San Francisco Zero Emission Building
Taskforce New Construction Work Group:
Meeting #1 Notes

New Construction Work Group: Meeting #1
Friday, January 24, 2020 from 9:00-11:00am in Conference Room at 1455 Market Street
Hosted by: San Francisco Department of Environment
Facilitated by: Michelle Vigen Ralston, Common Spark Consulting

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott Shell</td>
<td>EHDD Architects</td>
<td>Architects</td>
</tr>
<tr>
<td>Stet Sanborn</td>
<td>SmithGroup</td>
<td>MEP Engineering</td>
</tr>
<tr>
<td>Hilary Noll</td>
<td>Mithun</td>
<td>Housing Action Coalition &amp; Affordable Architecture</td>
</tr>
<tr>
<td>Pierre Del Forge</td>
<td>NRDC</td>
<td>Environmental Advocates</td>
</tr>
<tr>
<td>Avni Jamdar</td>
<td>Emerald Cities</td>
<td>Equity Advocates</td>
</tr>
<tr>
<td>Danny Murtagh</td>
<td>Boston Properties</td>
<td>Developer - Large Commercial</td>
</tr>
<tr>
<td>Ruchi Shah</td>
<td>TNDC</td>
<td>Developer - Affordable Housing</td>
</tr>
<tr>
<td>Cindy Wu</td>
<td>CCDC</td>
<td>Developer - Affordable Housing</td>
</tr>
<tr>
<td>Richard Berman</td>
<td>Port of San Francisco</td>
<td>City Partner - Complicated Environment</td>
</tr>
<tr>
<td>John O'Connor</td>
<td>RBA</td>
<td>Residential Builders</td>
</tr>
<tr>
<td>Lisa Fisher</td>
<td>SF Planning</td>
<td>SF Planning Department</td>
</tr>
<tr>
<td>Mohsin Shaikh (for James Zhan)</td>
<td>DBI</td>
<td>SF Building Department</td>
</tr>
<tr>
<td>Michelle Pierce</td>
<td>Bayview Hunters Point</td>
<td>Equity Advocates</td>
</tr>
<tr>
<td>Ted Tiffany</td>
<td>Guttmann &amp; Blaevoet</td>
<td>MEP Engineering, various TAGs</td>
</tr>
<tr>
<td>Enrique Landa</td>
<td>Associate Capital</td>
<td>Developer (Potrero Power Plant)</td>
</tr>
<tr>
<td>Terezia Nemeth</td>
<td>Alexandria</td>
<td>Sr. VP of Development</td>
</tr>
<tr>
<td>J. Edgar &quot;Ned&quot; Fennie</td>
<td>Fennie+Mehl Architecture</td>
<td>DBI - CAC</td>
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Meeting Notes

1. Welcome and Introductions

Michelle Vigen Ralston, facilitator, opened the meeting, welcoming participants to the Zero Emissions Taskforce - New Construction Work Group. She provided a brief overview of the role of the group and intention behind the work group process before turning it over to staff to provide additional background.

2. Background

Cyndy Comerford, overseeing the Taskforce, provided an introduction to the New Construction Work Group and its goals. In September 2018, Mayor London Breed made commitments for San Francisco to be net zero emissions by 2050. Part of the commitment was by 2030, all new construction would be zero emissions, and by 2050 all buildings would be zero emissions. Supervisor Mandelman asked for legislation for a natural gas ban to come to him in April 2020. The City staff is seeking diverse input to get to develop a local ordinance that will successfully signal market and drive the city to go all electric.

To Supervisor Mandelman and the Mayor, the most important component is to make sure the process is all inclusive. The city is doing additional outreach beyond this work group: Staff are working to arrange meetings with PG&E restaurant associations and hear from those who see such a law as a barrier for business.

Process

Today we’ll be gathering input and feedback on a future ordinance and when this Work Group reconvenes, the staff’s goal is to provide solutions and proposals based on that feedback. Staff will meet with the city attorney between meetings to begin drafting legislation based on these proposals.

More About the Taskforce and Process

There are four Work Groups: New Construction, Existing Commercial Buildings, Residential and Equity, and Municipal. Each working group has a different directive. This is to ensure that departments not typically involved in these conversations but important to implementation will be well informed and participating throughout. The city is updating its climate action plan so all recommendations will be
summarized into strategies for a climate action plan that the city plans to adopt in 2020. Outcomes from all four working groups will go to an Executive Steering Committee made up of public and private leadership.

Briefing: Takeaways from January 8, 2020 workshop

On January 8, 2020, San Francisco Department of Environment hosted a Building the All Electric City workshop for the public. More than 80 people attended, including experts from other cities, technology experts, and representatives labor and equity issues. Two members of this Work Group presented on panels: Stet Sanborn from SmithGroup and Hillary Noll from Mithun. The event looked at governance, technology and what a just transition looks like as the city goes from fossil fuels to electric. Small groups raised additional thoughts, issues, ideas, and concerns, which will inform staff work on drafting an ordinance.

3. New construction ordinance elements

The facilitator then presented the staff brief (an attachment to the agenda, included below in these notes), which provided a starting list of considerations or elements key to developing the ordinance. These would be added to, refined, and organized such that the Work Group would cover them throughout their meetings. Elements of ordinance proposed were:

- Applicability
- Timing
- Exceptions
- Outreach/Education
- Staff/Resources
- Equity
- Labor/Workforce

Attendees were then invited to name other elements they thought were important to be considered, as well as other concerns or thoughts that come up when thinking about building all-electric new construction. A number of issues rose to the top of the discussion. The summaries below attempt to provide highlights of the discussion but are not representative of every comment provided. Comments were recorded on large post-its, photos of which are attached to these notes.

“Time is Money”

While this Work Group process puts design professionals and buildings on notice, not everyone knows about the development of this new law. Owners don’t like finding out about changes late in the design and building process. It costs more money and causes additional costly delays every time the project must go back to the designers. If a builder begins the entitlement process, it will be easier and more cost-effective if requirements to be all-electric are known from the beginning.
**Education and Outreach**

Attendees and staff acknowledged the challenge around when it is appropriate to begin messaging the goals of the pending ordinance to the public. The City has an all-electric preferred code effective January 1, 2020. It can be confusing to hear that a law is coming without knowing exactly when it will be in effect (adopted), but it is also important for developers to recognize this is going to happen at some point, and not planning for that now would incur greater costs later. One main question that was raised is “What is a strong enough signal?”. When should the city start the education campaign, now or when the ordinance is done? It was not clear what kind of signal would be clear for the market: an adopted or introduced ordinance? A resolution from the City? A communication from a key and trusted City agency? Staff agreed to consider if and what might be appropriate.

**Simplifying the process**

Attendees noted that the new ordinance should be clear how it ties to or integrates with existing regulations. For example, there are existing solar and stormwater mitigation requirements. It would be beneficial if laws did not work at cross-purposes with one another, and perhaps were consolidated or simplified. Attendees noted the number of agencies that must be involved for any project and how the time it takes for approvals can be costly. Several people also noted the possibility of overlapping agency jurisdictions (city and utility) slowing down the process. One way to reduce the cost for electrification might be creating a simpler process, such as reducing time required to receive certain approvals.

**Labor and Workforce**

Attendees shared how some parts of the workforce, particularly contractors working on larger commercial projects, are aware of the move towards all-electric and are familiar with the technology, design, and engineering requirements. It was also clear that the workforce working on smaller projects (e.g., residential renovations) may not be as familiar with the changes coming to the market. Outreach and education specific to support labor and workforce is necessary, especially for those working on smaller projects. This need applies across both new construction (this Work Group) and existing buildings and renovations for electrification.

**Staffing and Resources**

Attendees noted that when the City passes the ordinance, it should come with resources. The City needs to make sure to provide staff and other resources to make sure everyone is trained with necessary outreach. Staff noted that they are confident resources will be allocated to support successful implement of the ordinance.

It was also raised that the more exceptions there are, the greater cost it will be for staff to implement. While uniformity is hard to achieve in an ordinance, the fewer exceptions, the less administrative cost—for both staff and for buildings.
Power supply for in-fill projects
Attendees remarked that most infill projects do not/will not have the access to power to supply new electrical, forcing them to use gas. There is an outstanding concern among infill developers on whether PG&E can and will figure out how to supply the infrastructure and cost for smaller infill projects.

Technical Design
One component of all-electric design is where and how equipment is arranged on first floors – from certain equipment with venting needs, to planning for an electric commercial tenant versus a natural gas commercial kitchen.

Bike Rack
Some issues were raised that were not central to the scope of the Work Group, but are also critical to be thinking about throughout the discussions and drafting process. These issues will be kept “on the board” throughout the meetings and the Work Group may develop recommendations on how to best address them.

- Restaurants: With commercial buildings, the technology is available to provide electric heat. The challenge remains with restaurants which still value natural gas. Electric induction cooking is difficult to introduce, however several chefs have come to really like it once they learned how to use it. Commercial induction range is 2 or 3 times more efficient than gas; it is also more costly than gas (e.g., ovens for bakeries cost more and have high energy costs). Attendees saw this as both a market and cultural challenge: 60% of restaurants buy equipment used because restaurants go out of business so quickly. Induction stoves are a brand new market, so there isn’t a strong used market available.
- PG&E and grid reliability: Questions were raised about the capacity of the existing grid to reliably handle the increased load created by new building construction electrification. In particular, several attendees questioned whether existing transformers would be able to handle the increased load, and if not, who would cover the cost of new transformers.

4. Element: Timing
The facilitator opened up a conversation about the timing of when such a law should go into effect. The group worked to clarify the process of an ordinance adoption, and an effective date that based on the adoption date, or a set calendar date (e.g., January 1, 2021). Some considerations and points were raised, including:

Applicability to Projects in Development
In any new construction project, it is important for staff to know what is the latest point in the process that a project can switch, when the plans are locked-in and prohibitively costly.

Also, attendees discussed the stage of the approval process that plans must be locked-in to comply with the proposed ordinance. One proposal was that the critical point was when building projects are entitled. The entitlement process, however, is not always clear or consistent across projects with different application requirements. For example, of 72,000 housing units in some phase of pipeline, more than half
have some degree of entitlement with an application submitted (see Table 1 provided by SFE staff for these notes). Another larger fraction have entitlement for horizontal development, but those plans often will change often in the ongoing process.

<table>
<thead>
<tr>
<th>Entitled</th>
<th>Units</th>
<th>Applicability of Building Codes</th>
<th>Potential Outreach</th>
</tr>
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<tbody>
<tr>
<td>Under Construction</td>
<td>9,717</td>
<td>New Building Codes Not Applicable</td>
<td>No</td>
</tr>
<tr>
<td>Building Permits Approved</td>
<td>8,186</td>
<td>New Building Codes Not Applicable</td>
<td>Maybe</td>
</tr>
<tr>
<td>Building Permits Filed</td>
<td>4,169</td>
<td>New Building Codes Not Applicable</td>
<td>Yes</td>
</tr>
<tr>
<td>Building Permits Not Yet Filed</td>
<td>3,492</td>
<td>Building Code Applicable</td>
<td>Yes</td>
</tr>
<tr>
<td>Major Multi-Phased Projects</td>
<td>28,764</td>
<td>Depending on Phase (Have data)</td>
<td>Yes</td>
</tr>
<tr>
<td>Applications Files</td>
<td>18,237</td>
<td>Building Codes Applicable</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Total Pipeline Units</strong></td>
<td>72,565</td>
<td></td>
<td></td>
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Another proposal was for the law to apply around the building application process, perhaps the “first construction document” – at which point, the building code version is determined. Attendees asked how much should the planning code versus the building code be involved or considered for marking when the ordinance applies to developing projects. It was noted that the planning codes can be more flexible while building codes are often tied to state laws.

Effective Date of the Law

Attendees discussed the potential effective date of the ordinance and whether implementing it on January 1, 2021 would be too soon. Some thought 1 year after an ordinance was adopted was too slow, others thought it might be too fast for some projects. Others indicated interest in a set date that could be announced ahead of an ordinance being adopted as a “heads up”.

Grandfathered Projects

One concern was that grandfathered projects, if they make any revisions, would they be required to comply with the ordinance. There is also liability that grandfathered projects will incur additional risk and cost in the future; rising gas prices, or that they may have to adopt that property at a later date to remove natural gas.

Different processes for different building types?

Several attendees suggested that with building codes, the process could be structured around size and use to decide the level of complexity of the approval process. For example, residential occupancy projects should get a quicker turn-around, while another category would be commercial buildings and then labs. The law could also apply based on size or square footage thresholds, differentiating between small, medium, and larger projects. More complex buildings with complex uses, institutional projects and/or big labs can take years to plan and organize so their runway could be longer. The city could also overlay
incentive structures for different uses such as restaurants to ease the electrification process. Timing and exceptions can be interlinked to encourage and support certain types of developments.

**Timing Proposals**
Several suggestions were made for the implementation timeline.
- One year after adoption of the ordinance? Could 9 months, or 6 months work? What could make it easier to go faster?
- January 2021? How long will it take for an ordinance to be adopted?

As the group wrapped up their discussion, the facilitator posed questions for the group to consider: What are the impacts across size/scale of buildings, how can phasing help or hinder progress, what exceptions need to be considered?

**Wrap-up and Recap**
The facilitator summarized the work and conversations from the meeting and welcomed additional comments to be emailed to herself or any staff.

Staff shared that they would take all this input into consideration and develop a proposal for the ordinance around timing and effectiveness to bring back to the group at the next meeting.

A request was made for a cataloguing of all buildings in the city that are already in the pipeline for the next 10-20 years to get a better idea of the kinds of new construction the ordinance will apply to.

A request was made to open the next meeting with equity and labor issues.