be a source which is classified as zero-carbon under the 100% Clean Energy Act of 2018 (S.B. 100) or recognized for credit by the California Renewables Energy Portfolio Standard, such as the following: photovoltaic systems; solar thermal power plants; geothermal power plants; wind turbines; hydroelectric plants; and fuel cells, turbines, or internal combustion engines powered by landfill gas or digester gas.
- d) Fuel cells, turbines, or internal combustion engines powered by renewable energy sources may use nonrenewable energy sources only for incidental or emergency use when supply of the renewable fuel is temporarily disrupted and within the limitations on nonrenewable fuel use by such facilities described in the California Renewables Energy Portfolio Standard.
- e) Off-site zero-carbon or renewable energy (including electricity and fuels) delivered or credited to the facility shall be subject to a legally binding contract to procure qualifying off-site zero-carbon or renewable energy. Qualifying off-site energy shall meet the following requirements:
 - i. The City shall sign a legally binding contract to procure qualifying off-site zero-carbon or renewable energy with a minimum duration of 20 years.
 - ii. The generation source shall be located where the energy can be delivered to the building or facility by the same utility or distribution entity, the California Independent System Operator, or the Western Electric Coordination Council.

CURRENT

- iii. Exception: Purchase of 100% zero-carbon or renewable electricity from San Diego Community Power is acceptable without a long-term contract.
- 4. New and existing buildings and facilities, which obtain energy from onsite or off-site zero-carbon or *Renewable Energy Sources*, shall continue to use zero-carbon or renewable energy from that source or a replacement source throughout the life of the building/facility.
- 5. All municipal buildings and facilities not covered by the above requirements shall obtain 100% of their electricity and other energy, excluding emergency generation, from zero-carbon or renewable sources to the greatest extent feasible and cost effective as soon as is feasible, and in no case later than by 2035.
- 6. Projects that are not classified as *New Construction* or *Major Renovation* projects shall meet the following requirements:
 - a) Energy Retrofit projects shall prioritize measures that result in the replacement of Fossil Fuel Systems used to meet space-conditioning loads and provide hot water with efficient all-electric systems.
 - b) All *Fossil Fuel Systems* used for space conditioning, water heating, cooking, lighting, and all other non-emergency functions shall be replaced with all-electric systems upon the end of that system's useful life.
 - c) No new *Fossil Fuel Systems* used for space conditioning, water heating, cooking, lighting, or any other non-emergency function shall be installed.

C. Electric Vehicle Charging

1. *New Construction* and *Major Renovation* projects with parking facilities for passenger and *Light Duty Vehicles* shall include *Electric Vehicle* charging infrastructure that meets the following requirements:

CURRENT

- a) The parking facility shall include sufficient reserved parking spaces for the number of City-owned *Light Duty Vehicles* expected to be parked there overnight. *Light Duty Vehicle* fleet spaces shall be made *EV Ready Spaces* at the time of construction in a manner consistent with the approved light Fleet Charging Plan for the facility. In absence of an approved Fleet Charging Plan, every two parking spaces designated for overnight parking of City-owned *Light Duty Vehicles* shall be *Level 2 EV Ready Spaces* to achieve a vehicle charger ratio of 2:1.
- b) At newly constructed buildings, parking lots, or parking garages, EV charging infrastructure requirements shall be designed to meet the requirements of CALGreen Tier 1. If any local, state, and/or federal code contains requirements more stringent than CALGreen Tier 1, EV charging infrastructure shall be designed to meet the more stringent code compliance requirements.
 - i. *EV* spaces accessible to the public or to employee private vehicles shall be connected to a separate electric panel and meter other than the panel and meter used for the City building and fleet charging.

D. GHG Emissions Reporting

- 1. All *New Construction* and *Major Renovation* projects larger than 1,000 square feet shall meet the following requirements:
 - a) Prior to submission of final building permit inspection, the architect or engineer of record shall submit to the City Manager or their designee, with a carbon copy to the Sustainability and Mobility Department Director, a GHG Emissions Compliance Report that includes:
 - i. Documentation of the applicable energy efficiency requirements under this Policy and energy modeling documentation that the *Proposed Design* meets the *Design Target*, or a completed *Prescriptive Energy Efficiency Measure Menu for Major Renovation Projects* indicating the minimum number of points (25) has been achieved.

CURRENT

- ii. An inventory of all *Fossil Fuel* consuming appliances and equipment and confirmation that space conditioning, hot water heating, and other non-exempt energy-consuming needs are met with all-electric systems and appliances.
- iii. An estimate of the annual *GHG Emissions* associated with the project. The estimate shall be made in accordance with ASHRAE Standard 105, Section 7 using GHG emissions factors published by the EPA.
- iv. A renewable energy assessment that identifies the zerocarbon or renewable energy sources that will be used to meet the energy needs of the building or facility.

E. Fossil Fuel Elimination Plans

- 1. By January 1, 2025, all AMDs shall submit a detailed *Fossil Fuel* Elimination Plan to the City Manager or their designee that identifies and prioritizes the strategies needed to eliminate *Fossil Fuel* combustion within each facility by 2035. This plan shall include:
 - a) The necessary actions, funding, and investments needed to eliminate Fossil Fuel Systems;
 - b) A timeline for substantial alterations and system replacement efforts;
 - c) Priority actions for system replacement efforts that have the greatest potential return on investment based on cost analysis that includes the cost of carbon emission impacts; and
 - d) Demonstration that the plan achieves at least a <u>50</u>% reduction of the department's direct *GHG Emissions* from *Fossil Fuel* combustion relative to 2019 levels by January 1, 2030 and 100% reduction by January 1, 2035.
- 2. All AMDs shall submit a report by January 1, 2026, to the City Manager or their designee and each year thereafter documenting their progress made in *Fossil Fuel* elimination. This annual report shall include an update to the *Fossil Fuel* Elimination Plan reflecting documented progress and remaining work.

CITY OF SAN DIEGO, CALIFORNIA COUNCIL POLICY

CURRENT

F. Fleet Charging Plans

- 1. By January 1, 2026, all AMDs shall submit a detailed Fleet Charging Plan to the City Manager or their designee that identifies and prioritizes the strategies needed to transition *Light Duty Vehicles*, *Medium Duty Vehicles* and *Heavy Duty Vehicles* to *EV*, in order to support electrification of all City-owned *Light Duty Vehicles* and 75% of City-owned *Medium Duty Vehicles* and *Heavy Duty Vehicles* by 2035.
- 2. The Fleet Charging Plans shall identify prospective charging locations for all City-owned vehicles that park overnight at prioritized facilities managed by the respective AMD. For each facility, these plans shall include:
 - a) The necessary actions, funding, and investments needed to electrify vehicles.
 - b) A list of all City-owned vehicles organized by vehicle classification of *Light Duty Vehicles*, *Medium Duty Vehicles* and *Heavy Duty Vehicles*, which use the facility as their primary parking location or otherwise use the facility as an overnight parking location. The list shall include the AMD's vehicles as well as any vehicles from other departments that normally park at the facility.
 - c) An assessment of the number, type, and power level of *EVSE's* most suitable for the location. The assessment is based on the daily mileage, cost, and charging requirements in terms of Vehicle per Port ratio for each vehicle.
 - d) A timeline for installation of *EVSE*.
 - e) Potential locations for the installation of EVSE.
- 3. All AMDs shall submit an update to the Fleet Charging Plans by January 1, 2027, to the City Manager or their designee and each year thereafter documenting progress made in installing vehicle chargers for their department's fleet and work remaining.

CURRENT

G. Leased Properties

- 1. All new leases and lease renewals of City-owned buildings and land (i.e., leases where the City is the landlord) that require Council approval shall include in the terms and conditions Policy provisions that apply the following requirements at all leased buildings and land.
 - a) The lessee is required to obtain for leased buildings and facilities 100% of electricity and other energy, excluding emergency generation required by local, state, or federal code, from zero-carbon or renewable sources no later than by 2035.
 - b) All leases shall meet the following requirements:
 - i. *Energy Retrofit* projects shall prioritize measures that result in the replacement of *Fossil Fuel Systems* used to meet space-conditioning loads and provide hot water with efficient all-electric systems.
 - ii. All *Fossil Fuel Systems* used for space conditioning, water heating, cooking, lighting, and all other non-emergency functions shall be replaced with all-electric systems upon the end of that system's useful life and in no case later than by 2035, regardless which party maintains the systems (i.e. City or lessee).
 - iii. No new *Fossil Fuel Systems* used for space conditioning, water heating, cooking, lighting, or any other non-emergency function shall be installed.

c) GHG Emissions Reporting

- i. For all *New Construction* projects larger than 1,000 square feet completed after the incorporation of this Policy into the lease agreement:
 - a. Prior to submission of final building permit inspection, the architect or engineer of record shall submit to the City Manager or their designee, with a carbon copy to the Sustainability and Mobility Department Director, a GHG Emissions Compliance Report that includes:

CURRENT

- 1. Documentation of the applicable energy efficiency requirements under this Policy and energy modeling documentation that the *Proposed Design* meets the *Design Target*.
- 2. An inventory of all *Fossil Fuel* consuming appliances and equipment and confirmation that space conditioning, hot water heating, and other non-exempt energy-consuming needs are met with all-electric systems and appliances.
- 3. An estimate of the annual *GHG Emissions* associated with the project. The estimate shall be made in accordance with ASHRAE Standard 105, Section 7 using GHG emissions factors published by the EPA.
- 4. A renewable energy assessment that identifies the zero-carbon or renewable energy sources that will be used to meet the energy needs of the building or facility.

d) Exemptions

- i. Facilities which use an onsite source of renewable gas (limited to landfill gas and wastewater treatment plant digester gas) for digester heating, renewable electricity generation, or other essential functions may use nonrenewable gas at times when the supply of renewable gas is disrupted.
- ii. Flares at landfills, wastewater plants, and similar facilities may use supplemental natural gas to the extent necessary to meet air quality regulations.
- iii. Industrial facilities such as landfills, pump stations, and treatment plants because their energy consumption is determined by industrial process factors which are not proportional to their floor area.

CURRENT

e) Exceptions

Lessees can follow the exception process outlined in section I. below if a portion of Council Policy 900-03 cannot be met.

2. If the City has been leasing City-owned buildings or land to a specific tenant since before January 1, 2024, and if the City proposes to grant a time extension or a new lease to that same tenant effective on or after January 1, 2024, that will require Council approval, the City Manager or their designee may propose to revise or omit specific provisions of this Policy when negotiating the lease terms on a case by case basis if the City Manager or their designee determines that the tenant has presented compelling reasons for the revision or waiver.

H. Exemptions

1. Projects to construct or provide emergency shelter are exempt from all requirements of this Policy, except buildings shall procure their electricity from a zero-carbon or renewable source, such as through qualifying options offered by San Diego Community Power.

I. Exceptions

- 1. An exception from portions of Council Policy 900-03 can be requested if part of Council Policy 900-03 cannot be met. A memo requesting the exception and providing justification is needed to make a formal request for an exception. The Asset Managing Department or the Lessee shall submit the memo to the City Manager or their designee, with carbon copy to the Sustainability and Mobility Department Director. The request shall be approved or denied at the sole discretion of the City Manager or their designee. Once the request is approved or denied by the City Manager or their designee, the AMD or Lessee will be informed via email.
- 2. On an annual basis, staff shall report to City Council the number of projects approved for exception from the policy, accompanied by a brief description of each exception.
- 3. It is the expectation of this Council that exceptions are rare and well documented. Approval of an exception should include a plan and a timeline to resolve the exception before the Climate Action Plan target date. The plan and timeline should be included in the annual monitoring report to Council on policy implementation.

CURRENT

J. Effective Date

This Policy shall apply in full to *all* applicable projects after the passage of the Policy update.

REFERENCES:

- California Department of General Services Zero Net Energy https://www.dgs.ca.gov/OS/Resources/Page-Content/Office-of-Sustainability-Resources- List-Folder/Zero-Net-Energy
- California Zero Code https://zero-code.org/wp-content/uploads/2018/09/ZERO-Code- California.pdf
- 2019 CalGreen https://codes.iccsafe.org/content/CAGBSC2019/cover
- ASHRAE Standard 105 (Methods for Determining, Expressing, and Comparing Building Energy Performance and Greenhouse Gas Emissions) https://webstore.ansi.org/standards/ashrae/ansiashraestandard1052014
- International Organization for Standardization (ISO) standard 14025 https://www.iso.org/standard/38131.html
- International Organization for Standardization (ISO) 21930 https://www.iso.org/standard/61694.html
- European Standard (EN) 15804 https://www.en-standard.eu/csn-en-15804-a2-sustainability-of-construction-works-environmental-product-declarations-core-rules-for-the-product-category-of-construction-products/
- Prescriptive Energy Efficiency Measure Menu for Major Renovation Projects

HISTORY:

"Zero Emissions Municipal Buildings and Operations Policy" Adopted by Resolution R-314377 – 10/11/2022 Amended by Resolution R-315940 – 12/19/2024