

ECC Electrification Policy Options Policy Proposal to City Council

12/4/2024

Dear City Councilors,

In response to your request to evaluate policy options to reduce natural gas use in buildings in Bend, the Environment and Climate Committee is recommending the following policy and program options. Our recommendations are guided by our Community Climate Action Plan Goals to reduce community-wide fossil fuel use by 40% by 2030 and to reduce community-wide fossil fuel use by 70% by 2050. Buildings make up the largest share (51%) of Bend's greenhouse gas emissions and with our most recent data between 2016 and 2021 emissions have been going up not down (see below).

Electrification of buildings paired with improved efficiency measures and clean energy procurement is the strongest path to emissions reductions. We are recommending a strong regulatory approach paired with community education and outreach, as well as the development of incentives to make a meaningful impact on reducing our emissions while balancing affordability, equity and access for our community. This type of layered approach is critical to policy and program development to achieve our goals. One type of policy or program will not be sufficient, and we will fall well short.



Recommendations

Our recommendations fall into two categories: 1. **Build smart from the start** which recognizes the need for new construction to be fossil-free from the beginning and 2. **Support the Electrification Transition** which addresses supporting residents and trades with education and outreach, developing incentives, and participating in ongoing advocacy at the state level.

Build Smart from the Start

In an effort to find the opportunities to electrify with the least cost and complexity barriers, we recommend developing policies to limit gas use in new construction.

Background

- Bend is rapidly growing and we have an opportunity to build smart from the start. The [Comprehensive Plan](#) in 2016 identified the need for 17,234 new housing units by 2028 and [new analysis](#) identified the need for an additional 19,000 units by 2045.
- Oregon has clean energy requirements for Pacific Power and Portland General Electric to hit clean energy targets of 80% clean by 2030, 90% by 2035, and 100% by 2040.¹
- Building electric from the start eliminates the need for retrofit later. Retrofitting is much more complicated and more expensive. Most appliances have 15-20 year replacement cycles so most appliances installed now will be using gas until the 2040s—well after our clean energy transition targets, and locks in 15-20 years of additional pollution.
- Building all-electric from the start is more affordable since it eliminates the need for additional gas infrastructure. That affordability is extended to the homeowner/occupant since electric appliances are cheaper to operate. Data from Rewiring America estimates that switching all Bend homes that currently use gas heating to an air source heat pump would reduce energy bills by about \$3.6 million or \$321 per household annually. In Rooted Homes' new affordable Simpson development, the all-electric, net zero homes are estimated to have energy bills of \$12/month.
- All-electric buildings are also safer and healthier for occupants since there is no risk of gas leak or air pollution from the combustion in these appliances. For example, a recent study found that 13% of childhood asthma cases in the United States are associated with gas stove usage

Policy recommendation

¹ <https://www.oregon.gov/deq/ghgp/pages/clean-energy-targets.aspx>

The three policies below are prioritized based on what we think will be most effective and impactful. We recommend that Council reviews each of these and recommends a path forward for further research and policy development.

- Enact regulation to limit gas piping in the right of way for new construction
- Pursue NOx standard for new appliances for new buildings and phase in new appliances for existing buildings.
- New construction pollution fee - building permit fee for buildings that choose to connect and install natural gas appliances that is scaled based on expected gas use and the social cost of carbon. Revenue can be used to establish a fund to retrofit homes for low-to-moderate income households that have higher energy burdens. The fee must be material in order to incentivize cleaner solutions.

Support the electrification transition

Develop education and outreach programs: to better educate the community and our local trades about opportunities to electrify, we recommend developing an education and outreach program. This is a program the ECC has already discussed as a priority, and with additional Inflation Reduction Act incentives coming in 2025/2026 for home electrification and solar it makes sense to launch this program next year.

Program recommendation:

- **Navigator program** - this type of program provides personalized support for residents to make an upgrade plan, identify incentives and financing, and connect with contractors. A number of cities have similar programs that have been successful at helping homeowners navigate the upgrade process, especially when paired with regulations and/or increased incentives. We recommend partnering with organizations that already work with low-income, vulnerable and energy burdened communities to reach residents that will most benefit from energy savings, added cooling, and resilience.
- **Trade/ contractor / developer education**- building relationships, educating and partnering with local trades and developers will be necessary for successful implementation. We recommend developing an education and outreach program including programming on how to build all-electric, considerations for retrofits, and heat pump best practices. There are a number of organizations within the community and state that can support this type of education.

Develop and fund incentives: Incentives are a broadly popular way to help support the electrification transition by the committee and stakeholders. There are gaps right now in efficiency rebate programs that are not able to be spent on electrification so this would be a helpful area to target incentive funds. Incentives can also support end of life and preventative appliance replacements in existing buildings.

Program Recommendations:

- Develop a fund that can be used to support incentive pilots to encourage and reduce barriers to electrification retrofits in rentals and low and moderate income households
 - Raise the licensing fee for the gas utility to help support these incentives, and other programs that also work to reduce gas use such as the navigator and community and workforce education and outreach programs.
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- **Policy Advocacy:** Advocate in support of policies and rulemaking that help support gas reduction in alignment with other CCAP advocacy goals (For example we had a similar recommendation in the CCAP around supporting building efficiency code and policy that allowed us to support statewide efforts to accelerate building code efficiency standards.)

Recognizing the Council's ask for short term actions we would like to highlight the following as more immediate actions that council can take:

- Commit to state-level advocacy
- Develop an incentive pilot program to fund retrofits for low-income households
- Raise the licensing fee for the gas utility
- Develop and launch outreach and education programs
- City has already taken action in its resolution to build fossil fuel free city buildings²

We also expect that regulatory policy research and development will begin immediately upon Council's recommendations and that implementation of selected policies would start before the end of the next biennium, if not sooner.

We understand that Council has a number of priorities to balance and would like to remind you that our environment is one of the key reasons that people choose to live, work and visit Bend. It is also a cornerstone of our local economy and we have the opportunity right now to shape the community and set ourselves up for a future we can all be proud of.

² https://bend.granicus.com/MetaViewer.php?view_id=9&event_id=1085&meta_id=80725