

## A Path Off Natural Gas V2.2

### **Introduction**

This is a plan to raise awareness of the role natural gas plays in climate change and begin to recruit public support for city-wide reduction in natural gas (methane) consumption to meet the goals of Ashland's Climate and Energy Action Plan (CEAP).

Ashland's sector based greenhouse gas emissions are driven by the energy used for residential and commercial applications and for transportation. Natural gas accounts for 50% of those emissions, gasoline accounts for 45% and the remaining 5% is from our hydropower generated electricity from the Bonneville Power Administration. The CEAP calls for the reduction in GHG emissions through conservation and a transition to clean energy. This transition will require moving from fossil fuels like natural gas and gasoline to renewables, primarily hydropower, wind or solar electricity.

Ashland's built environment has two main energy sources, 'Natural Gas' (methane, primarily) and clean electricity purchased from Bonneville Power Administration hydroelectric plants. Methane is a potent greenhouse gas with a global warming potential over twenty-five times that of CO<sub>2</sub>. Leaks from wellhead production and pipelines transporting gas to Ashland negate much of the global warming advantage gas has over coal. Gas appliances and fossil fuel-burning heating devices also generate a variety of air pollutants including nitrogen dioxide, sulfur dioxide, polycyclic aromatic hydrocarbons, carbon monoxide, carbon dioxide, volatile organic compounds, and particulate matter. Exposure to these indoor air contaminants has been linked to serious health risks, including cancer, decreased lung function, worsening asthma, chronic obstructive pulmonary disease and heart disease symptoms, nervous system damage, delayed neurodevelopment in children, and premature death.

The City of Ashland has granted a franchise to the natural gas utility Avista to construct and maintain natural gas infrastructure and supply gas to its local commercial and residential customers. The franchise agreement grants right of way to the utility to install, maintain and operate facilities in return for a franchise fee of 7% of Avista's gross revenue in Ashland. The expiration of the franchise agreement in 2025 offers the City the opportunity to renegotiate the terms and conditions of continued gas supply. The City of Eugene's franchise agreement has expired and the city council is exploring ways to regulate its gas supply in an effort to transition off of fossil gas.

Ashland has several new subdivisions in the planning stages which if they include new gas connections, will lock in additional gas usage for decades. In addition, Ashland and its immediate surrounding communities are forecast to add numerous new residences each year between now and 2030. If new construction includes gas infrastructure, achieving the City's GHG reduction goals will be more difficult if not impossible.

### **Climate and Energy Action Plan Goal**

An overarching goal of the CEAP are to reduce GHG emissions by the community by 8% per year and reduce the City's emissions by 50% by 2030 and 100% by 2050. In order to accomplish these goals Ashland must transition to clean energy sources and rely more heavily on conservation and local renewable power generation. The CEAP's Buildings and Energy (BE-1) strategy supports cleaner energy sources through fuel- switching from gas to electricity in residential and commercial buildings.

## Pathway Forward

### Element #1 (Bob, Tonya)

The successful implementation of the CEAP's climate policy goals will require a large measure of community support so the elected city council members can take the necessary steps to implement the planned actions in the face of proponents of the status quo. There is a widespread lack of awareness nationwide, and also among residents of Ashland about the urgent need to transition away from natural gas. Therefore, engaging and raising awareness of the residents of Ashland is a necessary first step in the process of phasing out the use of natural gas.

The community engagement and outreach campaign should include the following key messages:

1. Although climate change is a global challenge, individual households can do their part by diminishing and discontinuing the use of fossil fuels.
2. Buying gas appliances risks future supply interruptions and cost increases in the emerging energy supply and regulatory environment.
3. Transitioning away from natural gas will enable local renewable energy resources to provide Ashland with greater energy independence, resilience and employment.
4. Replacing cooking gas with modern induction stovetops will improve indoor air quality and overall community health.

The engagement and outreach campaign could be led by the Conservation and Climate Outreach Commission (CCOC) in conjunction with city staff and the SOCAN/Ashland Climate Action Project. Potential activities include surveys, formation of a commercial advisory group, open houses, presentations to community organizations and outreach to similar efforts in other cities.

### Element #2 (Jeff)

Explore legal options (including franchise agreements, fees, moratoriums and ordinances) at the city and state level to reduce fossil gas use. Collaborate with the efforts by Eugene and Medford as well as state and nation-wide advocacy groups to better understand mechanisms for limiting natural gas use.

### Element #3 (Jeff, Ray, Stu)

Complete an Ashland fossil gas inventory to better understand what changes need to be made to meet the CEAP GHG reduction goals. For example, we need to know what percentage of space heat, hot water heat, etc. needs to transition off fossil gas by some date to meet the goals. Then identify fossil gas reduction/phase out actions across City, Residential and Commercial users. The following graphs are for illustration purposes only and are not based on actual data or projections.

#### Element #4 (Jeff, Ray, Stu, Rick)

Evaluate how Ashland's electric grid capacity needs to be upgraded to support the additional loads that come from fossil gas reduction and future growth of EVs. Begin by updating the Electric System 10-Year Planning Study followed by preparation of a master plan for Ashland's electric utility that includes:

- Infrastructure Plan (includes reliability)
- Cost of Service Study and Rate Design
- Power Purchase Plan
- Risk Assessment and Hazard Mitigation Plan
- Adaptation and Flexibility for Future Utility Changes
- Local Utility Generation and Storage
- Community Electrification Plan
- Summary for inclusion in the City's Master Plan

#### Element #5 (All)

Evaluate the feasibility and effectiveness of a range of other actions Ashland might take to facilitate the transition off of natural gas including:

##### Short Term

- Increase incentives for electrification of existing and new residential construction.
- Require new single residential construction to have power service for full electrification.
- Prohibit financial incentives for installing new natural gas service.
- Prohibit financial incentives for purchasing natural gas appliances.
- Build community awareness of need to move off fossil gas; get community feedback.
- Organize business / commercial solutions working group to reduce fossil gas use.
- Review fossil gas policy for City and Parks operations and facilities adopting a Social Cost of Carbon in accordance with State and Federal Guidelines to account for the hidden cost of GHG emissions in the economic or cost/benefit evaluation.

##### Medium Term

- Require new subdivision residential construction to have power service for full electrification
- Research City vs State legal options to limit fossil gas infrastructure including a surcharge or fee on fossil fuel usage to fund conversion to clean energy
- Research capability of Ashland's electric grid to replace energy sourced from Fossil Gas.
- Limit new natural gas and propane outdoor fixtures
- Revise Avista Franchise Agreement with a Carbon Reduction Fee dedicated to implementing a program that provides incentives to switch from natural gas to renewable.
- Pass an ordinance taxing fossil gas in the absence of a franchise agreement to compensate for potential lost revenue.
- Require and facilitate energy audits and scores for Ashland's buildings, including rental units, triggered at the point of sale or permitting phase for new development or major remodels.

##### Longer Term

- Require Avista to fuel switch to biogas and renewable hydrogen mix if not driven by State goals.
- Prohibit the installation of new natural gas fired furnaces and hot water heaters.

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