

Climate Justice Priorities

Presentation to the Sustainability &
Renters' Rights Committee



Agenda

Item	Presenter
Introduction	Michelle
Climate Justice Work	Lylianna
2018 GHG Inventory Update	Ani
Green New Deal	José
Ongoing Emissions Reduction Efforts	Michelle
Broader OSE work	Michelle



Climate Justice Work

New additions to our team, priorities for the year



Climate & Environmental Justice



Lylianna Allala
(she/her)
Climate Justice
Director



Ximena Fonseca-Morales (she/her)
Equity & Environment
Program Coordinator



Lisa Chen (she/her)
Equity & Environment
Manager



Ani Krishnan
(he/him)
Climate Data & Policy
Manager

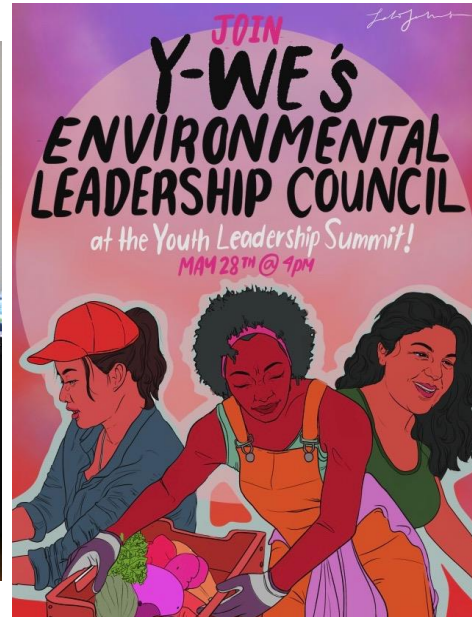


José Manuel Vasquez (he/him)
Green New Deal
Advisor

Climate Justice Priorities



Environmental Justice Committee 2020



Art for EJ Fund grantee Y-WE's Environmental Leadership Council

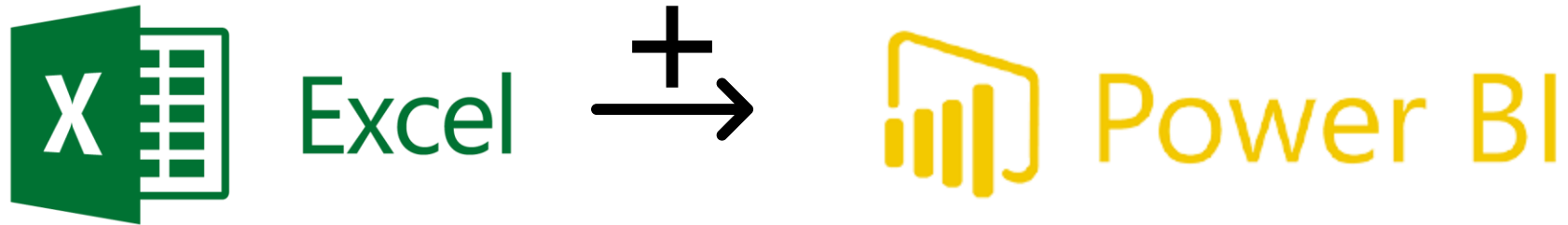
- Deepening partnership with our communities
- Co-developing solutions that advance equity-based outcomes to address climate change and environmental injustice.
- Investing in community led climate and environmental work

2018 GHG Inventory Update

Data structure migration, updated web presence, key insights



Data Structure Migration



- Improved efficiency and replicability for future inventory reports
- Increase granularity and flexibility of information provided to help with developing programs, policies, and measures
- More accessible to policymakers and public

Updated Web Presence

Office of Sustainability & Environment
Jessica Finn Coven, Director


Climate Change | Equity & Environment | Sustainable Communities | Environmental Progress | About Us

Home > Climate Change > Climate Planning

Performance Monitoring

The Office of Sustainability & Environment tracks and measures Seattle's greenhouse gas emissions on a regular basis. Called greenhouse gas inventories, these reports identify the source and amount of greenhouse climate pollution across the city of Seattle. These inventories inform planning and help monitor progress made toward our [climate protection goals](#).

- 2016 Community Inventory
- 2014 Community Inventory
- 2012 Community Inventory
- 2008 Community Inventory
- 2005 Community & City Operations Inventory



Sources of Seattle's Climate Emissions



Understanding Our Emissions

Seattle releases an analysis of our climate pollution, called a greenhouse gas inventory, every two years. See the tabs below for more context on why this work is important, what our recent analysis is telling us, and the action steps we are committed to. A downloadable version of our [most recent report is here](#).

What and Why

Data

Actions

Climate Data Visualizations

All of our inventory data is now available to explore through the dashboards below. The first dashboard displays data on overall emissions trends since the baseline year of 2008. The second dashboard contains a detailed breakdown of emissions by sector, sub-sector, source, and fuel type.

Annual Population, GDP, and Emissions Trends

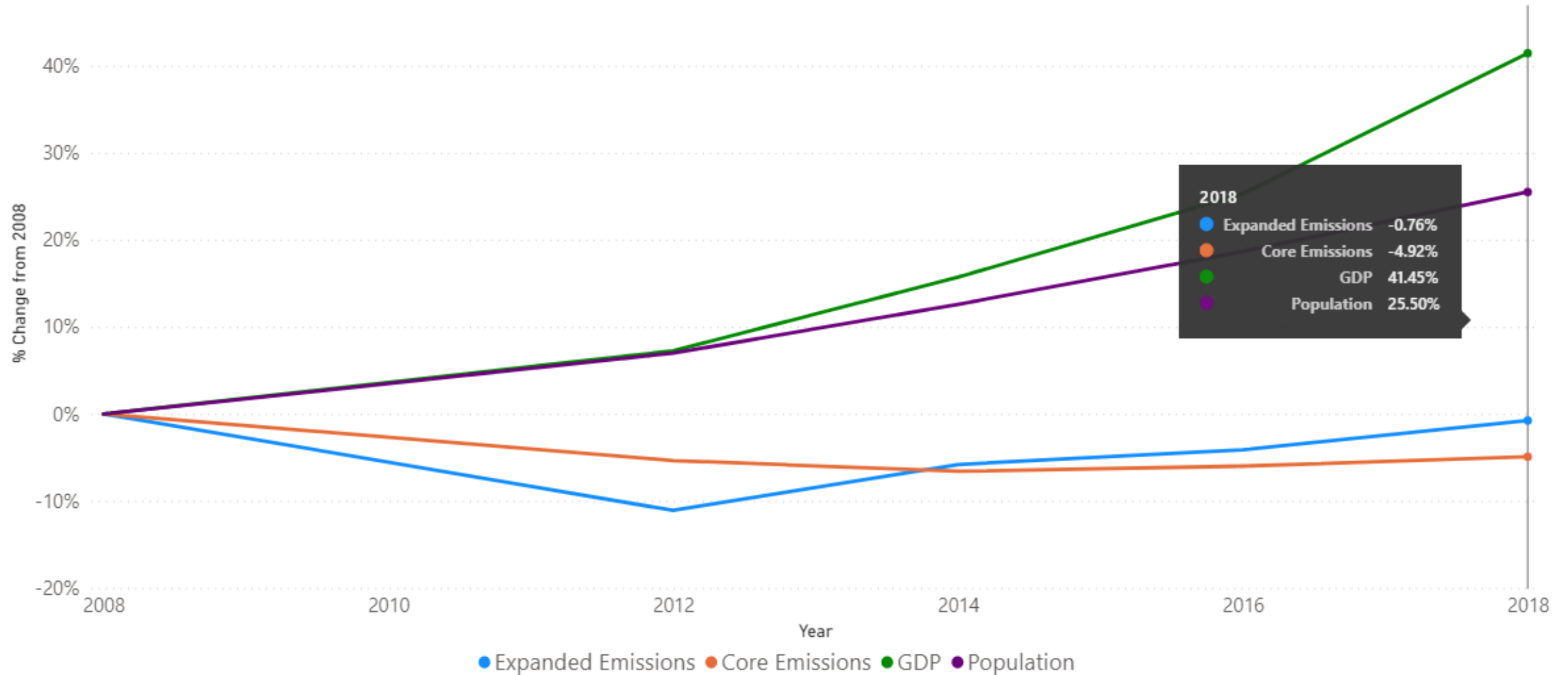
Emissions reductions were achieved in the last decade even though Seattle's population increased during the same time period. Expanded emissions are slowly rising above 2008 baseline levels.



Annual Population, GDP, and Emissions Trends



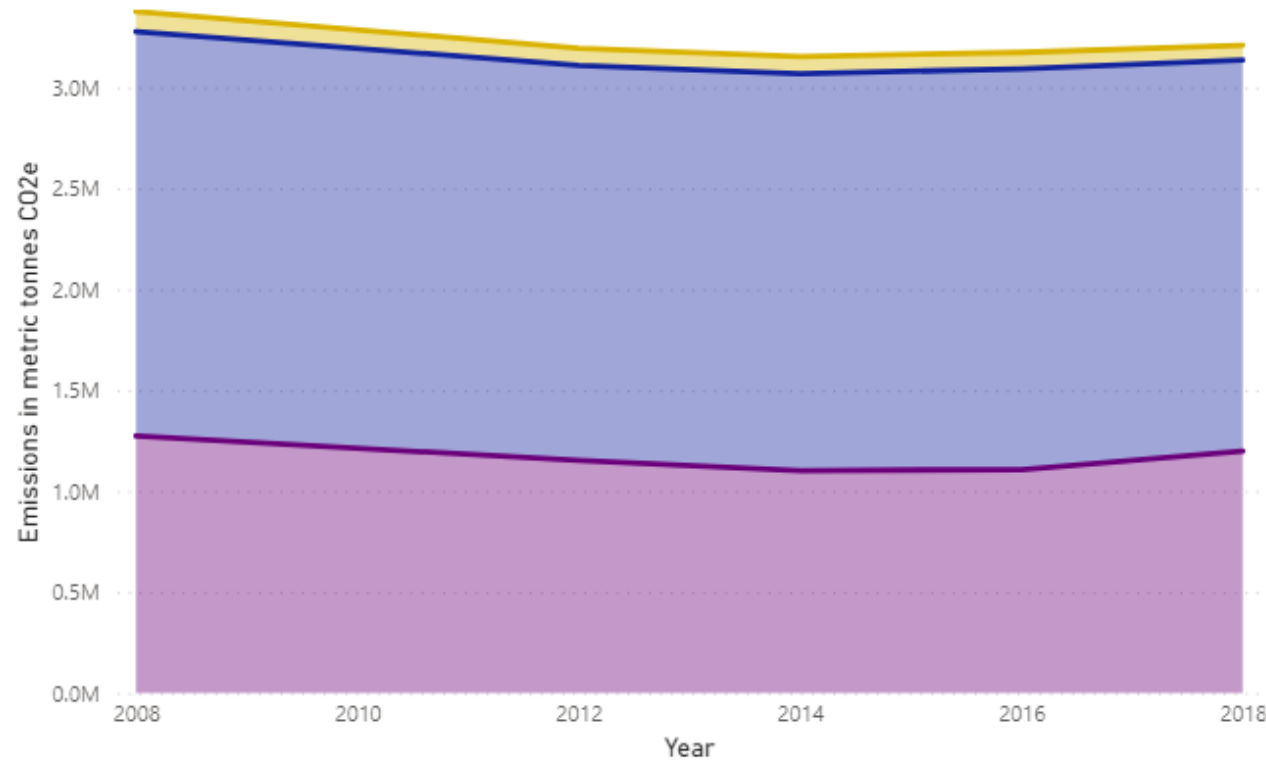
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Annual Emission Trends

Core

Expanded



Between 2008 and 2018, Seattle's emissions for the selected sectors and scope decreased 4.9%, from 3.38 million to 3.21 million mtCO2e.

Sector ● Buildings ● Transportation ● Waste

Select all Buildings Transportation Waste

2008 2012 2014 2016 2018 ↩



Total Annual Emissions by Sector



Core

Expanded

The majority of Seattle's emissions come from the transportation sector. The remaining emissions come from fossil gas use in buildings, processes in industry, and landfilling of organic waste.

Click the buttons below to navigate to each Sector's Page:

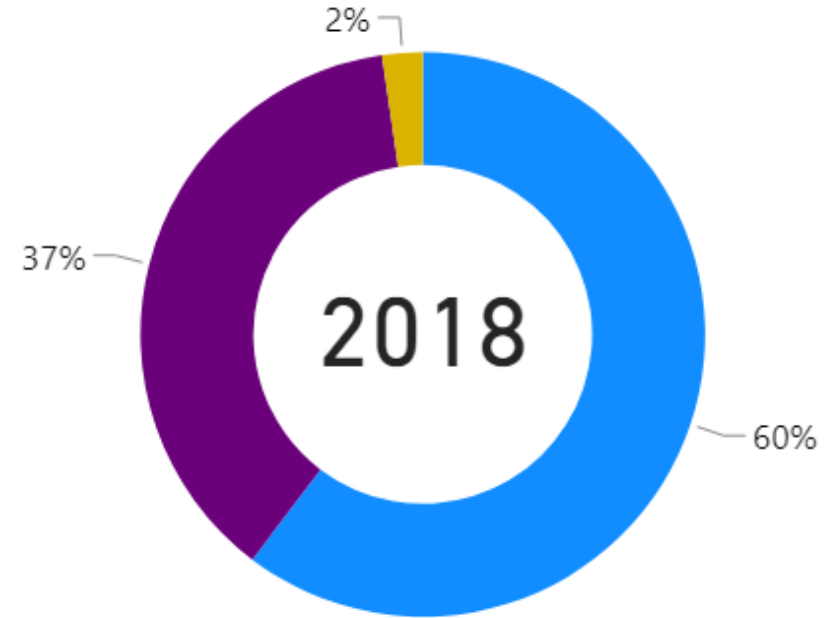
Transportation →

Buildings →

Industry* →

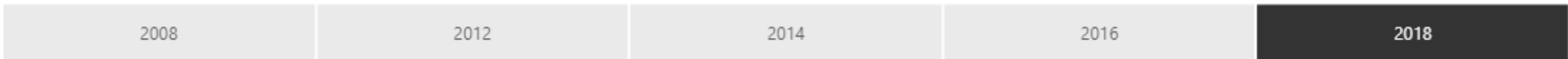
Waste →

**Industrial emissions, and other "expanded" emissions primarily regulated by jurisdictions other than the City, have been filtered out in this chart.*



2018

3,105,177
metric tonnes of CO2e in 2018



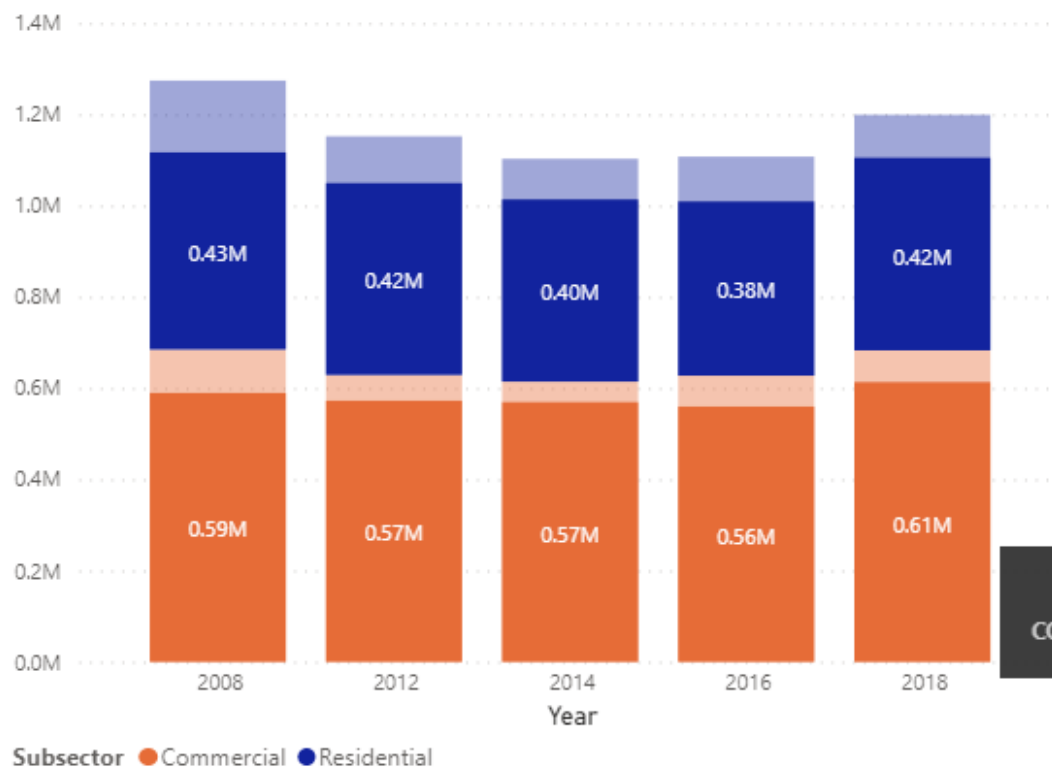
Buildings



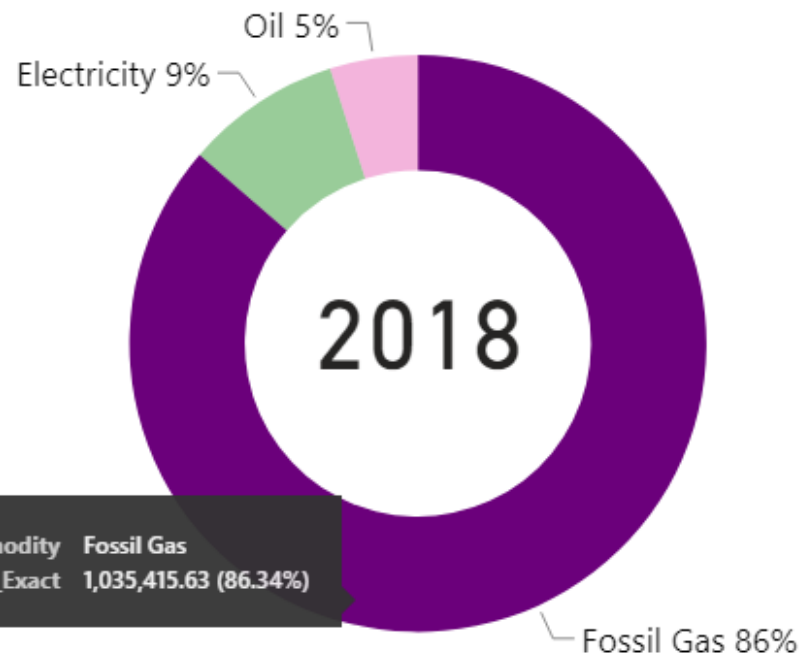
Core

Expanded

Emissions in metric tonnes CO2e



Emissions Share by Commodity



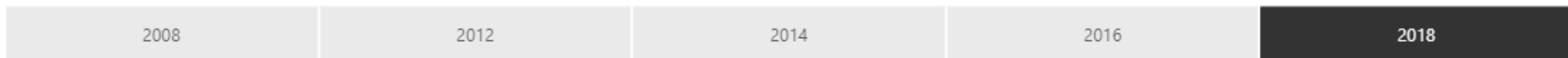
Commodity	CO2Emissions_Exact
Fossil Gas	1,035,415.63 (86.34%)

1.4%

Emissions Increase from 2008- 2018

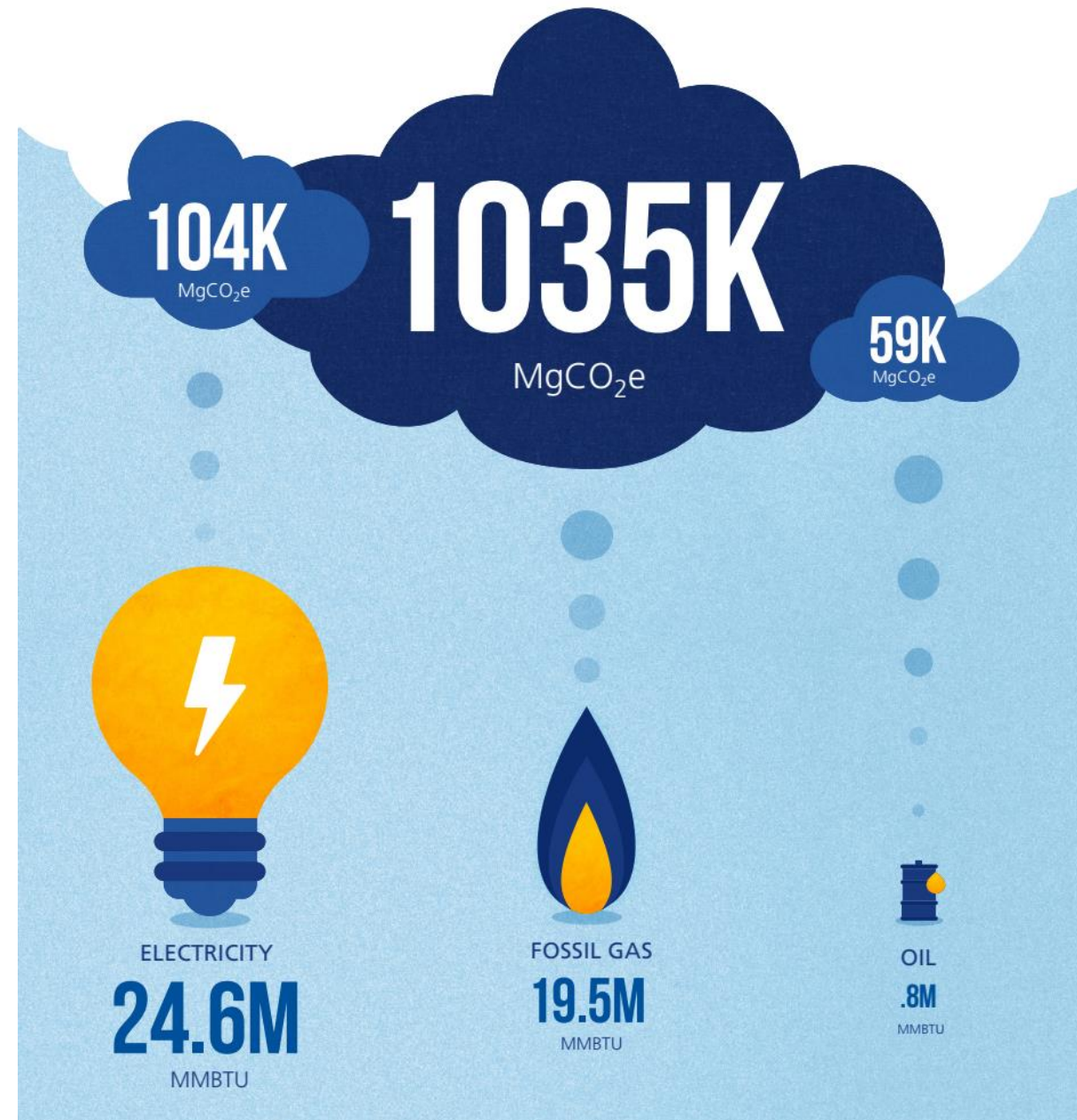
1,035,416

metric tonnes of CO2e in 2018



2016 to 2018: Key Insights

- Overall emissions went up by 1.1%.
- Buildings emissions rose by over 8%, primarily due to an increase in fossil gas use.
 - Fossil gas accounts for 86% of buildings emissions (94% after SCL carbon offsets) and only 43% of building energy use.
- Transportation emissions reduced by 2.4% due to slightly more efficient vehicles and less vehicle miles travelled.
- Waste emissions dropped by almost 10% due to more composting and recycling efforts.



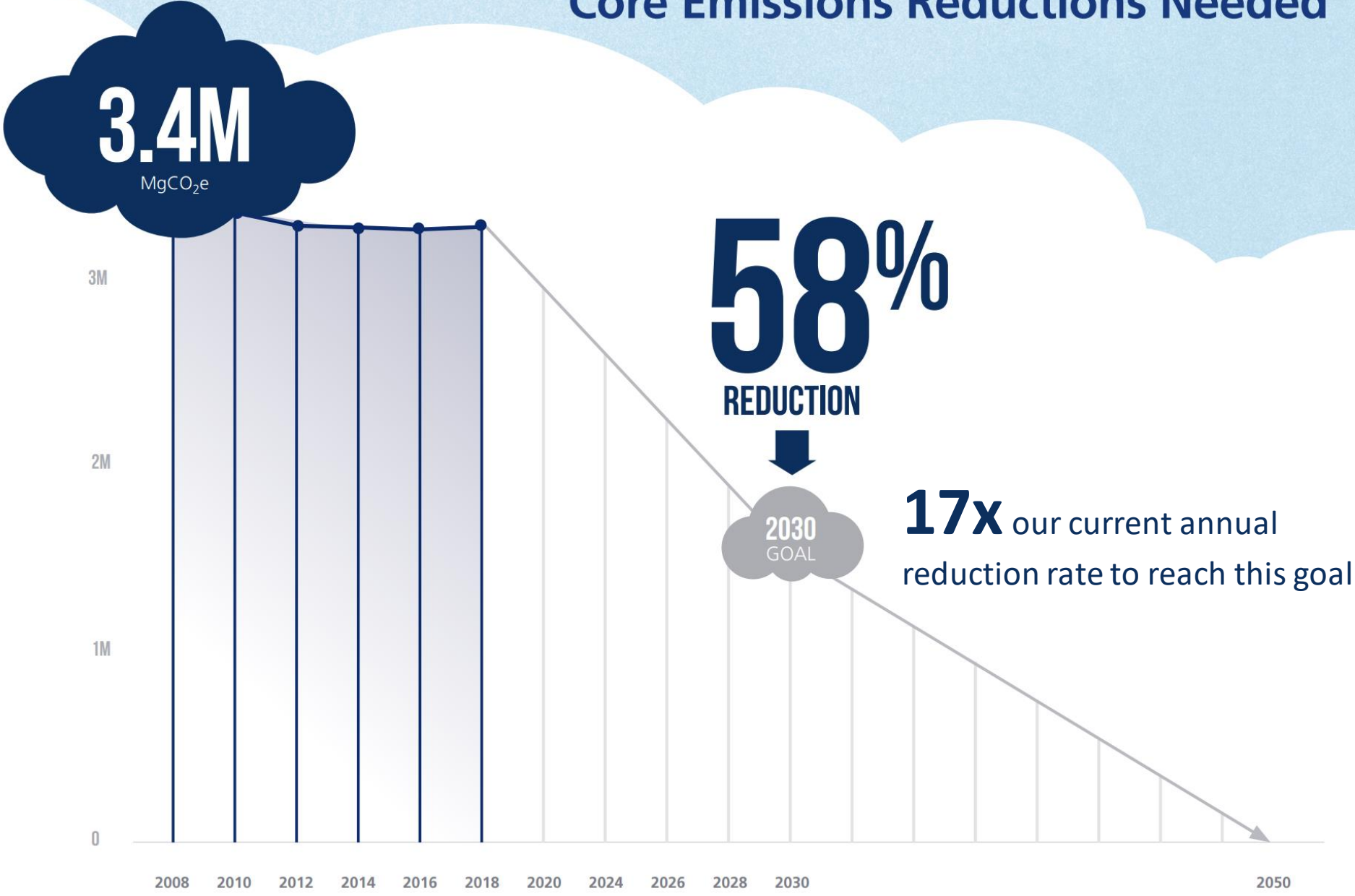
Emissions Reduction Targets

- Climate planning process
 - Climate Action Plan (2013, Council Resolution)
 - Climate Action Strategy (2018, Mayor's Office)
- **58%** reduction by 2030
 - **82%** reduction in passenger vehicle emissions
 - **39%** reduction in commercial & residential building emissions
- Net carbon neutral by 2050

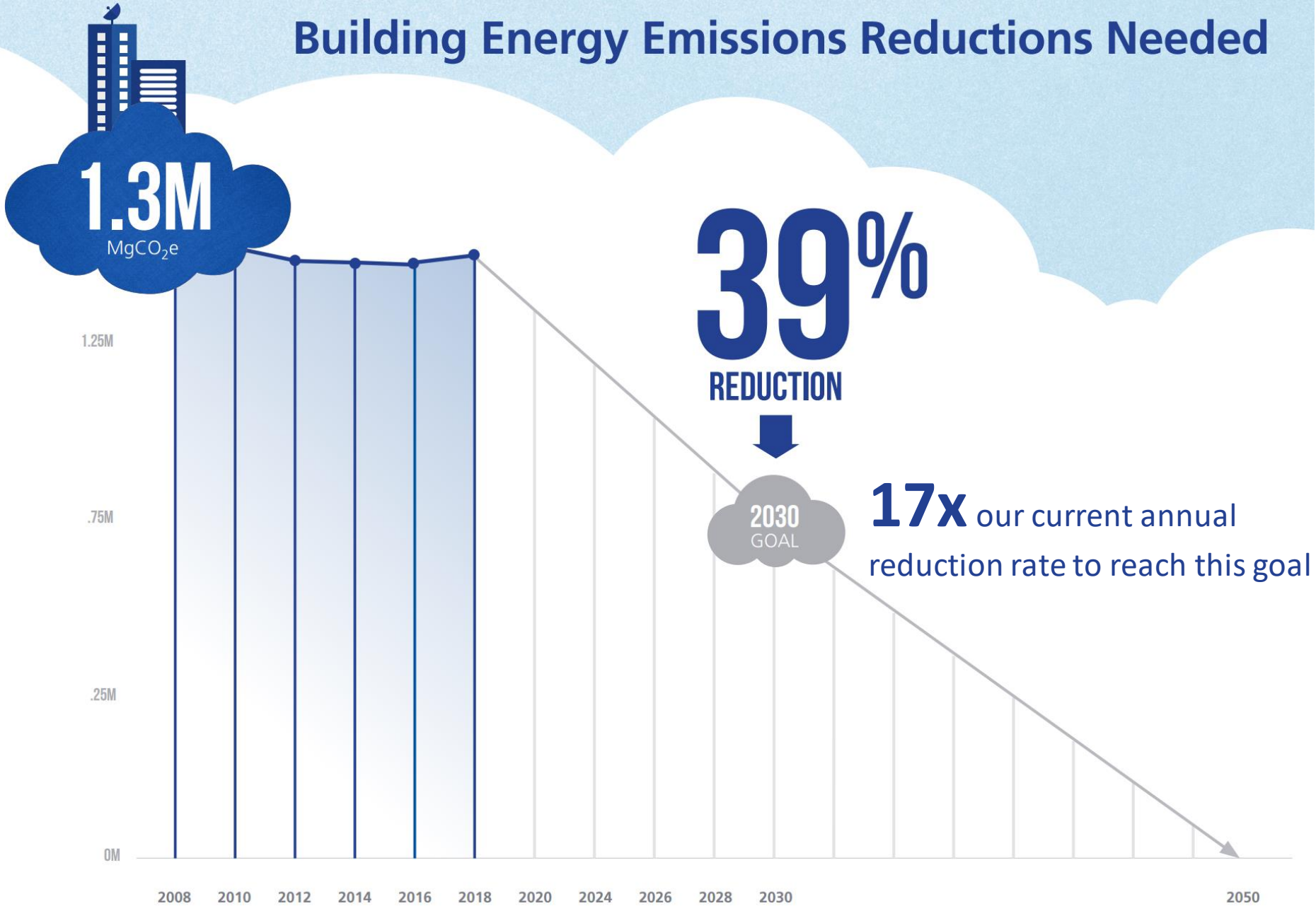


June 2013

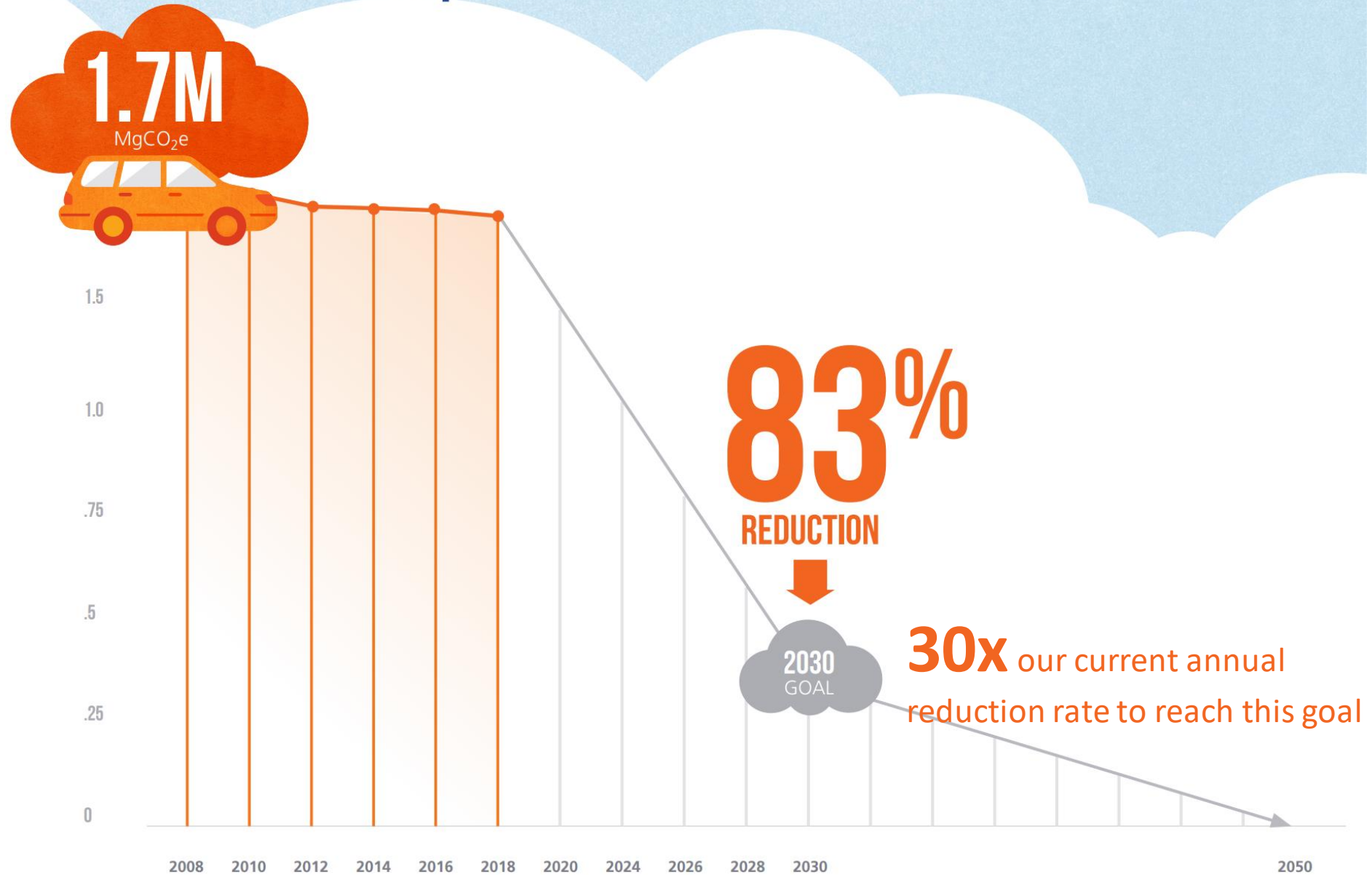
Core Emissions Reductions Needed



Building Energy Emissions Reductions Needed



Transportation Emissions Reductions Needed



Hazardous Sites

13 of the 14 heaviest industrial polluters are located within half a mile of the places where communities of color, immigrants, refugees and low income residents live.

(U.S. Census Bureau and Puget Sound Clean Air Agency)



The Environmental Protection Agency's Superfund program is responsible for cleaning up some of the nation's most contaminated land.

Lower Duwamish Waterway

58% of the population that lives within one mile of the Superfund boundary are **people of color.**

(U.S. Census Bureau and EPA)



Green New Deal

- **Key Climate Indicators**
Collect more frequent and granular climate data
- **Indicators Dashboard**
Contextualize data for public consumption with equity metrics and constituent stories



STAND WITH FRONTLINE COMMUNITIES IN OUR FIGHT FOR ENVIRONMENTAL JUSTICE, AGAINST THE RAVAGES OF TOXIC CHEMICALS AND CLIMATE CHANGE.

Artist: Ricardo Levins Morales

Green New Deal



Green New Deal Oversight Board



Green New Deal Oversight Board

19 seats available for 3-year terms

- 8 Community Representatives
 - 2 Tribal Representatives
 - 2 Youth Representatives
- 3 Environmental Justice Org Representatives
- 4 Labor Union Representatives
- 3 Greenhouse Gas Reduction / Climate Resiliency Strategy Representatives
- 1 Workforce Training Representative

Application Launches March 24th!

For more info on how to apply:

greenspace.seattle.gov

Twitter: @SeattleOSE

Facebook: Seattle Office of Sustainability and Environment



Ongoing Emissions Reduction Efforts

Near-term climate actions in the buildings and transportation sectors



Buildings

Building Tune-Ups

Just hit 500 Building Tune-Ups! Early analysis uncovered 7% energy savings and 8% emissions reductions on average per building in the first year after a Building Tune-Up. (n=50)

Municipal Building Electrification

Preliminary analysis shows over 20% reduction in site energy use and over 25% emissions reduction (2019 v. 2008); on track to hit 40% by 2025 reductions.

GND EO requires all new or substantially altered municipal buildings to operate without fossil fuels.



Buildings

Electrifying Existing Buildings

Complement the State energy performance standards and build on the City's existing Energy Benchmarking and Tune-Up programs to transition existing commercial & multifamily buildings off fossil fuels.

Clean Heat Program

Phase out residential oil heat by 2028. Oil tax to fund conversions for low-income households and Rebates available for market rate homes to switch to energy-efficient heat pumps.

Seattle Energy Code

Significantly reduce fossil fuel use in new commercial and larger multifamily buildings.

OIL HEAT vs CLEAN HEAT

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

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

Burning heating oil **pollutes our air**.

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

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

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

\$1,700 per year

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

500 gallons

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

Transportation

Mode Shift

Incentivize switch from drive alone trips to sustainable modes like transit, biking and walking. (SDOT)

Revenue for Equitable Mobility

The City is exploring road-pricing policies, as a possible approach to decrease traffic, reduce climate pollution, and support a more just transportation system.



Transportation

Transportation Electrification

Electrify everything that moves people, goods, or services to reduce climate and air pollution, increase electric mobility options, and create green jobs and workforce diversity.

Transportation Electrification Blueprint

Accelerate actions, policies and technologies to electrify transportation at scale.

- Fossil Fuel Transition Study (OED, Q1)
- Green & Healthy Streets Proposal (SDOT, Q2)
- KCM South Base – 10 E-bus chargers deployed (SCL, Q3)
- E-cargo Bike Pilot (SDOT, Q4)
- Policy & Budget Memo to disincentivize fossil fuels (OSE, Q4)
- Install Public Charging Stations – 27 DC fast chargers (SCL, Q4)



Broader OSE Work

Food Policies & Programs

- COVID Emergency Feeding Task Force (EFTF)/Human Services Department
- Fresh Bucks retail expansion and e-benefits
- Fresh Fruits & Vegetables and Water Filling Stations in Schools
- Sweetened Beverage Tax Community Advisory Board

Duwamish Valley Program

- Duwamish Valley Action Plan Implementation/COVID response
- Climate Adaptation & Resilience/Robert Wood Johnson Foundation

Urban Forestry

- Urban Forestry Management Plan (Q2, LUN Committee)
- Tree Protection Enhancements (SDCI-led, LUN Committee)
- Environmental Justice Partnerships
- Urban Forestry Commission

