Heating Oil Legislation

Sustainability and
Transportation Committee

Introduction

- Seattle's Climate Action Plan has a target to reduce GHG emissions in the residential sector by **32%** by 2030
- Mayor Durkan's Climate Strategy: identify opportunities to accelerate oil conversions to heat pumps, prioritizing low-income households
- Approx. 15-18k oil heated homes in Seattle; phasing out oil by 2030 represents an **8-9%** reduction in total building sector emissions, and **16-18%** in the residential sector.

OIL HEAT vs CLEAN HEAT

Oil furnaces burn heating oil that is similar to diesel fuel to heat the home.

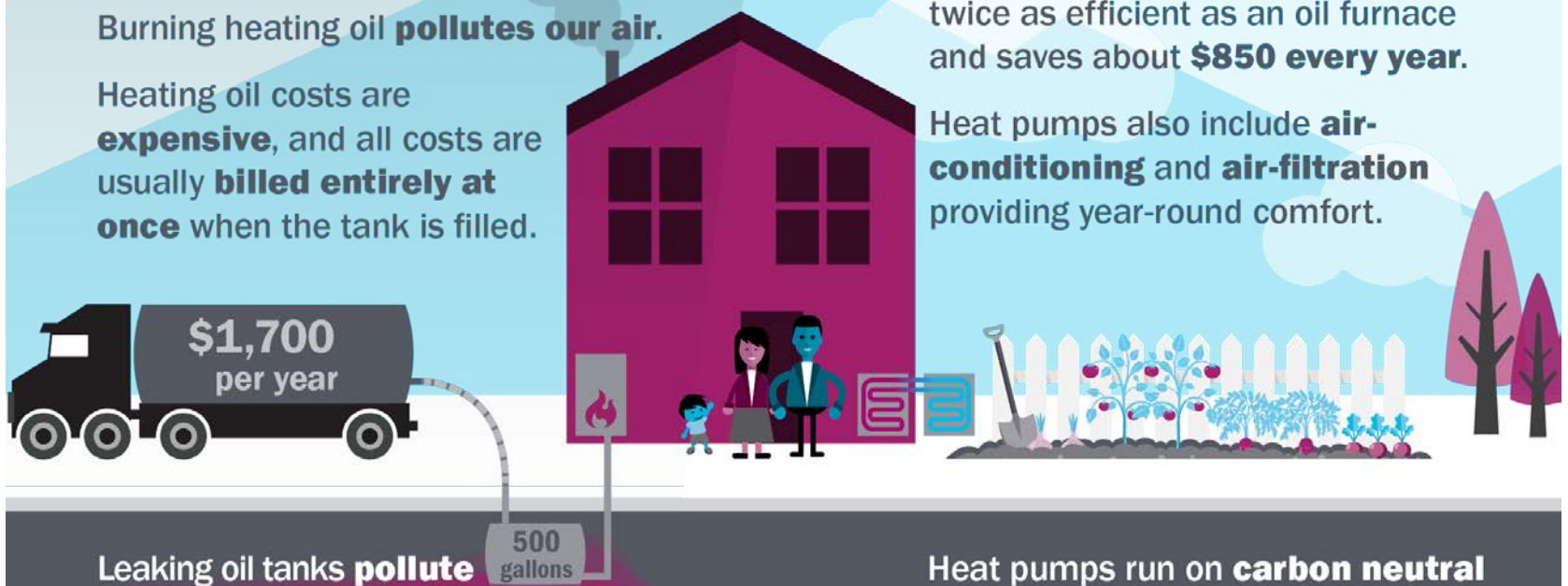
Burning heating oil **pollutes our air**.

Heating oil costs are **expensive**, and all costs are usually **billed entirely at once** when the tank is filled.

Heat pumps transfer heat from the air into or out of the house.

An electric heat pump is more than twice as efficient as an oil furnace and saves about **$850 every year**.

Heat pumps also include **air-conditioning** and **air-filtration** providing year-round comfort.



Leaking oil tanks **pollute our soil and ground water**, and can cause expensive clean-up costs.

Heat pumps run on **carbon neutral electricity** from Seattle City Light.

The Truth about Tanks

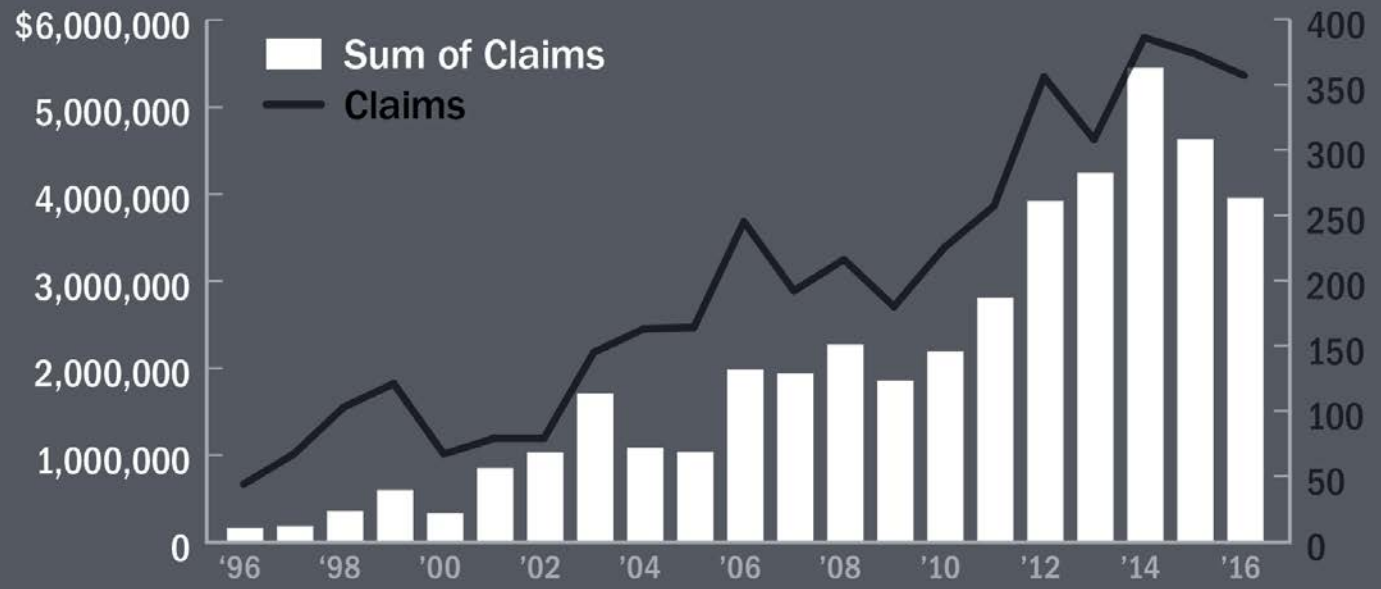
The majority of oil heat was installed between the 1920s and 1950s and thus most oil tanks are well beyond their useful life. Tanks were made of single-ply steel with a thickness of a quarter. Over time, the steel deteriorates, causing oil to leak and damage soil, property and potentially ground water.

Prevalence of Oil Heat by Age of Home

- 1880–1919 (12%)
- 1920–1959 (75%)
- 1960–1999 (13%)

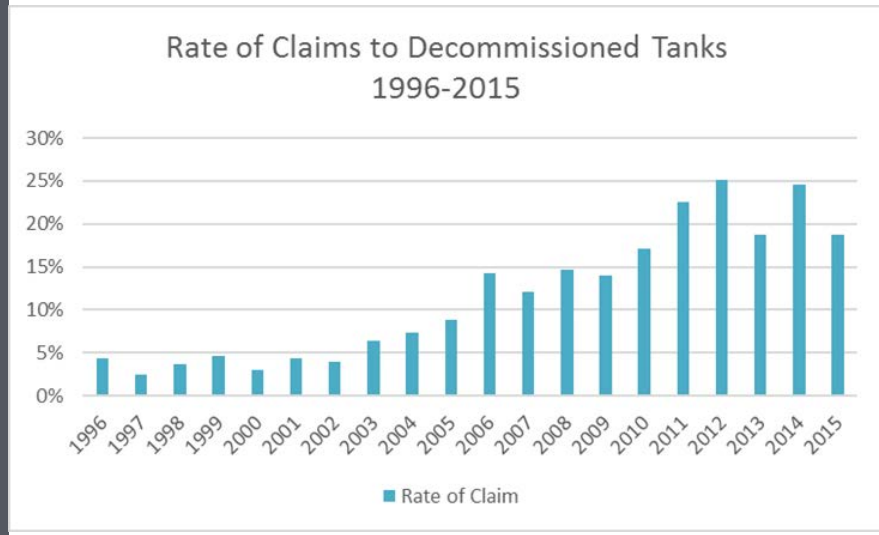
Since 2000, no new homes have been built with oil heat.

As tanks stay in the ground longer, the likelihood a leak will occur increases.



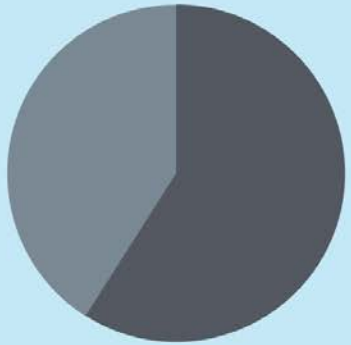
Since 1996 when the state's oil tank insurance program started, **4,128 leaking oil tank insurance claims** were made in Seattle, totaling more than **$42 million**.

About 1 out of 4 tanks decommissioned have a leak

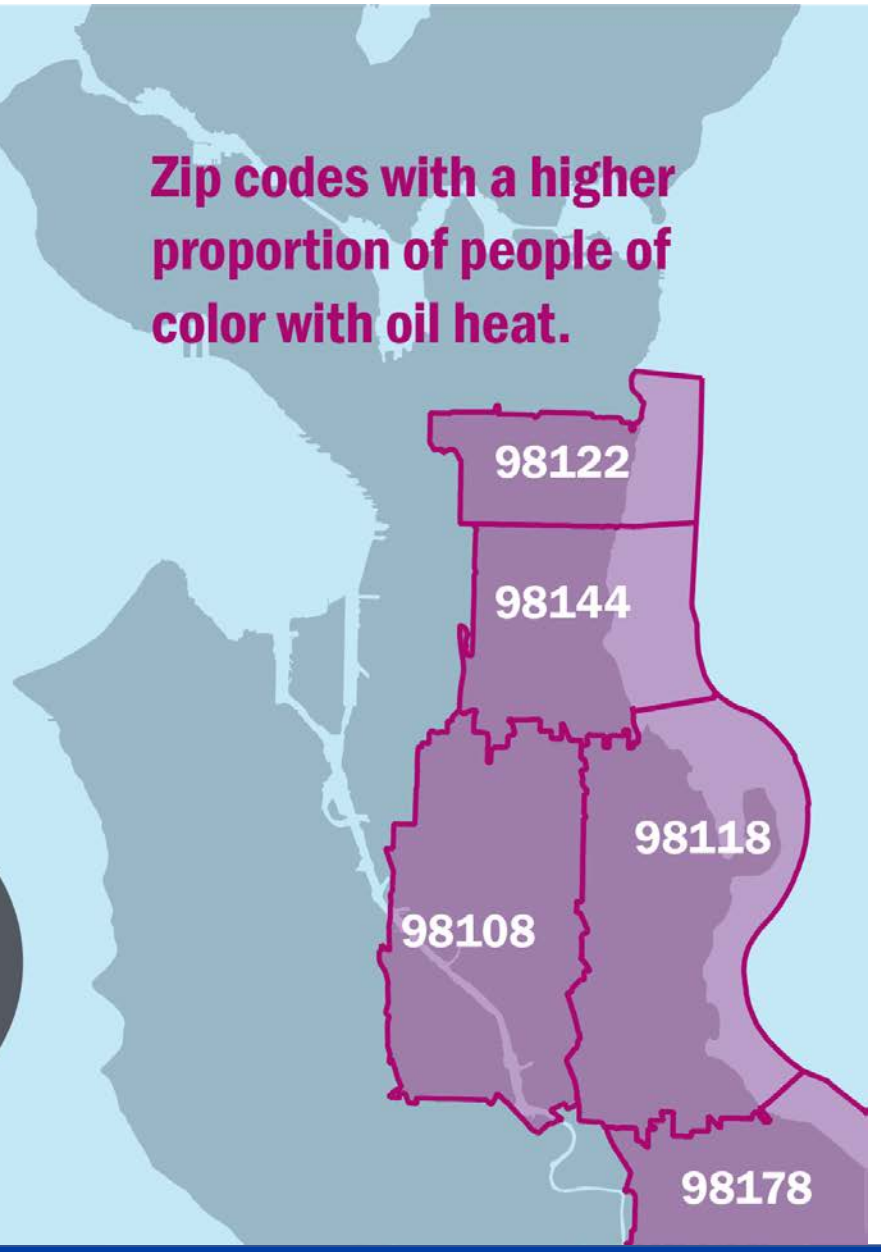


There are approximately **15,000–18,000** oil heated homes in Seattle. Of that, about **1,100 are low-income** households who participate in the City Light Utility Discount Program.

Out of the 1,100 households, **almost 60% are elderly.**



Zip codes with a higher proportion of people of color with oil heat.



Policy goals

- Convert all homes from oil by 2028
- **Increase the equitable adoption** of electric heat pumps, thereby reducing carbon pollution, overall energy use and heating bills
- **Prevent future oil leaks** minimizing future environmental damage, cleanup costs, groundwater contamination, and economic burdens to households
- **Provide a pathway for households with lower incomes** to be eligible for Office of Housing/Seattle City Light weatherization services (insulation, air-sealing, etc.)
- **Support oil dealer workforce transition** to heat pump technology

Policy Components

- Impose a heating oil tax $0.236/gallon on oil dealers
- Estimated $8.3 million from taxes will help mitigate the impact of oil on climate and prevent future hazards of leaks
- Prioritize oil conversion for low-income households – pay 100% of costs of converting for 1,000 households
- Expand existing rebate program for heat pumps – 1,700 rebates to non low-income households
- Legislation requires households to decommission or replace tank by 2028 – directs OSE, SFD and SDCI to develop plan and recommendation by July 1, 2020.

Households with lower incomes

- Fully fund conversions for 1,000 income-eligible households (renters included)
- Delivery of program in partnership with Office of Housing
- Electrification creates pathway for access to City Light/Office of Housing weatherization services available to electrically heated homes (insulation, air-sealing, etc.)
- Reimbursement on City Light account to mitigate anticipated tax burden

Example: Mary pays about $1,700/year to have her 500-gallon oil tank filled for the year (based on $3.40/gallon). With a heat pump that is more than twice as efficient, she can expect to save at least 50% on heating costs. She also participates in the Utility Discount Program (UDP) and receives a 60% discount-reducing her annual heating costs to $340 - **saving her more than $1,300 per year** on heating costs.

Projected value/ benefits

CARBON/ENVIRONMENTAL BENEFITS

- Projecting at least 433,000 MT/CO2e reduction over 10 years
- Reduced future incidence of leaking tanks and impact to soil and groundwater through 2028 tank mandate

ENERGY BENEFITS

- 50%-60% average savings on heating costs by switching from an oil furnace to a heat pump
- Households who switch can expect to save $800-1,000 on heating costs/year (more for low-income households)
- Reduced energy cost burden for low-income households

NON-ENERGY BENEFITS

- Increased comfort, **especially during extreme heating events and smoke events**

Appendix

	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Estimated Revenue	$ 889,425	$ 1,593,000	$ 1,395,350	$ 1,197,700	$ 1,000,050	$ 802,400	$ 604,750	$ 451,350	$297,950	$ 8,231,975
Existing General Fund	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$200,000	$ 1,800,000
Total Funding	**$ 1,089,425**	**$ 1,793,000**	**$ 1,595,350**	**$ 1,397,700**	**$ 1,200,050**	**$ 1,002,400**	**$ 804,750**	**$ 651,350**	**$497,950**	**$ 10,031,975**
Expenses										
Standard Rebate	$ 200,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -	$ -	$ 1,700,000
Low-Income Conversion	$ 225,000	$ 625,000	$ 625,000	$ 625,000	$ 625,000	$ 625,000	$ 625,000	$ 625,000	$625,000	$ 5,225,000
Low-Income fee exemption	$ 63,425	$ 118,000	$ 103,250	$ 88,500	$ 73,750	$ 59,000	$ 44,250	$ 29,500	$ 14,750	$ 594,425
Low-income conversion program delivery (OH)	$ 45,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$125,000	$ 1,045,000
Marketing/Outreach	$ 75,000	$ 50,000	$ 50,000	$ 40,000	$ 40,000	$ 30,000	$ 20,000	$ 20,000	$ 20,000	$ 345,000
Contractor Training	$ 30,000	$ 50,000	$ 50,000	$ 50,000	$ 30,000				$ -	$ 210,000
Program FTE	$ 112,265	$ 116,680	$ 116,680	$ 120,048	$ 120,048	$ 120,048	$ 68,487	$ 68,487	$ 68,487	$ 911,230
Total Expenses	**$ 750,690**	**$ 1,334,680**	**$ 1,319,930**	**$ 1,298,548**	**$ 1,263,798**	**$ 1,209,048**	**$1,132,737**	**$ 867,987**	**$853,237**	**$ 10,030,655**