

## **PUBLIC HEARINGS/GENERAL BUSINESS**

2.        [20-0783](#)        Forward a Recommendation to the City Council to approve a Phased Reach Codes program and implement Phase 1 for new Residential and Non-Residential Construction Projects: Introduce an Ordinance to Amend Chapter 16.42 (Energy Code) of Title 16 (Buildings and Construction) and Find that the Action is Exempt from CEQA

Suzanne Park, Chief Building Official, presented the staff report with a slide presentation.

Commissioner Weiss asked staff about the phasing for electric vehicle pre-wiring. Chief Building Official Park clarified that Phase 1 includes installing infrastructure (conduit) for new construction and Phase 2 includes pre-wiring (infrastructure and wiring) for additions and alterations. Commissioner Weiss asked if staff considered reviewing buildings with industrial and process loads on a case by case basis instead of giving them an automatic exemption and moving this aspect from Phase 2 to Phase 1. Chief Building Official Park responded that these small number of uses in the city conduct processes that cannot be supplemented by electricity.

Commissioner Weiss asked if the City can negotiate electricity rates and Community Development Director Trudi Ryan stated that the rates are controlled by the Public Utilities Commission. Commissioner Weiss also asked about how staff defines the

cost effectiveness of all electric. Chief Building Official Park explained that cost effectiveness is defined as when the use of electric appliances is cheaper than using gas across the life of the structure.

Commissioner Harrison asked staff how much greenhouse gas emissions are produced for commercial uses in kitchens, from space and water heating, and from process loads. Chief Building Official Park stated that she can confirm with the Environmental Services Department that conducted the greenhouse gas emissions study. Commissioner Harrison asked why electric vehicle pre-wiring is not proposed for Phase 1 given the Climate Action Playbook's strategies and that other nearby jurisdictions require it during Phase 1. Chief Building Official Park and Director Ryan stated that it is staff's recommendation and staff cannot comment on other jurisdictions' policy decisions. Commissioner Harrison asked about the Phase 3 trigger for additions and alterations to existing residential construction. Chief Building Official Park stated that staff would implement Silicon Valley Clean Energy's recommendations once its cost effectiveness studies are complete. Commissioner Harrison confirmed with Chief Building Official Park that Exception 5 is for applicants who could not meet the State Energy Code without the use of gas and that their technical justifications would be reviewed by a consultant before a final decision is made. Commissioner Harrison stated her concern that Phase 1 Exception 1 is too general and Chief Building Official Park clarified that only F, H and L occupancies apply to Exception 1 and that those applicants would need to provide justification.

Vice Chair Simons asked if the Reach Codes would apply to the City, specifically to the gas reclamation process conducted at the City's closed landfill that reduces greenhouse gas emissions. Chief Building Official Park responded that the Reach Codes would only apply to the design and sustainability of standard construction and would not apply to Department of Public Works capital projects. Director Ryan stated that the City intends to comply with its own regulations and recognized that the closed landfill is a unique operation that might qualify for an exception. Vice Chair Simons stated that he would be disappointed if current operations in Sunnyvale that benefit the environment are not exempted under the Reach Codes.

Commissioner Olevson asked if, for example, a simple bathroom remodel requiring an electrical panel upgrade could then also trigger the requirement to install electric vehicle charging pre-wiring, an even larger investment. Chief Building Official Park confirmed that a simple home renovation could result in a more expensive upgrade elsewhere but stated that she cannot comment on the cost to pre-wire for electric

vehicle charging.

Commissioner Weiss asked if there are any requirements for the type of refrigerants used when new heating, ventilation, and air conditioning systems are installed and if not, if it might be studied during the later phases. Chief Building Official Park stated that refrigerant specifications are not part of the scope of the current Reach Codes and that there is a possibility they could be explored during Phase 3.

Chair Howard asked if parking spaces in multi-family projects entitled after the phase schedule dates would be plug-in ready for electric vehicles. Chief Building Official Park stated that only the pre-wiring would exist and that only 12.5% of multi-family parking spaces would be equipped with the infrastructure and they would be dedicated for common use. Director Ryan added that some multi-family projects have installed the chargers at residents' request. Chair Howard stated that it would be beneficial for all of them to install the chargers up front regardless of cost. He also asked if the cost effectiveness studies consider rebates from various organizations since they can significantly offset the cost of all electric projects. Chief Building Official Park responded that the studies did not consider rebates. Chair Howard stated that it is disappointing that Sunnyvale is proposing to defer the Reach Codes for electric vehicle charging and commercial kitchens when they are pending or adopted in other nearby cities. Chief Building Official Park answered that many of those cities' ordinances provide a significant number of exceptions and staff decided to wait for viable options to be provided before implementing those phases. Chair Howard noted the importance of at least keeping up with other cities' actions due to the gravity of climate change.

Commissioner Harrison asked what changes staff is expecting between January and summer 2021 that will help to implement Phase 2. Chief Building Official Park stated that staff is waiting for a viable option for non-residential uses to implement electric cooking, hoping for the availability of a cost-effectiveness study, and striving to ease residents into the requirements for electric vehicle charging. Director Ryan stated that staff would bring the Phase 2 Reach Codes back to the Planning Commission for review if the cost effectiveness studies are available before summer 2021. She added that in addition to the code changes, staff is also working with the community to help with the transition as another effort in implementing the Climate Action Playbook. Commissioner Harrison commented that another potential trigger for pre-wiring for electric vehicle charging is if a project already requires an electrical panel upgrade.

Commissioner Howe confirmed with Chief Building Official Park and Director Ryan that Phase 2 would go through the same process with the creation of an ordinance, public outreach, and public hearings with the Sustainability and Planning Commissions and City Council.

Chair Howard appreciated Commissioner Harrison and Commissioner Olevson's comments and questions and asked about residents receiving information about the panel size required for an all electric home when a panel upgrade is required. Chief Building Official Park stated that it would be an educational opportunity for residents as PG&E cannot support some panel upgrades in the eastern part of the city and the upgrade would be extremely costly for some homeowners.

Chair Howard opened the Public Hearing.

Radhika Agarwal, sophomore at Homestead High School, spoke in favor of the Reach Codes, particularly electric vehicle readiness and the installation of electric vehicle chargers in residences and hotels.

Kaushik Tota, senior at Saint Francis High School, spoke in support of strengthening the proposed Reach Codes, especially for data servers and non-residential kitchens.

Kristel Wickham, Chair of the Sustainability Commission speaking on her own behalf, voiced support for an electrical vehicle Reach Code for new construction in Phase 1.

Sannath Mathapathi, junior at Lynbrook High School, communicated interest in increasing electric vehicle readiness in non-residential facilities.

Mallory Mitton, junior at Homestead High School, advocated for milestones and a detailed plan for beginning Phase 3 and Phase 4.

Beatrice Ho, freshman at Homestead High School, spoke in support of moving electric vehicle pre-wiring requirements from Phase 2 to Phase 1.

Bruce Naegel, stressed the importance of youth believing that they can continue to living on Earth given climate change and stated that he is not aware of any cost effectiveness studies for electric vehicle infrastructure.

Anika Khandavalli, junior at Fremont High School, spoke in favor of increasing electric vehicle readiness and chargers at non-residential facilities.

Pranay Mamileti, junior at Lynnbrook High School, advocated for electric vehicle infrastructure for new construction during Phase 1.

Rani Fischer, Sunnyvale resident, spoke about her difficulty finding charging stations for her own electric vehicle and encouraged the Commissioners to move electric vehicle infrastructure to Phase 1.

Jenny Green urged the Commissioners to recommend the strongest Reach Codes with as few exemptions as possible and stated her opinion that all electric appliances are energy efficient and that it was not expensive to install electric vehicle chargers in her own single-family home.

Rathik Murtinty, junior at Homestead High School, urged the Commissioners to support electric vehicle readiness with electric vehicle-friendly infrastructure.

Bill Hilton encouraged the Commissioners to recommend the Reach Codes to the City Council with electric vehicle charging infrastructure moved to Phase 1.

James Tuleya, Sunnyvale resident, spoke in support of strengthening the Reach Codes by incorporating electric vehicle infrastructure for new construction in Phase 1 and made comments on cost effectiveness studies.

Chair Howard closed the Public Hearing.

Commissioner Harrison asked staff what percentage of electric vehicle charging infrastructure would be required in multi-family and non-residential new construction and where the City would exceed the State's standards. Chief Building Official Park stated that multi-family would require 12.5% and hotels and office buildings would require 6%, which means the City would exceed the State's requirements with multi-family projects by 2.5 percentage points. Commissioner Harrison confirmed with Chief Building Official Park and Director Ryan that it is possible to increase the percentage of electric vehicle infrastructure and the change can be made in either the building code or the zoning code. Commissioner Harrison and Chief Building Official Park discussed the challenges of upgrading an electrical panel in east Sunnyvale.

Commissioner Weiss asked if it is appropriate for Phase 1 Exception 5 to be determined by the Building Official. Chief Building Official Park explained that the consultant would provide technical expertise and a recommendation with a final decision from the Building Official. Director Ryan added that the title is consistent with decisions made concerning the building code.

Chair Howard asked about the parking and electricity payment logistics for using a common electric vehicle charger and encouraged staff to review Silicon Valley Clean Energy's model Reach Code for electric vehicle readiness. Chief Building Official Park stated that staff will research both items. Chair Howard commented on the potential requirement that an applicant upgrade the electrical panel to support an all electric residence unless the electricity is supplied from underground and upgrading would be a financial hardship.

Commissioner Howe confirmed with Director Ryan that an applicant can appeal the Building Official's decision to the Board of Building Code Appeals and the process is established in the building code.

MOTION: Commissioner Harrison moved and Vice Chair Simons seconded the motion for Alternative 2 – Alternative 1 with Modifications.

The modification is as follows:

1. Require pre-wiring for electric vehicle charging if a panel upgrade is required for modifications to a residential project and the service is not underground. The requirement must be implemented during Phase 1.

Commissioner Harrison stated that in her professional experience many of her clients' projects require electrical panel upgrades and all of her clients who undergo entire home renovations choose to go all electric because they are interested in the most current and efficient technology. She commented that clients have never objected to installing electric vehicle charging infrastructure at the time they upgrade their electrical panel. While acknowledging that she has not conducted a cost effectiveness study, she stated that her experience has informed her that the cost to install electric vehicle charging infrastructure is negligible when already upgrading an electrical panel.

Vice Chair Simons, Chair Howard and Commissioner Harrison discussed the possibility of adding use cases and better clarity to the phases. Director Ryan stated

that staff will refine the report before it is presented to the City Council. Vice Chair Simons confirmed with Director Ryan that it is possible to modify Phase 1 Exception 5 to exempt a non-all electric operation if it demonstrates an ability to reduce greenhouse gas emissions further than if it were all electric. Commissioner Howe requested that the modification include that the exception must be reviewed by the Building Official. Vice Chair Simons explained for Commissioner Harrison how the modification would change the existing Phase 1 Exception 5.

FORMAL AMENDMENT: Vice Chair Simons moved and Commissioner Howe seconded the motion to modify Phase 1 Exception 5 to include new construction that, using different technologies, demonstrate a greater reduction in greenhouse gas emissions than with all electric energy, as approved by the Chief Building Official.

The motion for the formal amendment carried by the following vote:

**Yes:** 6 - Chair Howard  
Vice Chair Simons  
Commissioner Harrison  
Commissioner Howe  
Commissioner Olevson  
Commissioner Weiss

**No:** 0

**Absent:** 1 - Commissioner Rheume

Vice Chair Simons stated that he will support the motion and that he added the formal amendment to allow for technology improvements that might further reduce greenhouse gas emissions in the future. He stated his interest in speeding up the requirements for electric vehicle infrastructure and advocated for decreasing the cost of all electric infrastructure during new construction as it would benefit buyers and sellers.

FRIENDLY AMENDMENT: Commissioner Weiss proposed a friendly amendment to specify that Phase 1 Exception 1 be granted on a case by case basis by the Chief Building Official. Commissioner Harrison and Vice Chair Simons accepted the friendly amendment.

Commissioner Weiss stated that she is not comfortable with those facilities receiving

a blanket exception as they might not need it and because Phase 1 is important and should be successful.

Commissioner Howe stated his concern with the modification that would give those with underground service an exemption and commented that he receives electricity service from underground with no problems. He encouraged staff to resolve this equity issue before the report is presented to the City Council.

Commissioner Olevson stated that he will not support the motion because California has been shutting down its electricity sources from natural gas, nuclear power, and hydroelectric power and the purchase of electricity from other states has been unreliable. He stated his belief that the ordinance is too far reaching without the infrastructure to support the effort and that soon residences and commercial operations might not have enough power to support themselves.

Chair Howard stated his initial reservations with supporting the Reach Codes because they are not strong enough. He appreciated Commissioner Olevson's comments on the quality of the power grid, but stated that despite the uncertainty, burning fossil fuels must end. He added that given health concerns and Sunnyvale's wealthy and innovative status, swift action must be taken now. He appreciated staff's phased approach, the comments from members of the public, and the Commissioners' work to strengthen the Reach Codes.

Chair Howard summarized the original motion which is as follows:

MOTION: Commissioner Harrison moved and Vice Chair Simons seconded the motion for Alternative 2 – Alternative 1 with Modifications.

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FRIENDLY AMENDMENT: Commissioner Weiss proposed a friendly amendment to specify that Phase 1 Exception 1 be granted on a case by case basis by the Chief Building Official. Commissioner Harrison and Vice Chair Simons accepted the friendly amendment.

The motion carried by the following vote:



**Yes:** 5 - Chair Howard  
Vice Chair Simons  
Commissioner Harrison  
Commissioner Howe  
Commissioner Weiss

**No:** 1 - Commissioner Olevson

**Absent:** 1 - Commissioner Rheaume

Assistant Director Andrew Miner stated that this recommendation will be forwarded to the City Council for consideration at the Tuesday, October 27, 2020 meeting.