



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

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**STATE BUILDING CODE COUNCIL
PUBLIC HEARING RECORD**

Hearing Date and Time: Friday, October 14, 2022, 10:00 a.m.

Council Members in Attendance: Chair Tony Doan, Kjell Anderson, Jay Arnold, Micah Chappell, Daimon Doyle, Matthew Hepner, Craig Holt, Peter Rieke, Corey Wilker, Rep. Alex Ramel

Staff in Attendance: Stoyan Bumbalov, Managing Director; Krista Braaksma; Dustin Curb; Annette Haworth

Others in Attendance: Andrea Smith, Steve Simpson, Ryan Albrecht, Melinda Hughes, Jesse Simmons, Jani Hitchen, Gordon Wheat, Forest Wilson, Elsie Sabel, Lisa Ornstein, Cory Eckert, Pam Clough, Bryan Ricker, Caitlin Krenn, Phyllis Farrell, Andrea Scott-Murray, Robin Vasquez, Donna Albert, Steve Albrecht, Albert Rooks, Chris Fuess, Noelle Lovern, Deborah Hannock, Robert Marino, Pat Braddock, Judson Willis, Carolyn Logue, Mike Nykreim, John Rothlin, Natasha Jackson, Brian Emanuels, Charlotte Persons, Dusty Rhodes

Chase Abbott, Saeed Abtahi, Bryan Ahee, Ray Allshouse, Tara Anderson-Williams, Iris Antman, Jeff Aslan, Kim Barker, David Baylon, Nathalie Boeholt, Christine Brewer, Robin Briggs, Joseph Briscar, Ken Brouillette, Elliott Brown, David Camp, Julius Carreon, Cathryn Chudy, Heidi Cody, Pamela Colley, Greg Davenport, Andrew Davis, Bob Disney, Beth Doglio, Annemarie Dooley, Chuck Dougherty, Kevin Duell, Davina Duerr, Travis Dutton, Chris Edmark, John Ellertson, Alex Erzen, Robin Everett, Mike Fowler, John Frankel, Kai Fyrst, Kaylee Galloway, Dave Gerard, Martin Gibbins, Mel Gibson, Jenifer Gilliland, Anjali Grant, Scot Hattenburg, Patrick Hayes, Janet Hedgepath, Gary Heikkinen, Bartlett Higgins, Margo Hill, Judy Hopkinson, Erina Horikawa, Luke Howard, Ardel Jala, Ty Jennings, Nancy Johnson, Danielle Jokela, Jersey Jonathan, Mark Jung, Daniel Kadden, Devon Kellogg, Leslie Kenefick, Jonny Kocher, Rachel Koller, Wendy Krakauer, Jason Krum, Ava Larsen, Michael Laurie, Jim Lazar, Breck Lebegue, John Liver, Senator Liz Lovelett, David Lowrey, Larry Luton, Riley Lynch, Millie Magner, Cristina Mateo, Christiana Matthew, Marsha Maupoux, Michel Maupoux, Ted McCammant, Jeanette McKague, Alejandra Mejia, Karen Messmer, Sarah Moore, Kate Mrgudic, Dave Nakagawara, Dave Nehren, Jenny Nickerson, Stephanie Noren, Don Orange, Lisa Parshley, Mike Pattison, Richard Pellingier, Henry Perkins, Mike Petersen, Annie Phillips, Kim Piper, Eric Pravitz, Christine Reid, Sandra Richartz, Tena Risley, Joelle Robinson, Kevin Rose, Bill Sampson, Keith Sanderson, Albert Sardinas, Paula Sardinas, Eric Schmidt, Aloma Sharon, Warren Sheay, Naghmana Sherazi, Jeffery Short, Cindy Simmons, Jon Siu, Dalton Smith, Alona Steinke, Ty Stober, Alison Stokes, Kate Strathdee, Kerry Sutton, Joseph Szwaja, Gavin Tenold, Jennifer Thomas, Linda Tim, Holly Townes, Candice Trusty, Seth Vidana, Rich Voget, Rachael Weasley, A Werede, William White, Kym Williams, Richard Williams, Kurt Wilson, John Woestman, Monica Zazueta, Jessica Zimmerle

**WAC 51-50,
Adoption and
amendment of
the 2021
International
Building Code -
Structural**

WSR 22-17-151; The proposed rule adopts the 2021 edition of the International Building Code (structural provisions) published by the International Code Council, with state amendments to incorporate proposed changes as adopted by the Washington State Building Code Council. The rules will provide increased clarity and life safety measures for building construction in Washington State.

| From: | Testimony |
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| Mike Pattison, Master Builders Association of King and Snohomish Counties | I'll begin by saying we agree with testimony provided by members of the Olympia Master Builders Association and at previous hearings by the Building Industry Association of Washington and their written testimony. First of all, like most, we want a cleaner, more sustainable. Washington Master Builders Association has been a pioneer in the development of our built green program. However, we believe these proposed changes must be made more incrementally and more thoughtfully. While we're making progress on decarbonization, we're going the opposite direction on our housing goals we're woefully under producing needed housing inventory, and costs are ever increasing. We haven't faced this much uncertainty in housing, since the 2008 housing crisis. In fact, I can tell you that hardly a day goes by when a planning director or other planning professional, as they look ahead to staffing, wonder how they should be staffing up for next year, they don't know if they should even keep staff that they have or make other adjustments. We are clearly in a period of great uncertainty, and this package of updates only makes that uncertainty greater and exasperates our housing challenge. I can tell you from personal experience, we're very concerned about infrastructure and ability to support these changes. I meet with our utility districts regularly and they're rationing transformers which stops housing construction. So, in my final moments I'd urge you to proceed thoughtfully and please balance the needs of housing. |
| WAC 51-50, Adoption and amendment of the 2021 International Existing Building Code | WSR 22-17-151; The proposed rule adopts the 2021 edition of 2021 edition of the International Existing Building Code, published by the International Code Council, with state amendments to incorporate proposed changes as adopted by the Washington State Building Code Council. The rules will provide increased clarity and life safety measures for building construction in Washington State. |
| From: | Testimony |
| Chris Edmark, Thurston County Community | We are proposing a modification to the proposal 21-GP2-029, to change the definition for substantial damage and substantial improvement. The use of the building code valuation table requires modifiers based on jurisdictions and cost to administer the code. The value will fluctuate from year to year and does not take into consideration the actual value based on the actual market, since it varies from area to area and from structure to structure. Okay, this conflicts with the guidance provided by FEMA as it does not account for the depreciation of the structure and I'm going to provide some written testimony and the information from FEMA213. FEMA provides three ways to make the determination; estimates, the assessor values, and those based on the professional judgment of a local official. As a CRS Class 2 jurisdiction, which Thurston County is. We adhere to the requirements of FEMA to retain our Class 2 rating with a higher regulatory standard. We would be out of compliance using this method. The local assessor can provide current market information as modifiers and based on the market times the condition of the structure, since they go out there and look at them. Using the building valuation data will hurt the areas where homes are valued higher, or the cost of administration is lower. The scope of the IEBC does not cover structures under the International Residential Code and will cause jurisdictions to administer the determination of substantial damage and substantial improvement separately. You can see the verbiage that FEMA has and basically there's three ways. I would really think that it's important for jurisdictions to have options so that we can comply with the FEMA requirements. |
| Nathalie Boeholt, WABO | We submitted proposal 21-GP2-056 on voluntary lateral force assisting system alterations that was approved by the State Building Code Council. Today, I'm here to present a public comment to make some modifications to it. The public comments clarify the applicability of the proposal and overall improves it. It |

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| | <p>doesn't not change its original intent. It reflects comments heard from the ICC Committee during the April 2022 committee action hearings in Rochester, New York, and includes another IBC proposal EB68, that will be incorporated in the 2024 IEBC. The ICC Committee had feedback about the location of the proposed changes as exception, as well as a proposed change being possibly too broad. So, in response with this public comment, we're making some changes that are identical in both sections, 503.13 and 805.4. The text is being moved out of the exception into paragraph 2, specifically, section 2.1. We added the words, where approved, this gives a chance to the code official to review and determine if the proposed lateral design is reasonable. And the public comment also adds Section 212 as a criterion for when this flexibility can be used which is basically to provide the formation compatibility.</p> |
| <p>WAC 51-51, Adoption and amendment of the 2021 International Residential Code</p> | <p>WSR 22-17-148; The proposed rule adopts the 2021 edition of the International Residential Code, published by the International Code Council, with state amendments to incorporate proposed changes as adopted by the Washington State Building Code Council. The rules will provide increased clarity and life safety measures for building construction in Washington State.</p> |
| <p>From:</p> | <p>Testimony</p> |
| <p>Andrea Smith, BIAW</p> | <p>We are a Trade Association of about 8,000 members that represent all segments of home building and remodeling across the state. I'm here today to publicize the industry concerns with IRC Appendix AF, Section AF104.1 which covers radon testing requirements. We'd like to see this withdrawn from the appendix until a task force of radon specialists and builders can get together to discuss the best path forward. The main issue with this section is the prescriptive nature of the language in this section. Our builder members would like to see language that addresses the unusually high nature of radon in homes in the Spokane area, but they'd like to see clearer, performance-based language that takes into consideration square footage of a home and radon mitigation systems installed.</p> |
| <p>Anjali Grant</p> | <p>State Senate Bill 5237 was passed in April 2021 section 313 of that gives the Department of Children, Youth and Families (DCYF) flexibility to waive the twelve-child limit on family home childcare. This was made effective in July 2021. Per this ruling assessment for the larger limit would be based at a minimum on square footage and staffing capabilities. I respectfully request that the Building Code Council convene a working group to create and codify some expectations around egress, fire, life safety, and accessibility, so that this law can be evaluated and potentially implemented in a way that protects the health, safety, and welfare of children in care. This would not supplant DCYF regulations but supplement them. The intent of the legislation was to expand access to childcare at a time of crisis; however, it is in conflict with the State Building Codes which define family home childcare as serving no more than twelve children. I'm an architect that works with many childcare providers, mostly in a commercial setting under the IBC. I'm working with a family home provider within a municipal preschool program who's caught in the middle. Based on the IRC, she cannot have more than twelve children in her home. DCYF regulations state the opposite. This conflict puts providers at risk and creates confusion. Per the RCWs, cities and counties cannot diminish the health and life safety provisions of the State Building Code. So, the State Code is the right place to begin this work. I would be happy to serve on such a group as a technical volunteer.</p> |
| <p>Ardel Jala, WABO</p> | <p>This proposed code change takes Appendix Chapter J Existing Buildings and Structures of the 2021 IRC and moves it into the body of the IRC as a new Chapter 44. Our goal with this change is to maintain a one stop shop vision of the IRC. Across the country, jurisdictions can use Appendix J, but that appendix is not adopted by our WA State Residential code. There is also an option to</p> |

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| | <p>design existing residential buildings using the IEBC, but we want applicants to be able to stay within the IRC. Code standards for existing buildings are needed in the body of the Residential code. In addition, more reasonable standards are needed for residential buildings that were built decades ago with noncompliant windows, ceiling heights and stairs. Considering that many of the spaces in these buildings are being used as habitable spaces, it is preferable to adopt reasonable standards but give a break on full compliance with new construction so we can continue to allow use of the spaces in a safe manner. The proposed edits to CR102 incorporate pre-adoption of several structural public comments that were reviewed and approved last month at the 2024 Public Comment Hearings in Louisville. These proposals cover changes to structural provisions for existing buildings for additions and alterations; a reroofing trigger for seismic bracing of unreinforced masonry parapets; provisions for change of use and clarification of foundation requirements when an existing building is effectively demolished. This public comment also strikes pointers to electrical chapters in the model code since Washington State has its own Electrical Code and does not adopt those chapters. This public comment modifies those proposals for local use as we have moved all existing building provisions from Appendix J to Chapter 44 and is intended to completely replace the previous proposals 21-GP2-053 and 21-GP2-053R.</p> |
| <p>Kevin Duell, NW Natural</p> | <p>Residential Code TAG member. I wanted to speak about proposal 068, it's regarding kitchen exhaust and wanted to make a recommended adjustment that code regarding vent hood in particular should be regulated or should be at least modeled after national or international standards, which in this case would be ASHRAE62.2 and ASTM E3087. At this moment both standards are being revised, they're taking a fresh look at their air quality. They expect to have a new take ASHRAEs regarding airflow and ASTM regarding the efficacy of the hood. They won't be done until probably late 2023, so I would like to recommend, instead of changing the air flows as proposed in the table M1505.4.4.3, keep the existing table, which has a minimum exhaust rate for a kitchen range hoods.</p> |
| <p>WAC 51-56, Adoption and amendment of the 2021 Washington State Uniform Plumbing Code</p> | <p>WSR 22-17-153; The proposed rule adopts the 2021 edition of the Uniform Plumbing Code, published by the International Association of Plumbing and Mechanical Officials, with state amendments to incorporate proposed changes as adopted by the Washington State Building Code Council. The rules will provide increased clarity and life safety measures for building construction in Washington State.</p> |
| <p>From:</p> | <p>Testimony</p> |
| <p>Steve Simpson</p> | <p>I'm representing Seattle Area Pipe trades. I'll be speaking in opposition to 21-GP2-057. I've also submitted my written comments. There are several key factors to my opposition to this amendment under the WAC and RCWs that allow us to amend these codes. None of these have been met with this proposal to proponent checked the box the amendment clarifies the intent or application of this code the Air Admittance Valve is not in the UPC code. Therefore, how can we clarify the antenna application if it doesn't exist in the Model Code? I sit on the Plumbing TAG, and I ask your director about the requirements and the WAC and RCW and reply all those requirements you wouldn't have any amendments. The RCW clearly requires the proponent to have a detailed economic analysis. No such analysis was provided to the TAG or this Council. Your proponent checked that no impact reasoning for this was it's an optional component. I disagree with this statement only it considers the plumbing contractor. It does not look at the end users' small businesses, building owners, and building occupants. The Air Admittance Valve is a mechanical device. I have a cut away of it here. I don't know if you can see it online. I apologize about that. Mechanical devices they fail, they leak sewer gases, they are highly toxic gases. This needs</p> |

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| | to be replaced, they fail and once again that would cost serious amounts of money, up to the four-to-six-hundred-dollar range. The health impacts of the building occupants and when these devices are installed and failed adversely impact this amendment would allow these devices in any building types. Do we really want these devices in hospitals, nursing homes, and other places where compromise people are using these? The way this amendment has been filed...I will submit further comments in writing. |
| Micah Chappell, WABO | This proposal for the Air Admittance Valves was submitted as going into the body of the code and at the TAG (Technical Advisory Group) they refused to even discuss the technical merits of this proposal. Their argument was based on how it was submitted and what was submitted. However, we adopt the international codes as a series International Building Code, Residential Code. The only thing we don't adopt is the International Plumbing Code. Air Admittance Valves are part of the International Plumbing Code and as code officials, we regularly get requests from plumbers and plumbing as groups to allow Air Admittance Valves to be installed in new construction, old construction. We wanted to provide technical guidance for the code officials to say, yes, you can do this here or not here or where and to provide additional information to the code officials to approve these. When we got to the BFP Committee, we decided that it was best, maybe, to put this in an appendix, so a jurisdiction can adopt this if they feel they want to use that, which could be allowed now, a jurisdiction can go in and adopt code language on their own to allow Air Admittance Valves and we thought an appendix would be fine. The intent for this code change is to provide a code path for the alternative requests. Again, this is part of the International Plumbing Code and is used all around the country. We didn't see it as a problem being in an appendix for jurisdictions to provide technical guidance. We urge your support of this proposal. |
| WAC 51-52, Adoption and amendment of the 2021 Washington State International Mechanic Code and International Fuel Gas Code | WSR 22-17-147; The proposed rule adopts the 2021 edition of the International Mechanical Code and International Fuel Gas Code, published by the International Code Council, with state amendments to incorporate proposed changes as adopted by the Washington State Building Code Council. The rules will provide increased clarity and life safety measures for building construction and use in Washington State. |
| From: | Testimony |
| NA | NA |
| WAC 51-55, Adoption and amendment of the NEW, 2021 Washington State International Wildland-Urban Interface Code | WSR 22-17-150; The proposed rule adopts the 2021 edition of the International Urban Wildland Interface Code, published by the International Code Council, with state amendments to incorporate proposed changes as adopted by the Washington State Building Code Council. The proposed rule will also take the International Urban Wildland Urban Interface Code out of WAC 51-54A and produce a new WAC 51-55. This will in turn make the International Urban Wildland Urban Interface Code a stand-alone code under WAC 51-55. |
| From: | Testimony |
| Micah Chappell, WABO and Washington State | We came together as a work group that included some folks from King County, and we had some participation from BIAW on developing this entire code. We know there was some testimony questioning whether or not we had the authority |

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| <p>Association of Fire Marshals</p> | <p>to do this. It does appear that we do at this time. We are also working on legislation, or with legislators to modify the current RCWs in order to fully adopt this and implement it the way it should be. What we did provide as a written public comment that completed the WUI Code as we wanted to see it. I know we had to rush through a few things at the TAG level. However, we did get together in complete Chapter 3, which indicates the mapping, how to read and interpret the mapping, and how to apply the mapping when doing findings of fact for the Wildland-Urban Interface Code as allowed by the current legislation. We did provide an updated table. It kind of walks you through what you need to identify so you can determine whether or not your area is, or your parcel, is within a wildland urban interface area. And with that, we wanted to request that the proposal 21-GP2-059, which was another version of that table, for consideration. We do encourage the full Council to adopt the Wildland-Urban Interface Code, as shown. We will be working on modified legislation that way it is clear what we intend to adopt, which is just the Wildland-Urban Interface Code, like the other codes are listed in RCW 19.27.031. And with that it would provide additional options that could be less restrictive than the current code. Again, this is not new, the WUI Code went into effect last August.</p> |
| <p>Mark Jung, King County Fire Marshals</p> | <p>I'm with the City of Kirkland and Chair of the Fire Marshall's WUI Code Committee, and our committee members worked on the WABO code proposal that is in front of you that provided additional context for the code officials to successfully implement the statewide WIU Code, as required by RCW 19.27.560. We strongly support the proposal that was modified by Mr. Chappell's written testimony, letter dated September 28. This is beyond the requirements of the RCW. The proposal provides clarity while not adding additional costs. Furthermore, the code proposal provides all other options for ignition, resistance, construction, as an option. If an applicant is pursuing more detailed while plan for fire, risk analysis. Finally, Mr. Chappelle's written testimony is added on September 28 provides clarification for the use and application of the DNR WUI map produced as required by the RCW.</p> |
| <p>WAC 51-11R, Adoption and amendment of the 2021 Washington State Energy Code, Residential</p> | <p>WSR 22-17-149; Update from the 2018 edition of the Washington State Energy Code to the 2021 edition, incorporating changes from the 2021 International Energy Conservation Code and those code changes submitted to increase energy savings and provide better clarity. There are a few instances where two options are provided. Testimony on the preferred option is requested.</p> |
| <p>From:</p> | <p>Testimony</p> |
| <p>Ty Jennings, Cascade Natural Gas</p> | <p>After listening to testimony in Yakima two weeks ago, I feel I must call attention to the testimony from the International Brotherhood of Electrical Workers. IBEW representatives stated several times that the electrical grid in the Northwest simply cannot handle the increased load associated with the proposals included in this strapped energy code. To provide the infrastructure necessary to keep the electrical grid online, additional large-scale transmission line development and substation construction is required to handle the heavy increase in demand. With the shortage of trained and qualified line workers, this infrastructure will take many years, if not decades, to permit and install. We simply cannot put this immediate increase in demand on the electrical grid and risk disaster. Leaving Washington to follow California in their consistent brown outs. Washington is blessed to have a safe, efficient, and reliable natural gas distribution system already in place, providing energy to 1.2 million residences here in Washington. The use of natural gas in these homes is helping keep our power on by reducing the peak demand on the electrical grid. With requirements for decarbonization of the natural gas sector already mandated through the Clean Buildings Act and Climate Commitment Act, I implore this Council to take a deep breath and</p> |

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| | <p>consider the need of Washingtonians. Right now, Washington's demand, given that the increased cost of this energy code is forecasted over twenty-four thousand dollars, it's imperative we stop and listen to the needs of Washingtonians. Advanced energy codes will accomplish nothing, if Washingtonians cannot afford the price of a new home. I therefore ask this Council to please keep today's testimony focused on what Washingtonians need.</p> |
| <p>Ryan Albrecht</p> | <p>I work for Murray Franklyn which is a home builder in this great Seattle area. My main issue with the energy code that we have right now is that we're going for an energy standard or strategy to meet a guideline that is probably a little bit out of reach. We're taking too many options away from our homeowners and in terms of how they can actually meet the energy code. We've done this by reducing the additional credits, basically taking credits away in a way that. So that if you want to put a gas furnace in, you're going to be penalized initially, and I do believe that we need to retain consumers opportunities to make choices about their energy use. A couple of specific points. I think we need a balanced approach to how we use energy in this state. We can't just say you're going to use electricity only. I realize that's the mandate. But at the same time, it's not necessarily the only way to achieve a good balance for people in Washington. Specifically, I think U-factor on windows. We need to take a look at what we've done, where we keep bringing that down. We've had serious supply issues around windows in the last few years here, and that was made worse by the pandemic. As you continue to increase or decrease the U-factor to make it more necessary for us to put in a better window, that actually becomes a real logistical problem. Also, I think we need to look at the air changes per hour, 3 air changes just per hour is actually a very difficult standard, and it is a no cost issue for builders. So, reverting back to 5 air changes per hour as a standard, and keeping three air changes per hour for an upgrade makes more sense. I also believe that you need to look at Option 2, where currently you do not have any option for a deeply buried duct in attic situation for a return error, as you do in Option 1.</p> |
| <p>Melinda Hughes, Thurston Climate Action Team</p> | <p>I live and work in Olympia. In addition to be concerned citizen, I hold a masters on environmental law a policy focusing on energy law and climate change law. I've worked in the environmental field now for almost thirty years on climate change since 2005 with an extensive background in natural resource abstraction, as well as pipeline safety. I'm also the Executive Director for Thurston Climate Action Team, better known as TCAT. Our work focuses on reducing greenhouse gases in partnership with the four principal jurisdictions who are urging adoptive to person pilot mitigation plan, but their authority only goes so far, so I urge the Council to help our elected leaders as well as our residents, by adopting the proposed changes behind me. You can see a lot of people in blue shirts, here today. So, a lot of residents are coming out and speaking out. Proposing just nothing is dangerous. Besides combustibility factor, nothing becomes trapped in mountainous areas, creating an exasperating health issues, especially for those with respiratory issues and other marginalized populations. As the methane travels far, it contributes to air pollution down winds also across the country. So, what we do in Washington state affects us beyond our borders. With the methane, we also curve other hazardous air pollutants, such as the OC, which are released alongside of the methane. In my free time, I work with scientists' and physicists on a global team on sustainable products. Green hydrogen biochar as well as negative concrete. The buildings industry is definitely seeing progress in technology. Technology is moving forward in the building sector, including heat pumps and induction stoves. Our coast to keep up with the products for clean energy future. Finally, from a moral standpoint, it's our duty to combat climate change. My fiancé is a thirty-five-year-old, veteran of the union in the building sector, I see supply issues all the time. It's not supply issues that are driving up the price. So, heat pumps should not be discounted because of the</p> |

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| | cost of the difference. |
| Jesse Simmons, Olympia Master Builders | I am the Government Affairs Director for Olympia Master Builders. We represent nearly five hundred members associated with the local building industry. These are international developers, they're not even national developers, they're local builders trying to provide stability for both them and their neighbors. As you've heard previously, and probably we'll hear again today. Our concerns with these code changes are centered around the issue of portability. Since you've heard all the statistics and numbers before. Instead, I'm going to tell you a little bit about my experience. I served this country for about eight years in the United States Army, and a significant amount of that time, my family has called this community home. My kids have grown up here, and they've made lifelong friends here. I, too, have become connected to this community and my neighbors. I left the army in 2014 and we decided as a family to stay here and continue to call Washington home. I was able to work hard and buy a house. The cost of that house, which I might add, is about half of what it appraised for today. I was fortunate to be able to use the VA loan and able to not have to put any money down to buy my house. I like thousands of others who come before me and left military service to call this community home. My kids are attending local schools, I have joined local politics, I've managed campaigns, I have donated thousands to local non-profits, and I have tried my best to give back to this community that I call home. My fear is, and I believe that what professionals in the building industry are trying to tell you is that you will price people like me and my family out of this community and out of this State. Most homes now go for around a half a million dollars in this state. So, I ask, is it really time to be weighing whether people like myself deserve to live here with your desire to be first in green energy. |
| Jani Hitchen | I'm a member of the Pierce County Council. I'm speaking on behalf of myself. I'm also a former high school teacher and taught science for many years and had many different conversations with my students who are concerned about their ability to live to my age. We must, as policy makers, and as this committee, think beyond this generation on behalf of children in our state today and the children coming in the future. We must use all the possible tools to reduce our carbon footprint. Many home builders are already having great success building with heat pumps for space and water heating. Highly efficient, all electric buildings typically cost less to go and less to operate once they're built, while also helping to cover public health and climate cost. But because some developers will continue with current practices until prodded to change by the SBCC, we must enact building requirements that decarbonize our energy and heat sources and eventually provide a way to retrofit older buildings. The residential energy code proposal focuses on prioritizing energy efficient electric heat pumps that help both the heating and cooling which we need now more than ever due to climate change. It prioritizes using clean electricity as an energy source and looks to require stricter ventilation requirements when gas stoves are used. There are other things mentioned, but these are the ideas that students have shared with me prior to becoming an elected official. I know, as we continue to build for a growing population in Washington, these changes will have a net impact of good and begin to show our use that we want them to have a healthy place to live now and in the future. |
| Sarah Moore | I am a resident, parent, and city council member in Burien WA, in King County. I urge you to adopt the proposed energy code updates, especially the requirements for heat pumps and increased ventilation for gas stoves, because moving away from methane gas in our buildings is important for addressing the climate crisis as well as a safeguard on the health and safety of the community. When I moved to my current home, we purchased a new, fancy, expensive natural gas burning stove. Despite our complying with all codes, there were |

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| | <p>defects with the starter in the oven portion of the unit, causing a delay between the gas turning on, and the flame igniting it. Gas would build up, and ignite as a fireball when the oven door was opened, and oxygen was let in. It was not until we replaced it with an electric stove that I came to associate my headaches with the stove. On the other hand, my household is the only one among several in our neighborhood with a heat pump which offers both heating in winter, and cooling in summer. In the past two year we have hosted neighbors during the unprecedented heat waves and have helped both elder neighbors and their medically fragile pets to cool down during times that might have endangered their health and wellbeing.</p> |
| <p>Paula Sardinas, WBBA</p> | <p>I'm proud to represent the Washington Build Back Black Alliance. We are a coalition of sixteen BIPOC studios serving Washington State, and nearly three hundred and thirty thousand Washingtonians. I am testifying this morning in support of the energy code and heat pump proposals. We know the impacts of environmental racism are not going equally. Marginalized communities have lived, and experience documented inequities because of structural and systematic racism that dates back to redlining. The harm caused by where we work, live, and play it's without any controversy. Every three years this body has an opportunity to look at these policies and the past ordinances that align with Washington's values. We can look at our neighbors and their children and say, we see your humanity. Washington State has said unequivocally over the past two to five years, we can't wait. We must reach next through by 2050. We know that disproportionately impacted families live in modest and low-income housing. Their access to methane gas is a direct result of their dependence on their heat pumps, their water pumps, and their air conditioning. We have an opportunity today in a strong message that we don't expect Washington is to choose between bare necessities and basic human health. We can offer a better choice. So, I urge you to adopt the proposed energy code updates because moving away from methane gas where we work, live and play is addressing the climate crisis, health care disparities, and our needs. I am a fifty-year-old black woman with asthma. The change in these policies will not save my life, but they'll save the life of community members that look like me.</p> |
| <p>Gordon Wheat</p> | <p>I am physician and a public health advocate. As you know, modern building codes require house to be air-tight, however, tight buildings do not allow for indoor air pollution to escape without the resident actively turning on an outside vent and we know that's something that very few residents do. Tight buildings create a safety risk from high concentrations of indoor air pollution, and this is why the disincentive to install new gas stoves provided by the proposed codes is an important safety measure. Installing fewer gas cooking stoves would immediately decrease asthma in children and cardiovascular disease and cancer risk in adults in all of those houses. Eliminating indoor combustion resolves the indoor air pollution, public health issue.</p> |
| <p>Cathryn Chudy</p> | <p>I am a longtime resident and retired physician, here in Vancouver, Washington. I have enjoyed two successive summers of record heat temperature days without air conditioning, while my gas furnace sits idle through the summer months and no help with the cooling I now need in the changing climate conditions we face. My gas company gives me a deceptive, deliberately misleading marketing message delivered with my gas bill, telling me that renewable natural gas is on its way home, our net zero, carbon energy future is just around the corner. They don't tell me that because of cost supply and availability challenges, they are not, in fact, going to deliver a renewable, safe, healthy product to my home anytime soon, if ever. This is the essence of corporate greenwashing to benefit their shareholders and business bottom line, not provide me with the most efficient and healthy way to heat and cool my home. We have to start somewhere, not digging deeper with burning fossil fuels, but instead build our new homes without</p> |

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| | <p>climate and health harming emissions. I'm tired of being gas lite by the gas industry. I urge you to see through the intentionally misleading claims of the gas utilities that ignore the growing body of evidence about the harms of continuing to burn gas fuel in our homes. I urge you to adopt the proposed energy code updates because moving away from methane gas to using clean and efficient electricity in our homes is a necessary step to address our climate crisis, while at the same time protect our community public health.</p> |
| Forest Wilson | <p>I'm a Marine Corps veteran and owner of Tops Solid Surface. We fabricate install quartz, granite for some services such as countertops, showers stuff like. We currently employ twenty-seven people in Pierce County. We use some point more but over the past year we lost two good, experienced employees. We're forced to leave the area due to the egregiously high cost of living. While I'm sure these new code requirements were created with the best of intentions the timing for implementation could not possibly be worse. We've got inflation on the horizon, war with Ukraine, a looming recession and a homelessness issue that won't go away. Coming from Kansas, I can tell you that I never drove by two to three homeless encampments every single day during my commute. This is a Washington State problem created by us and solvable by us. I will lose more employees to the Sun Belt, and we will all lose more knowledgeable workers to cheaper and better climate. If you implement these new code requirements, you will be adding further to the cost of building new homes. And what we really need is common sense densification zone to protect the environment, not luxury, single family, home plots which only the wealthy Tesla rabies can afford to a litany of code additions. I believe that you can both love the outdoors and love your fellow human being. You can choose to implement a scarce mindset more rules, more cost, or you can encourage an abundance mindset. One is good for Washington State and encourages continued economic growth. One puts our State on a path of decline. My challenge in my question to the committee is what code or zoning requirements will you be sunseting or outright removing to make room for these new code requirements so that we can offset these new building costs and house more people.</p> |
| Elsie Sabel | <p>I'm a high schooler here in Olympia. I urge you to adopt the proposed energy code updates because we don't have time not to. I've grown up with climate change. I can't remember a time when I wouldn't think about it and feel scared, and as I've grown, my dread has only worsened as I realized how little we're actually doing about it, and how small our attempts are in the face of everything. In the newest IPCC report said that our emissions have to peak by 2025, which is in three years, at the very latest, to stay below the magic 1.5 degrees Celsius. It's true that you could wait another three years to pass this proposal and in those three years nothing much will change. Your life will go on just like it always been. I know that to you it doesn't seem like things can change very much in that little time, but it can. In three years, I'll be twenty. My life will have changed completely. I'll be attending my second year of college in a new city, with a new home and living with new people, and if we do nothing, in three years it'll already be too late. We'll be facing a climate catastrophe and the people my age will have to deal with the repercussions of your actions. We have to do everything that we can while we can do it. And if that means that houses are cheaper, and we have better indoor air quality, then it's the perfect solution. Please, for me and for every young person in the State, adopt the proposed energy codes. My future, my right to clean air and clean water and sustainable systems depends on you.</p> |
| Lisa Ornstein | <p>I live in Olympia and a mother of 2 children, in their twenties, who miss their father, every day. I'm here to urge you to adopt the proposed energy code updates because moving away from gas in our buildings is critical to addressing climate crisis. This is not about some future potentiality. Climate change is here</p> |

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| | <p>now, and its effects in the Pacific Northwest are already deadly. My ex-husband perished in the 2021 Portland, Oregon heat dome because his apartment building had no air conditioner. He left behind a grieving family. Highly efficient heat pumps with cooling ability will keep vulnerable people safe in this during increasingly dangerous heat waves or wildfires. Especially homeowners and apartment dwellers who otherwise cannot afford air conditioning.</p> |
| Kai Fyrst | <p>I am a local builder and the owner of First Finishers, LLC. I have been in the building industry for the last 23 years and my company currently employs 45 people who are all a part of this community. Our company builds mostly in Thurston and Pierce County, we build custom homes and develop properties for multifamily projects. I already see my employees and my neighbors being priced out of my community. As a local builder with a focus on residential, I am passionate about my work. I am passionate about providing housing options that are both high quality and affordable. The proposed code changes this council is considering will not allow me to do that. To compensate for the added cost to my business I will need to impose several changes as well. I will need to either sacrifice quality or price to build housing. I do not believe in sacrificing quality. I will need to compete harder for the required materials to ensure I maintain the quality of our product...I'll submit it in writing.</p> |
| Kaylee Galloway, Whatcom County Councilmember | <p>In June, the Whatcom County Council voted 6-1 to send you all a letter outlining our perspective on this important issue. We support a new residential energy code that will help our communities decarbonize by transitioning to electric space and water heating, while addressing vulnerabilities to climate change, reducing indoor and outdoor air pollution, and ensuring that our communities are sustainable, affordable, equitable, and healthy, now and in the future. By electrifying and increasing energy efficiency, we can work to reduce pollution and carbon emissions from our building sector. In 2021, Whatcom County adopted a Climate Action Plan, which includes strategies and actions to reduce greenhouse gas emissions in the built environment. We recognize buildings comprise the second largest and fastest growing component of our state's GHG emissions, including 29% of our county's emissions. Here in Whatcom County, we have seen climate change right before our eyes. Over the past couple years, we have experienced increasingly severe and frequent effects of climate change including unprecedented heat wave, drought, smoke from wildfires, flooding, and other severe weather events. And we know we are not alone. These emergencies often disproportionately impact our low income and rural communities, exacerbating inequities and vulnerabilities. Communities must be able to prepare for emergencies and continue to build resilience and self-sufficiency; therefore, we urge the council to support a strategic transition to all-electric new residential construction and incorporate measures addressing vulnerabilities and increasing community resilience. As Whatcom County is still recovering from climate related emergencies, and preparing for future ones, we recognize climate change is a threat that must be addressed at every level of government, and we are committed to doing our part. I urge the SBCC to move forward with a new residential energy code that addresses these important issues.</p> |
| Daniel Kadden | <p>I'm a resident of Olympia. I'm here to urge adoption of the proposed residential building code updates. I've been deeply involved in affordable housing issues for many years, and previously served as executive director of a local faith-based nonprofit, working on housing solutions for the hardest to house population. The immediate local challenges of homelessness and housing needs are often overwhelming. But more and more we have all come to better understand the practical and long-term connections between affordable housing and clean energy efficiency. There is no way forward without consciously linking climate and housing goals. New, all electric construction, specifically heat pumps and extending code provisions to low-rise multi-family buildings which are</p> |

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| | <p>increasingly common type of affordable housing in our communities will have tangible financial health and safety benefits for those who live on the economic margins and bear a disproportionate burden of energy costs and exposure to unsafe environmental conditions. These goals resonate deeply with me, and among affordable housing experts and advocates across the State. The decisions you make will shape outcomes for many, many Washingtonians who have challenges accessing safe, healthy, energy efficient and affordable housing, including individuals on the precipice of homelessness, vulnerable seniors, and families with children. I appreciate the opportunity today and I especially thank you for your work on these complex issues.</p> |
| Jessica Zimmerle | <p>I am a deaconess in the Lutheran tradition, and I serve as the Advocacy Director of Earth Ministry and Washington Interfaith Power & Light. We are a statewide nonprofit, and we work with over three hundred spiritual communities and represent nearly six thousand individuals who are people from all different faith traditions that come together around our deep care for environmental justice. And with reflecting and preparing for today and this conversation, the smoke has been weighing on us all so much in these last few weeks, and our executive director this week shared how their child couldn't go to school because the air quality was so poor. And while I grew up in the central valley of Northern California and I literally didn't know that it wasn't normal to have spare the air days which were days when the air quality was so bad, we didn't have recess. We had to stay inside. I grew up thinking that was normal until I came to the Pacific Northwest. We think asking our children and those for the most vulnerable to stay inside we'll protect them in these times of poor air quality and smoke covering creation. And the sad reality is that that is not the case with indoor air estimated by the EPA to be two to five times more polluted than outdoor air. So, with that we really fully recommend passing the proposed code updates and especially support the requirements for heat pump systems and new homes and stricter ventilation for gas stoves. We want to see more clean air in our homes, so we can all grow up healthy. Take action on the climate crisis which we see as a moral crisis. We'll also be submitting a letter signed by members of the faith community. That will be coming in later this afternoon.</p> |
| Janet Hedgepath | <p>I'm a resident of Vancouver, Washington, and I urge you to adopt the proposed energy code updates. Year after year we receive increasingly urgent reports from the intergovernmental panel on climate change, urging drastic cuts in carbon missions. Year after year more of the West burns, as our air is filled with smoke, and year after year we spend precious time and energy debating whether various proposals to address the crisis we face are too soon or are too radical. I say no, the proposed code is neither too soon nor too radical. It will benefit both the earth and the residents who will live in those buildings, both with their health and with affordability. The Roman Emperor, Nero, was known for fiddling while his country burned. I suggest that we not become known in the same way. It's time to stop fiddling and to act. Please adopt the proposed codes.</p> |
| Lisa Parshley, Olympia City Council & Climate Solutions | <p>I am an Olympia City Council member, but I haven't had a chance to say, yet I also serve as the chair of the Thurston County Climate Mitigation Planning Steering Committee. I first want to refer you to a letter from the Olympia City Council, signed by our Mayor Cheryl Selby. But I want to point out that all seven Council members supported this letter, and I want to state very clearly for the record as an Olympia City Council member, and as an individual, I urge you to adopt the posed energy code updates, especially the requirements for heat pumps and increased ventilation for gas stoves. I challenge you to look into the eyes of a person below the age of eighteen and know that your decision will impact their future. You need to ask yourself what will their world look like when they are your age? As a city council member, I have had to look into our youth's eyes and it has lit the fire in me, knowing we do not have enough time to do the</p> |

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| | <p>work for climate mitigation. I want to point out just a few things; in Thurston County, two-thirds of our carbon footprint is our built environment, continuing to add new buildings to the gas distribution will walk into for decades carbon and methane emissions that will be costly for us to retrofit in the future and put us backwards. I also want to point out that in 2021, the Harvard School of Public Health said that in the United States we spend sixty-five billion dollars due to indoor poor air quality from natural gas burning and in Washington State we spend about 6.3 billion and then one more time for Miss Sardinias. This is not just about climate change, it's about a sense of equity. We are going to have to address climate change if we are going to provide a diverse and equitable society, because climate change is impacting these communities most.</p> |
| Monica Zazueta | <p>I'm here to speak today to urge you all to adopt the proposed energy code updates because moving away from methane gas in our buildings is important for addressing the climate crisis, health equity, and for the future of my two kiddos, Aries, who is eight, and Rufio, who is one month old, and for all future generations. Sir David King, the UK's former chief scientist, told the opening session the National Climate Emergency Summit in Melbourne last year, what we do over the next three to four years, I believe, is going to determine the future of humanity. We are in a very, very desperate situation. I am terrified. I'm terrified because I know that we don't (inaudible) together. I can't leave my kiddos on a dying planet. And I really urge, and I beg you all to please do this for the future, for now, for everything, because we need you, and I need you and my kids need you. But please push this forward, and I'll be one happy mama.</p> |
| Rachael Weasley | <p>I'm a local pastor and renter in Washington. I'm urging you to adopt the proposed energy code updates for heat pumps and improve ventilation for gas stoves. As we see more extreme weather a well inflated home with the heat pump will be much safer and do a better job at maintaining air temperatures and indoor air quality for people during heat waves and wildfire smoke. I'm concerned about building new gas infrastructure in a rapidly changing climate building with gas powered furnaces and water heaters, which last the two decades and locks in carbon emissions, just as we are hoping to reduce them. High missions causing change, have contributed to the pop and influx to our region and temperatures, and all our access elsewhere become unattainable. The housing affordability crisis is already here. Building with fossil fuel furnaces all these years has not been if anything is contributed to it. I have a four-year-old child, so the proposed building codes hit home in two important ways. One is safety. We have a local teenager lost his life because he was fishing, and a gas explosion killed him. Meanwhile, as smoking conditions become common, clean, and indoor air is vital for our young children, who are in their lungs and respiratory systems. And two, I passionately desire a safe natural environment for my children. Just in the past seven years, the weather has changed drastically, and we can reverse this trend by cutting emissions now and adopting heat pumps. Please do what you can for my child and his generation to reduce our state's carbon emissions and safeguard environment for our children to grow up in. I'm really excited about this heat pump option. I hope that it gets adopted.</p> |
| Representative Davina Duerr | <p>I am an architect, by training and have a deep commitment to ensuring our built environment is sustainable and moving towards the state legislative mandate that residential construction, permitted under the 2031 State Energy Code achieve a 70 percent reduction in annual net energy consumption. The Legislature has worked hard to pass laws that ensure that we are headed toward a sustainable future that mitigates the direst effects of climate change, and advances those already underway. The Legislature has a set of series of aggressive targets to reduce carbon emissions, green the grid transition to electric vehicles, construct energy efficient buildings and reduce super pollutants. The 2021 Washington State Energy Strategy states that building electrification is</p> |

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| | <p>the least cost strategy to decarbonize the building sector. However, a cost-effective electrification strategy requires a concerted effort, not a piecemeal series of changes, to send a strong market signal to manufacturers and distributors, the State must implement a consistent electrification strategy. Starting with the residential buildings that have yet to be built. Specifically, I support a residential energy code that requires electric heat pump technology for water and space heating as the fossil fuel counterparts of these appliances account for the majority of emissions in the building sector. As a legislator, I'm committed to solve climate change by lowering Washington's greenhouse gas emissions, helping my constituents in our State be healthier and more resilient. The Legislative Directive is clear, and the SBCC can succeed in meeting our clear legislative intent by establishing a pathway to a clean electrification of our homes. For all the reasons mentioned above, I urge the SBCC to pass the proposed changes to the residential energy code, including requiring heat pump, space and water heating in new residential buildings, ensuring that Washington is sustainable, equitable, and healthy now and in the future.</p> |
| <p>Eric Pravitz, Homestead Community Land Trust</p> | <p>We feel strongly that decarbonizing our new construction homes is critical to creating a healthy indoor environment. Better energy efficiency brings down the total cost of home ownership which helps our low-income home buyers. Some people who are often the ones most impacted by the negative impacts of climate change. We need to clean up our new construction housing and at the same time reduce our impact on the environment. Really, the time to act is now.</p> |
| <p>Cory Eckert</p> | <p>I'm the owner of Alpine Ductless, here at Olympia. We're specialized in installation and sales of ductless heat pumps. Since 2012, my company has installed over four thousand ductless heat pumps in both new construction and existing homes. Over eighty of those installs that for Habitat for Humanity homes in Thurston, Pierce, and Kitsap counties. Two considerations when analyzing affordable housing are the cost to build the home and then the cost to live in the home once it is built. What type of the systems we've installed for habitat? We never use the cheapest model, but we chose models with high efficiency. Increased cost was minimal while maximizing the reduction of electricity needed to heat and cool the homes. In 2016, a study by Tacoma Power conducted on fifty of the homes that we had installed them on, prove that the installation of ductless heat pumps increased cost to the home was fully recovered by the homeowner in less than five years, through savings on their utility bills. Properly maintained heat pumps last fifteen to twenty years or more so, the homeowners continues to save on the power bill for the life of the heat pump. Maintaining the ductless heat pump is easy for homeowners and if done professionally can be done for as little as one hundred and fifty dollars a year. All the ductless heat pumps provide both heating and air conditioning. We learn from the heat wave of June 2021, that air conditioning is not just a luxury, but arguably a lifesaver, especially for low-income and elderly. Ductless heat pumps are the right choice for homeowners, the environment and affordable housing. I urge you to adopt the proposals.</p> |
| <p>Annie Phillips, Burien People for the Climate Action</p> | <p>I live in Burien. I'm a full-time volunteer climate activist and I Chair two local groups of citizen climate activists. We applaud your proposal for the update for the residential building code. I used to live in Los Angeles and in the seventies, I was a single mom, and I had two little kids, and one morning about five o'clock, we were sharply awakened by an earthquake. The kids were terrified. I was pretty scared. They ran to me, and we all hid under the covers, and my daughter asks, mommy, what is this? And I said, it's an earthquake, honey, and she said, is an earthquake nature? And I said, yes, its nature, she said. Oh, good! Then it can't hurt us. Global warming is not nature. We've done this to ourselves in the last two hundred years, and we can undo it if we act fast and with decisiveness. And that's why we applaud your heat pump proposals, and your proposal for a</p> |

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| | <p>better ventilation for gas stoves, because this will go so far to make our new homes in Washington State healthy and green for our grandchildren, my seven grandchildren.</p> |
| <p>Pam Clough, Environment Washington</p> | <p>I'm an advocate with Environment Washington. We're a statewide, citizen based environmental advocacy organization and we work for clean air, clean water, and open spaces. I'm testifying to urge you to approve the proposed updates to the Washington State Residential Energy Code requiring that new homes to be built with high energy efficiency heat pumps to heat and cool spaces and increase ventilation for kitchens that burn polluting gas. In 2019, Washington established the State-wide goal to transition our grid to 100 percent clean energy by 2045. And so, while we do this, we also have the opportunity to decarbonize all aspects of our lives for our health, and to reduce emissions, including the use of highly efficient heat pumps. Currently an emissions from the building sector, the fastest growing source of climate pollution, in Washington State. In addition to climate pollution buildings are a significant source of unhealthy air pollution. Reports have shown that homes with gas stoves have significantly higher nitrogen dioxide levels than homes using electric or induction stoves, and this can obviously contribute to health problems, heart failure and asthma. Just one hour of cooking on gas stoves can produce nitrogen dioxide levels that would be illegal if found outdoors. We need to eventually transition to cleaner, safer, electric and induction cooking, requiring better ventilation in kitchens with gas stoves is a necessary step forward in protecting Washington. These proposed code updates ensure that as Washington grows, and as we construct new homes. We're creating healthy homes and honoring the climate commitments.</p> |
| <p>Bryan Ricker, SEL - Schweitzer Engineering Labs</p> | <p>SEL is founded and housed in Pullman, Washington. We have two thousand eight hundred employees throughout the State. SEL specializes in creating digital products and systems that protect and control and automate the power systems around the world. We work to make electric power safer, more reliable, and more economical. We all want clean air, safe drinking water, and sustainable future. But taking steps to remove natural gas from Washington's energy mix will only harm those who can we support it. Let's learn from California's challenges, instead of finally following their lead. We have seven-dollar gas, electricity rates, the highest in the country, and only continue to increase. People are struggling. SEL is a company of inventors and innovators, and so we can tell you with confidence that the best way to support innovation towards cleaner electric power and cleaner buildings is not to mandate a single solution, but to keep the door open with regulatory framework and support new ideas. We understand that a supply does not meet demand on the power grid, the lights will go out. These proposed energy code changes will push more demand onto the grid, and we need to ensure the grid is ready, so their citizens and businesses are not unnecessarily harmed in the process of pursuing electrification. As an employer trying to attract the best and the brightest who live and work in Washington, we also want to ensure that our employees can afford housing in our communities. Everyone one-thousand dollars added to the price of a new home, prices up two thousand one hundred and eighty-two households. Costs for these code proposals could rock the other fifty-three families fifty-three thousand families of the opportunity to purchase a home. We should not be forcing our citizens to pay more money to have fewer choices. Washington can meet the State's goal of seventy percent reduction in energy consumption by 2030, without eliminating customer choice for their space meeting.</p> |
| <p>Caitlin Krenn, WA Environmental Council</p> | <p>I'm commenting today in support of the energy forward changes under consideration. I also live here in Olympia and on the classroom at home built in 1927, nearly a hundred years old. Our home has a lot of character and also some twentieth century elements that must be updated for this century. Two of those I'm sorry gas furnace, and I guess so with no met them. My partner and I</p> |

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| | <p>bought our home. We knew we have to shoulder the substantial costs which will be thousands of dollars of installing, and that that end up creating our electrical service panel for a heap at some point that was just part of buying it. But there's no reason that homes being built today should lock future residents into costly and complex retrofits for years of breathing toxic cues from natural gas furnaces and water heaters and unventilated natural gas stoves and ovens. The way forward is clear. We need to be building twenty first century homes with the benefit of twenty-first century knowledge and technology The code proposals under consideration will deliver just that; high efficiency, electric appliances, and proper ventilation. Four thousand five hundred and eighty-seven community members have commented to the Council during this open comment period in support of these code updates. In addition, there have been letters and support from eighteen building industry organizations, seven affordable housing organizations, sixteen racial justice organizations, thirteen environmental organizations, two healthcare organizations, including the Washington State Medical Association, sixty-seven local elected officials and over one hundred faith leaders. Please vote to approve the full package of proposals.</p> |
| Phyllis Farrell | <p>I'm a resident of Thurston County and thank you for the opportunity to urge for the adoption of the residential energy code updates. From the proposed codes to transition to all electric system in new buildings will be an important component of Washington's goals to reduce emissions from methane gas and homes and buildings to address climate change and for electricity to be fossil free by 2045. Washington State energy code strategies model scenario for full electrification predicts the proposed codes will have long-term benefits, including affordable rates. Transitioning buildings to all electric is achievable, affordable, safe and creates a more resilient energy system. I can attest to this because two years ago I had an energy audit by PSE, and subsequently installed a new energy efficient furnace. My energy audit confirmed I had good windows and installation, but nevertheless my energy usage dropped forty percent the next year, which was the pandemic year when I was home all day long, saving me sixty dollars a month in my electric bill. Please approve the proposed residential energy code updates to transition to all electric systems to include heat pumps in new buildings. My heat pump was a lifesaver during a heat dome.</p> |
| Akil Werede | <p>I am an engineer, by discipline and I work for King County Wastewater Treatment division. I am kind of familiar with HVAC systems and how is a gas burning effect is. We burn a lot of gas on our flares at King County, and I know how the issue is. With all that knowledge and the experience, I have also working experience with heat pumps and furnaces, because I work a lot with engineers in heating and cooling of the buildings. So, with all this, what I would say is, we have a moral obligation to cut the carbon emission. Look what we have now. We have six or five days of abnormal air quality, and it has it to be cancelled. We inherit this problem from our parents or from what we have inherited from last year we don't want to pass it to our kids, and the next generation. We have all the things we need to make these amends. I really recommend that having this energy efficient heat pumps, to be including to be included in the energy code. It's very important and we need to do that to save the atmospheric greenhouse effect we have now.</p> |
| Tom Crawford, Thurston Climate Action Team | <p>I am board president for Thurston Climate Action Team. We have worked with the four largest jurisdictions in Thurston County on reducing greenhouse gas emissions. By expanding the use of energy efficient heat pumps and reducing fossil gas use in homes, we believe the proposed changes to the state energy code will provide important help to our efforts. They will also save residents money on utility bills, improve health, and support home safety with air conditioning on hot days. I have worked with indigenous communities throughout the Pacific Northwest on education and community development</p> |

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| | <p>projects. Indigenous communities are suffering severe impacts from climate change, while they've tried to protect their land, waters, and fisheries. As I work on climate change here in Thurston County, I try to listen for the teachings of the people whose home this has been for thousands of years, and whose guest I am on this land. I invite council members to pay special attention to tribal voices in this matter.</p> |
| Naghmana Sherazi | <p>I live and work in Spokane for the Lands Council, and also for the low-income housing consortium. I'm an immigrant and have lived in Spokane the last ten years. I'm also a renter in one of the lowest median income districts in Spokane. I'm representing a huge swath of communities of color and stand in solidarity with my brothers and sisters of the indigenous community. I am grateful that I get to live in a State that is a leader in green initiatives and committed to reducing the carbon footprint statewide. I want to reiterate testimony from Paula Sardinas, this morning, she outlined many of the points around access and equity that I wanted to make. For those reasons, you'll find above, I would like to urge the Council to adopt the proposals under WSEC-Residential provisions. In Washington, most of the gas we use in our homes is expensive and brought to us by fracking. Gas extractions from fracking largely take place on or near tribal or first nation lands creating this disproportionate risk to indigenous communities for air pollution, water contamination, and overuse of water. This is particularly true for Spokane region, where our four tribes' heritage lifestyle, is at risk due to many factors affecting the Spokane River and our sole source aquifer which includes fracking. My son was a Boy Scout and, working on his sustainability merit badge, when he came to me asking if I knew what fracking was, I did not, so we went back and researched, and I was truly appalled to discover how terrible it is. People spend the majority of their time indoors, up to ninety percent of their lives. Yet indoor air quality is estimated by the EPA to be two to five times more polluted than outdoor gas because of methane. I thank the Council for their work and again urge you to adopt the package as we can continue to live in a healthy and green environment.</p> |
| Andrea Scott-Murray | <p>I have lived in Washington State my whole life. I'm sixty-seven, I have asthma, as many of my family members also have respiratory issues. I also have been diagnosed with COPD. My doctors tell me that I have seventy-five percent lung capacity of a person my age and gender and that affects many parts of my life. It's my understanding that the paramount purpose of building codes is to ensure the safety and health of the people who use those codes. I just want to take one second to appreciate that we're all in a room together and able to listen to each other's testimony of bearing stripes on this issue, and I've listened carefully to issues about cost from the building industry and I've listened to issues of health and safety. From my personal perspective, health and safety have to come first, not only personal health and safety, but the health and safety of our species on this planet. I just want to add an individual history; my mom was a single mom and living in Renton in the early 1980s. She replaced the gas furnace with the heat pump. She never regretted that decision. It was a very good financial decision for her. I think she had repairs on that, I think once.</p> |
| Wendy Krakauer | <p>I live in Seattle. I'm a grandmother who wants Washington to remain livable for my grandchildren. Two years ago, I replaced my forty-year-old natural gas furnace with a new gas furnace. No one told me that natural gas is not really natural. The company selling me the furnace certainly did not tell me how harmful natural gas is to our environment, nor did they mention that I could have easily installed an electric heat pump instead. It is not feasible for me to now replace that almost new furnace with an electric heat pump, and I realized we cannot mandate replacement of all existing gas furnaces. But our State's legislative commitment to a ninety-five percent reduction in emissions by 2050 will not be achievable if we continue to expand fossil fuel infrastructure. Homes</p> |

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| | and buildings are one of the largest and fastest growing sources of climate pollution in Washington. To that end, the State Building Code Council can ensure that, as we are building new homes, we are doing so sustainably, and while protecting the health and safety of not only my grandchildren, but of all residents of Washington. Accordingly, I urge you to adopt the proposed residential energy code updates. |
| Robin Vasquez | I am a member of the Lacey City Council, here in Thurston County. Earlier this year, Lacey City Council had a lot of conversations about our urban tree policy. We were discussing what trees do for the community, because trees, like energy efficient heat pumps, decrease emissions, especially mature trees. During our discussions one of our city staff shared that due to hotter drier summers. Many of our trees which are native local breeds of trees were ailing. They were in failing health. This terrified me. Because of climate change, one of the most beautiful and iconic characteristics of the Pacific Northwest are trees. They're struggling to survive. Lacey eventually decided to increase protections on trees in our community, and I urge this council to do similarly and adopt these proposed building codes. Doing this is good for the environment. It's good for people, and it's good for the sustainability of our towns and cities. I have two little kids. I have a daughter who's eight and a son who's five, and I want Lacey and Washington to be as beautiful and healthy and green for them when they grow up as it has been for me my whole life. I'm here today for my city. But first, I'm here for my kids. I urge you to adopt these measures to protect their future. |
| Donna Albert | I'm a retired Master Civil Engineer, PMP and grandmother. Please adopt the proposed energy code updates because all electric homes are safer for the climate and healthier for occupants. Children at home with the gas, though, are more likely to have symptoms of asthma. A gas stove can create more pollution indoors than is allowed by outdoor good quality standards. Unburned gas that escapes from appliances contains harmful chemicals other than methane, some carcinogenic gas from leaks can asphyxiate, poison, catch fire or explode. Neighborhood gas distribution systems can leak when damaged by construction activities, landslides. Electric homes are an important piece of an effective greenhouse gas reduction strategy that also has help and safety benefits. |
| Ty Stober, City of Vancouver | It is my pleasure to come to you today, representing the entirety of our city council in asking you to pass these proposed regulations. The city of Vancouver has set a very aggressive climate target of reducing community greenhouse gas emissions by eighty percent by 2030, and to become carbon neutral by 2040. We know our building stock plays a very important role in being able to meet those targets. There is no question that if all electric is implemented during construction that it reduces the long-term costs for the homeowner and has lower greenhouse gas emissions. The at the same time, the increase in demand will help drive costs down in the market, that will make it easier for existing homeowners to make the transition. I personally am trying to, while I have a heat pump as my primary source of heat, I have gas water and gas emergency heat, and I'm going through the process of trying to switch those out and going through the process of having to argue with the installation companies about my goals and being able to shift the mindset in the State will play a big part in helping our homeowners. Thank you very much, and again encourage this passage of this package. |
| Iris Antman | I'm urging the Council to adopt the proposed Energy Code updates. The time to end fossil fuel use in new buildings is now. The poor air quality in Seattle has kept me indoors for most of the last two weeks. I've lived in Seattle for forty years, and it's so different now. The consequences of global warming resulting from fossil fuel use is a clear and present danger, and we know it will only get worse. The planet is reaching, and has already reached, tipping points beyond which devastating destruction within the next several decades is probable. You |

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| | can address the root cause of global warming and the climate crisis. We have the technology and knowhow to scale the use of electric heat pumps. Please adopt the proposed energy code updates. |
| Jim Lazar | I'm an economist, now mostly retired, from a global consulting practice in electric utility regulation. I served on the energy code TAG for the 1979, 1986, 1993 code cycles. Each of those were giant steps forward. The 1979 Code first required floor, wall, and insulated glazing. The 1986 Code first implemented moisture control and ventilation. The 1993 Commercial Code took it greatly forward in efficiency with availability electronic product and variable speed drive for HVAC. Those code improvements were path-breaking at the time. They're all old hat today, but they served us well, and have saved us millions and millions and millions of dollars and a lot of energy and carbon pollution. The amendments that are before you to require heat pumps and heat pump water heaters are also path breaking. They will give new homeowners the ability to save money and energy, and to be more comfortable. It's time for this Council to be as courageous as your predecessors in moving codes ahead. The nay Sayers will say this is expensive, need to understand that electricity and natural gas are expensive, and the climate impacts of electricity and natural gas are also expensive. Heat pumps are the last option. Please move ahead with these requirements for heat pumps and heat pump water heaters. Your community, your planet, and most of all your grandchildren will be better off for these decisions. |
| Steve Albrecht | I'm a retired family physician. I've lived in Thurston County since 1986, and while I have some dedication and interest to personal and public health. Much of the testimonial you will hear today, both verbally and in writing will lend expertise and evidence about how important it is that you adopt these proposals, and I urge you to adopt these proposals. But I'm here today because I like to present some kitchen table lessons that my parents taught me when I was a young man, and those are very applicable to your decisions today. The first is double negative aside. There ain't no free lunches. There ain't no free lunches. We cannot burn fossil fuels, willy-nilly, without paying the price, and evidence is overwhelming that that price is becoming untenable. Don't be penny wise and pound foolish. Quality costs ten percent less and its less work if you do it right the first time. I live in a thirty-year-old house. Friends of mine, who testified earlier today live in a hundred-year-old house. The builders, some of whom I've contracted with, talk about the importance of quality. But quality is something that pays the benefits. The most important message was what my mother taught me. Steven, clean up your mess. We've made a mess of our environment and our climate, and this is an important step in cleaning it up. I urge you to adopt these measures. |
| Albert Rooks, Passive House Northwest | I am the board president of a nonprofit organization that began introducing the standard to North America about ten to twelve years ago. I'm here to express support by the entire membership in Washington, Oregon, and the rest of the Pacific Northwest for the residential energy code proposals, especially heat pumps. Our membership is strongly in favor that, in addition to that, there's only one way to enter my name in, I'm also the CEO of Small Planet Supply, we are a local Washington state business supplying heat pumps, and to also let you know that in 2021 we made a major investment here in Thurston County and in the city of Tumwater to set up a facility to produce large-scale packaged heat pumps to produce domestic hot water for apartment buildings ranging from five units up to several hundred units. From the economic standpoint of cost of living in Thurston County and State of Washington. This business, we think, will scale to something in the range of twenty million dollars annually and turn over and provide very good high-tech jobs, high skilled jobs in manufacturing here within the State and within Thurston County. We have invested heavily in training of employees and can grow business substantially. |

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| Andrea Smith, BIAW | <p>Our more than 8,000 members represent every corner of the residential construction industry, working hard each and every day to build the places we call home. We're here to urge the SBCC to not pass the heat pump proposals for reasons already stated by our builders, line workers, and utility companies that have to build and maintain power lines. If we were to fully electrify the state, we need to consider the consequences. First is housing affordability, the energy codes presented will drive up the cost of a home by 24,000. Second is the risk of more wildfires from more power lines to deliver the energy we need. California is an example of this, where the top 3 causes of wildfires is power lines. Third is the increase in utility bills each month and added maintenance costs. I live with a mini split, and it's gone out twice in the last year, taking the HVAC contractor a week to come out and fix it. Next, I wanted to address Proposal 84 which moves low-rise buildings with entrances in the interior of the structure to be moved to the commercial energy code and would constitute a significant variance from the CR102 and CR103 that would open the SBCC up to risk of more legal action if adopted.</p> |
| Chris Fuess | <p>I'm a resident of Olympia Washington. First, I wanted to thank you for considering the proposal to require residential electric heat pumps for heating and cooling. Electric heat pumps are typically two to four times more energy efficient than standard gas heating equipment. The cost to purchase and install are about the same. For the more investment in this technology only makes it better and cheaper. It does not make sense to lock in customers by installing equipment that is dependent on a single fuel source like natural gas, when more flexible electrical electric alternatives are available. Electricity can be generated in many cleaner ways. We are seeing the effects of this type of inflexibility in the EU right now. Commercial and residential customers across Europe are entirely dependent on. Prices are skyrocketing. Businesses are shutting down; people will not be able to afford to heat their homes this winter. About ten percent of the US carbon emissions come from burning fossil fuels like national natural gas for heating and cooking. Decarbonization of the States building sector, which was the State's fastest growing source of greenhouse gas emissions between 1990 and 2015. It's very important step to reducing our mission's climate change and gases. This is the most important issue of our time in the future of all life on the planet. Carbon dioxide has a unique, long-term effects on climate change that are nearly irreversible. For a thousand years after emissions stop. It's time to stop kicking the can down the road. I think this proposal is a step in the right direction. My children and future generations will thank you all for taking this first step of change.</p> |
| Michael Laurie | <p>I'm a resident of Vashon Island. I was on the technical advisory group in 1993 that revised the non-residential energy code. I have some detailed experience with these kind of things. I've been a sustainability consultant for over thirty-five years, and I've worked on over one thousand energy projects at a wide range of levels, from audits to inspections and to helping even with installations. I've seen many people who made energy efficiency changes and we're very happy with the results. But I've also seen some people who are not motivated to take action to address climate change which to me is one of the reasons that it's important to revise the residential energy code to transition away from fossil fuels to clean energy with this big focus on heat pumps for space and water heat. We are running out of time to make the major progress needed to address climate change. Making climate progress in some sectors like cement, steel, plastics, and fertilizers will take decades, and that is another important reason that we need to act, where we have well proven solutions that will be relatively easy to implement. I say relatively easy because I had a heat pump installed in my home over eleven years ago to replace the oil furnace and it works great. I know a number of other people, I carried out energy audits for, they installed the heat</p> |

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| | pumps, and they were also very happy with the results. |
| Judy Hopkinson | I'm a retired nutrition scientist, a mother and owner of a one hundred- and twenty-year-old home in Bellingham, Washington. I'm speaking on behalf of myself and on behalf of a citizens group called Whatcom Undaunted. My husband and I have installed both solar panels and heat pumps. The solar panels some eight years ago have more than paid for themselves, and we're delighted with the savings we are now enjoying from our heat pumps. In my opinion it is unconscionable that only people with sufficient money to manage the upfront insulation costs are able to access these savings. It seems as though allowing dwellings to be built without electric heat pumps, and at least the capacity to install solar panels is just another way to increase the wealth gap in this country. Perhaps of even greater importance, it is now abundantly clear that the use of gas, heating, and appliances dramatically increases the risk of serious illness in the occupants. For example, children who live in homes with gas stove have a forty percent increased risk of asthma symptoms. An estimated one hundred and ten million dollars in health impacts annually can be attributed to burning fossil fuels in commercial buildings in Washington. As a person of faith, I stand on my commitment to equality, economic justice, care for the earth and compassion. As I call on you and all of us to stand strong and see that our government's policies that reflect the values we hold dear. There's always resistance to change even when change is necessary. And those who sell gas will be affected financially if you take these changes, and they too deserve compassion. But their financial considerations do not outweigh the safety and health of our citizens and the future of our planet. We need to do this, and we need to do it now. |
| Noelle Lovern | I'm here on behalf of the BIA of Clark County and its seven-hundred-member businesses, and the one hundred and sixty thousand families who will be priced out of the housing market should all of these codes be implemented. Currently eighty-five percent of Washingtonians cannot afford a home at the immediate sale price. A safe and healthy place to live is a basic human need. The current cost of regulations, codes, and fees where I work in Clark County is approximately a hundred and thirty-five thousand dollars and only fourteen percent of our residents can afford to purchase a home at the median sales price. While many of these codes will likely come into play in the future, is now the time to add additional costs, more restrictive regulations, and expensive mandates? Let's look at the actual cost of this cycle of proposed updates, the human cost. For the cost of mandating an electric vehicle, supply equipment in all construction, you will be pricing out more than one thousand four hundred Washington families, and for the cost of requiring heat pumps for space and water heating, another eighteen thousand families in our State will be priced out. With home ownership being the most viable and reliable pathway out of poverty, we are fueling a human tragedy if we do not balance the desired net zero with the basic human need of shelter. Before moving forward with any of these code updates, I urge you to consider that in total, should you implement these code updates, you would be pricing out more than one hundred and sixty thousand families. |
| David Camp, 350 Spokane | I'm in Spokane where I helped build Eastern Washington's leading renewable energy contractor and I'm here today representing 350 Spokane. We applaud this code update. Our state energy strategy calls electrifying homes and buildings, the cheapest way to meet our state goal of reducing emissions ninety-five by 2050. Heat pumps are far more cost effective than gas, often cutting heating bills in half, and because a heat pump replaces both a furnace and an air conditioner, the capital cost is nearly the same. New Federal tax credits make heat pumps look even better. We just have an economic disconnect. Owners and |

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| | <p>renters love heat pump savings, but builders don't see these long-term benefits, and they want more gas company kickbacks. This is a job for a better energy code. Across the US, heat pumps turn out in forty-eight percent of new homes. New heat pumps handle the coldest winters Washington will ever see. Meanwhile the news on gas just keeps getting worse. Our gas is methane, a greenhouse gas eighty-six times worse than CO2 and the gas system leaks far beyond EPA estimates. A study, this week, by researchers at Stanford and Arizona State shows that pipelines in the largest US gas field leak at fourteen times EPA estimates. Heat pumps for the easiest and most cost-effective solution we have, so I urge you to require them. If you want low-hanging fruit you want heat pumps.</p> |
| Kurt Wilson | <p>We all can agree that heat pumps are more efficient. There's a cost to that and the costs to implement these proposed changes span a large area. Starting with our energy grid, which is not equipped to handle electrification that the State continues to mandate, and the electrical companies are telling you this. But it's falling on deaf ears. Your response is simply, you need to figure it out. You all think this is going to affect new construction, that new construction in Washington will somehow put a dent in global greenhouse gas emissions. The rest of the world adversely counteracts our efforts, and as such cost benefit does not exist. This is being done at the expense of roofs over people's heads because they simply can't afford these mandates. Furthermore, new construction is not the one who will carry the cost burden of these mandates as you're portraying. It's at the expense of the consumer. The citizens of Washington will undoubtedly pay higher electric rates in the future and could be faced with rolling blackouts like California and the result of cumulative mandates and desires of the State. Where is Sally and Joe Public in the outreach process, on this effort? Electric car charging on top of the proposed changes will undeniably increase the loads and demand on the energy grid, and infrastructure which is not sized for the sudden change in load demands. The lack of acknowledgment of this and ignoring and silencing the utilities as utter negligence, in my opinion. I think we need to take this one step at a time. We are enforcing too many mandates, too quickly, driving attainable housing off the grid here. While we're talking at the legislative level about the need for housing and bringing more housing and dealing with the homelessness crisis, we're countering that by increasing regulation unnecessarily without a cost benefit analysis.</p> |
| Nick Engelfried | <p>I am urging the Council to support the proposed code updates, as others have said, climate change is not a future problem anymore, it's here today. I was recently visiting Chuckanut Creek in Arroyo Park in Bellingham, where I live. This is a creek that some salmon will soon be migrating up to reach their spawning grounds if they're not in the creek already. There is barely any water in the stream bed. I am here to think, how many salmon are going to die, how many are not going to survive because of the drought that we're having in the Northwest this year. Up in BC, they're already seeing thousands of salmon dead in their streams because of low water level. This is a crisis that affects ecology, but it also affects our industries that rely on salmon. It affects anyone who cares about the healthy environment. We need to curb carbon emissions and emissions from buildings are a big part of the problem that needs to be addressed. These code updates are a big step in the right direction. I urge the Council to support them.</p> |
| Michel Maupoux | <p>My name is Michel and I have been a resident of Vancouver for thirty years. I'm a grandfather and a retired solar energy engineer. I taught thermodynamics and experience the impact of climate change in many places over the years from the tropics to our latitude. My thirty-year-old Vancouver house is now net zero. With improved installation and windows, the ductless mini split heat pump, a heat pump water heater, and rooftop solar, I now have the benefits of all of those because of Washington State's commitment away from fossil fuels. Clean</p> |

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| | <p>electricity within the next decades I do recommend including heat pumps in the building code for the following advantages as compared natural gas appliances. It's better for the planet, as it reduces emissions of greenhouse gases to slow down climate change. It's better for residents' health, it reduces the methane in the air, it is better for safety, as it poses no danger in case of an earthquake or power outage. It's better for consumers pocketbooks, as it is cheaper to operate in the long run. In addition, the building code should keep pushing on better energy efficiency by improving installation, but also encouraging solar panels and in the summer with window orientation, shading reflective windows, treatment, etc. Otherwise, with climate change and everybody using AC, big energy demand will move from winter to summer, like in the south of the US and overall building energy use will be back up. If this council can influence it, I would recommend setting up a mandatory energy rating of every housing unit which would have to be published before any sale, like in Europe so that buyers know.</p> |
| Mike Petersen | <p>I live in Spokane. I have a master's degree in mechanical engineering, specializing in thermodynamics. I support the building code changes that require heat pumps in new home construction. While a gas-furnace-based heating system is at best 95% efficient, modern heat pumps are upwards of 450% efficient. Nearly half of new multi-family buildings in the U.S. and more than 40% of new single-family homes are being built with heat pumps, according to a November 2021 International Energy Agency report. Heat pumps have an added bonus that they act as cooling systems during the summer. Modern heat pumps are designed to accommodate the low and high temperatures that Spokane has. One expert says that if you regularly experience winter outdoor temps below -10°F then you might need fossil fuel heating systems. We don't have those temperatures in Spokane, or anywhere in Washington, so heat pumps are appropriate across our state. The costs of heat pumps can run from \$8-16,000, so claims that they will cost up to \$70,000 are unfounded. And there will be rebates up to \$7,500 under the Inflation Reduction Act. Our electric grid can handle the addition of heat pumps to new homes. Please adopt the proposed code.</p> |
| Cristina Mateo | <p>I work for FMS Global Strategies, a BIPOC firm who represents many residents of Washington State where equity, clean energy, and environmental justice is concerned. Many Washington state residents and families of color are directly affected by these state building codes. I urge you to adopt the proposed energy code updates because moving away from methane gas in our buildings is important for addressing the climate crisis. These code proposals are also important for health reasons because they will play a key role in disincentivizing gas cooking which many studies have documented is harmful for health, due to the economics of hooking up just gas for cooking. Lower income households may also be at a higher risk of exposure to gas stove pollution because of small unit sizes, more people in homes, older homes that don't have great ventilation and then using ovens for supplemental heat because you don't have a heat pump. Gas stoves release unburned methane through leaks even when they're off. Research shows that yearly leaks in the US could have as much of a climate impact as emissions from five hundred thousand passenger vehicles. Additionally, energy codes focus on how energy is used in homes and buildings and strengthening energy codes is a keyway to minimize energy waste. Constructing efficient and quality buildings means lower energy bills for tenants and residents. Transitioning to clean energy is imperative for all Washington State residents, old and young, you know people who will have to live on this planet after many of us are gone.</p> |
| John Frankel, NW National | <p>As members of this Council, you should be informed by data, not by dogma. Unfortunately, you lack the data (required by statute) to make an informed decision. We don't have the cost analysis, so you have to rely on the bias of</p> |

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| | <p>proponents asserting that heat pumps are more cost effective and that there are no negative impacts on affordability or commerce. We simply lack the required, third-party analysis needed for this very dramatic code change. There is a data point that is critically important to your decision. According to the most recent report from the Washington Dept of Ecology, the proposed measures to electrify space and water heat in homes would reduce GHG by a very small amount. All direct use of gas in the Washington residential segment accounts for 4.9% of the state's GHG emissions. The proposed residential code affects only new construction so the emissions reduction will be less than 2% of the state's GHG. Despite this surprising low emissions level, the Washington gas utilities acknowledge the climate imperative and are committed to decarbonizing. The Climate Commitment Act does mandate that gas utilities decarbonize. Just like CETA requires that the electric utilities decarbonize. Of course, we will comply with the law. Of course, we have filed detailed plans with regulators. NW Natural recently filed a very detailed resource plan showing how we will meet demand and comply with the decarbonization mandate. Why are you being asked to restrict natural gas space and water heat? The action will result in less than a 2% reduction in emissions, and offers unknown cost effectiveness, no understanding of the impact on housing equity and affordability, no consideration for impact on labor or business, it does not consider the likely impact on power resource adequacy, it restricts choice and design options for homeowners and builders. As voting members if you do not believe that there is a data-informed reason to restrict choice of fuel for space and water heating in homes, you should not approve the CR102 as presented.</p> |
| Deborah Hannock | <p>I represent Hearth Industry Products and am a board member of the Northwest HPVO. I've been in the alternative heating industry for forty years. The real cost here is for the families at risk. When I see that we think of a certain group of individuals. In reality, all families are at risk in the scenario you are creating. How many of the lives lost in the great Texas freeze were considered at risk before the event took place. Supplemental heating in Washington State is a necessity that is being ignored in these regulations by incentivizing all electric calls you are creating an environment where consumers have no safe backup heating to protect the lives of their families. Electric heating is the reason our industry exists. Heat pumps do not work effectively in our damp climate, below forty degrees, or during a power failure. Energy efficient pre-standing gas stoves and fireplaces are a low cost non-electric option that has been proven to work for decades. My furnace failed four years ago for seven days. Each day it was eighteen to twenty-two degrees. Luckily, I had a natural gas fireplace and was able to keep my home and do it with no power and sixty percent less fuel than my furnace currently uses because of Covid, we have been taught to shelter in place to avoid large indoor crowds and to maintain a safe social distance. Are these families like those trapped in the Texas freeze, considered acceptable losses? We know from experience that consumers will protect their families in any way that they can. It will be best to provide safe back up heating equipment. The language in the code needs to allow for gas lines and new homes and for gas free standing and fireplace is to be installed for use during cold weather and power outages.</p> |
| Keith Sanderson | <p>I'm testifying in support of the updated residential code for heat pumps for space and water heating. Today I'm a current student at the University of Washington, and I plan to continue education to become a healthcare professional. I speak today for myself and future medical and public health professionals, all of whom will inherit the consequences of climate influenced diseases. It is absolutely essential that we remove gas from our homes. The climate crisis is already wreaking havoc on our communities, and the health consequences of climate change related events are overloading our hospitals, overworking our doctors</p> |

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| | <p>and nurses, and most importantly, the reducing the quality of life of so many families across the state. Not only will denying these proposals allow more climate warming greenhouse gases to enter our atmosphere, but it will also continue to make our community sick. I grew up in Arizona, so I am no stranger to hot summers. Since being a student at UW, I have had the privilege of enjoying the relatively cooler summers of Seattle. Even in my short time here the summer heat has become increasingly worse in the absence of cooling in most buildings in the Pacific Northwest worries me as Washington and the world begin to heat up rapidly. Not only are we not prepared for the increasing heat, but we are also relying on the very thing that is causing our climate to warrant fossil fuels. Heat pumps for space and water heating would reduce the reliance on our fossil fuels and lead to cooler, more efficient and healthier buildings. Overlooking the health burdens of our society's to fossil fuels would be an egregious wrongdoing. Today, I urge you to adopt this proposal, so we do not leave future citizens and families into a polluted and scorching world.</p> |
| Ray Allshouse | <p>I'm the building official for the city of Shoreline and I'm speaking on behalf of the entire City Council of Shoreline in recognition and support of the work of the residential energy code tag. You can add Shoreline to that list of cities that are basically one hundred percent behind this. I won't elaborate on the reasons as you've already heard them. I will point out that due to the mini maxi restrictions, the state law regarding the residential energy code, the Legislature is depending on your action to further progress towards the achievement of their energy saving goals. In fact, it's the only reason that we haven't adopted more stringent residential requirements in Shoreline is because we're restricted from it by state law. We urge your support, and speaking for them, the entire council, and the more or less sixty thousand residents of the city of Shoreline, please support these changes.</p> |
| Breck Lebegue | <p>Public health doctor with WA Physicians for Social Responsibility. We urge you to electrify our buildings. I'm the grandson, son, and brother of a family of builders. During my 40-year medical career, I remodeled every home I lived in. I heated & cooked with gas. It's fast, easy, and we used to think it was clean. Now we know better and have better choices. Although liquid-fuel transportation is still responsible for most greenhouse gases, methane gas in our homes and apartments is dangerous to health. Unvented gas cooking produces nitrogen oxides, carbon monoxide and fine particulates that damage lungs, hearts, and brains, especially in pregnant women and babies. Doctors make decisions based on facts and evidence. Indoor air is often worse for our health than the fresh air outside, whether it's COVID virus, chemicals in paint and carpets, mold, or burned hydrocarbons from a stove. New building codes can help prevent illness from combustion by-products, by requiring non-polluting clean electric appliances in our new homes and commercial buildings and remodels, powered by hydro, wind and solar. Clean electric heat pumps & stoves can keep us warm and safe. Please make the right choice, with the right codes, for our good health indoors.</p> |
| Bob Disney | <p>I own seven Washington State corporations, one of which is an electrical company, the other a general contracting firm. I have a degree in manufacturing and set as Vice President for the Kitsap Builders Association and the Washington State Affordable Housing Committee. Currently in Kitsap County, I have the least expensive homes considered starter homes for twelve hundred and seventy-nine square feet, the cost of construction is three hundred and fifteen thousand dollars for two hundred and forty-six dollars a square foot. With my land, I have three hundred and seventy-six thousand dollars into these homes. We've priced them with no profit to afford some first-time home buyers the chance to buy a home. We have a four hundred and thirty thousand dollars. We don't have any buyers. Right now, fifteen percent of people in Washington</p> |

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| | <p>State can only afford to buy a home. Every time we add any money to the cost of building these homes it just takes more buyers out of the pool. I think it would be also wise to say that the R32 that we use today has gone up. That's for the refrigerant for heat pumps has gone up one hundred and ninety-five percent in the last year alone, and China is the sole source provider of that. I think we should probably mandatorily adopt plans like heat pumps, but we should spread it out over time. Keep the cost of it housing down.</p> |
| Robert Marino | <p>I am the clean energy and infrastructure director at the Climate Action Team in Olympia. The big one, according to researchers, has a ten to seventeen percent chance of devastating Western walking in the next fifty years, and by the good one I mean a nine-point zero magnitude earthquake of the Cascadia Subduction Zone. I recently read that a gas pipeline exploded in Washington, I believe it was earlier this year, there was a fatality, and they think that the leading cause for why the gas line exploded was from falling ice. If some ice can fall and cause a gas line explosion and kill someone. Imagine what the big one would do we have to say for alternatives. Please adopt the full slate of WSEC-R codes.</p> |
| Warren Sheay | <p>I've been a resident of Bellingham and Whatcom County for twenty-eight years. I strongly urge you to adopt the proposed energy code updates. You've already heard dozens of fact-based technical reasons why we should do so. Eliminating methane gas in new homes and buildings will significantly reduce climate pollution in Washington, and we're running out of time to address this issue. We can no longer sweep it under the rug. We must constantly ask ourselves, what kind of world are we leaving behind for our kids and grandkids? The correct course of action is obvious. I beseech you to make these crucial changes.</p> |
| Larry Luton | <p>I've lived in Spokane for over thirty years, and I'm a volunteer with 350 Spokane, a climate policy advocacy group. There is no better way to reduce the impact of climate change between now and 2050, than to curtail the use of methane. Buildings are the fastest growing source of greenhouse gas emissions in Washington State. Much of their emissions result from the use of methane to heat buildings and water in those buildings. Please adopt a new energy code requiring electrification of buildings.</p> |
| Alejandra Mejia-Cunningham | <p>I am here testifying in support of the building electrification requirements in this latest residential energy code on behalf of the Natural Resource Defense Council and our more than five hundred members and activists from Washington State that have submitted public comments urging you to adopt this new code. We know that burning fossil fuels and homes is damaging to Washingtonian's health and to our climate. Children that live in homes that use gas for cooking have a forty-two percent higher chance of experiencing asthma symptoms than those who do not. Further, we know that very same onsite burning of fossil gas is a leading cost of the climate crisis that is, that has already taken lives in Washington State. The requirements before you today will only make it easier for homes and other buildings in Washington State to be built efficient, and all electric from the start, which we know is more affordable today than building with gas. For those reasons I urge you to vote yes.</p> |
| Pat Braddock | <p>I'm the owner of Kirkland Fireplace and a member of the Northwest Hearth and Patio and Barbecue Association. We've been in business for forty-three years selling fireplaces and wood stoves, gas stoves for many years consumers want options, and not having a choice to either supplement their home heating with natural gas, or make it more primary option, heating their home, using an alternate meeting appliance like a gas fireplace, gas insert, or gas stoves, instead of turning on a furnace in one room is more economical. Currently, there is no electric option to buy gas as a supplement. Consumers want to have the ability to heat their homes when there is no power, and for consumers, gas is less expensive to install and operate than propane or wood products, as an alternative. Building and remodel contractors wanted to be able to offer the</p> |

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| | <p>customers every possible option allowed to the consumer to build their dream home they've always wanted. If you restrict gas appliance, you've taken away that option. What will be the effect of small business, selling or servicing gas appliances? Has anyone done a cost now to see the impact to those businesses currently selling or servicing gas appliances, gas fireplaces, gas inserts, gas stoves, not cooking stoves, can be up to fifty to eighty percent of some business and stores in the fireplace industry? What will happen to the employees who are trained to do this? This type of work? Who will pay to retrain them for a different career? What happens to the business that support the retailers and warehouses? We work with the local manufactured employees, seven hundred people. What impacts for this business job losses? The Washington State Energy Code should be revised to ensure the ability for homeowners, builders to put back up natural gas heating into their homes, and the event of power outages, gas inserts, fireplaces remain a viable option for that. They weren't effective during power outages.</p> |
| Judson Willis | <p>I'm not here to debate the Washington State Energy code heat pump versus natural gas versus electric. I actually own a Custom Construction Company. I'm the loan originator and among many other things and the many hats I wear. I was sitting at four years ago, testifying to everybody talking about where we'd be at today's time, but how affordability is going to affect Washingtonians, and here we are. You heard testimony, earlier, about how that affected people and buying homes first time, both refinance cash out and all types of loans. Change my testimony, mores so to the affordability. The average income in Pierce County, where I live, is about ninety-three thousand dollars a year, and that individual back in January, first part of January, with about 3.2 percent origin, with twenty percent down, on a thirty-year fixed rate could afford five hundred-thousand-dollar home, not a twenty, seven-hundred-dollar month payment. Fast forward to ten months from now, here we are at the rates now historically twenty years higher. That broker's rate, yesterday, was about seven and a quarter. The same scenario allows that same individual the same exact scenario to now afford three hundred and twenty thousand dollars. There's nothing on the market for three hundred and twenty thousand dollars. I deal with people, every single day, begging pleading of ways to try to come up to it just simply afford a home. What I ask, in all of this. I was appalled by the fact that I didn't hear about it, but there's a table. What I would like to see put into the building state code performance base, not prescriptive. I believe, with a performance-based model, we can curtail all these affordability issues and actually get down to it, and then build good efficient homes without having to chase credits and energy tables and make it affordable for everybody going forward.</p> |
| Joseph Szwaja | <p>I'm a retired high school teacher, and my testimony is in the form of a song I wrote: Hey friends, we got to electrify. A climate solution is in front of our eyes. We must electrify all of our Washington houses .You know I got to electrify. Can't let another year go by. Think of all our sweet grandchildren and even their spouses. Now, on natural gas it sure is a fossil fuel. Don't let their industry green wash us and play us for a fool. You electrified all our large stores and buildings, extending now the housing for all of our children.</p> |
| Devon Kellogg | <p>My testimony today in favor of the heat pump and range ventilation proposals as a parent and teacher, I echo the feelings and lyrics of the previous speakers, but I like to add testimony today on a practical matter of cost and health. I like to describe for you what life is like as an asthma sufferer on a budget in an older gas service home without air conditioning. During our now standard heat waves, my family and I rely on opening the windows during cooking and at night to cool off to ventilate our home. Faced with increasingly warm nights and smoke, as we currently have from fires, our home becomes intolerable to live in. Add a gas stove in the mix, and the air indoor becomes toxic, and I suspect how I ended up</p> |

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| | <p>with asthma in the first place. It gets so bad at times that my hands on feet swell up and my breathing becomes labored just walking through my own home. In the winters, when our methane gas first kicks on, my asthma goes into overdrive. Plus, the price of gas heating increases our monthly cost of four times the summer rate. The cost of standardizing heat pump, and fan installations in new constructions is negligible compared to the cost of folks like me, who are now faced with expensive upgrades just to protect me and my family's basic health. Condo owners and renters have even less options. These proposals would also reduce monthly utility and health care, bills, and lost wages. Plus, they would help stabilize the skyrocketing insurance and home repair costs resulting from the climate effects of putting more heat trapping gases into our atmosphere. The code proposals address these health and cost concerns and are necessary to prevent more harmful warming effects. We can overcome any technological challenges much more easily than we can overcome climate chaos. Please vote to adopt.</p> |
| Leslie Kenefick | <p>I am a second-year medical student here in Spokane and I am a part of Health Equity Circle. I urge you to adopt the proposed energy code updates because of the long-term impacts of methane gas on our health and our planet's health. Long term exposure to nitrogen dioxide can has been linked with heart failure, asthma, and other morbidities. Furthermore, the impacts of gas disproportionately affect low-income communities of color and fracking practices often directly impact indigenous communities. As a future Washington-state physician, I want to see all of our communities living with good air quality.</p> |
| Jeffery Short | <p>I'm speaking strongly in favor of the proposed energy code updates because I want the Council to consider the role that state level institutions have to play in mitigating the ongoing climate crisis. It's my understanding that the Council meets every three years to update the code as a college instructor. Many of my students will be graduating by the time the code is up for review, and I worry about how much worse the effects of climate change could get by then. I strongly urge the Council to adopt those energy code updates because we can't afford to wait another three years. We can't afford three more years of wildfires, droughts, floods, and inaction exacerbated by greenhouse gas emissions. As a teacher at heart, I ask you to consider your role in giving our state's future graduates a world that's actually worth living in.</p> |
| Don Orange | <p>I'm a former small businessman. I've made my living fixing cars for a long time. We're going to shift to cars but the main point that I'd like to come to, coming from Vancouver, we're working hard at doing a lot about this. My mother worked in the shipyards because she wanted to preserve our way of life here. My dad sailed on the Liberty ships, for the coming generation to protect our way of life. It's our job as adults to preserve a decent place for kids to live. I urge you to adopt this proposal. Certainly, there are challenges we better rise to. Let's be the adults in the room.</p> |
| Luke Howard - Dept of Commerce | <p>I'm providing testimony and support of the package of proposals that have been reviewed by the state by the Energy Code technical advisory group on behalf of the Department of Commerce State Energy Office. I've been involved in the energy code development, technical assistance, and training for over a decade. The package of proposals put forward by the TAG, reflect necessary changes for the 2021 residential energy code to make forward progress in meeting the requirements of RCW 19.27A.160 and put the state on the path towards meeting our greenhouse mission limits. Furthermore, these proposals align with the recommendations of the State energy strategy for the building sector, published by the Department of Commerce in 2021, as required by law. The deep decarbonization analysis is conducted as part of the strategy. The Strategy process found that incremental improvements in residential code are important to providing broad benefits to all housing types, and the least cost approach to</p> |

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| | <p>implementing energy efficiency and carbon reduction in buildings. I urge the State Building Code Council to adopt this package, and I invite you to follow up with either myself or Liz Reichart, senior energy policy specialists in the Department of Commerce if you have questions about the State energy strategy or meeting statutory requirements.</p> |
| <p>Carolyn Logue – Washington Air Conditioning Contractors Association</p> | <p>We are an association of HVAC contractors around the State, just expressing some concerns specifically with the fact that your mandating heat pumps in this proposal, with limited exceptions. Currently, the LNI electrical code does not allow HVAC specialty electricians to connect the indoor and outdoor units of ductless mini split systems. This needs to change before you do any mandate of this type, because otherwise you will have a workforce problem. In addition, we have to wait for O1 or O2 electricians to come out, even though these HVAC technicians are trained on how to do this work, and you would have to have what basically what happens right now is the wall sits open. The HVAC technician runs the refrigerator line the walls. It's open until the other electrician could come out. That is going to be an expensive endeavor, and it's unnecessary. If we can wait until this code is until that is changed before doing a mandate of heat pump systems. There's a lot of things that must be a lot of supply chain disruptions with heat pumps. We've already been before the Council several times, having to discuss this. There's the HPSF2, the new requirements and efficiency standards we need to crosswalk that goes into place that we know, and we all feel comfortable with before we have a mandate of this type. We need to also make sure that there's a way to provide flexible options in the event that there is some sort of building that is being built, a house for something in some area where more exceptions need to be. The options table right now already drives towards electrification to mandate the specificity of heat pumps actually create, we believe, is going to create more problems going forward than solutions, and there needs to be some time before we move that direction.</p> |
| <p>Mike Nykreim</p> | <p>University graduate, construction management, 1977, played little football while I was there and part of being a football player, we have captains on the team, and the captains are on the field to play they lead from the front. As you all look at this proposal, I expect as captains, as the leaders in the industry, you yourself will step up, and before implementing this program you yourselves will convert your homes to your full electricity, and I expect every single person who spoke on support of this, they themselves will have their homes fully electric before they implement the proposal. Anything less, there lies in hypocrisy and are unattainable. Now, one guy said, there's no free lunch. You're right. I am a builder in Seattle. I built green since 2022 and I build lead certified office buildings in the City of Bellevue, first one to do that in the city's history. You're looking at full electrification house, the average upgrade for range, first, hot water tank, an electric vehicle charger will blow through a two-hundred-amp panel with a three-hundred-amp panel. You're going to have to replace your service strike your transformer. If you go out in the street, you must dig up the street and replace transform and the ball that it's in the street. Yes, sir, you will hit seventy thousand dollars, I know, I am a real estate developer. Please, before you approve this code, I want to see all you folks with blue shirts, you do it yourselves first. There's nothing right now stopping you from doing it yourself. There was nothing that required me to be a Build Green builder twenty-two years ago, nor did anybody tell me to be lead certified. You don't need this regulation to move ahead. Those want to do it, go right ahead.</p> |
| <p>Seth Vidaña</p> | <p>I'm the climate and energy manager for the city of Bellingham. Our cities climate, action plan calls for electrification of all new buildings, Bellingham, to meet our carbon pollution, reduction targets, forty percent reduction by 2030 and eighty-five by 2050. We made progress in the area of electrification, passing local codes that require electrification of commercial and large multi-family buildings,</p> |

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| | <p>following good work done in Seattle and other areas. We're really pleased that the State Building Code Council expanded this requirement, statewide, for those building types. We've made really good progress for a large multi-family and a commercial we're prohibited from creating local codes for single family and in small multi-family. Every new building that's built using gases, space and water heating represents a city sanctioned long term carbon emission source as well as a potential financial risk. Should these buildings need to be converted to electricity as a fuel at a later date. In order to achieve our long-term targets, we support code changes that will ensure that every new home or unit built is using heat pumps for space and for water heating. We support policy, alternative funding sources and supplemental programs that will make all electric homes more affordable for all Washington residents. We see work completed through the Institute that shows that all that all electric homes are no more costly to build or to power over their lifetimes, then mixed fuel homes. To encourage the Washington State as a whole, to go further and use the incoming Inflation Reduction Act to make electrification for new homes, even cheaper through a rebate and other programs. We do want to acknowledge that the proposed electrification changes will lead to some job and the city is transitioning.</p> |
| Robin Briggs | <p>I live in Seattle. I'm speaking in support of the new residential building codes for electric heat pumps for space and water heating. This is a better solution. It's better for the people who will live in the home, so will have cleaner air in the house, cooler air in the summer. A previous comment made it clear that this can be lifesaving and lower fuel prices, and as we sit here in the fifth month of summer staying indoors because the air quality is so poor. We understand that this is critical for all of us. We need to pay heed to what is going on around us, and the proposed new rules represent a small step towards a better future with a better quality of life. Please support these new codes with requirements for heat pumps, and better ventilation for gas stoves.</p> |
| Dalton Smith | <p>I work for Conner Homes, a second-generation local home builder. As you have heard, our industry is facing major supply chain issues across the board. Builders are trying to work around the supply issues, but the energy code doesn't allow enough flexibility which is forcing all builders to buy certain products. For example, many builders are installing electric heat pump HVAC systems to meet the current energy code requirements. Being forced into all electric houses raises concerns about our aging power grid and it doesn't help that our state is ranked very low for solar power potential. With that said, the more immediate issue is that many manufacturers aren't producing and supplying many systems that meet the current energy code requirements. This has forced some of our subcontractors to switch to brands they don't typically work with. Which in turn has reduced their buying power and caused many issues as their installers must learn how to correctly set up these new systems. With the ongoing supply chain issues, home builders need flexibility in sourcing these systems so that we can continue to deliver homes to buyers. As of September 2022, it's estimated that there is less than a 2-month supply of houses in King County (Source: Northwest MLS). Another important factor is the comfort of the house. The feedback we have received from buyers is that the hybrid heat pump water heaters can't supply enough hot water for families and don't work unless the homeowner puts the tank in full electric mode, thus defeating the energy savings. Gas tankless water heaters were much more popular with buyers due to the increased availability of hot water, but the energy code requirements are forcing many builders into using hybrid water heaters. Housing affordability is another big concern. Rising material costs, labor costs, and most recently interest rates have all hurt affordability. Continuing to increase the energy code requirements at this pace and with these limited options is increasing the costs of new homes to buyers. With those things in mind, I ask you to consider the larger implications of</p> |

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| | <p>the Washington State energy code. California, Texas, and Colorado have already shown what happens when the power grid is overloaded. These changes will have major impacts to our power grid, to our ability to deliver houses to buyers, to the comfort of homeowners, and to the affordability of houses in a market that is already making it hard for families to purchase a home.</p> |
| Kevin Duell, NW Natural | <p>Residential-Code TAG member. Proposal 80 requires water heaters to be installed within the thermal envelope to capture standby losses from the tank. This makes sense, but there is a problem: Gas heat pumps are allowed by Proposals 65 and 66 for both space and water heating. There are gas heat pumps on the market for multifamily housing regulated by this Code. Also, a gas heat pump for single-family homes is coming in 2023. Both types are designed for domestic hot water. Both are designed to be outdoors. And both have virtually no standby losses. Proposal 80 would basically prohibit these gas heat pumps, because installing them indoors would be ridiculously expensive. And because there are minimal standby losses, Proposal 80 would fail cost-benefit analysis, high cost, low benefit. Given that, it seems Proposal 80 violates statute which requires that “the rule being adopted is the least burdensome alternative”. Therefore, I recommend a change to Section R403.5.5, which is to add: “Exception 2: Gas heat pump water heaters with an efficiency greater than or equal to 1.15 UEF.” This change aligns with the intent of proposals 65 and 66, it corrects a potential statute violation, and it affirms a code that is technology-neutral while driving efficiency and reducing emissions.</p> |
| Gary Heikkinen | <p>I’m a member of the Energy Code TAG and have been since 2015. I’m here to strongly encourage the Council to take a close look at the TAG Minority Reports. There are some great improvements in the 2021 update, but we do have issues with a few of the proposals. We believe that the recommendations in these minority reports provide practical and reasonable alternatives to the controversial proposals being considered. Proposal 052 changed the carbon emissions factor for electricity to a highly speculative future number that may not be realized for a decades. The current marginal factor for NW is 4 times higher than that proposed. This could actually result in increased emissions after this update goes into effect. We recommend adopting a more reasonable and realistic factor of .8 lbs./kwh or eliminating carbon emissions as a metric altogether. Proposals 065 and 066 will ban the use of natural gas and propane equipment for space and water heating. This extreme proposal will take away customer choice, increase the cost of construction and will not eliminate emissions, but simply shift them to the location of the electricity generation. And with all due respect to those concerned with indoor air quality or suffering from asthma, these heat pump proposals have nothing to do with cooking and will do nothing to improve indoor air quality in the home. The solution to reducing emissions from cooking with either gas or electric stoves is to have a good vent hood installed to exhaust those emissions to the outdoors. We recommend disapproval of these 2 heat pump proposals. Proposal 078 modifies the Energy Credits and Fuel Normalization Tables that will result in significant free-ridership and further complicate enforcement of the code. We recommend striking the Fuel Normalization Table altogether which will give builders much more flexibility in choosing the high efficiency options that work best for them. We believe that WA can still achieve its goal of a 70% reduction.</p> |
| John Rothlin, Avista Corp | <p>This is an electric and natural gas utility headquartered in Spokane. We are urging the Council to reject provisions that unnecessarily restrict heating technologies. These provisions warrant further analysis and discussion that should be put off and carried over to the next code cycle. The measures that limit equipment, type for space and water. Heating and demonstrate bias toward electrification do not comport with the statutory requirement to provide flexibility and heating equipment, efficiency, or the requirement to yield the lowest overall</p> |

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| | <p>cost to the building owner and occupants. Those are directives for the building code under RCW, Chapter 19.27A. The proposed changes also fail to recognize the statutory requirement to account for regional climate conditions. This serves IBC climate zones, five and six in Eastern Washington, which have conditions that are much colder than the marine climate zone along the I5 corridor. The efficiency of electric heat pumps is significantly diminished in the regions where our customers live in work. Our annual heating degree days are forty percent higher than Western Washington. Electric heat pumps have to be oversized to account for frequent defrost cycling and the use of auxiliary heat when temperatures are below freezing. In addition, the newer heat pumps for colder climates are still separately several years away from meeting the needs of our region and requiring additional training and education for this transition to be successful. Even then the role of natural gas plays in supporting energy reliability in our region will remain critical. We'll end by saying that if this supports thoughtful decarbonization pathways that safeguard energy, reliability and preserve jobs and assure energy affordability, but we don't need to eliminate energy choice.</p> |
| <p>Scot Hattenburg</p> | <p>I've lived in Spokane, Washington, north of Spokane for all my life, fifty-five years. I'd like to add a couple of things. I'm a 1992 graduate of Eastern Washington University. I had a professor in physics and was magna cum laude while working in the energy industry. Professor of Physics said our fuel of the future, I want you to hear this, our fuel the future is hydrogen. Those will be transport, he said, in the early nineties by our natural gas lines. What I fear with this thing is we're going to take out all of that potential. We're going to kneecap ourselves from really where we have to go, is not electricity because our grid is overgrown. And by the way, I lost my grandfather to building this grid. We have to do that, my one of my employees, he built a shop because he's in an area. He's lived there thirty-five years and he's older. He's sixty-five years old, him and his wife they can't move out, and so he built a shop because people are breaking in from the crime. He put up one of these heat pumps that are supposed to be awesome. It cost him six hundred bucks a month. He had to put on a credit card to go to a natural gas fired boiler to actually fix it. He said, seventy dollars a month. When you hear all these beautiful stories about how with that it is not true. These people are on the take, and we have not inspected the duck curve, which is the scientific example of what this will destroy. I urge you to look at the duck curve.</p> |
| <p>Natasha Jackson, Northwest Gas Association</p> | <p>NGA represents the distribution companies and transmission pipelines who are in the energy, delivery business, serving warmth and comfort to three point five million residential customers in the in Washington State. Our members are experts in their customers' needs and advocates on behalf of their interests on this topic. We're also in the energy transformation business, and we're constantly looking for new innovative ways to utilize every available tool to bring cleaner energy to our customers, such as utilizing our forty-five thousand miles of safe, dependable energy, delivery, infrastructure right under our fee. We bring three arguments to the table here today in regard to CR-102. The first is about choice. Consumers and homeowners have the right to choose the type of energy that best suits their everyday energy needs. It's not this council's role to dictate a person's right to choose the type of energy that is right for them by eliminating some energy options, while prioritizing others. Second argument is about grid dependability. With Washington's aggressive climate policy putting more and more strain on the electrical credit, this Council will literally put consumer lives on the line during peak cold winter days in this region when the grid fails to deliver what it promises to Washingtonians across the State. And the third and final argument is about equity and small business impact. We employ you to conduct a small business impact analysis and an equity study before moving forward. All</p> |

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| | <p>climate policies have maintained that equity should be at the forefront of policy change, this case should be no different. The changes to the code will impact access to portable housing, dependable energy, and a clear, clean energy future which we're we are all striving for. Respectfully request this council take a step back on CR-102 and address all of the concerns mentioned by us and other stakeholders who specialize in energy policy on this kind of work on regular basis. We will be submitting written testimony on behalf of the utilities diving into further detail about why we stand on the issue, and I encourage you to agree.</p> |
| <p>Brian Emanuels</p> | <p>You've heard from builders, engineers, architects, state and local elected officials and staff, health professionals, faith leaders, affordable housing advocates, environmental justice leaders and others who overwhelmingly support adopting these code improvements, particularly to require heat pumps and strengthen ventilation requirements for gas stoves. In addition, over four thousand other residents, including at least 68 local elected officials, have submitted written testimony in support of these proposals, note though that most of these don't show up individually on the written testimony log, as they were batched and submitted together to make it easier on the staff. To meet the legally required 70% reduction in energy use in new construction by 2031, it's imperative that we start by requiring heat pumps, which are 3-4 times more efficient than gas or electric resistance heating. In addition, the Climate Commitment Act requires gas utilities to reduce emissions 95% by 2050. To meet that legal requirement, we must stop digging the hole deeper by continuing to build new buildings with gas. And as you've heard from so many health professionals and environmental justice advocates, we have to stop piping a harmful and explosive gas into our homes, especially those of our most vulnerable residents, particularly those with low incomes and those in Black, Brown, and Indigenous communities, who are already disproportionately impacted by poor air quality. You've also heard from affordable housing advocates, calling on you to approve these proposals, because the cost analysis indicates that they will reduce residents' utility bills over the long term, and reduce upfront construction costs relative to mixed fuel buildings with AC, by an average of \$7,600 for an all-electric new home in Seattle, and \$7,250 in Spokane. Finally, you've heard from at least 17 builders, who have already made the transition to all-electric construction, who are proving every day that all-electric new homes are healthier, safer, and more affordable. Because of changes you've previously adopted, 88% of space heating and 87% of water heating in new construction is already electric. Please finish the job by approving these proposals in this code cycle.</p> |
| <p>Danielle Jokella</p> | <p>I'm a resident of Vancouver. I have fifteen years of experience working in interior design, construction, management facilities, management, environmental compliance, and safety. I'm urging you to adopt the energy code updates to move our communities away from fossil fuels. Fossil fuels maybe an inexpensive way to heat and cool, but the risks outweigh the benefits. In 2014 in Plymouth, Washington, four people were injured, and hundreds evacuated as a result of a natural gas explosion. In 2016, two people were killed in Port Orchard, and twice this year here in Vancouver entire neighborhoods have been closed down, forcing hundreds of people to evacuate because of dangerous gas leaks. And that's all before we begin to evaluate the rest to into individual health from the carbon monoxide and particulate matter that's emitted into our homes when we burn gas. As we consider the future of our state population growth, tackling the housing crisis, we should be developing communities that are future proof for energy use. This means planning for homes that can adapt to energy solutions that are high efficiency, and that won't need to be replaced if we change from hydro power to solar or wind. Electrical solutions also relieve the administrative burden at the municipal level by reducing the amount of infrastructure that needs to be sourced, installed, maintained, to build and collected. Moving away from</p> |

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| | fossil fuels is not only good sense for our planet, but it makes our community safer, our homes more affordable, and our relieves administrative burdens at the municipal level. |
| Sen Liz Lovelett WA40 | I'm in Anacortes representing the San Juan and western portions of Skagit and Whatcom counties, here in support of these changes in this these past years we've witnessed unprecedented floods, wildfires, droughts, and heat waves that have cost lives and cause significant economic disruption across our nation and in our State. I represent an area adjacent to the Nooksack basin, where we saw floods ravage our communities. All of these are a result of climate change and the changes in our overall weather patterns. We need to be decarbonizing our built environment and we have a state energy strategy. We have the Climate Commitment Act, the low carbon fuel standards, and yet we have much ground to gain in our built environment. I hope that you will continue to press forward on ensuring that we have these new standards in place. Furthermore, the economic impoverishment as a result of climate change is already starting to happen, and the more we can decarbonize and make energy, more energy efficiency, the standard in our buildings the less harm we will have on people over time, so as we get to a place where we can provide our grid with more renewable options over time. We also need to make sure that we are reducing the demand and ensuring that folks in their households have the opportunity to have the lowest energy cost possible to ensure a just transition among many different economic factors in our community. I urge you to adopt these updates. |
| Jennifer Thomas, Spokane Home Builders Association | I'm the public relations and government affairs director for the SHBA. We represent members throughout Eastern Washington. We're parents, grandparents and concerned community members. We're not disagreeing that we should move towards best practice building policies, but those policies should not be mandated restrictions. We are in agreement that we need to leave our planet better than we found it for our children and our children's children by reducing global carbon reductions by having global carbon reductions. However, adopting these code proposals would not accomplish that objective they are merely a carbon shift, not a carbon reduction globally. One hundred and ninety-eight of our members from Spokane County have participated in forwarding a letter with strong objections to eight group two code change proposals. I'll refrain from reading it since it has been submitted, is written testimony already, but I thank you in advance for your diligence and commitment and reviewing perspectives from experts in the home building industry. As you consider proposals and public input, I request that you pay special attention to statewide housing crisis, as you've heard many others talk about today. Experts from the American Public Health Association and the World Health Organization have agreed that affordable housing is essential for good health and for healthy communities. We cannot make housing more attainable. We're making it more expensive because home ownership is out of reach for most of the workforce in the Spokane area and across the State demand for rental units is driving rent costs. That this is the result is that we don't have enough housing, especially the most vulnerable and that is not environmental justice. In closing, I'd like to remind you that the purpose of this to focus on safety, best building practices and energy efficiency, not driving political agendas as laid out in RCW 19.27.02. The State Building Code Council should be focusing on minimum performance standards requiring requirements on performance such as energy efficiencies. |
| Margo Hill | I'm a Spokane tribal citizen from Eastern Washington. I urge you to adopt the proposed energy codes. You know the emissions that comes from building is one of the fastest increasing emissions. We have to take a look at climate change. Here in Eastern Washington, we are dealing with extreme environmental issues, wildfires, air quality. For climate change our tribal communities get hit first. They get hit the worst. In Western Washington, we see our communities the |

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| | acidification of oceans and increased pressures on water systems here in Eastern Washington we haven't even done water adjudication. These energy codes can go a long way into helping our emissions and protecting against climate change. I want to thank all of you at the State Building Code Council for taking the time to listen to our issues for our communities and really consider our impacts on the environment. You know we have a state energy strategy here in Washington and we see that the there's a large burning of fossil fuels in the building sector. Again, I would just urge you to adopt the proposed energy codes. |
| Charlotte Persons | I live in Olympia, Washington. The Board has a chance to make a big impact on our future by helping us transition away from methane and gas. Other health benefits you can reduce asthma. Imperceptible slow leaks from gas stoves and furnaces. As you've already heard, this transition from methane will also help us meet our Washington State greenhouse gas reduction goals. Passing strong codes for the use of heat pumps is an opportunity for another two-for. Heat pumps reduce the greenhouse emissions and residents' long-term heating and cooling costs. You've heard today about the cost of installation. Eighteen years ago, when I lived in Kelso, I replaced a failing furnace with an electric heat pump with the help of a small tax rebate. Within eight years my reduced energy bills made up the difference between buying and operating that heat pump than a regular oil or electric furnace. Now, initial cost for heat pumps from lower and the reduced cost for energy bills come even faster. I urge you to adopt these codes that will have many positive impacts on our future. |
| Dusty Rhodes | I am a resident of Olympia, and I am here to speak in favor of adopting the regulations to make heat pumps and anything else we can do to further support the environment and reduce emissions. I've been doing research on the climate crisis consistently for the past three years and sporadically before that, and I would just like to share with you some information that puts this hearing into what I feel is a broader context of what the world is facing in the immediate future. The years leading up to 2030. I'd like to quote from a recent article that just was published in the proceedings of the National Academy of Sciences that came out on October 6. The title of the article is "Climate change and the threat to civilization". Basically, what the scientists are saying is that because we have for the past forty years and longer not faced the reality and leaders across the world have not communicated clearly and taken the steps that we need to take to save the planet. |
| John Saunders | I urge you to adopt the proposed energy code updates because moving away from methane gas in our buildings is extremely important for addressing the climate crisis. According to the Washington State Department of Ecology, homes and buildings are the fastest growing source of carbon emissions in Washington, State and with this increase largely attributable to the direct use of methane gas in appliances like hot water heaters and furnaces. Washington's 2021 state energy strategy found that electrifying homes and buildings is the lowest cost way to meeting the state's goals of reducing emissions by ninety-five and all electric homes and buildings are a robust and market ready solution. Buildings are long-lived assets and is much more cost effective to use the best practices. Transitioning off polluting gas to high efficiency heat pumps that run on clean, renewable electricity will reduce emissions, now. These code updates ensure that as we are building new homes, we are doing so sustainably and responsibly, the time to act is now we must start the transition towards clean energy in our homes today. |
| Adjourn | The Hearing was adjourned at 2:22 p.m. |