

## City of Portland Carbon Shadow Price – Comment Period Fact Sheet

This fact sheet is intended to serve as a resource for the public comment period on the City of Portland’s draft Carbon Shadow Price Policy.

### Public Comment Period

The public comment period on the City of Portland’s Carbon Shadow Price Policy will be open from Monday, November 2, 2020 to Friday, November 20, 2020. Please submit comments to [danny.grady@portlandoregon.gov](mailto:danny.grady@portlandoregon.gov); write “**Portland Climate Test public comment**” in the subject line.

### **About the Documents**

The Resolution is the mechanism by which City Council will adopt the Carbon Shadow Price as a binding city policy. The Resolution consists of a “Whereas” section and a “Be it Resolved” section. The “Whereas” section provides background on the purpose of the Resolution, while the “Be it Resolved” section includes the actions directed by the Resolution. Exhibit A includes the details of the Carbon Shadow Price Policy.

### **Guiding Questions**

The following are some questions to consider while reviewing the documents.

- What is your expectation of the role that City government should have in modeling climate leadership?
- To what degree do you value that the City of Portland’s government operations develops a pathway to consider carbon in project, planning, and policy decisions?
- What are the highest priority areas where you think the City should apply a climate test?
- Is the shadow price of carbon an appropriate mechanism for the climate test?
- What would you like to see in the next phases of the City’s climate test?

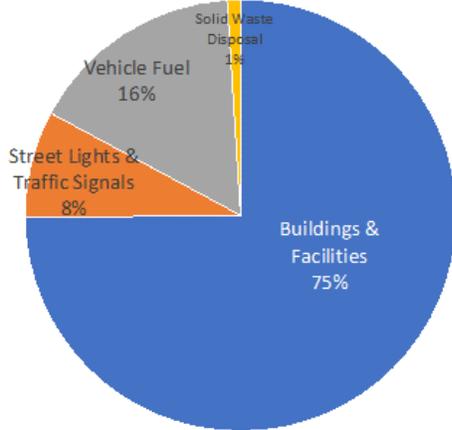
### **Questions?**

If you have questions about the policy or the public comment period, please reach out to Danny Grady, Senior Energy Specialist at the Bureau of Planning and Sustainability at [Danny.Grady@portlandoregon.gov](mailto:Danny.Grady@portlandoregon.gov) or Amanda Watson, Senior Policy Advisor for Mayor Ted Wheeler at [Amanda.Watson@portlandoregon.gov](mailto:Amanda.Watson@portlandoregon.gov).

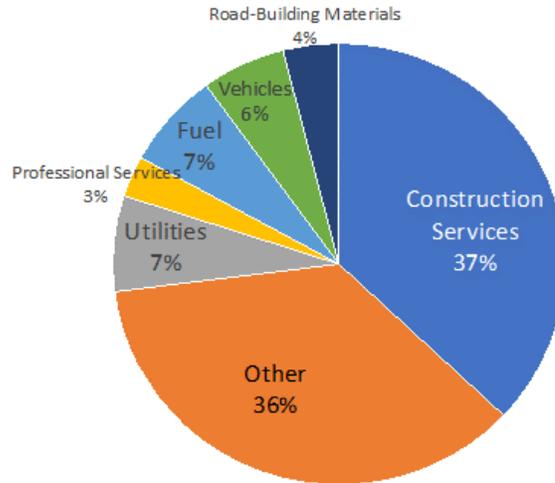
## City of Portland Carbon Emissions

- **Where do the City's carbon emissions come from?**

*Production-Based Inventory*



*Supply Chain Inventory*

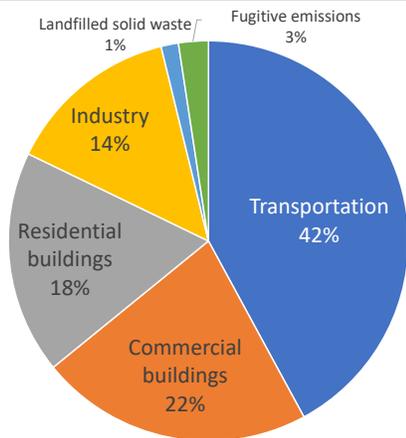


The production-based inventory shows emissions that result directly from City operations. The Supply Chain Inventory shows carbon emissions generated in the production of goods and services the City purchases.

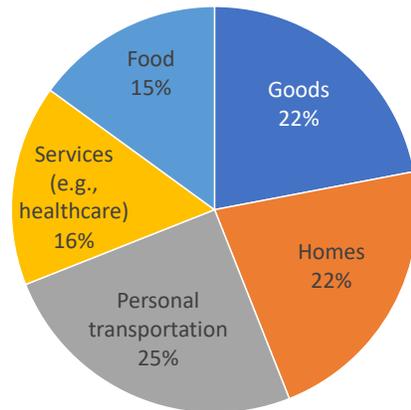
- **How do these compare to community-wide emissions?**

Emissions from the City's direct operations account for 1% of community-wide (Multnomah County) emissions. The City of Portland maintains two different carbon emission inventories that assess community-wide emissions: a production inventory, which looks at emissions produced in different sectors (fuel use in transportation and energy use in homes, commercial buildings and industrial facilities, and from landfilled waste) and a consumption inventory, which includes emissions that result from Portlanders' consumption of food, goods, materials, and services as well as energy used by households and for transportation.

*Production Inventory (community-wide)*



*Consumption Inventory (community-wide)*



### **Climate Test Policy**

- **What is the impact of this policy?**

The Carbon Shadow Price Policy applies to internal City of Portland operations. It will help to reduce direct emissions from City operations by driving bureaus toward low-carbon options, for example converting gasoline-powered vehicles in the City’s fleet to EVs. The City’s fleet vehicles are responsible for contributing 9,000 metric tons of CO<sub>2</sub> emissions annually; according to analysis from CityFleet and the Bureau of Planning and Sustainability, transitioning 350 vehicles to electric fuel will reduce fleet carbon emissions by about 1,028 metric tons annually.

By “walking our talk” in our own operations, we can also contribute to impacts beyond reducing the City’s direct emissions by sending market signals, setting an example other organizations and institutions can follow, and working collaboratively with other public agencies. In addition, the Carbon Shadow Price Policy will build the capacity of City bureaus to conduct life cycle carbon emissions analysis and build the foundation for applying a climate test to other areas where the City has review authority.

- **What is the Carbon Shadow Price level based on?**

The carbon shadow price is based upon the social cost of carbon (SCC), which is an economic estimate of the present-day dollar value of future societal and environmental damage caused by carbon emissions. There is a wide range in calculated SCC values from a variety of economists and climate research professionals. A survey of existing research, and the recommendations of existing state and local government policies with adopted SCC values has been taken into account to establish the City’s price level. The primary sources of research used to establish the City’s carbon shadow price are outlined below.

Leading economic research that surveys existing professional SCC models ([Pindyck, \*The Social Cost of Carbon Revisited\*, National Bureau of Economic Research, 2016](#)) indicates a central estimate of \$108-\$138 / ton CO<sub>2</sub>e.

The federal values were published by the Environmental Protection Agency (EPA) in 2016; it is derived from a federal [Interagency Working Group on Social Cost of Greenhouse Gases](#) that calculated the SCC at various discount rates and impact scenarios.

The [Washington State Energy Office](#) recommendation for standardizing the SCC when used for public decision-making processes indicates a 2020 value of \$78 / ton CO<sub>2</sub>e (in 2020\$), based upon the federal central estimate at a 2.5% discount rate. [King County, Washington](#) adopted the Washington State Energy Office recommendation for their application of an internal SCC for evaluation purposes.

The City of Vancouver, British Columbia, Canada adopted an [Internal Corporate Carbon Pricing policy](#) in December 2018. The 2020 value is the equivalent of \$117 USD (\$155 CAD).

The King County Operational Cost of Carbon report and the Vancouver BC Internal Corporate Carbon Pricing policy served as models for municipal government application of a carbon shadow price.

- **What does this policy apply to?**

This policy requires City of Portland bureaus to apply the Carbon Shadow Price in their options analysis to inform major capital investments and other high-carbon-impact decisions, such as procurement of energy for City buildings, fuels for City vehicles, and environmental protection and restoration efforts. This is outlined in Exhibit A.

- **What is not included?**

The City already has several prescriptive policies that apply to internal decision-making. The [Green Building Policy](#) requires that new buildings owned and operated by the City meet leading environmental performance standards. The Bureau of Planning and Sustainability will be updating the Green Building Policy over the coming year to also include prescriptive performance standards for existing buildings.

The [Sustainable Procurement Policy](#) applies to City purchases of goods and services and requires that bureaus follow purchasing best practices to reduce greenhouse gases, prevent or reduce exposure to harmful chemicals, promote supplier diversity, and support safe and fair labor practices. It includes a Clean Air Construction Standard to reduce emissions on City construction projects. The Shadow Price of Carbon Policy will apply to high-carbon impact decisions where there is not currently a prescriptive policy based on the best available climate science.

- **What is next?**

The Carbon Shadow Price Policy is intended to be the first phase of the City's implementation of a climate test. The Resolution would direct the Bureau of Planning and Sustainability to continue to engage with youth and other stakeholders to explore options to expand the application of the Carbon Shadow Price Policy and/or to adopt another life cycle climate test that would apply to other areas where the City has review authority that could impact community-wide emissions, such as in the areas of environmental, safety, land use, zoning, and design review.