

# ***2022 Sustainability Progress Report***

*Community Oversight Panel*

*9/13/2023*



# ***Why we are here***

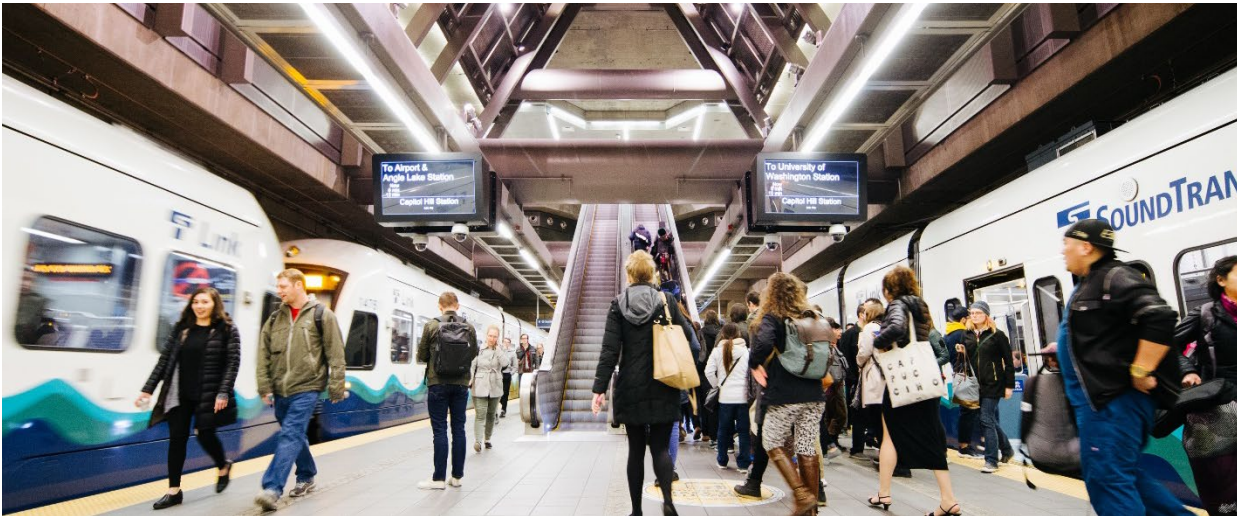
- Sustainability defined
- 2022 data at a glance
- Highlights from 2022 Sustainability Targets
- External recognition
- Continual improvement

# Defining sustainability



## ***Agency Mission***

Moving more people to more places



## ***Sustainability Mission***

Moving more people to more places, *efficiently, affordably, reliably, and environmentally*

# ***Annual Board Sustainability Presentations***

## **Annual Progress Report (today)**

- Operational performance and efficiency
- Progress on annual sustainability targets and KPIs

## **Strategic Planning (winter)**

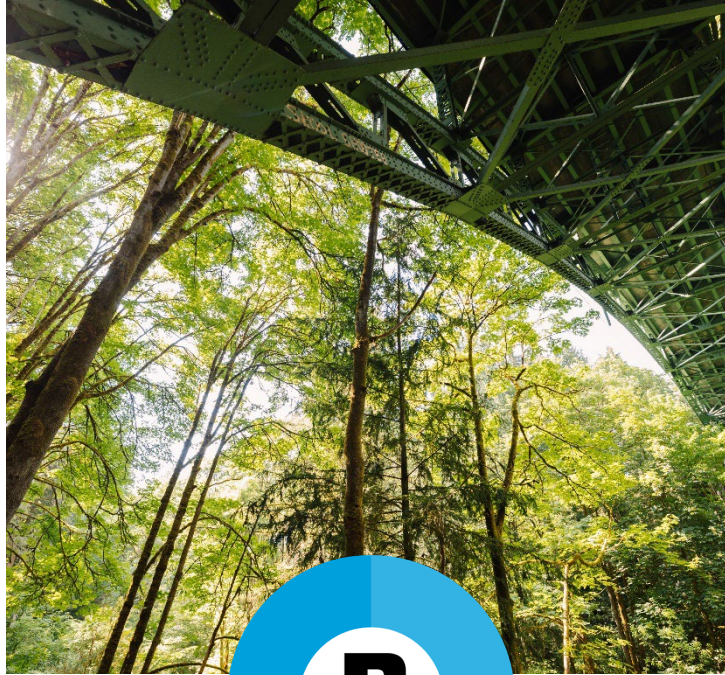
- Strategic direction and goal setting
- Sustainability Plan progress
- Program updates







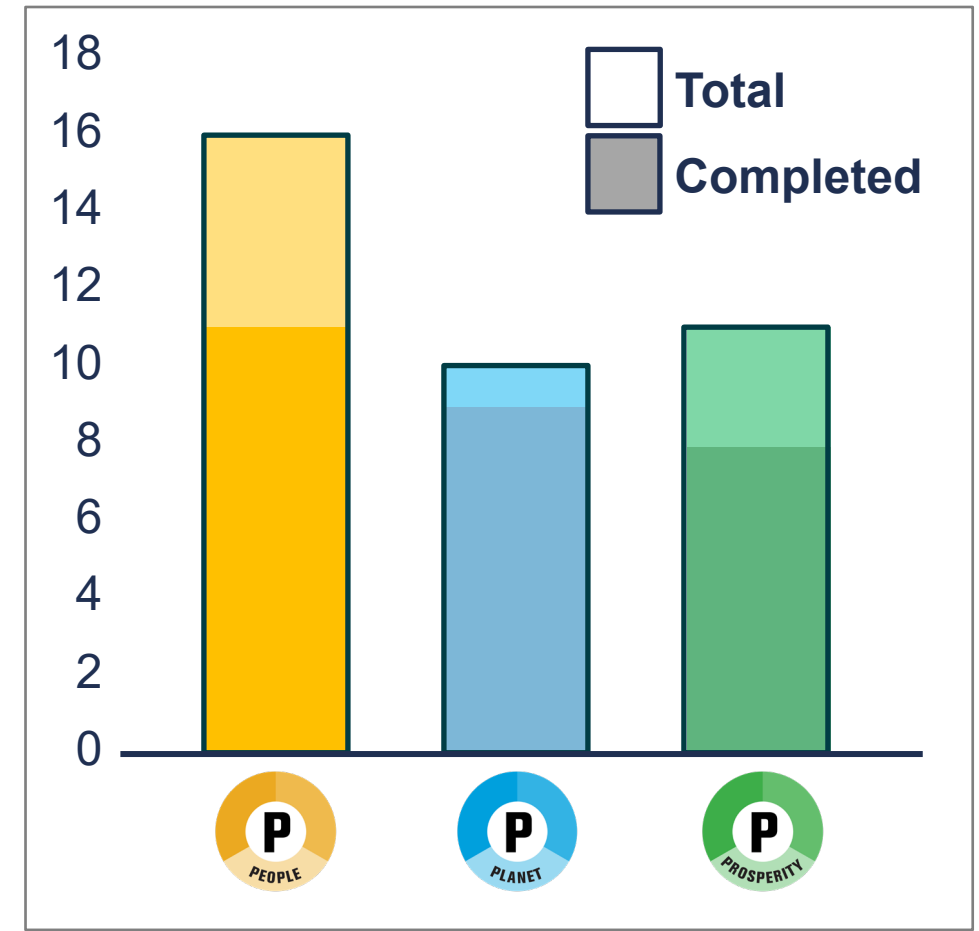
# *Sustainability*



# 2022 Annual Environmental and Sustainability Targets

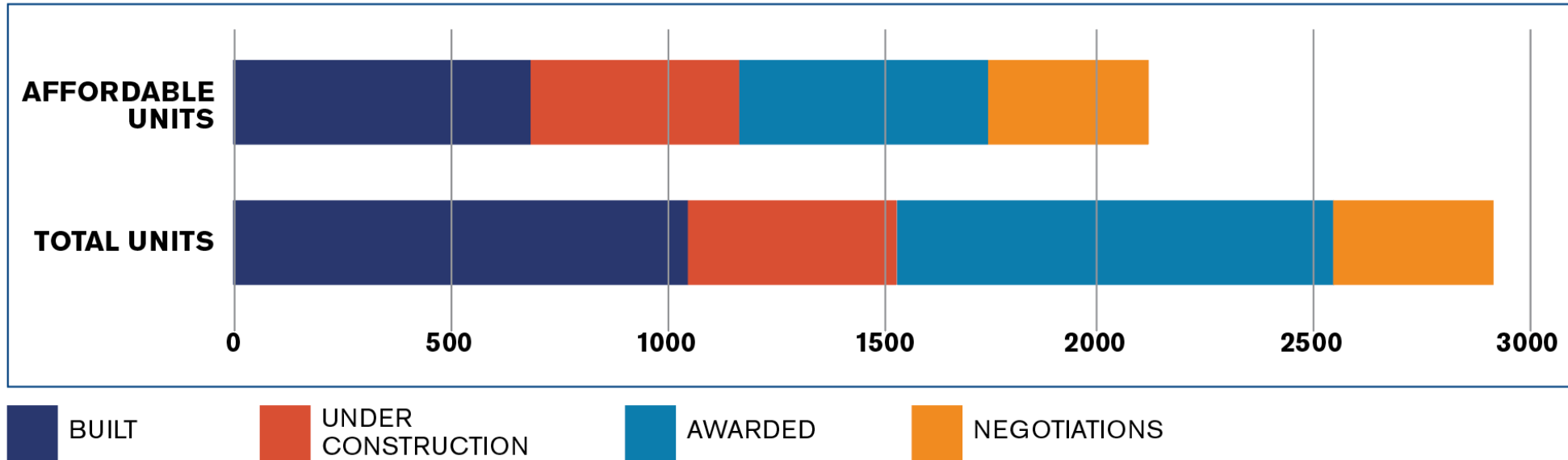
- Completed 76% of 37 targets
- The agency made progress on all partially completed targets, the majority of which will be completed in 2023.

2022 Target Completion Status



# 2022 Highlight – People

## Supporting affordable housing



- Approved three new sites for mixed use TOD developments
- Advanced construction on more than 450 units of affordable housing
- Awarded three former ST surplus properties as home building sites

# ***2022 Highlight – People Committed to equity***

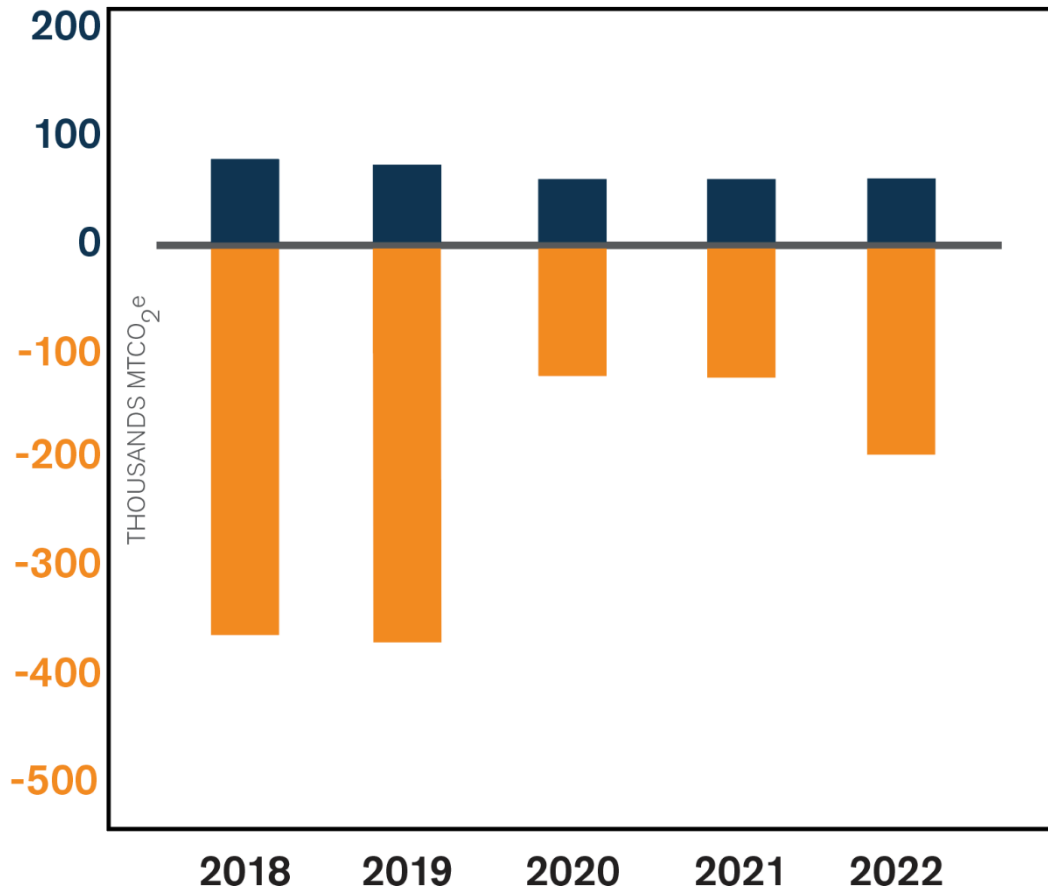
- Published first Racial Equity Toolkit in February 2022.
  - Everett Link Extension and Tacoma Dome Link Extension implementing RETs by end of 2022.
  - Several more slated for 2023
- Began development and Implementation of Anti-Racist Strategy.





# 2022 Highlight - Planet

## Maintained significant environmental benefits from transit



- In 2022, 1 ton of ST GHG emissions avoids nearly 4 tons of GHG in region
- 59% more emissions avoided compared to 2021
- Offset significantly more GHG than emitted

■ Agency emissions from operations  
■ Regional emissions avoided when residents take transit

# ***Regional environmental benefits***

**Sound Transit services avoid  
GHG emissions equivalent to:**



Providing electricity for nearly  
38,000 homes for a year



Burning nearly 22 million  
gallons of gasoline

# 2022 Highlight – Planet

## Achieving carbon-free operations

- Received \$9.3M grant for battery electric buses for the Stride bus rapid transit program
- Awarded Envision Platinum from the Institute for Sustainable Infrastructure for the Downtown Redmond Link Extension



ENVISION™

# ***2022 Highlight – Prosperity***

## ***Efficiency and resource savings***

A sample of resource conservation projects at the agency saved nearly \$1M in 2022 and more than \$7.5M over project lifetimes



**\$652K**

Fleet Upgrade  
Projects



**\$44K**

Irrigation  
Projects



**\$48K**

Facilities  
Upgrade Projects



**\$22K**

Solar  
Installations



**\$217K**

LED Lighting  
Upgrade Projects



# 2022 Highlight – Prosperity

## *Resilience and efficiency*

- Ensured revision to agency design requirements incorporated higher efficiency standards and climate resilience considerations.
- Made advancements on several agency Management Systems including:
  - Signed Asset Management Policy
  - Developed ISO 45001 and FTA Safety Management System Implementation Plan



# Recognition





## *2023 and beyond*

- Continue planning efforts to decarbonize the agency's revenue fleet.
- Prioritize reducing the use of materials with high carbon content.
- Prepare for the expansion of publicly accessible electric vehicle charging at Sound Transit parking facilities.
- Create strategies to address greenhouse gas emissions that are difficult to reduce, including refrigerants and facilities' natural gas use.

# Diving into the data

The screenshot shows a web browser window with the URL `soundtransit.org/get-to-know-us/environment-sustainability`. The page features the Sound Transit logo in the top left and navigation icons (chat, search, menu) in the top right. A large dark blue banner contains the text "Environment and sustainability" in white. Below this, a breadcrumb trail reads "Home / Get to know us / Environment and sustainability". The main heading "Environment and sustainability" is followed by a large image of a person wearing a white hard hat with the Sound Transit logo. To the right, a section titled "Looking for Environmental documents?" provides links to the "Environmental documents library" and the "System Expansion documents library", and notes that documents are available from 2011 onwards. The Windows taskbar at the bottom shows the search bar, several application icons, and system status information including 69°F and the date 9/11/2023.

Environment and sustainability | x

soundtransit.org/get-to-know-us/environment-sustainability

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**SOUNDTRANSIT**

Environment and sustainability

Home / Get to know us / Environment and sustainability

## Environment and sustainability

**Looking for Environmental documents?**

Check out our [Environmental documents library](#).

Environmental review documents for active projects can be found in our [System Expansion documents library](#)

Our website includes documents from 2011 and later.



Figure 1. Boardings, Vehicle Revenue Miles, and Passenger Miles Traveled by Year



Figure 2. Regional Greenhouse Gas Emissions (CO<sub>2</sub>e) Avoided by Sound Transit Services

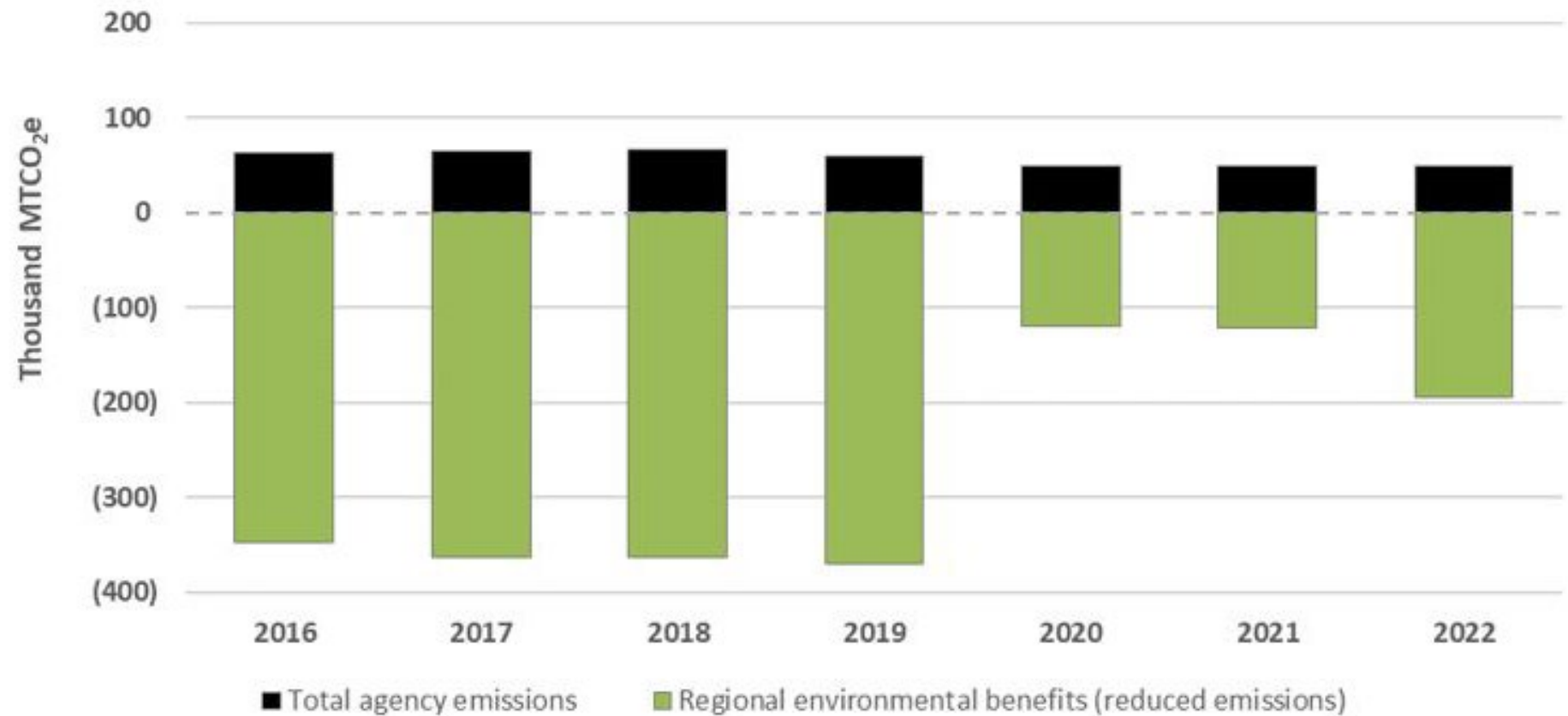


Figure 3. Change in Total Resource Use Over Time, 2021-2022

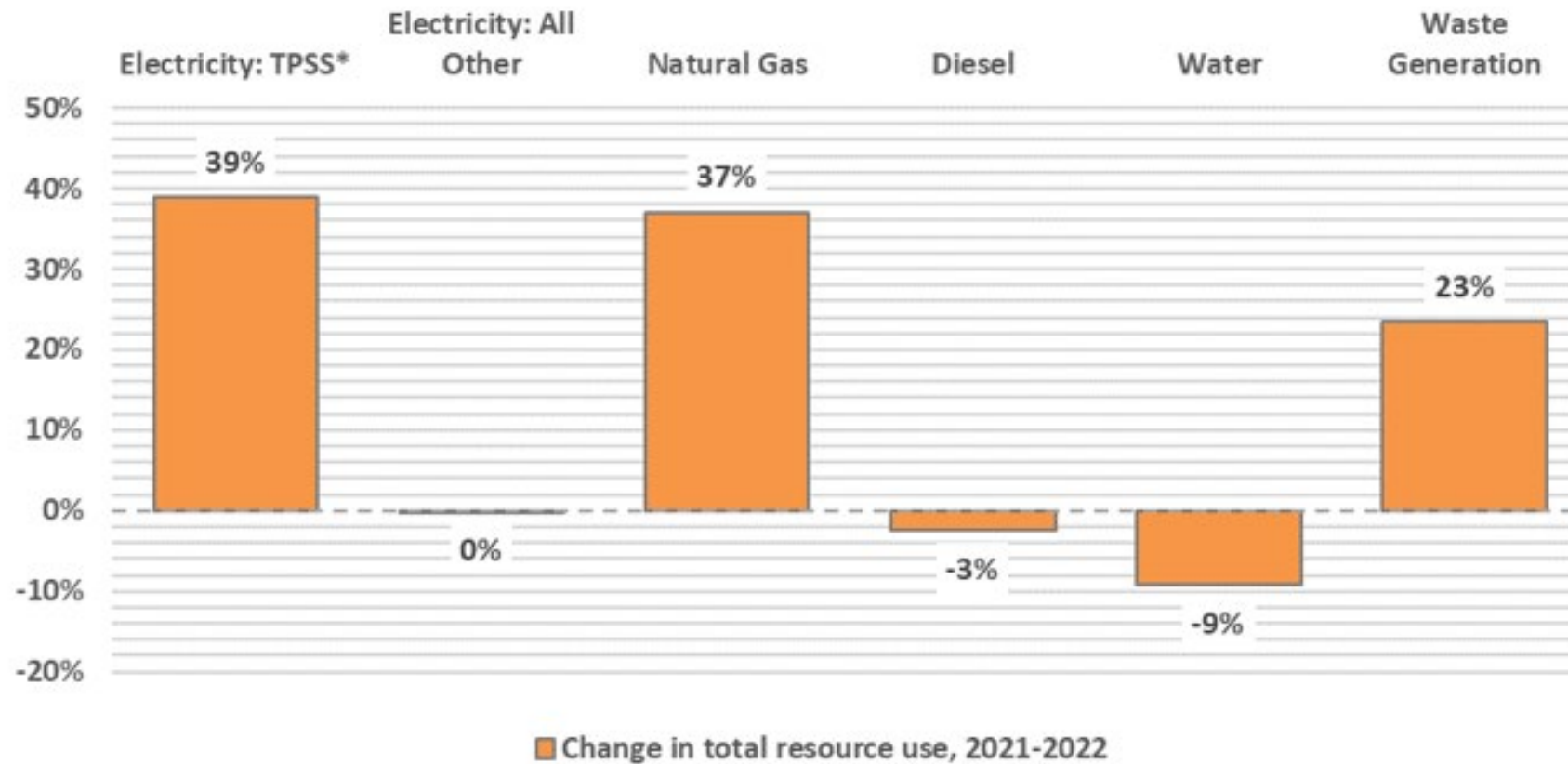


Figure 5. Revenue Fleet Energy Use (Normalized by Vehicle Revenue Miles)

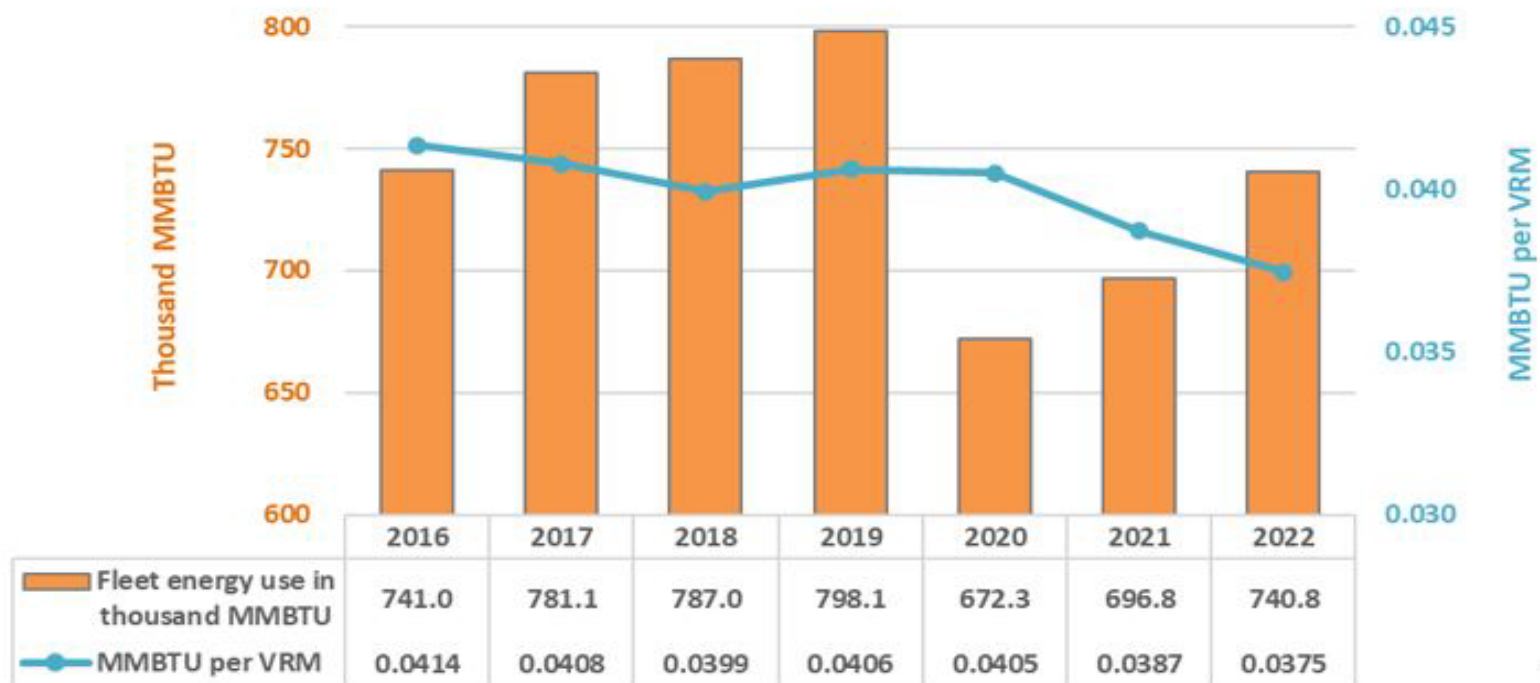


Table 2. Change in Energy Use by Mode, 2021-2022

Mode	% Change in Total Energy Use	% Change in Energy Use per PMT	% Change in Energy Use per VRM
Sounder Commuter Rail (diesel)	+8%	-37%	-6%
ST Express Buses (diesel and CNG)	-4%	-22%	+1%
Link light rail traction power (electricity)	+39%	-26%	+3%

Note: Mode energy use is normalized by PMT and VRM specific to each mode.



**Figure 12. Greenhouse Gas Emissions (Scope 1 and 2) by Source, 2022**

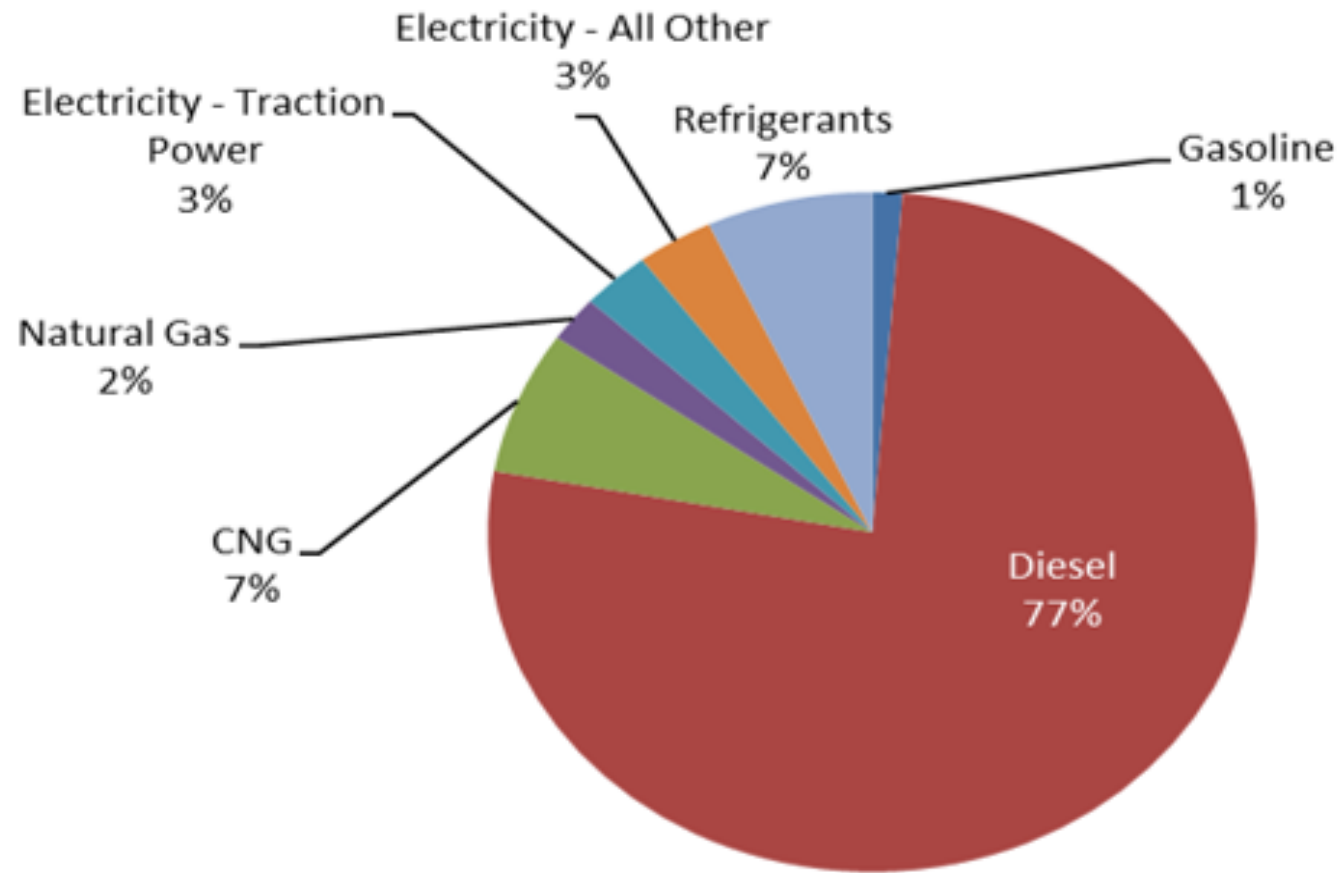


Figure 11. Agency GHG Emissions (Normalized by Vehicle Revenue Miles)

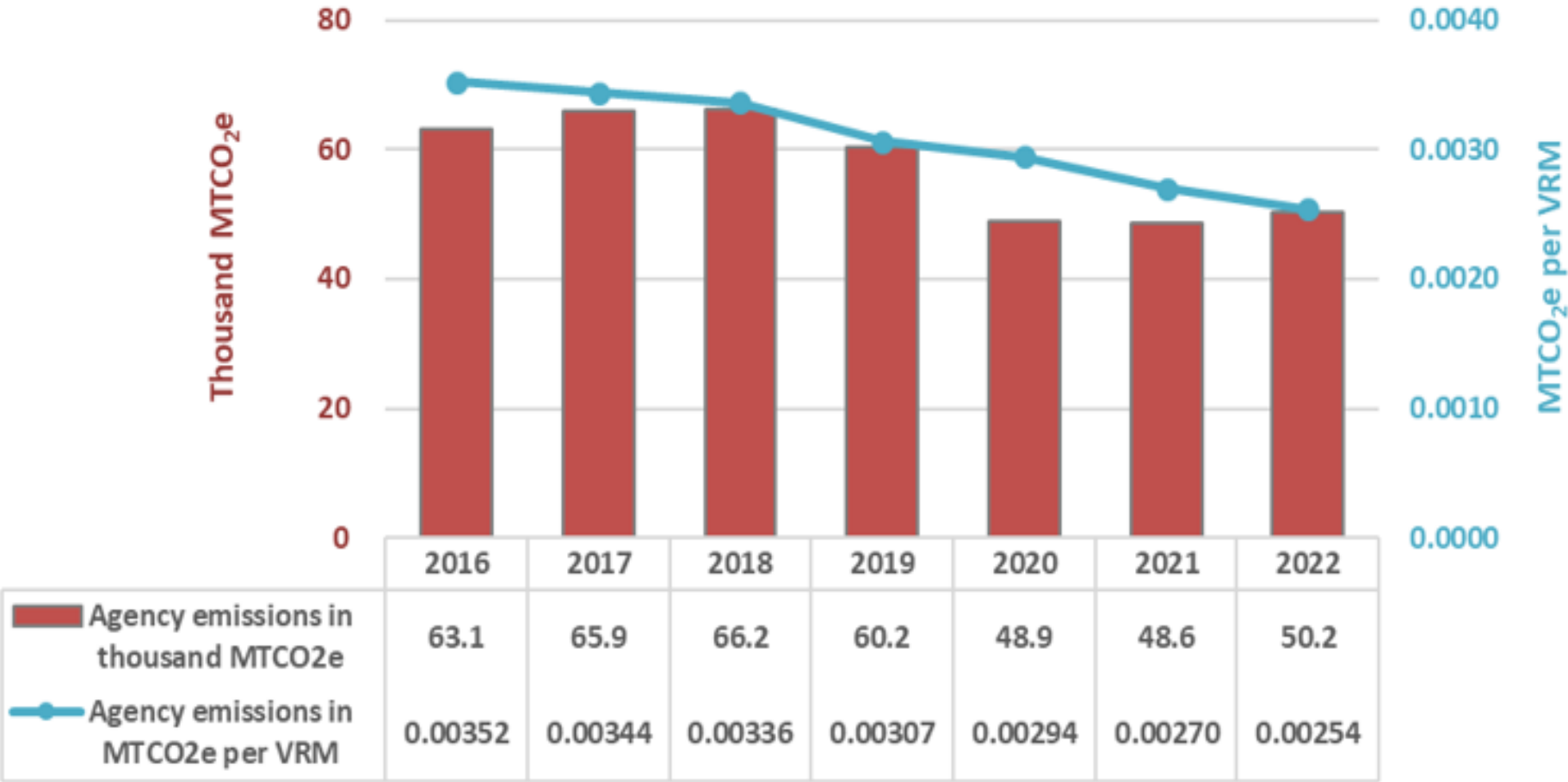


Figure 19. Waste Generation and Diversion, Tons and Diversion Rate (Percentage)

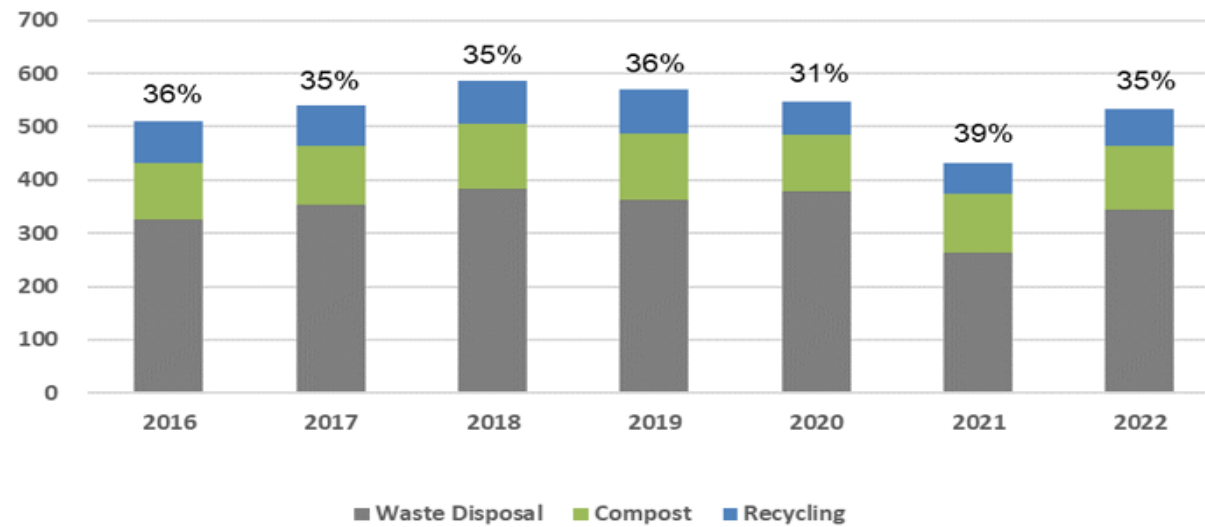


Table 4. Waste Diversion Rates by Facility Type

Year	Central Office	Other Facilities	Total
2016	67%	24%	36%
2017	60%	24%	35%
2018	64%	24%	36%
2019	64%	24%	36%
2020	51%	23%	31%
2021	73%	29%	39%
2022	73%	24%	35%

# Transit Fuel and Utility Costs – An argument for Efficiency!

- From 2021 to 2022, transit fuel costs increased by 61% (52% for ST Express and 85% for Sounder), driven by dramatic fuel price increases even as quantities decreased slightly.
- Transit vehicle fuel use accounted for 66% of Sound Transit’s fuel and utility expenses in 2022, up from 59% in 2021.

Table 5. Change in Utility Costs

	Change 2011-2022 (Absolute)	Change 2021-2022 (Absolute)
Traction power electricity costs	+501%	+40%
Facility electricity costs	+83%	-8%
Facility natural gas costs	+196%	+51%
Water costs	+13%	+2%
Waste, recycling, and compost costs	+9%	+6%
<b>Combined Utility Costs</b>	<b>213%</b>	<b>19%</b>



*Thank you.*



 *soundtransit.org*

