San Francisco Zero Emission Building Taskforce - New Construction Work Group:

Meeting #2 Notes

New Construction Work Group – Meeting #2
Wednesday, February 19, 2020 from 9:00am-11:00am
1455 Market Street, Ground Floor Meeting Room, San Francisco
Hosted by: San Francisco Department of Environment Taskforce
Facilitated by: Michelle Vigen Ralston, Common Spark Consulting

Attendees

Those in attendance are listed below. Those grayed-out were absent.

Name	Organization	Representation
Pierre Del Forge	Natural Resources Defense Council	Environmental Advocate
Ted Tiffany	Guttmann & Blaevoet	MEP Engineering, various TAGs
Andrea Granados	JMA Ventures	Real Estate Investor
John O'Connor	RBA	Residential Builders
Lisa Fisher	SF Planning	SF Planning Department
J. Edgar "Ned" Fennie	Fennie+Mehl Architecture	DBI- CAC
Greg Yaelin	Alexander Real Estate	Real Estate Investor
James Zhan	SF Department of Building Inspection	SF Building Inspectors
Richard Berman	Port of San Francisco	City Partner
Ruchi Shah	Tenderloin Neighborhood Development Corporation	Developer – Affordable Housing
Danny Martagh	Boston Properties	Developer – Large Commercial
David Fahey	San Francisco Plumbers Union	Labor
Michelle Pierce	Bayview Hunters Point Community Advocates	Equity Advocates
Enrique Landa	Associate Capital	Developer (Potrero Power Plant)
Jacob Bintliff	SF Board of Supervisors	Staff - Supervisor Mandelman
Avni Jamdar	Emerald Cities	Equity Advocates

Josh Arce	Office of Economic & Workforce Development	Workforce Development
Scott Shell	EHDD Architects	Architects
Stet Sanborn	SmithGroup	MEP Engineering
Hilary Noll	Mithun	Housing Action Coalition & Affordable Architecture
Cindy Wu	CCDC	Developer - Affordable Housing
Collin Ensley	Associate Capital	Developer (Potrero Power Plant)

San Francisco Environment Staff in attendance included: Cyndy Comerford, Climate Program Manager; Barry Hooper, Green Building Specialist; Brian Reyes, Climate and Sustainability Analyst

Consultant Team: Lane Burt, Ember Strategies; Michelle Vigen Ralston and Jack Chang, Common Spark Consulting

Meeting Notes

1. Updates

Meeting #2 kicked off with a brief refresher on the objective of the Work Group, a recap of the last meeting, and an overview of what will be covered in the Agenda.

The City of San Francisco wants to deliver to Supervisor Rafael Mandelman the language of a new construction zero-emissions ordinance as well as a funding package to support the transition process.

In the previous meeting, the city heard from stakeholders that any delay to the development process would cost money, which means the city, developers and engineers need to prepare as soon as possible. Education and outreach are priorities in this transition so that everybody knows how to comply with the proposed requirements. Ramp-up time is needed to implement the ordinance given the multi-year cycle required to plan and design buildings.

2. Straw Proposal on Timing, Applicability, and Special Transitions

Staff presented a straw proposal whereby new buildings that are submitting a building/site permit must, by January 1, 2021 be all-electric. The proposal applies to all construction, residential and non-residential. Life Sciences, which were discussed in Meeting #1, were proposed to have their deadline extended one year.

Timing

Developers expressed concerns about the straw proposal's implementation timeline.

Facilitator's note: Much of the discussion around timing pertained to buildings that are beyond the building/site permit application submittal, which would not be covered under the straw proposal as presented. Staff are interested in a discussion on how to encourage those projects in the pipeline, essentially grandfathered in, to design and build all-electric, but that is a separate conversation.

For buildings in the pipeline:

Cost: There can be a substantial cost to certain re-design and utility assessments. For example, a PG&E fee on an eight-story building alone can cost $40,000 to $50,000. Reengineering a heating system for that building can cost another $50,000 and require up to three months of planning. Also, getting PG&E approval for a different building transformer design to accommodate higher electrical loads can take 18 to 24 months.

Size of Project: The timing issues applies mainly to smaller, medium-sized projects, including for affordable housing projects. Bigger projects move much more slowly, which buys them time. But the whole development and construction industry needs about three years generally to absorb such changes.

For buildings that would be covered under the straw proposal language, certain concerns remain:

Marketing and Education: Several attendees said consultants, engineers and architects largely still don't know that the change is coming and that the city's development and construction industry needs time to adapt. New heating and cooking systems need to be incorporated at design phases to avoid having to redesign projects.

Grid Capacity: In older parts of the city such as in the Tenderloin, buildings are still using Thomas Edison-era secondary electricity networks that will need to be upgraded to handle additional electrical load. City incentives that consider building life-cycle costs could help get more designers and architects to move more quickly to incorporate the changes.

A later date (e.g., January 1, 2021) was discussed:

City officials and community representatives said the reach code passed by the city in January should have been sufficient warning to the developer community that the ordinance was coming. If the city delays implementation by six months, to July 2021, is it because more buildings want to get approved with natural gas or is it because buildings need more time to be designed as all electric? The city plans to transition all buildings to net zero emissions by 2050, so buildings constructed now with natural gas-powered heating systems will likely have to upgrade to electric systems anyway.

End Result of Discussion:

It was ultimately determined that if the "cut off" is at building/site permit application submittal, the January 1, 2021 date is reasonable.

Special Transitions (formerly "exceptions")

These buildings need more time to comply with the proposed ordinance because of their unique technical and financial requirements.

Life sciences buildings would have until 2022 to comply with the new requirements. Labs (B, L, H) often have technical systems to handle hazardous materials used in research and require once-through cooling, where indoor air is released after one cycle through the building. It was recommended that the building code use type be used to identify buildings that warrant this additional time.

Some stakeholders recommended that large hotels and high-rise residential buildings over 120 feet tall also require some additional time since technology may not be ready. Others disagreed. It was proposed that these two types of buildings should be all-electric ready by 2021 (at building/site permit application submittal) and have no gas by 2022. Hotels are heavy energy uses because they're always open and operating so designing systems that meet their needs could require more time. With high-rise residential buildings, engineers must design central heating systems that can move electric-powered heat to top floors. No high rise in San Francisco currently uses such a system yet but developers could look at examples in Seattle and other cities. All-electric ready means buildings have the physical space and wiring ready for a heat pump or other all-electric systems to be installed. Developers said such an all-electric ready alternative would let the technology catch up so that the right heater can be installed in the space.

3. Next Meeting

For the next meeting, eight people in the group voted to discuss public marketing and education about design, electrical and plumbing requirements to comply with the proposed ordinance. Seven people voted to consider workforce readiness issues including the timing of such training. Three people each voted to discuss equity concerns, cost impacts and technology issues including solar/thermal hot water heaters.

SF staff also noted they would like to revisit the discussion of buildings in the pipeline, those beyond building/site permit application that would not be under the law, but pose an opportunity to still decarbonize, and which may bear greater risk or cost to retrofit in the future under an existing building decarbonization policy.

The work group will hold two more meetings, adding one meeting to the original plan.