

Chair Lieber and Members of the Committee,

My name is Nathan Philips. I am a licensed electrician, a NECA electrical contractor, and an electrical systems designer. In addition, for the past twenty years I have been developing and managing medical office buildings in Lane County. I served on the Oregon Electrical and Elevator Board for 13 years, three as chair, and have chaired the Oregon Electrical Specialty Code Adoption Committee for more than twenty years. I have also participated in the development of the National Electrical Code for 15 years and am currently chair of Code Making Panel 10. Finally, I am a parent and a grandparent of five with a profound concern about the need to address the causes and mitigate the effects of climate change. I understand the issues that are the subject of SB 1518 from perspective of a contractor, designer, installer, code writer, developer and building owner, as well as that of a concerned citizen. I am in alignment with NECA and the IBEW in opposition to SB 1518. To be clear, NECA and I do not oppose improving building efficiency or resiliency. However, we do not think it is necessary to break up the statewide building code to accomplish this goal. I was signed up to testify at your February 7 hearing but time did not allow me to speak.

Our statewide building code has served us well for nearly 50 years. The many benefits of the statewide code were well covered in the hearing so I won't repeat them here. As you heard, our building code is already a national leader and is on track to continue to make significant improvements. The governor's executive orders mandate a 10% improvement in energy efficiency with each 3-year code cycle leading to net zero in residential and significant improvements in commercial and industrial construction (the base code). The reach code adds another 10% on top of that. BCD has said that in order to accomplish this, they would have to slow down the advances in the base code. The practical challenges from a code writing perspective of accomplishing this are not small. The bill requires that the codes be developed simultaneously, yet until the base code is completed, the baseline doesn't exist so there is no way to measure the required 10% improvement. Having participated in code development at the local and national level for decades, I can tell you that until the code is finally adopted it undergoes many changes. As written, the bill creates an impractical standard.

Setting this extremely aggressive and arbitrary standard (10% over the base code) would inevitably result in mandating the use of experimental and unproven solutions. As you heard, this has occurred in the past with extremely costly and unsafe consequences as in the case of building envelope mandates. The low hanging fruit in this area has been plucked. This means that the cost of the additional measures goes up substantially while the benefits decline with each passing code cycle. The idea that energy savings will cover the costs is unproven and unlikely. If the measures in the reach code would really result in paybacks of a few years as you have heard, as a developer I can tell you that owners would be implementing them voluntarily. They are currently permitted and as you heard are sometimes doing so. Both as an owner and as a contractor proposing energy savings measures to other owners, my experience is that anything under a three-year payback is easy to justify. However, more typical is that when a sober analysis is made, the payback period is well in excess of ten years. This is a tough sell to investors, home owners and facility operators. When increased cost of construction exceeds the energy savings, the additional costs are born by homeowners, renters, customers of retail and service business, and buyers of products manufactured in Oregon. This in itself doesn't mean we shouldn't take action to address climate through improving the built environment. However, relying on an unproven assertion that these costs are non-existent or insignificant is not appropriate and could mislead policy makers into imposing costs unequally or in conflict with other goals such as increasing affordable housing

stock or attracting industry to our state.

As the building codes approach mandating net zero energy use, the value of the mandated 10% energy savings declines. At the same time, the measure required to accomplish this become more expensive resulting in a lower return on investment as a society. This is a blunt instrument that will have a minimal impact on the very real need to mitigate the climate problem it is purported to address. And it imposes an additional burden of cost and confusion by dismantling our statewide building code that has served our state so well.

In spite of assertions to the contrary, this bill could result in a multitude of codes throughout the state. First of all, it's not just two codes, but potentially at least six, and possibly more, different codes for developers, designers, contractors, craft workers, building officials and inspectors to learn and train to: the residential code, the low rise residential code, and the building (commercial) code with a reach code version of each. This doesn't include potential alternate versions or almost certainly amendments to the electrical, plumbing, mechanical, boiler and other specialty codes. This doesn't just affect new construction, it would or could, depending on how the jurisdiction adopts it, affect code and licensing standards for remodeling, or other modifications, and maintenance. And, in spite of what you have been told, local government will have the ability to amend these reach codes (it's on page 4 of the bill). Sound confusing? Try navigating this system on a house or building by building basis as you cross local jurisdictional boundaries. Only someone who has not trained, designed, inspected or built in the construction industry could say that this is no big deal because the industry is constantly adjusting to new technologies.

This bill that will create confusion and unnecessary added cost for every property owner, renter and consumer in the entire state. It destroys a statewide code system that is a model around the country. The mandatory Reach Code is an idea that is not fully thought out and this bill should not be moved out of committee. The need to address energy efficiency in the built environment is real and important but needs to be evaluated by all of the affected stakeholders. As was clear in today's hearing, SB 1518 was developed by the proponents with little to no input from the rest of the construction industry.

In closing I want to reiterate that I stand with NECA the IBEW in support of taking action to reduce carbon emissions in the built environment. I don't believe that it is necessary to destroy the statewide building code with all the many benefits it brings to our citizens to achieve this goal. I do believe it is incumbent upon the legislature to call the stakeholders together to address this issue which has been brought to it in virtually every session beginning in 2009, if not earlier.

Thank you for your attention,

Nathan Philips

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