



PUBLIC WORKS DEPARTMENT

CITY HALL
10300 TORRE AVENUE • CUPERTINO, CA 95014-3255
TELEPHONE: (408) 777-3354 • FAX: (408) 777-3333
CUPERTINO.ORG

SUSTAINABILITY COMMISSION STAFF REPORT

Meeting: April 17, 2025

Subject

Policy Options for Electrification of Cupertino's Existing Commercial Buildings.

Recommended Action

Receive presentation and recommend that City Council direct staff to pursue adoption of a Flex Path reach code for commercial buildings and develop an ordinance establishing Energy Benchmarking requirements for buildings 10,000 square feet and larger, with the intent to develop and phase in a Building Performance Standard to support the City's Climate Action Plan's existing commercial buildings emissions reduction goal.

Background

Cupertino's City Council established a FY 24-25 City Work Program item to "Conduct public outreach, policy research, and coordinate with regional efforts to develop policy options for electrification of Cupertino's buildings in light of recent legal rulings inhibiting certain electrification efforts."

This report focuses specifically on existing commercial buildings, which account for approximately 9% of Cupertino's total communitywide greenhouse gas emissions. Electrifying this sector is critical to advancing the City's climate targets, particularly Measure BE-3 of the Climate Action Plan 2.0, which calls for reducing annual commercial natural gas usage from 119 therms per person in 2018 to 90 therms by 2030 and 54 therms by 2040.

Policy pathways for new buildings were addressed in a previous staff report and an energy efficiency reach code was approved by City Council in September 2024. Policy options for existing residential buildings will be addressed separately due to legal uncertainties from pending legislation and differing building characteristics. This report evaluates near-term policy options for reducing emissions from existing commercial and large multifamily buildings.

Sustainability and Environmental Programs staff, with support from Raimi + Associates, conducted stakeholder engagement and evaluated feasible policy approaches aligned with legal, technical, and community considerations.

Reasons for Recommendation and Available Options

Staff evaluated decarbonization policy options for existing commercial buildings based on legal feasibility, greenhouse gas (GHG) reduction potential, administrative burden, cost to property owners, and alignment with regional best practices. The attached memo provides detailed analysis of the two primary options: a Building Performance Standard (BPS) and a Flex Path reach code.

Based on this analysis and stakeholder feedback, staff recommends pursuing a dual approach:

- **Adopt a Flex Path reach code** as an amendment to the building or energy code. This policy would apply to renovation projects and allow property owners to choose from a menu of electrification measures to meet a target score. While this approach reaches fewer buildings each year, it can drive significant upgrades at the time of permit and is relatively simple to administer through existing processes.
- **Develop an ordinance establishing annual energy benchmarking** for commercial and large multifamily buildings 10,000 square feet and larger. Benchmarking provides building owners and the City with essential data to understand energy use and emissions performance and lays the groundwork for building performance standard requirements.
- Phase in a **Building Performance Standard (BPS)** in the near future. A BPS sets performance thresholds for energy or emissions intensity and provides flexible compliance options. Staff recommends a phased rollout that begins with benchmarking, followed by education and performance targets in later years. This approach can capture a broader share of the building stock and yield greater cumulative GHG reductions.

This combined strategy represents the most effective path to reduce emissions from the commercial building sector and moving towards meeting our City's greenhouse gas and supports Cupertino's leadership role in sustainability. As a city committed to innovation and climate action, Cupertino must continue moving forward with bold, data-driven solutions that align with Climate Action Plan goals and regional trends.

Additional options are available for the commission to consider, outlined below.

Question 1: Should the City pursue a Flex Path Building Energy Code?

Option 1: Yes, pursue a Flex Path reach code for existing commercial buildings.

- **Benefit:** This provides a cost-effective, flexible compliance pathway for property owners undergoing renovations. It supports incremental electrification aligned with state energy code updates and offers an additional decarbonization tool alongside the Building Performance Standard.
- **Drawback:** Flex Path reach codes apply only to permitted renovations, which represent a small portion of commercial buildings each year. As a result, GHG reductions would be limited without broader adoption or complementary programs.

Option 2: No, do not pursue a Flex Path reach code at this time.

- **Benefit:** Avoids the cost and staff time required for code development, public engagement, and permitting integration. Removes an additional requirement for construction and property developers.
- **Drawback:** Misses an opportunity to engage properties already planning upgrades and could limit decarbonization options in the near term.

Question 2: Should the City pursue an Energy Benchmarking Ordinance?

Option 1: Yes, move forward with developing an energy benchmarking ordinance for the City.

- **Benefit:** Satisfies CAP 2.0 action BE 1.3 and lays the foundation for a future Building Performance Standard. Benchmarking provides data critical to understanding energy use and identifying opportunities for emissions reductions across the commercial sector.
- **Drawback:** May pose a burden on property owners unfamiliar with energy reporting and would require upfront investment of staff time and resources for program setup and administration.

Option 2: Wait for a regional effort to launch benchmarking requirements.

- **Benefit:** Aligning with a regional program could reduce administrative burden on City staff and provide a more consistent experience for property owners with buildings in multiple jurisdictions.
- **Drawback:** Delays local action, slowing progress toward Cupertino's climate goals. A regional program may use a building size threshold that excludes a significant share of Cupertino's building stock.

Option 3: No, do not pursue development of a benchmarking ordinance.

- **Benefit:** Saves City resources and avoids placing additional requirements on the commercial sector.
- **Drawback:** Without benchmarking data, the City would lack a mechanism to track and reduce building-related emissions, undermining the CAP 2.0 targets and long-term decarbonization efforts.

Question 3: What size buildings should be required to report? (Note: This question is only applicable if the City chooses to pursue a benchmarking ordinance.)

Option 1: Require all commercial buildings 10,000 square feet or larger to participate.

- **Benefit:** Aligns with CAP 2.0 goals and maximizes GHG reduction potential by covering more buildings across the City.
- **Drawback:** Higher administrative workload for City staff and potential pushback from smaller property owners less familiar with benchmarking tools.

Option 2: Implement a phased approach starting with buildings 20,000 sq ft and larger.

- Benefit: Allows City staff to build experience and streamline processes before expanding the program. Reduces the upfront workload and gives smaller property owners more time to prepare.
- Drawback: Delays GHG reductions from smaller buildings, which collectively represent a substantial share of emissions.

Option 3: Limit reporting to buildings 50,000 sq ft and larger, consistent with state requirements (AB 802).

- Benefit: Many of these building owners are already reporting, minimizing new administrative burdens. Targets buildings with the largest energy footprints.
- Drawback: Only a small portion of Cupertino's building stock meets this threshold, limiting the ordinance's overall emissions reduction impact.

Question 4: Should the City pursue a Building Performance Standard (BPS) as part of the benchmarking ordinance? (Note: This question is only applicable if the City chooses to pursue a benchmarking ordinance.)

Option 1: Yes, include planned future BPS in the benchmarking ordinance now.

- Benefit: Signals the City's commitment to meaningful GHG reductions and accelerates implementation of a CAP-aligned policy. Performance standards can drive long-term efficiency and electrification while offering compliance flexibility.
- Drawback: Increases the initial complexity and cost of the program. Requires additional technical support, staff capacity, and stakeholder engagement to set appropriate thresholds.

Option 2: Wait to develop a BPS and consider adding it in a future phase.

- Benefit: Gives the City time to build capacity and analyze benchmarking data before establishing performance thresholds. Allows property owners to acclimate to energy reporting requirements first.
- Drawback: Delays the full emissions reduction potential of a benchmarking program and may reduce policy momentum.

Option 3: Do not pursue a Building Performance Standard.

- Benefit: Keeps the program focused solely on data collection and avoids the complexities of compliance enforcement.
- Drawback: Without performance targets, the City loses a powerful tool to drive emissions reductions and may fall short of its CAP goals.

Sustainability Impact

Commercial and large multifamily buildings currently account for approximately 9% of Cupertino's total communitywide greenhouse gas emissions. Implementing a combined approach—adopting a Flex Path reach code and establishing energy benchmarking as a foundation for a phased Building Performance Standard—positions the City to make the most significant impact in this sector.

This strategy supports Measure BE-3 of the Climate Action Plan 2.0, which calls for reducing commercial natural gas use from 119 therms per person in 2018 to 90 by 2030 and 54 by 2040. Together, these policies can drive both near-term efficiency improvements and long-term emissions reductions while maintaining Cupertino's leadership in regional sustainability efforts.

Fiscal Impact

There is no immediate fiscal impact associated with this recommendation.

The Flex Path reach code can be implemented using existing staff and permitting processes. The primary cost would be limited to code development, stakeholder engagement, and ordinance adoption, which may be supported through existing staff capacity or external partners.

Implementation of a benchmarking ordinance and phased Building Performance Standard would require additional resources, particularly during program design and rollout. Future staffing or consultant needs, including opportunities for regional coordination, would be assessed before bringing a proposal to Council if so directed..

City Work Program (CWP) Item/Description

Yes, FY 24-25

Electrification Study

Conduct public outreach, policy research, and coordinate with regional efforts to develop policy options for electrification of Cupertino's buildings in light of recent legal rulings inhibiting certain electrification efforts

Council Goal:

Sustainability and Fiscal Strategy

California Environmental Quality Act

No California Environmental Quality Act impact.

Prepared by: Victoria Morin, Sustainability Specialist

Reviewed by: Ursula Syrova, Environmental Programs and Sustainability Manager

Approved for Submission by: Chad Mosley, Director of Public Works

Attachments:

A – Cupertino Commercial Building Decarbonization Strategy Options Memo