



City of Spokane

2019 Greenhouse Gas Inventory



City Council PIES Committee Meeting - March 27, 2023

Agenda



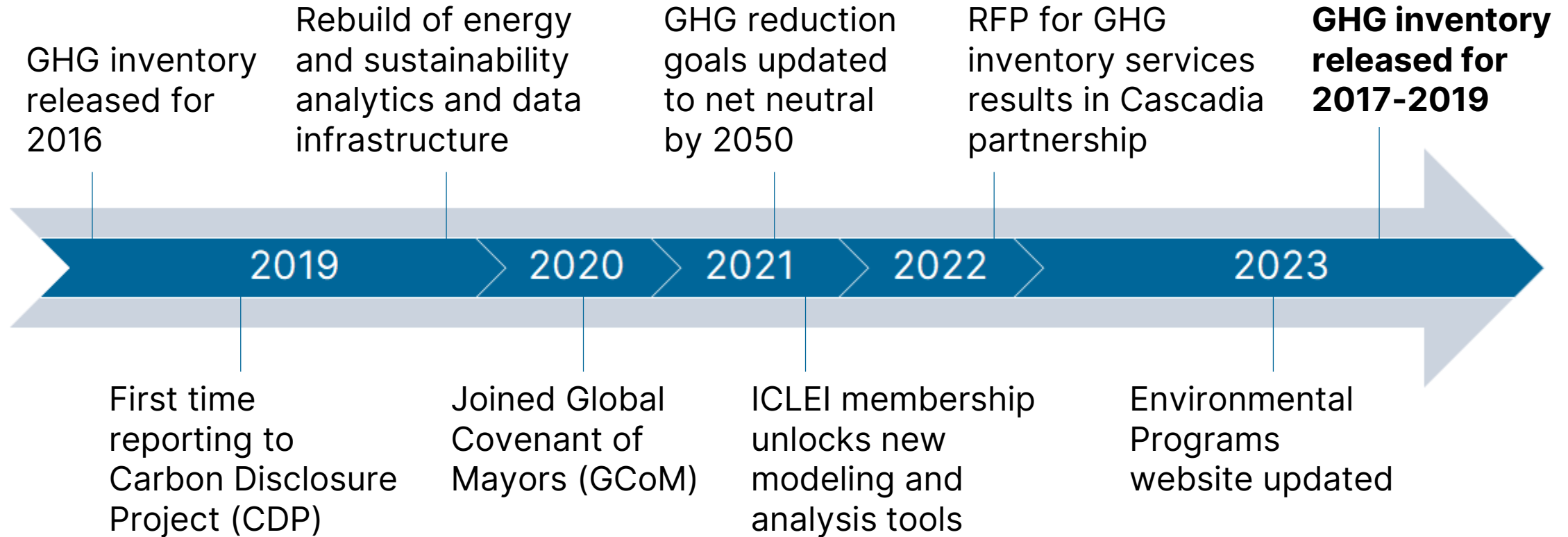
- Overview of Climate Emissions Reporting
 - Past
 - Present
 - Future
- 2019 GHG Inventory Results
- Next Steps
- Questions



Overview



Climate Emissions Reporting History



Key Takeaways:

- Increased data accuracy and transparency
- Increased expertise and analysis tools

Current Alignment with Multiple Goals

Spokane Municipal Code

Chapter 15.05 – Climate Change

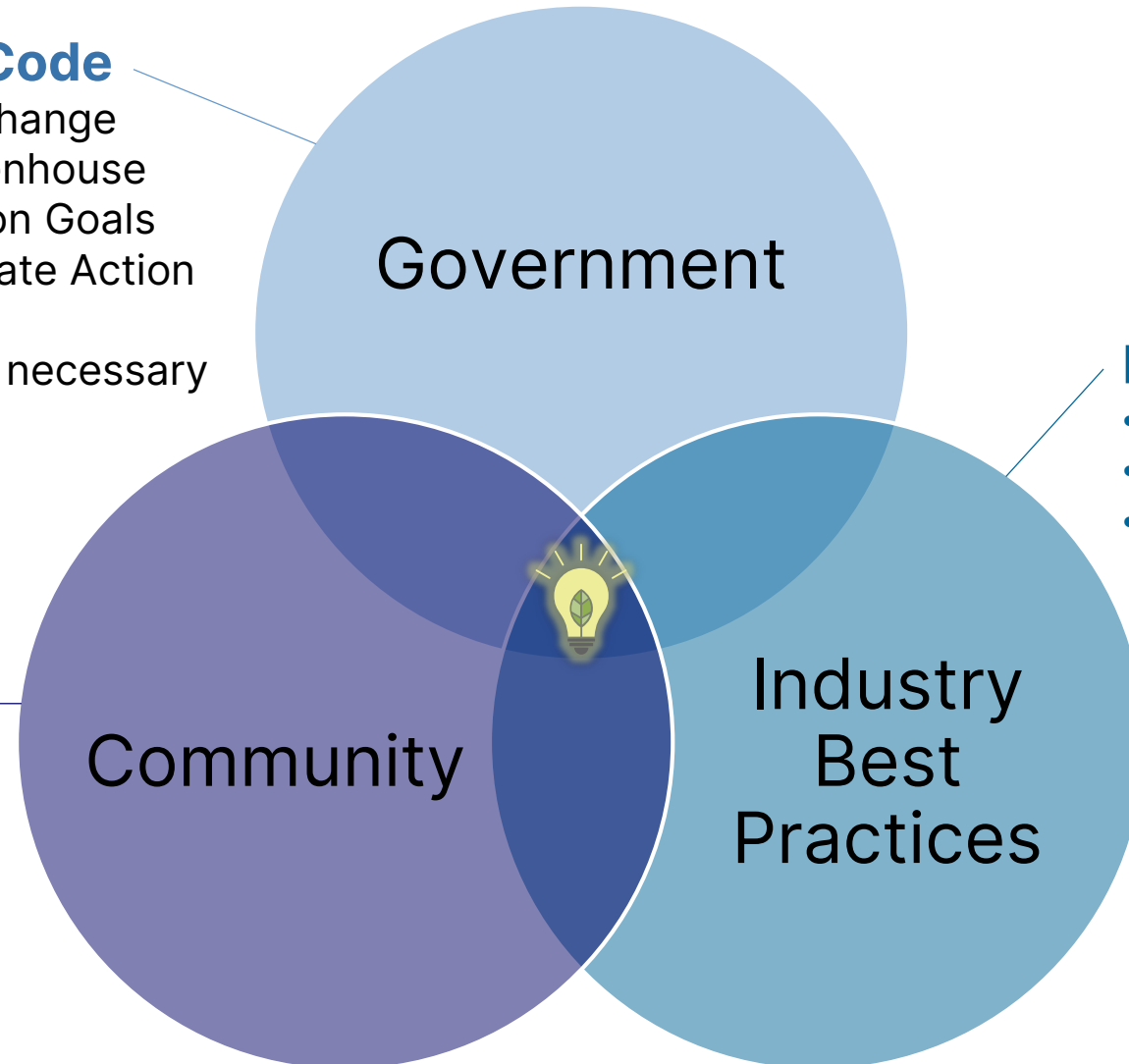
- [Section 15.05.020](#) Greenhouse Gas Emissions Reduction Goals
- [Section 15.05.060](#) Climate Action Progress Reports

Also, provides information necessary to compete for funding

Sustainability Action Plan

Implementation Strategies (IS)

- IS 1.1, 1.2, 1.3
- IS 7.1
- IS 11.1

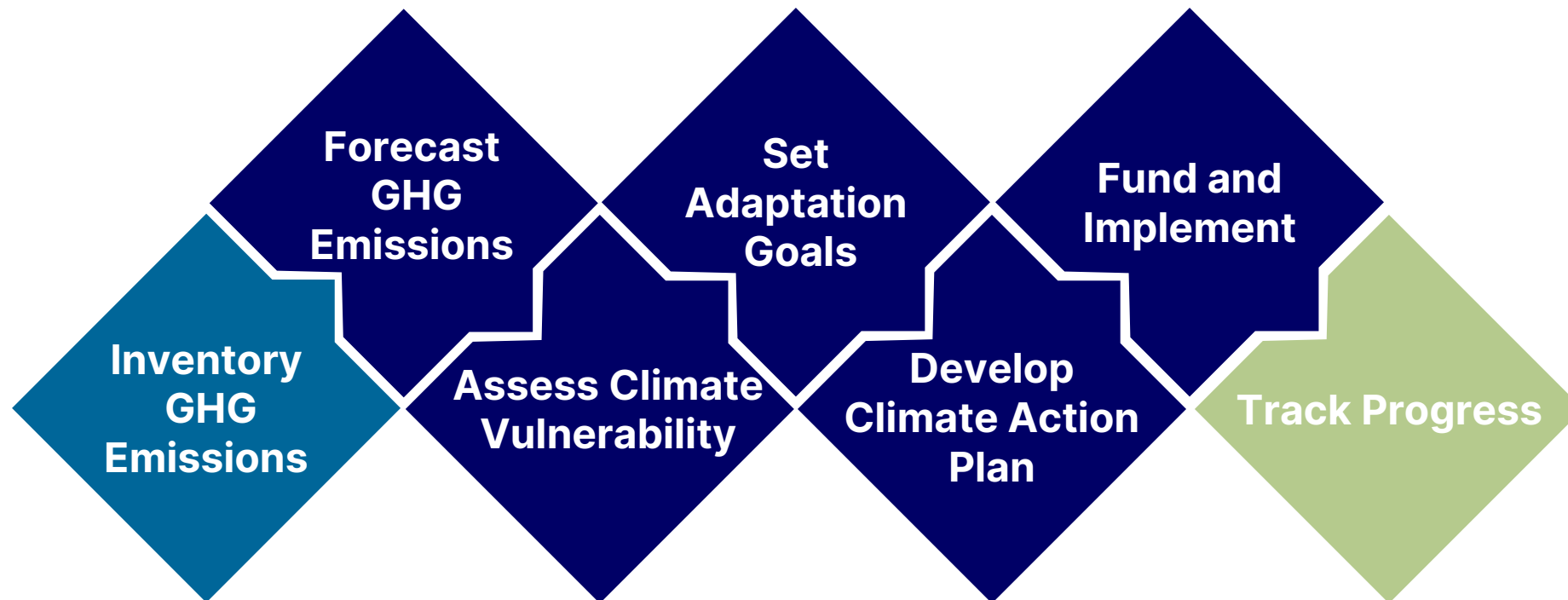


Reporting Guidelines

- Carbon Disclosure Project
- Global Covenant of Mayors
- Three reporting protocols

Future Plans

- Re-baseline 2016 GHG inventory
 - Required in order to be able to compare apples-to-apples
- Implement best practices in climate action planning efforts



Cascadia Consulting Group



- **Small, women owned consulting firm** working to foster sustainability in communities, businesses, and organizations
- **30 years** of experience, with deep expertise in **PNW & CA**
- **3 lines of business:**
 - Planning & Facilitation
 - Communications & Engagement
 - Research & Analysis

Climate Planning/Analysis Clients

Cities:

- All King County Cities
- Tacoma
- Bainbridge Island
- Everett
- Edmonds
- Port Angeles
- Vancouver, WA
- San Francisco, CA
- Pleasanton, CA
- Albany, CA
- Dublin, CA
- Foster City, CA
- Livermore, CA
- Ashland, OR
- Flagstaff, AZ
- Sedona, AZ
- Columbia, MO
- Fort Collins, CO
- Telluride, CO

Counties:

- King
- Pierce
- Snohomish
- Kitsap
- Thurston
- Whatcom
- Clallam
- San Mateo (CA)
- Sonoma (CA)
- Teton (WY)

Tribes:

- Coeur d'Alene
- Yakama
- Makah
- Port Gamble S'Klallam
- Puyallup
- Grande Ronde

Public Agencies:

- DNR & DFW
- Sound Transit
- Port of Seattle
- OR DEQ
- USAID



Inventory Findings



What is a greenhouse gas inventory?

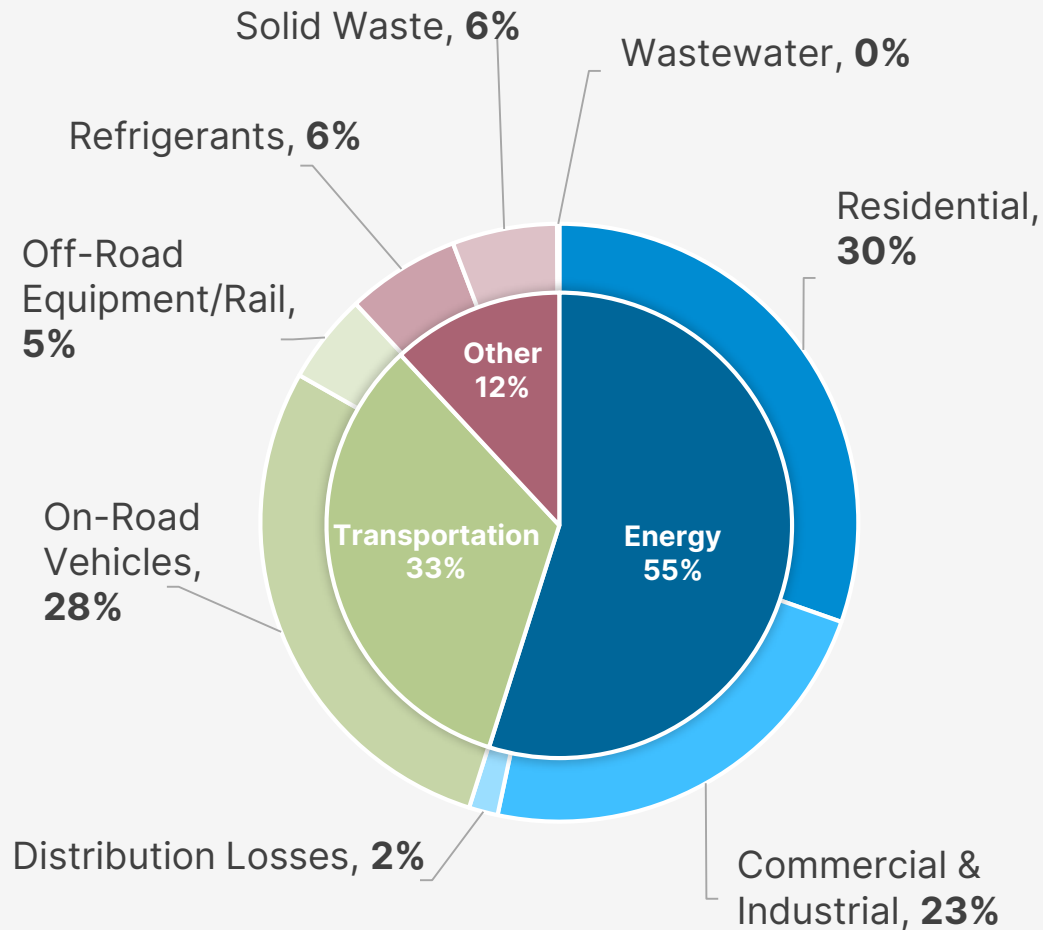
- Set of methods for **quantifying/estimating GHG emissions** produced by a community or other entity.
- Provide insights into top sources of GHG emissions to **inform strategic climate action planning**.
- Some inputs are **measured data** (e.g., electricity and natural gas consumption)
- Others are **modeled** using **robust assumptions** (e.g., transportation mileage).

Two Inventory Scales

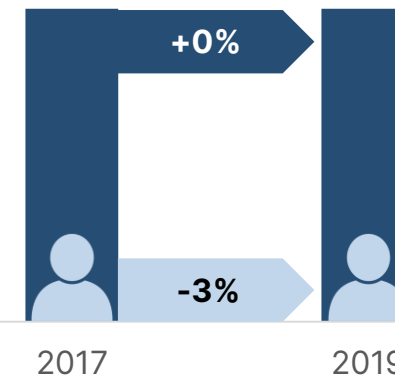


- **Communitywide**
 - Geographic
 - Activity within City Limits
- **Local Government Operations**
 - Activity within the City's operational control

Communitywide Inventory Findings



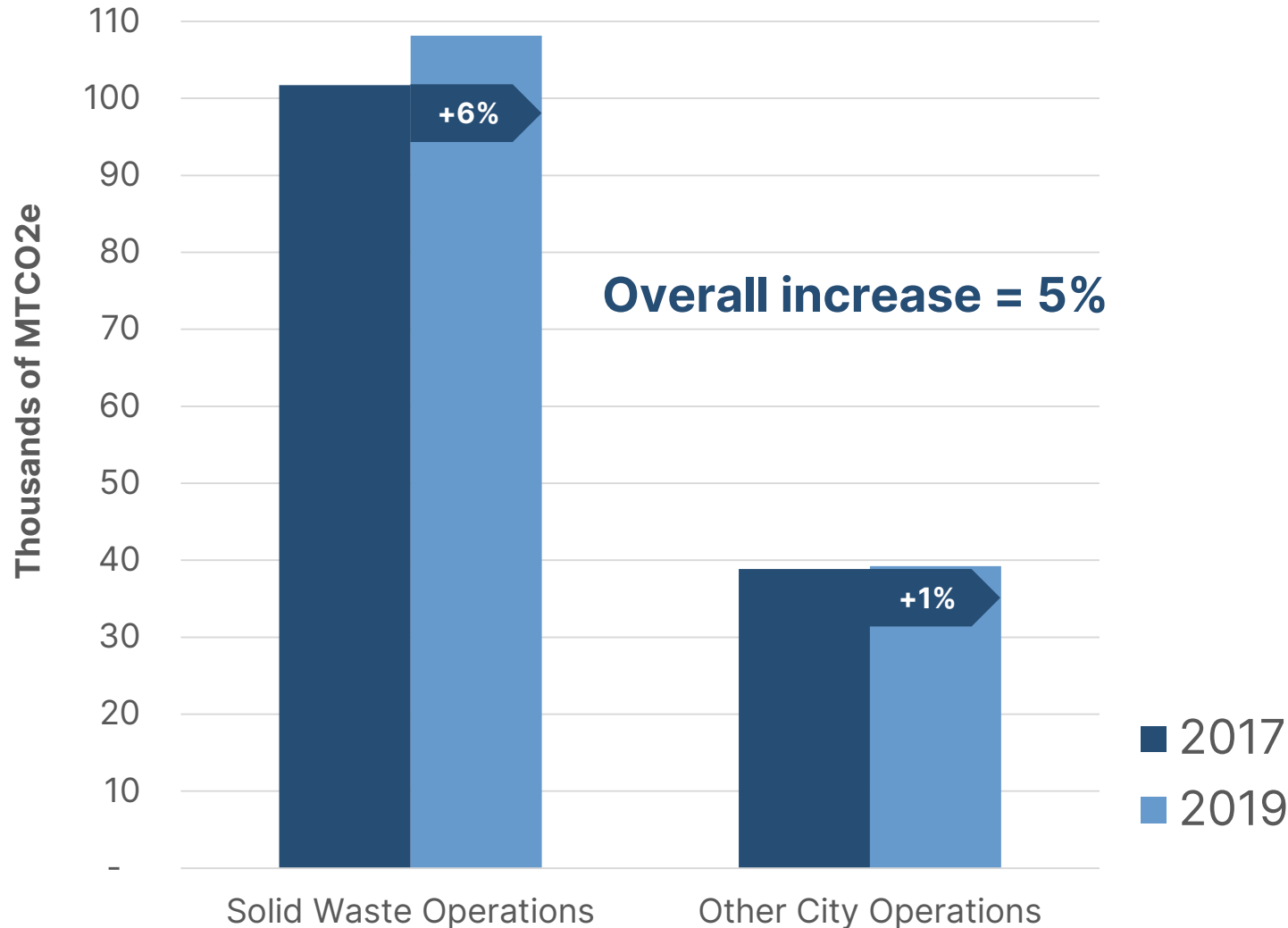
	2017 Emissions (MTCO ₂ e)	2019 Emissions (MTCO ₂ e)	% Change
Energy	1,103,395	1,080,649	-2%
Transportation	641,624	653,461	2%
Refrigerants	115,518	120,812	5%
Solid Waste	104,547	111,569	7%
Wastewater	3,333	2,490	-25%
Total	1,968,418	1,968,982	0%
Per-Capita	8.93	8.67	-3%



Total emissions were flat from 2017 to 2019.

Controlling for population growth, **per capita emissions decreased 3%.**

City Operations Inventory Findings



Other City Operations:

- Vehicle fleet
- Wastewater facilities
- Water facilities
- Energy in other facilities
- Employee commute
- Streetlights & traffic signals
- Refrigerants

2016 Greenhouse Gas Inventories

2016 Inventory

- Prepared using **different data sources and methodology** than 2017-2019 inventories
- Calculations performed **manually** instead of in ClearPath
- Does not provide “**apples to apples**” **comparison** to 2019 inventory

Recommendations

- **Review** 2016 inventory
- **Adjust** 2016 inventory data inputs to align with 2017-2019 inventories
- **Recalculate** emissions in ClearPath to get new total
- **Restate** adjusted 2016 baseline and associated emissions reduction targets

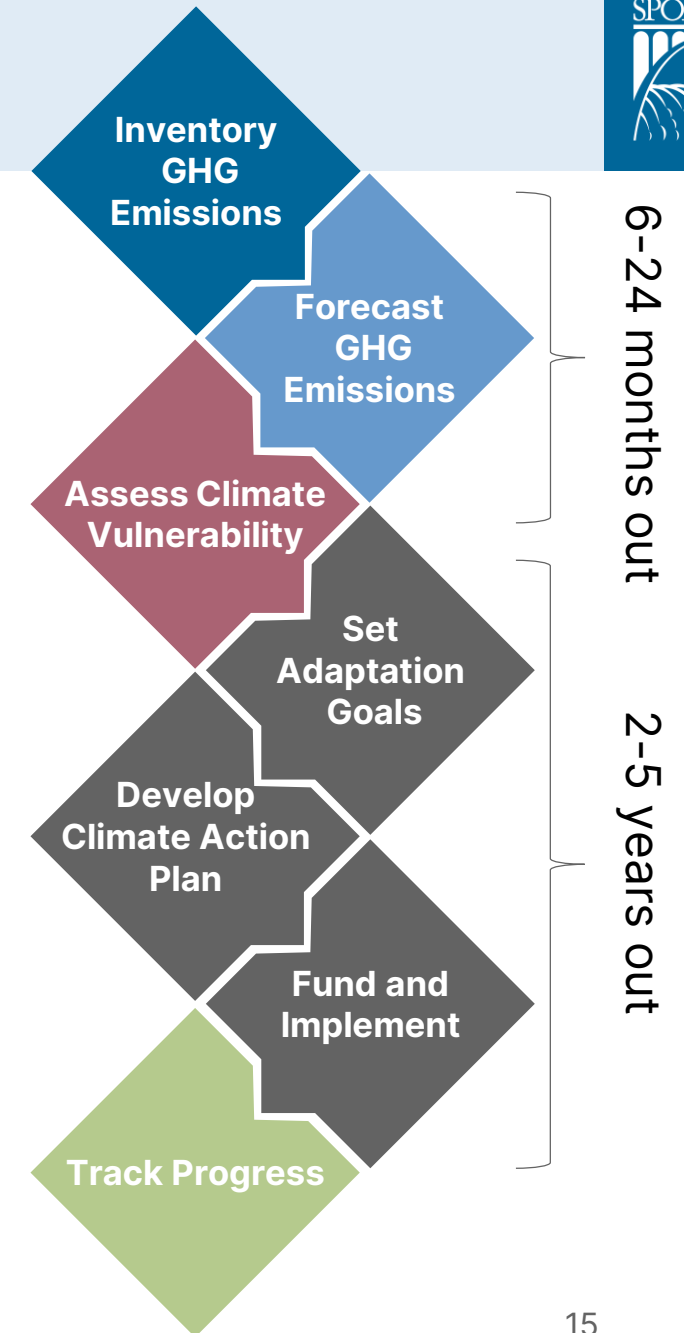


Next Steps



Next Steps

- **2022 Environmental Highlights**
- **Re-baseline 2016 GHG Inventory**
- **GHG Emissions Forecast**
- **Climate Risk and Vulnerability Assessment contract scoping**
- **Comprehensive Plan Updates**





Questions?



**THANK
YOU!**

Questions/comments:

Environmental Programs Website

greenspokane.org

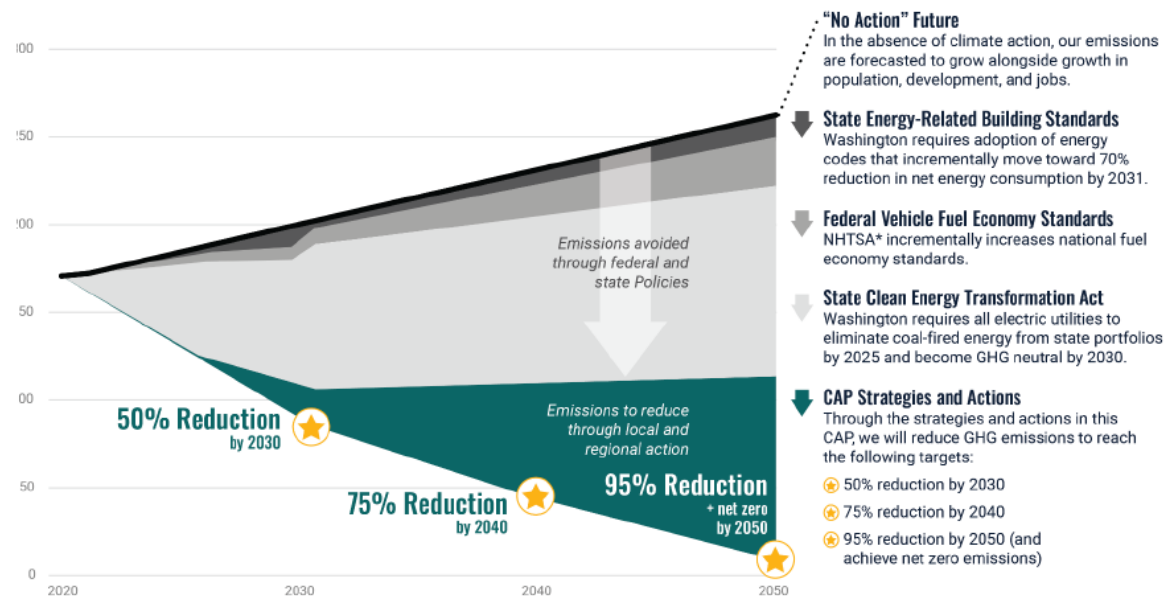
Environmental Programs Email

EnvPrograms@spokanecity.org

GHG Emissions Forecast Example

FORECAST & TARGETS

Kenmore is joining peer communities around King County in setting **aggressive GHG emissions reduction targets** that meet or exceed state and federal targets. Specifically, Kenmore has pledged to uphold the ambitious, yet achievable targets set forth by K4C, which will be used to track the City's progress over time. Refer to **Appendix C** for K4C emissions reduction commitments and targets. The figure below illustrates the emissions path Kenmore is currently on, anticipated emissions reductions from federal and state policies, and the gap that remains in meeting our reduction targets (to be addressed through the CAP).



*NHTSA = National Highway Traffic Safety Administration, in charge of regulating light- and heavy-duty vehicle fuel economy standards.

- Uses current emissions and projections to forecast future emissions.
- The forecast is used to analyze the gap between future emissions and emissions reduction targets.
- Forecasts are overlaid with expected emissions reductions from national, state, and regional policies to **identify priority areas for local emissions reduction efforts.**