March 12, 2022



Washington State Building Codes Council

RE: NWGA Comments Concerning Commercial Energy Code Proposals 103, 136 and 179

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Members of the Washington State Building Codes Council (SBCC):

The Northwest Gas Association represents the four natural gas distribution companies and two interstate transmission pipelines that serve warmth and comfort to 3.5 million residents and productive energy to 110,000 businesses, institutions and industries that employ hundreds of thousands of people in Washington State. Our members own and operate 45,000 miles of safe, reliable energy delivery infrastructure here.

NWGA members acknowledge the climate imperative and the need to act together to decarbonize. We embrace our role in helping the region achieve its decarbonization goals. Indeed, we maintain that the region cannot achieve its ambitious objectives without relying on the natural gas delivery system.

Within the constraints of existing policy and regulations, NWGA members are keenly focused on and investing in energy efficiency, innovation, fuel decarbonization and replacing dirtier fuels. Furthermore, policies recently passed by the Legislature will accelerate the process of decarbonization and should be allowed to work before piling on ill-considered and detrimental proposals without regard for the consequences of those proposals.

To date, the 2021 commercial energy code process has lacked sound reasoning and careful analysis. It has instead been biased in the consideration of and advocacy for commercial energy code proposals 103, 136 and 179. We strongly oppose these ill-considered code proposals and ask the SBCC to remove proposals 103, 136 and 179 from the package that goes to the CR103.

It has been wrongly suggested that there is no plan for how the gas system will meet the State's greenhouse gas emission (GHG) reduction goals. On the contrary, the gas industry supported Washington's historic Climate Commitment Act (CCA) in 2021, which prescribes a compliance pathway that must be met. Additionally, the integrated resource planning process conducted by gas utilities at the direction of the Utilities and Transportation Commission (UTC) describes how each investorowned utility will acquire requisite resources to serve anticipated demand in compliance with existing laws and regulations.

These electrification code proposals lack the requisite data to warrant adoption. In fact, securing necessary data to inform future carbon policies is the very rationale for why we and other stakeholders negotiated in good faith, and agreed to the UTC Proviso for system research. Finally, these code proposals add nothing to the CCA in terms of achieving the State's GHG reduction goals. The CCA mandates that GHG reductions occur in line with the State's goals and provides a marketbased mechanism to facilitate compliance.

These code proposals add costs to buildings while doing nothing to achieve GHG reductions beyond those already mandated by the CCA. In fact, this approach fails to promote innovation and creative thinking by prematurely determining which decarbonization pathways must be pursued. Washington is a geographically diverse state. What is good local government policy in Sprague is not necessarily good in Sequim.

Each of these proposals individually – and collectively – deprive the building sector of using market-based solutions to achieve carbon reduction. Instead, they mandate an approach that ignores feasibility and cost considerations. These measures threaten life-long, good paying careers. They will burden residents and building owners with higher costs and create duplicative regulatory requirements already addressed by existing economy-wide directives to reduce emissions on a trajectory based on the best climate science.

It is also clear that the SBCC can meet Washington's 2030 commercial building energy goal of reducing energy use by 70 percent using off-the-shelf natural gas technologies. Research by the NW Energy Efficiency Alliance specifically on Washington State's 2030 commercial energy code goals shows that the 70 percent energy use reduction goal can be met using existing natural gas technologies.

Additionally, in the commercial scenarios NEEA researched, gas technologies were comparable to electric technologies in energy reduction. This comprehensive research, by an unbiased and highly respected research organization dedicated to energy efficiency, was presented to the TAG and summarily ignored.

NWGA members are held accountable by the regulatory compact for understanding the impact of policies on their systems and particularly on the customers served by those systems. It is our informed perspective that these three code proposals will not achieve the state's energy reduction goals. What they will do is create more pressure on an already fragile grid, increase building construction and O&M costs, require the installation of equipment that is not widely available and will not perform as needed in certain applications, and have no material effect on energy use or emissions reductions.

The 2021 TAG failed in its duty to carefully analyze the impact of the code proposals in question and to objectively consider all the information brought to bear by experts and activists alike. Instead, banning the use of natural gas and preparing for electrification was the stated intent of the group (as communicated by the Chair on June 4, 2021) and was done with no regard for data, building science or factual evidence. **Please consider the following:**

1. Banning the gas appliances needed to serve commercial space and water heating loads will incur great cost and put service reliability at risk, while providing minimal benefit. According to the state, the direct use of gas in commercial buildings accounts for 3.3% of the state's overall GHG emissions¹, while serving space and water heat for more than 108,000 commercial buildings and institutions including schools, hospitals, and universities.

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¹ https://apps.ecology.wa.gov/publications/documents/2002020.pdf

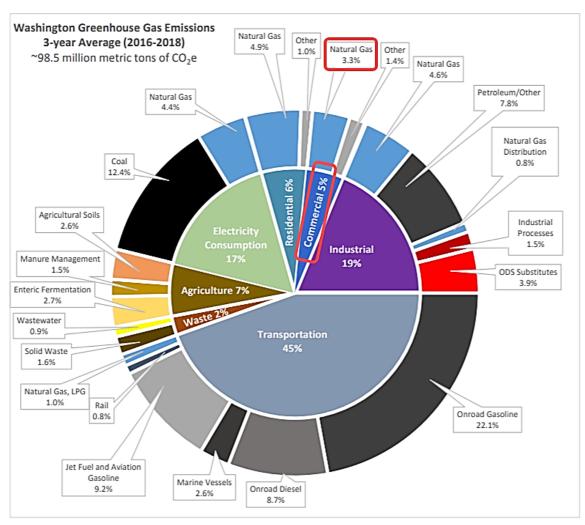


Figure 9: Washington GHG emissions, 3-year average (2016-2018) ~98.5 MMT CO₂e

- 2. Washington's gas and electric utilities expressed serious, data-backed concerns about the potential impact of aggressive building electrification through building codes. Proponents of the proposals mischaracterized data from the Northwest Power and Conservation Council (NWPCC) to refute the legitimate concerns expressed by utility experts responsible for system reliability and to make the case for electrification of commercial space and water heat.
 - When fact checking these claims with NWPCC staff, NWGA members learned that the NWPCC's data as presented to the TAG was misinterpreted and misused to mislead the TAG into believing there would be little impact from the code proposals in question. The gas and electric utilities in the room noted at the time that full building electrification, which these proposals are designed to accomplish over time, will require doubling (or more) the electricity infrastructure to serve peak loads. These concerns were dismissed out of hand. NWPCC staff asked proponents of the proposals to correct the record, which to our knowledge was never done.
- 3. The Chair repeatedly stated that the **only path to achieving the statewide energy savings goal was through electrification**. The only evidence provided in support of the claim was the analysis associated with the State Energy Strategy. The NWGA and other parties who

participated in the State Energy Strategy process had grave concerns with that analysis and provided comments for the record expressing those concerns.²

Furthermore, the TAG casually dismissed evidence produced by the Northwest Energy Efficiency Alliance (**NEEA**) showing that the state could in fact reach the mandated goals with direct use of natural gas in commercial buildings.

NEEA's "Washington State Commercial Energy Code Technical Roadmap Report" (September 28, 2020) analyzed packages of energy efficiency measures to achieve a 70% energy savings goal by 2030 as mandated by the legislature. NEEA found that "Overall, systems using gas furnaces achieve parity with their all-electric counterparts".

4. The TAG failed to consider the actions of the Washington Legislature, which passed the state's landmark Climate Commitment Act (CCA) and failed to pass a policy to restrict access to natural gas. The CCA levels the emissions field between electricity and natural gas by requiring both industries to decarbonize at the same pace. **This tool creates enforceable limits on climate pollution across all major sectors of its economy**, which will reduce emissions in accordance with the state's 2030, 2040 and 2050 goals.

The CCA is explicitly designed to meet the state's emission reduction goals. The proposals in question as endorsed by the TAG are shadow versions of the failed natural gas ban legislation. They are unnecessary under the CCA regime and will discourage investment in decarbonized fuels – a sector where the State of Washington is a national leader – as well as other innovations and will constrain the maintenance and evolution of the infrastructure in place today to deliver the clean fuels of tomorrow.

5. Pursuant to Article III of the SBCC's bylaws, **TAG members requested by motion that the TAG request the SBCC's Workgroup on Economic Impact (WEI) conduct an economic impact analysis of these proposals**. The TAG defeated the motion claiming that the SBCC had to do an economic impact analysis anyway. However, the WEI process codified in the SBCC's bylaws is distinct from the economic impact analysis that the SBCC must conduct according to the state's Administrative Procedures Act (APA). The WEI may be called upon to analyze the impact of specific code proposals whereas the APA requires the SBCC to analyze the collective impact of the entire code revision as put forward in the draft rule (CR-102). The TAG ignored mandated requirements for economic impact analysis and refused to consider the potential impact (to small business and renters) of the gas ban proposals.

Furthermore, the Economic Impact Statement review is not an automatic process as the Chair and gas ban proponents argued in TAG meetings. It is the obligation of the TAG to formally request that the State Building Codes Council (SBCC) perform this analysis. From the TAG rules:

Section 6. When reviewing proposed amendments to the codes, Technical Advisory Groups shall identify proposed changes that may have an economic impact on small businesses, housing affordability, construction costs, life-cycle costs, and the cost of code enforcement and shall report those findings to the Economic Impact, Enforcement, Correlation and Construction Committee.

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² Contact Dan Kirschner (<u>dkirschner@nwga.org</u>) for relevant NWGA and other stakeholder comments.

Proponents of the gas water heat and space heat bans clearly indicated that there will be additional costs to electrification of gas equipment in commercial code. They noted that the return on investment was slower on small, lower-use buildings (hence greater impact on small business). It is the responsibility of the TAG to request the analysis and an Impact Statement from the WEI. The refusal of the TAG to approve this very basic and appropriate motion reflects the TAG majority's refusal to consider any legitimate data or other evidence that could lead to a different outcome than banning gas space and water heat in commercial buildings.

- 6. The TAG voted down a motion to request that the Washington Office of Equity apply an "equity lens" to the gas ban proposals. As defined in HB 1783, the Equity Office was established on July 1, 2020, within the Office of the Governor, to promote access to equitable opportunities and resources that reduce disparities and improve outcomes statewide across state government. The duty of the Office is to "[assist] agencies in applying an equity lens to agency decision-making."
 - During discussions of gas ban proposals, proponents acknowledged the added cost involved in electrification of space and water heat but rejected requests that the TAG consider impacts to vulnerable populations. In refusing to support the equity motion, gas ban proponents stated that the Office of Equity did not have a charter, funding, or a director to complete the review. Testimony by proponents of the motion corrected all of these misstatements. Opponents of the motion also indicated that the equity review was not necessary for agency actions, that they did not understand the concerns about equitable impacts of their actions, and that a state agency (the Office of Equity) was incapable of performing the work correctly.
- 7. The TAG casually dismissed evidence regarding the specific **plans and intent by the natural gas industry to decarbonize pursuant to the legislative mandate** under the CCA (SB 5126, 2021). The CCA applies to <u>both</u> electric <u>and</u> natural gas providers. The Legislature's inclusion of natural gas is tacit acknowledgment by the state's elected policymakers that natural gas *remains* a lawful and necessary source of energy service in Washington.
 - Utility representatives presented Denmark's perspective on decarbonization. With only 23% of Washington's land area, Denmark still has 76% of the State's population, making their example quite relevant. They attempted to decarbonize exclusively through electrification and encountered problems with cost, reliability, and resiliency. Today, Denmark is decarbonizing using both their electric *and* gas utilities, aiming for a carbon neutral gas system by 2040, a decade sooner than Washington. Its plan to achieve this is centered on reducing gas use while raising renewable natural gas (RNG) production strategies that are explicitly supported by Washington's Legislature and that are being implemented by Washington's utilities.
 - When presented with this information about real world achievements in decarbonizing economies utilizing an all-of-the-above approach, renewable natural gas and hydrogen development programs were characterized by supporters of gas ban proposals as fictitious, failed efforts and "magical" concepts.
- 8. The "Electrification readiness" proposal (#179) requires that electrical outlets (with wired electrical panel circuits) be installed next to every gas appliance in a dwelling unit; namely, adjacent to gas stoves and dryers. The charter and mandate of the TAG and SBCC (RCW 19.27A.025) indicates that code measures must provide the lowest cost path for energy savings.

This proposal clearly **provides no energy savings and only adds cost** — therefore failing any cost-benefit criteria. Since it burdens dwelling units specifically, it will add significant costs to multi-family housing development and negatively affect those who are least able to afford the rental cost surcharges from this proposal.

9. The proposal banning gas water heat in commercial buildings (#136) is particularly problematic. As outlined in testimony by design engineers, the Air-Conditioning Heating and Refrigeration Institute (AHRI) and commercial equipment suppliers, there are **not enough commercial heat pump water heating equipment options available in the marketplace**. Activist proponents acknowledged this issue in testimony but stated that the July 2023 effective date for this code proposal would allow enough time for manufacturers to innovate, design, manufacture, distribute product though supply chains and to train technicians.

This claim is speculative at best given that Washington would be the only state with this type of heat pump water heat mandate and the industry would not drive commercialization of new product for a limited market. It is even more problematic given that gas is the predominant heating fuel for water in commercial buildings and that manufacturing and distributing channels nationwide focus on providing water heating equipment solutions for the market of greatest demand and volume, namely gas boilers.

There are presently few manufacturers of commercial-grade heat pump water heating equipment. Most public bid projects require at least three manufacturers to ensure competitive pricing. Many private bid projects require the same. Commercial projects in design phase need product specifics (make, model, ratings) for buildings being planned months in advance of the July 2023 effective code date. This critical timing and product availability problem was discussed in the TAG meetings and casually dismissed by proponents.

- 10. The TAG Chair **wrongly indicated** (and cited RCW as support) that the Commercial Code must comply with **a mandate to eliminate fossil fuels**. On the contrary, RCW 19.27A.020 does not mandate the elimination of fossil fuels in buildings. The statute notes: "Construct increasingly energy efficient homes and buildings that help achieve the broader goal of building zero fossil-fuel greenhouse gas emission homes and buildings by the year 2031."³
 - When considering the required introduction of renewable natural gas by natural gas distribution utilities—a step that will decarbonize their product—and the full-fuel cycle impact from the expected use of fossil fuels in power generation over the next several decades, the energy picture is far more complex and nuanced than the Chair considered in his statement. The Washington state energy code must account for the future of total energy supply including decarbonized fuels the delivery of which must be allowed.
- 11. The TAG's **deliberations** were not supportive of a meaningful and respectful public **discussion**. At its best, the TAG process is a forum for careful review of the technical merits of proposed changes to the commercial energy code. Instead, the 2021 TAG process focused on advancing a gas ban agenda without regard for state policy, common sense, or basic costbenefit and other technically grounded analyses. For instance, prior to hearing any testimony or evidence regarding the gas ban proposals, the TAG Chair urged TAG members to vote for them.

³ See NWGA Comment Letter dated June 15.2021

The very real, objective, technically grounded, building science focused concerns of utilities and others were blithely dismissed, even mocked⁴

For instance, utility experts and other knowledgeable stakeholders brought information to bear highlighting very real concerns that building electrification has troublesome implications regarding resource adequacy and grid reliability.

Specifically, a July 2021 Clean Energy Transformation Act report jointly authored by the Utilities and Transportation Commission and the Department of Commerce noted serious concerns about resource adequacy in the state. These concerns exist absent aggressive electrification of buildings and transportation and demonstrates the implicit hazard of imposing building codes that ban appropriate fuel choice. Once again, NWGA member concerns in this regard were dismissed as hyperbole.

Summary:

Washington's natural gas utilities are subject to a range of laws targeting climate change and the decarbonization of energy supplies. Consequently, as entities regulated by various state agencies, we have adopted policies and are making financial investments in decarbonization – we are 'putting our money where our mouth is' – even as we have an obligation to continuously provide as much energy at any given moment as is demanded by our customers.

The code proposals included in the CR-102 were developed by a TAG process that was inherently flawed, deeply biased and blithely indifferent to the very real issues and concerns raised by building and utility experts who work in this space every day. Building codes that ban direct use of gas will limit commercial growth, jeopardize jobs, restrict options to develop comprehensive solutions, and negatively impact small business and frontline communities. Most importantly, they will not accomplish and may work against the objective they are intended to achieve, which is reducing the state's greenhouse gas emissions.

The NWGA recommends that the SBCC reject Proposals 103, 136 and 179.

Thank you for your consideration.,

DAN S. KIRSCHNER Executive Director

⁴ See NWGA Comment Letter dated July 7, 2021