



Construction Codes Advisory Board

May 16, 2024

Board Members present:

Greg Gilda
Jamie Yengel
Rob Lane
Bill Babbitt
Jim Safranek

Judy Tucker
Lily Iftner
Joel Crabtree
Eric Vander Mey

Board Members absent:

Joe Trembley
Lachlan Foss

Finnegan Wetterau

City Staff:

Richard Pellingner
Merria Norris
Jenifer Gilliland
Ken Brouillette
Jessyn Farrell
Duane Jonlin
Christine Bunch
Ray Jacobson
Philip Man
Cary Novotney
John Thomas
Amy Barnett

Ardel Jala
Shawn Shepherd
Micah Chappell
Nathan Torgelson
Marco Lowe
Sam Steele
Jess Harris
Jim Lowen
Daniel Nelson
Marsha Poon
Kye Lee

General Public:

Patrick Foley, Nick McDaniel, Brian Runberg, Kathleen Petrie, Ryan Packer, Alice Lockhart, Andi Burnham, Tony Fan, Ben FSI, Bonnie Frye Hemphill, Brandon Morgan, Brian Oh, Oyvind Naess, Brock Trimble, Caroline T., Christopher Palms, Colt Fry, Dan Bertolet, David Carroll, David Curran, David Reddy, Diana Fisher, Don Koberg, Don Larson, Erik Olnon, Evan Maros, Glenn M., Jacob Jimenez, Johnny Kocher, Julien Loh, Kelvin Battle, Kim Barker, Kyle Jenkins, Laurel Schandelmier, Leah Missik, Mike Thomson, Miranda Karli, Nancy Henderson, Natalie@nataliequick.com, Nathan Miller, Nick Hryciuk, Nicole Sanders, Nina Olivier, Patricia Hernandez, Peter Locke, Robert Armamento, Robert Landa, Roxy Robles, Sam Whitehead, Sara Belz, Scott Koppelman, Scott Leinenwever, Stuart Stovin, Terry Galiney, Timothy Goeglein, Van Duong, David Mead, dnehren@hermandon.com, Johnny Kocher, Kyle J., lhawkins@bellwetherhousing.org, Mark Smeltzer, Mike Baranick

1. Welcome and Introductions: Micah Chappell

2. Approve CCAB meeting minutes from February 1, 2024:

Jim Safranek made a motion to approve the minutes as written. Motion was seconded by Eric Vander Mey. Minutes approved.

3. Changes in the adoption of the 2021 Seattle Energy Code - Jessyn Farrell, Director, Office of Sustainability and Environment (OSE) & Marco Lowe, Chief Operating Officer, Seattle Mayor's Office:

Micah Chappell said that the revised proposal in front of CCAB rolls back proposed amendments that were more stringent than those in the 2021 Washington State Energy Code. There are a few exceptions where some language will be maintained; existing 2018 SEC amendments will remain but be evaluated. Flexibility for existing buildings will be maintained and simple clarification and corrections will stay but any significant changes will be removed from the document.

Marco Lowe said his office, Seattle's Mayor's Office, has heard from many builders who build affordable and market rate housing, who say that Seattle's Energy Code exceeding the State of Washington Energy Code makes it harder for them to build within the City of Seattle. Their recommendation is that the city should revise its code to match the State of Washington 2021 Energy Code.

Jessyn Farrell stated that OSE works to ensure that the City fosters a healthy environment for everyone within the City of Seattle, which means promoting climate resilience as well as affordable housing. OSE supports harmonizing the State of Washington's Energy Code with the City of Seattle Energy Code. The City of Seattle has been a national leader in the Energy Code, which pushed the State to adopt the most progressive State Energy Code across the country. The City is experiencing a profound housing crisis caused by rising construction costs, interest rates, and inflation. Mayor Harrel has directed the City to achieve and balance housing production, energy efficiency, and predictability. It makes sense to align the City's Energy Code with the State of Washington's Energy Code along with other policies such as building emissions performance standards that were passed this year. The city is looking for feedback on how we achieve these objectives.

Eric Vander Mey asked how Seattle's Resolution 30280, passed in July 2001, which benchmarks progress of the Seattle Energy Code to the ASHRAE 90.1-2001 standard will be treated with this process? Are we changing which version of ASHRAE 90.1 we are benchmarking against? How is the city measuring the 20% of increased energy efficiency beyond ASHRAE 90.1 standard; both quantitatively and qualitatively?

Marco Lowe stated, there are legal mechanisms and resolutions that got us to the path that we are on today. We are aligning with WA State instead of looking back on the decisions that were made in the past. We are looking for legislative steps to move us closer to the State of Washington. In which allowing home builders to use the State regulations, which is a carbon free grid. Not sure what the legal mechanisms would be to point more towards the state code with maybe some Seattle amendments to fit the City to achieve the goals we are trying to reach for tomorrow.

Greg Gilda asked what is the intent of the alignment with the State of WA 2021 Energy Code, and is this alignment being applied to both the residential and commercial energy codes, not just homebuilders for single family?

Marco Lowe's response: I mean anyone who builds a tower, mid-rise, residential structures, or anything that is within commercial code.

Greg Gilda indicated that part of the reason the state has gotten its standards is because of leadership from the City of Seattle. Seattle's influence has been strong in recent years, and will there be a mechanism that we put into place to evaluate what the State does every year or is this intended to be a permanent shift in policy?

Jim Safranek asked if this sets a precedent that will be applied towards other codes and provisions within the city. Will the State be the go-to for energy code advancements and the City of Seattle will lose its authority? Greg Gilda said that the State doesn't always have the same level of commitment to balancing its priorities.

Jessyn Farrell indicated OSC and SDCI are in partnership as we move through code updates. She acknowledges the leadership and the important role that the City plays in pushing the State level policy across. What makes this unique and hard to predict is this profound housing crisis while making sure we are balancing multiple priorities around housing production and efficiency. The devil is in the details. We need to refine the draft over the next several weeks. We are in a very different place than ten years ago and there are moments in time when you take a different policy approach.

Marco Lowe acknowledged Seattle's leadership when it comes to the electric grid. Seattle is committed to a carbon-free grid and just signed a new PPA for solar power out of Arizona coming online in the next few years. The Berklee decision forced us to develop a fossil-fuel option for gas appliances that has a point system. When Seattle sets policy that exceeds the State, we may get to a stratosphere that is hard to follow. We should retain our ability, if the State back slides, to revisit our current course.

Ardel Jala addressed Eric Vander Mey's question about ASHRAE 90.1 standard and the 20% resolution. Jessyn and Marco are saying it is ok not to make exactly 20% progress every new code cycle. We are still making progress, just not on the same arc as we have been to date.

Eric Vander Mey said the 2021 State of Washington Energy Code references ASHRAE 90.1-2019. Since then, the 2022 edition has been issued. Several provisions from the 2022 edition planned for Seattle's 2021 Energy Code are now proposed to be withdrawn. We need to be sure we don't need to do a comparison of 2022 standards on a measure-to-measure basis to support how you are interpreting Resolution 30280. There is flexibility on that 20%. Ardel Jala said the ASHRAE 90.1-2022 revisions that we were incorporating in the 2021 SEC have been withdrawn as Seattle amendments to the 2021 Seattle Energy Code. Eric Vander Mey noted that things like occupied standby for office buildings have been withdrawn.

Micah Chappell pointed out that the State of Washington has a mandate to perform ten percent better than the current version of ASHRAE 90.1 and to adopt the latest standards automatically.

Ardel Jala addressed Jim Safranek's question about policy changes creating a slippery slope of rollbacks for the other Seattle Construction codes. This is a specific point in time with reference to only the energy

code. We will not be rolling back the other codes to align with the State. This pause is specific to the energy code and no other construction codes adopted by the City of Seattle. Greg Gilda said it is good there is thought to having something that allows us to revisit this in the future if the State takes a different approach.

Eric Vander Mey asked if there is a potential to roll back only the requirements affecting multifamily projects to the 2021 State Energy Code levels? If there are past 2018 Seattle Amendments that are more stringent than the current State code that affect multi-family and residential; will there be discussion of rolling those back and how will we review the codes in relation to the residential and 2021 WS Energy Code? Marco Lowe said there will have to be discussion on that issue. As the State code on continues on its march for efficiency from where we are today, I think the State will pass what we were hoping to do as it approaches the 2030 goal from legislation. What we are trying to do is to enable housing production and meet efficiency goals and continue building a carbon free city in relation to housing. My goal is to help an affordable or market rate builder produce housing during this time and still build a highly efficient building running carbon free electricity. How we balance all these needs is important and need to work together to meet our goals. I know we want a very efficient building, but I also want buildings with people in them and I think we can get there, and it will be a process to get there and today's discussion starts that process.

Ardel Jala said the revised proposal has eliminated the amendments that are more stringent than the state code. We still maintain the provisions in the 2018 Seattle Energy Code; 2018. There is a summary document that highlights specific amendments that are being removed that is available on the SDCI code adoption amendment page.

Jessyn Farrell said this discussion presents an opportunity to make some tweaks on the first point aligning with the current State standard and if there are some places that does not make sense in our context to adopt the State language where it is currently then this is the opportunity to have this conversation.

Rob Lane said industry says new standards cost more and the status quo costs less. Is there specificity on how much the standard would of cost that we are trying to address. Percentage? Dollars? Something? Marco Lowe said that is something we would want the builders to answer. One thing is the concern of glazed windows and how high the cost is as well as being hard to maintain. Maintenance of new devices that are unique to the Seattle market are harder to maintain in this code cycle compared to the State.

Jessyn Farrell said this is a unique point in time in a housing crisis. Predictability in different policy making arenas and levels of government is important; this is both State and local. We need to make sure this aligns with big cornerstone policies that have passed like BEPS.

Eric Vander Mey said Resolution 30280 from 2001 allows Seattle to adopt something up to twenty percent better than ASHRAE 90.1. There is no cost check and balance in the Seattle process. Are there any plans to update this resolution? Ardel Jala said we do not plan to update the resolution at this time. Eric Vander Mey said the State requires a specific cost benefit analysis for changes to the energy code. Seattle does not have a similar process. If the direction is to align with the State code and to make provisions beyond that, then we have the ability to do it without a cost benefit analysis. Judy Tucker asked if Eric would be opposed to cost benefit analysis or just don't want to see it come into play? Eric

Vander Mey said he wants to know what the rules are, so I can advise clients about those rules. Micah Chappell confirmed that Seattle is not required to perform or have funding for a cost-benefit analysis. These analyses do incur significant costs and it was an issue at the State Building Code Council. The State does not require a cost benefit analysis on all State of Washington energy code proposals. Eric Vander Mey says he is not recommending one be done. Greg Gilda said that is something to consider. Right now, we are taking public comments on costs and treating it like a cost benefit analysis.

Rob Lane asked if this affects the whole energy code: commercial and residential? Will the next high-rise, that is forty+ stories of commercial follow the State amendments plus amendments from the Seattle Code? Marco Lowe responded that would be difficult to carve out multi-family from the commercial code but has not been discussed yet with SDCI that I am aware of. Rob Lane asked if we have any commercial developers that we are trying to appease?

Eric Vander Mey said there has been a roll back on provisions in this new draft that would affect office occupancies. These provisions would have lessened the cost of building an office building. Seattle can only amend the commercial sections of the energy code and that would affect multi-family; there are no amendments planned for residential buildings.

Jim Safranek confirmed that Seattle does not have a cost-benefit requirement. The State will always have the leverage of being able to distinguish what the actual costs are and make their points more effective because they are supported by financial information. There will always be disproportionality between the State and the City when it comes to the energy code. The State has the numbers; Seattle does not. Micah Chappell said that could occur but it is a possibility.

Eric Vander Mey said a reverse dynamic is also at work because it is easier to get new provisions through the Seattle Code. Seattle has always been a testing ground for provisions, so this this change will impact the speed of developing the State code.

Marco Lowe asked doesn't the State law have a mandate to keep reducing energy use by moving forward a certain percentage every three years to work towards its energy use reduction goals. Eric Vander Mey said correct to Marco Lowe question. RCW 1927A does require to do the seventy percent of energy and it has to move forward but alignment with the State results in the loss of Seattle as a testing ground that can be used to push the State forward.

Marco Lowe said what we have heard from builders that in the early days it was easy to make energy efficiency goals, but as we get to higher efficiency levels the gains are fewer and more expensive. Not testing for cost is concerning to me; it may explain why we are here today. If the State is testing for cost, then that makes it a great place to be the testing ground for everyone. Rob Lane made a comment earlier about office towers and I would welcome office investment in the city. There are not a lot of office towers being built right now in any city. Jobs, investment, and anything that we can get within the city--we should welcome it within the city. If we are building a highly efficient electric office tower that is a good thing, so if we can align up with a State code that still meets our goals of climate and inclusion on equity in the city so that everyone can work and live here. I would support an office tower as well, (working through the commercial system). Jim Safranek said those office towers are being converted to apartments in other cities. Marco Lowe said hopefully that will happen here also, but new legislation will have to come about.

Eric Vander Mey says Resolution 30280 needs to be updated because it is 23 years out of date.

4. Public Comment on revised 2021 Energy Code Changes:

CCAB members and the public: There will be a second public comment meeting on June 6th. Public Comment time per speaker is limited to two minutes.

Patrick Foley, Co-founder and management partner with Lake Union Partners. Housing developer. Concerned with some impacts. Was the developer of Mid-town Square in the central district. Brought in community members to participate in the development. The result: 432 housing units and sold 20% to Afrikatown Community Land Trust across the street, for a total of 57-+ units. Afrikatown is 100% affordable, Mid-town is 30% affordable/70% market, if you blend the two projects together 50% of the units are affordable. Private solution. The new code would have added 35k per unit and we would not have been able to do the project. Seattle already has a green energy grid with hydroelectric power. We can't make the investment if it is too expensive.

Nick McDaniel, Architect with NBBJ architects, has worked in Seattle for 25 yrs. Throughout the years, in every code cycle we have had the same discussion about changes being exorbitantly expensive. Developers and the City always make the energy code work. These changes have become standard practice. I have not seen the large costs that have been described in the hearing today. Rolling it back is dangerous on carbon. It feels like a backroom deal. Very different from what I would expect from a Seattle public process. There was a long, public process to develop the original 2021 energy code and now those changes are being removed. Need to continue leading the country and really the world.

Brian Runberg, Runberg Architectural Group. We design multi-family both affordable and market rate housing. We are strong advocates for high performing energy in the multi-family sector and we partnered with a lot of people on this Zoom call. The multi-family is flat lining right now. Obviously, there are a lot of factors, construction costs, land costs, etc. These types of projects have higher risk and lower margins. Up until now, we have had the ability to get these projects to market and keep up with energy cycles. EUI's are below 20. But the low hanging fruit has been picked. We need a reprieve this code cycle—by rolling the 2021 proposed changes back we are still at a high standard. It would be the lifeline right now in the multifamily industry.

Dan Bertolet, Sight Line Institute, is in support of Seattle adopting the 2021 Washington State Energy Code, not the original proposed 2021 Seattle-specific code that is more stringent. Agree with Marco and Jessyn and others. The marginal benefits of ratcheting down Seattle's energy code beyond the State of Washington's Energy code are outweighed by the costs that would be incurred by multi-family housing. Cars are the biggest climate change problem here. We need to build more housing in places with good transit, more walking, etc. Any cost added to develop means less likely to be developed. Renters pay the price for the added cost of stringent energy code requirements. The planet pays a price with more sprawl. Public policy is about trade-offs. The best overall outcome for sustainability is to adopt the State code.

Alice Lockhart, with 350 Seattle. We are not meeting the city emission reduction goals. Did not hear any serious cost benefit analysis supporting the need for rolling back the original proposed 2021 Energy Code changes. We need non-anecdotal analysis on the increase of climate emissions that would follow and the cost saving to developers and expected housing development. We support flexibility for projects like Afrikatown up to 100% of AMI. We don't support reductions of energy requirements for large commercial projects or luxury housing projects who can afford to comply with energy efficiency.

Seattle does use clean power, but hydropower is a limited source. We should do more analysis before adopting this change.

Leah Missik, Washington Climate Solutions. Seattle is and should continue to be a leader on the commercial code for energy efficiency and decarbonization for cities across Washington. Seattle's energy code is a blueprint for Statewide commercial for heat pumps, which improves energy efficiency, quality of air and cooling. We do have a clean grid. We will need to build energy reduction resources. We need to move away from direct use of fossil gas in buildings—to improve indoor air quality and decrease utility bills. Do not think we should follow the State and that Seattle should keep the lead. Don't cancel the progress achieved with BEPS by making these changes. Electrical Readiness for commercial kitchens needs to go back in. Don't want to see the code delayed. We want to build equitably but also to reduce energy costs for future tenants.

Terry Galiney, Seattle Housing Authority. We are the largest owner and producer of affordable family housing. Leader in energy efficiency in buildings. Keeping cost in mind and Seattle housing crisis and to align State energy code will allow more housing to be developed.

Brandon Morgan has enjoyed working with the City to advance the energy code over the years. His company has piloted and partnered with the City on a heat pump domestic hot water heating system, mini split units to replace electric resistance heat and heat pump domestic hot water heating. We always looked at the cost of occupancy for the tenant and covered the cost. Is the tenant at least saving something in the utility bill? Yes, they were on these projects. There is a more severe cost now than there was before. Incremental costs that have an impact on housing. An example of something that is already in the code. There was a \$10,000-15,000 cost for ERV per unit (all in costs) which represents a \$75 increase monthly rent forever. Saving \$1 on a one-bedroom unit on electrical bill. We are getting a diminimus return. We need to slow down and let some of these costs be absorbed in the market. ERV is already a done deal.

Nancy Henderson, representing Shift Zero. Alliance of 50+ organizations working for O carbon buildings. Disappointed to see elimination of the 2021 provisions that are beyond State Cde . Happy to see the maintenance of the existing building provisions. Shift Zero supports a strong energy code and understands the importance of this issue. Support of the removal of some of things of the energy code. Strong maintenance of existing buildings and alignments. Shift Zero would like to see the electric ready commercial kitchens added back into the 2021 code.

Jim Long, with Seattle City Light, but speaking on his own behalf. Like's exemptions to electrification that are included in the proposed code. Electrification has substantial costs from needing to upgrading electrical services to the lead times for placing transformers. Allowing non-profits and others a break on electrification is good. Concerned about the cost of conversion from natural gas to electric. If buildings are allowed to be upgraded and keep their gas service, then there will be buildings out of compliance with BEPS down the road. Need to make allowances in the city ordinances for these buildings that may be out of compliance for 15 years or longer.

David Carroll, with a design build company. Heat pump systems are too expensive-we are reaching the point of diminishing returns. This committee should be aware of what you are making people do. Heat pumps don't work everywhere, for instance, they don't work in E. Washington and Montana and electric backups will be needed. Commercial heat pumps get frozen over in sub-30 degree weather.

This cycle's energy code rollout and pullback has been extremely challenging. Permitting has been a nightmare.

Nathan Miller, speaking on his own behalf. I don't like this process and have been consulting on projects involving the 2021 energy code for months and now those provisions are being retracted. What is the point of all the public process if it is kneecapped at the end? This creates an awkward situation between the designer and building owner because we have been meeting with them assuming that . The originally proposed changes to the energy code don't need to be universally applied across all building types; multi-family housing could be targeted. Can't make ideal.

Jonny Kocher, Rocky Mountain Institute. Has been involved in the Washington State Energy Code process. Affordability is a big issue. We need to move towards decarbonization by moving away from methane gas. Likes alignment with BEPS. The code needs to include commercial kitchen electrification.

Scott Koppelman, developer for market rate communities in Seattle. Cost is an issue in Seattle. Construction is currently at a standstill. Supports this change and it believes it will help keep rents in check. It will improve the economics of building housing in Seattle.

Ben, Design engineer, MPE. Heat pumps do work in cold climates. Every code cycle there is a lot of hand ringing saying this isn't possible. Every people are able to meet it. The costs don't end up being what we thought they might be. It becomes industry standard practice by the next code cycle. Seattle makes their code aggressive but not too aggressive. It is well thought out and developed by a deeply thinking committee. Throwing it out at the last minute seems doesn't make sense when in two years we will be saying it is great.

David Reddy, 360 There are opportunities to revise what was originally proposed to address the costs in multi-family to reduce the impact. I advanced a lot of the ideas in the original proposal. I understand where the costs were added. I think that we can reduce some of them and have been working with HCD to come up with ideas.

CCAB Discussion:

Eric Vander Mey has specific questions on the proposed changes. Ardel Jala said it is not clear what the OSC and the Mayor's office want to discuss at this time on policy--whether we can keep certain proposals and adjust them. I think we should listen to them and note the items at this time but make no decisions right now.

Eric Vander Mey said he would like feedback on specific measures that affect the multi-family beyond the 2018 code. There are areas in the 2018 Seattle Code that are not in the 2021 State code. Also, there are things that can be moved into C406 credits, so we can keep language and people can choose from them. That way Seattle can still be a leader in the code, but it's not mandatory and someone can elect to use them.

Jessyn Farrell agrees with Ardel, we can hear the items and note them, but no decisions will be made at this time.

Eric Vander Mey said there are some editorial items that can be addressed and he will send them to Duane Jonlin. Not all prescriptive projects need to comply with target performance path, so that needs to be clarified in the code. C404.2.1.1 Primary heat pump system sizing currently has the State language

and would have to be electric heat pump. It should read 100% and change the 25% to 50%. Also, bring in a clear definition “wastewater”. Duane Jonlin said it should be 40% for the outside temperature. Eric Vander Mey said that they should get public comment on that issue. By keeping the 100%, we would be striking the language in the Table C406.2(1) Efficiency Measures Credits #17 Heat pump water heating line on the table then keeping Table C406.2(2) Efficiency Measures Credits for use with Fossil Fuel Compliance Path #17 heat pump water heating line on this table.

In the 2012 code cycle Seattle adopted the language for C505.2 Change in space conditioning for existing buildings. When you change a space that was conditioned with a heated space that is mechanically cooled you must bring it in full compliance with the code. Our criteria is more stringent than the State’s. The 2018 code cycle has an interpretation that you can replace either electric resistance heat or fossil fuel heating system with a space conditioned with a heat pump system if it saves energy and applies to existing buildings(residential or commercial). In the new language for exception 1, the new system includes a DOAS with energy recovery in compliance with Sections C403.3.5. Would this apply to multi-family residential or only to non- Group R space? I would like to strike that language so we can replace the existing electric resistance system or fossil fuel system and not have to add a DOAS system. Micah Chappell asked Eric to provide his comments and proposals in writing.

Eric Vander Mey said there are several provisions on occupied office standby systems that have been removed—it was good language. Can we salvage that by moving that language into a C406 credit? We could assign a reasonable number of credits to it, but not make it mandatory. Let’s bring that language back into the code and review it for technical language

5. Update on adoption of the 2021 Seattle Construction Codes – timelines and enforcement by Micah Chappell:

Code adoption schedule. There will be a second public comment meeting on June 6th to provide public comments on this energy code policy shift. To submit written comments, check the construction codes advisory board webpage and you will see the email addresses for myself and Jenifer Gilliland email. Comments will be forwarded to the board members. The final advisory vote from CCAB on the energy code is scheduled for June 20th. Our anticipated implementation date of 2021 Seattle’s code is no earlier than September 30th. There is a Land Use and Neighborhood Committee meeting process that we must go through before it goes to the City Council and to the mayor for a signature.

Ardel Jala said that folks with projects designed to the 2021 code should come speak to us because there is no landing spot for the energy code. We are accepting 2021 projects currently designed to the draft 2021 Seattle Codes, but the 2018 codes are still in effect. Jim Safranek asked if Seattle was accepting projects designed using both the 2021 SBC draft and the 2021 WSBC? Ardel Jala said we are not accepting WSBC at this time only projects utilizing the draft 2021 SBC. The website says the State code is in effect as of March 14th and we are accepting 2021 Seattle Building code as the draft code. We have removed the state code reference from the website. The State plans to adopt the 2024 code cycle in November 2026.

Greg Gilda said the summary is the intent of the code.

6. New Business:

Eric Vander Mey said he is working with SDCI to clarify mechanical and building code requirements for ceiling radiation dampers and code provisions for refrigerant piping and shafts.

Sam Steel, SDCI Inspection Director, requests that we add refrigerant licensing as a future agenda item. Seattle is the only jurisdiction who administers a licensing program at the state and has been getting push back from heat pump installers.

7. Adjourn