

CITY OF SAN DIEGO, CALIFORNIA
COUNCIL POLICY

CURRENT

SUBJECT: ZERO EMISSIONS MUNICIPAL BUILDINGS AND OPERATIONS POLICY
POLICY NO.: 900-03
EFFECTIVE DATE: OCTOBER 11, 2022

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 (2006-2007 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.

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- 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 zero-emission 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

- 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.
- 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.
- Design Target*: The annual energy use intensity calculated for a *Proposed Design*.

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- D. *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.
- E. *Electric Vehicle (EV)*: A vehicle whose drivetrain is powered exclusively by electricity.
- F. *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*.
- G. *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.
- H. *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).
- I. *EV Capable Space*: An automotive parking space that is provided with some of the infrastructure necessary for the future installation of *Electric Vehicle Supply Equipment (EVSE)* at a specified level (Level 1, 2, or DCFC). Infrastructure shall include a raceway that is capable of accommodating a dedicated branch circuit of the appropriate level from a building electrical service panel to the parking space, sufficient electrical capacity and physical space in the same building electrical service panel to accommodate a dual-pole circuit breaker sized to the appropriate level, and sufficient physical space at the parking space for installation of *EVSE*.
- 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.

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- 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 Capable*, *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 Capable*, *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:

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- 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. *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*.
- Y. *Renewable Energy System*: Photovoltaic, solar thermal, geothermal, wind, hydroelectric, landfill gas, and digester gas systems used to generate energy.
- Z. *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.

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III. 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)* 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. The requirements of this Policy shall be incorporated into the terms of all new leases of City-owned buildings and land (i.e., leases where the City is the landlord) that require Council approval. Generally, San Diego Municipal Code section 22.0901 requires Council approval of a new lease if its duration will exceed three years (or will exceed ten years in the case of a telecommunications facility using wireless technology).

IV. Implementation

- A. Building Efficiency
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.

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Table 1: Proposed Site *EUI* Targets for *New Construction* Projects

Building Type	Site <i>EUI</i> Target for <i>New Construction</i> (kBtu/sq.ft./year)
Community Center	20
Fire Station	28
Laboratory	160
Library	28
Medium Office ($\leq 100,000$ 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 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.

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.

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Table 2: Proposed Site *EUI* Targets for *Major Renovation* Projects

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

Industrial facilities such as 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.

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:

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.

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- 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 equipment sized to match the annual average building electricity 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. *Battery Energy Storage Systems* shall be evaluated based on their economic impact to facility operations and reliability benefits. 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.
 - a) Exceptions:
 - i. The generation and storage requirement may be reduced or avoided if economic analysis indicates that the cost of installation of renewable electricity generation plus energy storage equipment at the site could not be recouped through savings, revenue under Net Energy Metering, or other available utility programs using a 20-year time horizon.
 - 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

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- 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.

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- 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:
 - 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 charging plan, all parking spaces designated for overnight parking of City-owned *Light Duty Vehicles* shall be *Level 2 EV Ready Spaces*.

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- b) At newly constructed buildings, parking lots, or parking garages, at least 50% of parking spaces not designated for City-owned vehicles shall be *EV Capable Spaces*, *EV Ready Spaces*, or *EVSE Spaces*.
 - 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.
 - ii. *Direct Current Fast Chargers* of 50 kilowatt capacity or greater may be substituted for *Level 2 EV Capable Spaces* at up to 40% of parking spaces not designated for City-owned vehicles, with one parking space with *DCFC* installed counting as equivalent to five *Level 2 EV Capable Spaces*.
- c) The electrical panel that contains the physical space to accommodate the future installation of circuit breakers for *EV Capable Spaces* shall have sufficient electrical capacity to provide no less than 3.3 kilowatts per *EV Capable Space* and no less than required by state code.
- d) On a case-by-case basis where there is insufficient utility-side electrical supply to meet the above requirements, the number of *EV* spaces not designated for City-owned vehicles may be reduced to the amount which can be accommodated by the supply. If there is not sufficient electrical supply for the facility's planned allocation of City-owned vehicles, adequate supply must be created or the number of City-owned vehicles allocated to the lot must be reduced.
- e) At large parking lots primarily used for special event overflow parking or where a large proportion of spaces are normally not occupied, the *EV* charging requirements may be calculated based on the number of spaces to be regularly occupied rather than the entire lot. Such reductions shall be done on a case-by-case basis and each case shall require approval by the Sustainability and Mobility Department Director or their designee.

D. GHG Emissions Reporting

- 1. For all *New Construction* projects and *Major Renovation* projects larger than 1,000 square feet completed after the adoption of this Policy, the Asset Managing Department (AMD) must disclose the following information to the Mayor or City Manager:

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- a) Prior to submission of final building permit, the architect or engineer of record shall submit a GHG Emissions Compliance report to the Sustainability and Mobility Department Director or their designee 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*.
 - 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 zero-carbon 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 May 1, 2023, all AMD shall submit a *Fossil Fuel* equipment inventory to the Mayor or City Manager which shall include:
 - a) An inventory of each facility's *Fossil Fuel Systems*, their install dates, and the useful life remaining for those systems.
 - b) Any known or anticipated equipment-specific obstacles that would prevent replacement with electric equipment.
- 2. By January 1, 2024, all AMDs shall submit a detailed *Fossil Fuel* elimination plan to the Mayor or City Manager 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;

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- 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;
 - d) Demonstration that the plan achieves at least a 33% reduction of the department's direct *GHG Emissions* from *Fossil Fuel* combustion relative to 2019 levels by January 1, 2028; 55% reduction by January 1, 2030; 67% reduction by January 1, 2031; and 100% reduction by January 1, 2035; and
 - e) Potential locations for the installation of *On-Site Renewable Energy Systems*.
3. All AMDs shall submit a report by January 1, 2025, to the Mayor or City Manager 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.
- F. Fleet Charging Plans
- 1. By January 1, 2024, all AMDs shall submit a detailed light fleet charging plan to the Mayor or City Manager.
 - 2. By January 1, 2026, all AMDs shall submit a detailed medium and heavy fleet charging plan to the Mayor or City Manager.
 - 3. The fleet charging plans shall identify prospective charging locations for all City-owned vehicles which park overnight at each facility, which the respective AMD manages, 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. For each facility, these plans shall include:
 - a) A list of all City-owned 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.
 - b) An estimate of the daily mileage and charging requirement of each vehicle, assuming all *Light Duty Vehicles* are replaced with an equivalent *Electric Vehicle*.
 - c) An assessment of the number and type of chargers most suitable for the location, considering both vehicle usage needs and cost.

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- i. The quantity shall support electrification of all vehicles based at the facility.
 - ii. By default, plans should assume one *Level 2* charging port per *Light Duty Vehicle*.
 - iii. For *Light Duty Vehicles* with modest daily mileage and charging requirements, plans may specify a single *Level 2* charger to be shared between multiple *Electric Vehicles* or use *Level 1* chargers.
 - iv. If *EV* chargers will be shared, the plan shall specify how sharing will be managed, such as by assigning alternating days.
- d) A map of the facility, which indicates the proposed charging locations, the location of the electric panel, and any additional panel or subpanel to be used.
 - e) An estimation of the quantity of circuits and length of conduit required to be installed, the required and available capacity in the electrical panel, whether an *Automated Load Management System* should be used, and whether panel upgrades are required.
 - f) An estimate of the cost to install the specified chargers.
4. Each AMD's medium and heavy fleet charging plan shall include an option and timeline to achieve 100% electrification, going beyond the initial 75% target.
 5. Departments shall additionally submit a list of all vehicles owned or operated by their department, as well as additional vehicles anticipated to be acquired, which indicates the vehicle's assigned parking location and which facility fleet charging plan will accommodate the vehicle. Departments shall ensure that any of their vehicles which park on a facility managed by a different AMD are included in the relevant charging plan. Departments shall include a plan to provide charging to any of their vehicles which currently park at a location not owned and operated by the City.
 6. All AMDs shall submit a report by January 1, 2025, to the Mayor or City Manager and each year thereafter documenting their progress made in installing vehicle chargers for their department's fleet. This annual report shall include an update to the fleet charging plans reflecting documented progress and remaining work.

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G. Leased Properties

1. The requirements of this Policy for buildings and facilities shall be incorporated into all new leases of City-owned property with an effective date of January 1, 2024, or later that require Council approval. The lease language shall apply the requirements to all leased buildings and land.
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 Mayor or Mayor's 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 Mayor or Mayor's designee determines that the tenant has presented compelling reasons for the revision or waiver. A full explanation and justification for any Policy revision or waiver shall be presented to Council as part of the staff report when the time extension or the new lease is being presented to Committee and Council for approval.

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. Effective Date

1. This Policy shall apply in full to *New Construction* and *Major Renovation* projects for which a design contract is issued 120 days or greater after the passage of the Policy or for which in-house design or planning begins after final passage of the Policy.
2. Any *New Construction* or *Major Renovation* project which does not have a 30% design completed and approved by the City prior the final passage of this Policy shall be designed and built with no Fossil Fuel Systems, excepting the emergency or backup uses permitted by the Policy.
3. All other portions of this Policy, including portions related to operation of existing buildings and replacement of building equipment, shall take effect 120 days after final passage of the Policy.

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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/>

HISTORY:

“Zero Emissions Municipal Buildings and Operations Policy”
Adopted by Resolution R-314377 – 10/11/2022