



**ICECAP**

INTEGRATED COMMUNITY  
ENERGY & CLIMATE  
ACTION PLANS

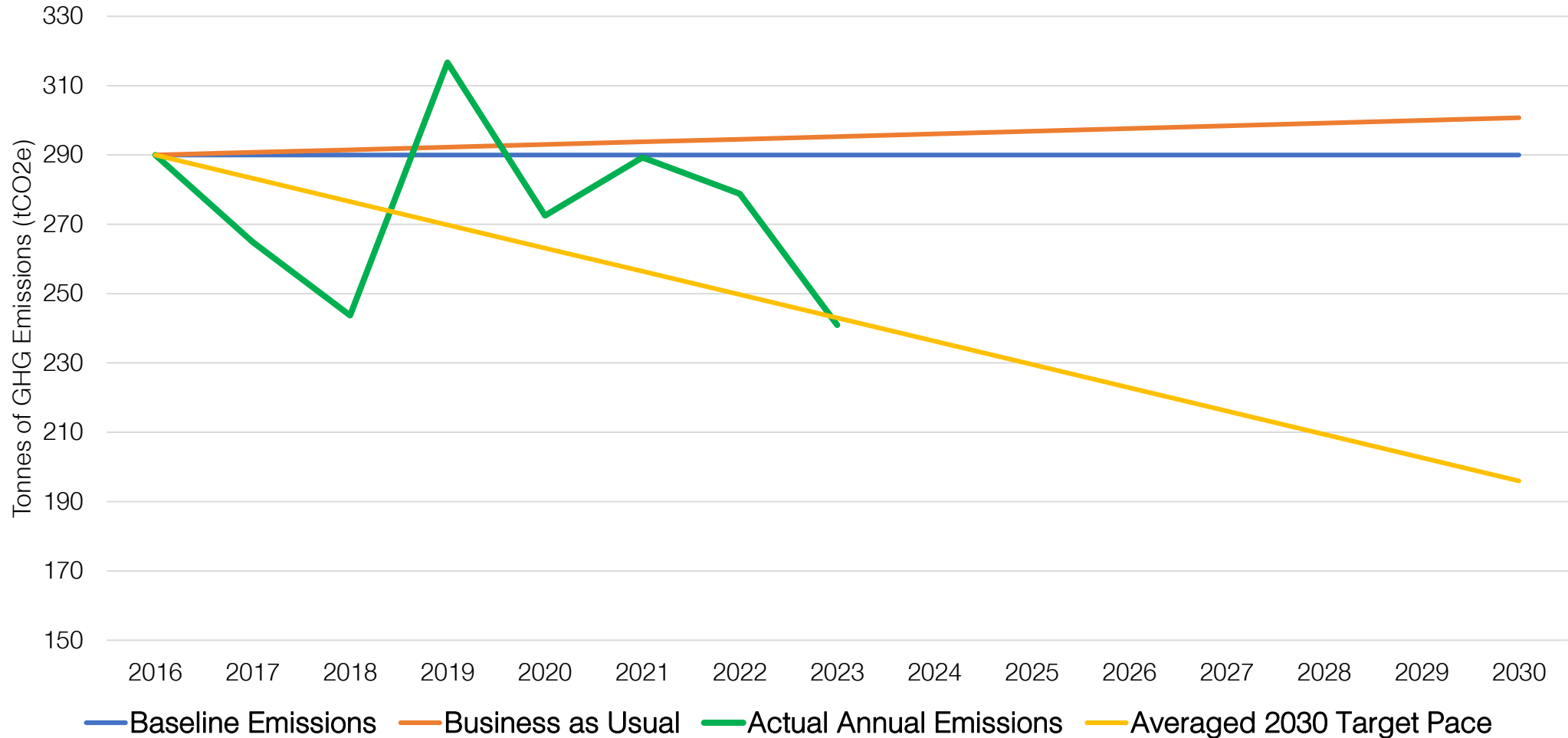
**Milestone 5 Update**  
**Corporate Energy & Emissions Trends Analysis**

# Background

- Resolutions adopting both Corporate and Community Climate Action Plans
  - Corporate Target: 30% GHG reduction from 2016 baseline levels by 2030
  - Corporate & Community: Strive for net-zero by 2050
- Corporate trends analysis and progress report is part of TOA's 2024 ICECAP deliverables and contributes to the ongoing work of Milestone 5 in FCM's PCP program



# Progress to Target - Actual Annual GHG Emissions



# Corporate GHG Emissions by Sector

Emission Sector	2016 Emissions *	2023 Emissions *	% Change
Buildings	51	54	5.9
Streetlights	0	0	0.0
Fleet	228	176	-22.8
Waste	11	11	0.0
<b>Total GHG Emissions</b>	<b>290</b>	<b>241</b>	<b>-16.9</b>

\* All GHG emissions are measured in terms of carbon dioxide equivalent (tCO<sub>2</sub>e)

# Corporate Energy Use by Energy Type and Sector

Emission Sector	Energy	2016 Use	2023 Use	% Change
Buildings	Electricity (kWh)	150,939	157,419	4.3
	Natural Gas (m <sup>3</sup> )	7,754	12,198	57
	Propane (L)	0	15,930	100
	Fuel Oil (L)	11,405	0	-100
Fleet	Gasoline (L)	32,273	30,062	-6.9
	Diesel (L)	56,014	33,385	-40.4
	Dyed Diesel (L)	0	5,453	100
Streetlights	Electricity (kWh)	8,709	8,382	-3.8

# Corporate Energy Expenditures by Energy Type and Sector

Emission Sector	Energy	2016 Costs (\$)	2023 Costs (\$)	% Change
Buildings	Electricity	31,715	30,541	-3.7
	Natural Gas	2464	8,574	248
	Propane	0	13,917	100
	Fuel Oil*	10,367	0	-100
Fleet	Gasoline*	34,898	47,016	34.7
	Diesel*	52,844	57,088	8.0
	Dyed Diesel*	0	7,161	100
Streetlights	Electricity	3,085	2,747	-10.9
Total:		135,373	167,044	23.3

\*Calculated using local energy price data and actual consumption values.

# Percentage Change Comparison Between Corporate Energy Use and Costs

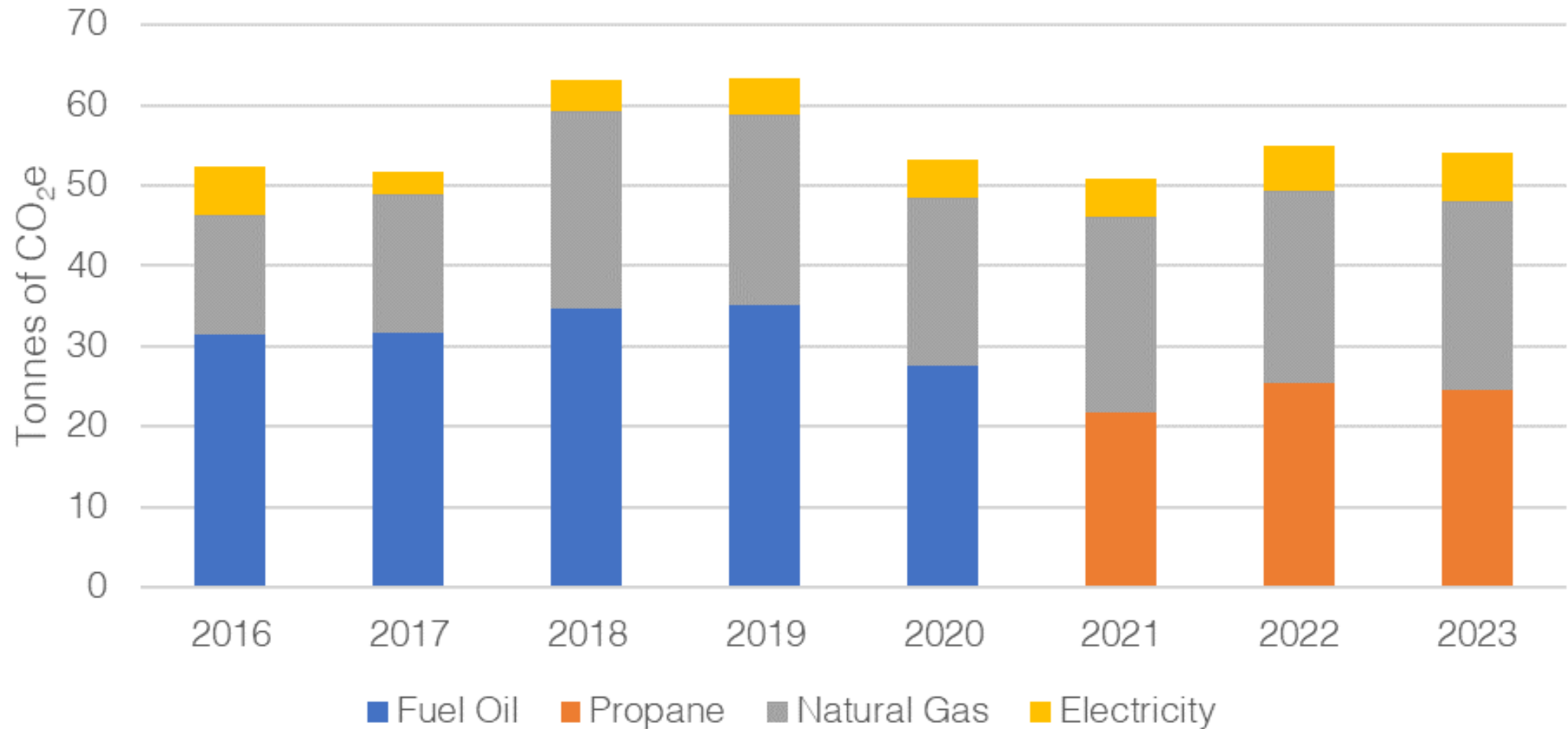
Emission Sector	Energy	Use Change (%)	Cost Change (%)
Buildings	Electricity	4.3	-3.7
	Natural Gas	57	248
	Propane	100	100
	Fuel Oil	-100	-100
Fleet	Gasoline	-6.9	34.7
	Diesel	-40.4	8.0
	Dyed Diesel	100	100
Streetlights	Electricity	-3.8	-10.9

# Total and Annual Avoided Energy Costs

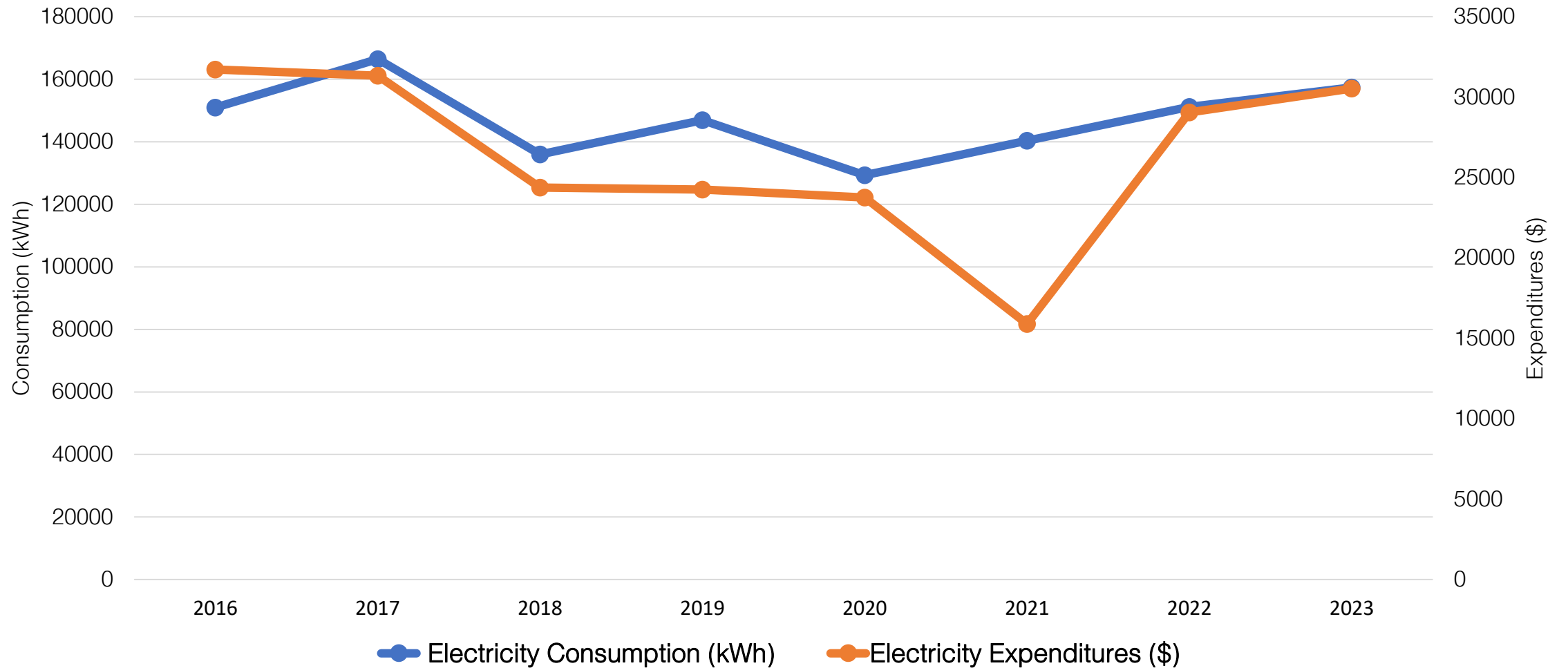
	2016	2017	2018	2019	2020	2021	2022	2023	Total
Avoided Electricity Costs in Buildings	\$ -	-\$ 3,564	\$ 2,688	\$ 662	\$ 3,964	\$ 1,198	-\$ 44	-\$ 1,257	\$ 3,646
Avoided Natural Gas Costs in Buildings	\$ -	-\$ 431	-\$ 1,545	-\$ 1,974	-\$ 1,296	-\$ 3,575	-\$ 1,955	-\$ 3,124	-\$ 13,900
Avoided Propane Costs in Buildings	\$ -	-\$ 93	-\$ 1,477	-\$ 1,649	\$ 1,465	-\$ 1,790	-\$ 5,081	-\$ 3,953	-\$ 12,579
Avoided Electricity Costs in Streetlights	\$ -	-\$ 90	-\$ 164	-\$ 304	-\$ 113	-\$ 737	-\$ 265	\$ 107	-\$ 1,565
Avoided Diesel Costs in Fleet	\$ -	\$ 4,408	\$ 14,929	-\$ 12,876	\$ 11,153	\$ 6,319	\$ 18,569	\$ 38,696	\$ 81,198
Avoided Gasoline Costs in Fleet	\$ -	\$ 11,374	\$ 16,823	\$ 13,778	\$ 3,841	\$ 2,937	-\$ 120	\$ 5,277	\$ 53,909
Avoided Dyed Diesel Costs in Fleet	\$ -	-\$ 2,567	-\$ 1,506	-\$ 2,981	-\$ 1,840	-\$ 3,513	-\$ 5,071	-\$ 7,161	-\$ 24,640
<b>Total Annual Avoided Energy Costs</b>	\$ -	\$ 9,036	\$ 29,748	-\$ 5,344	\$ 17,173	\$ 840	\$ 6,031	\$ 28,585	<b>\$ 86,069</b>



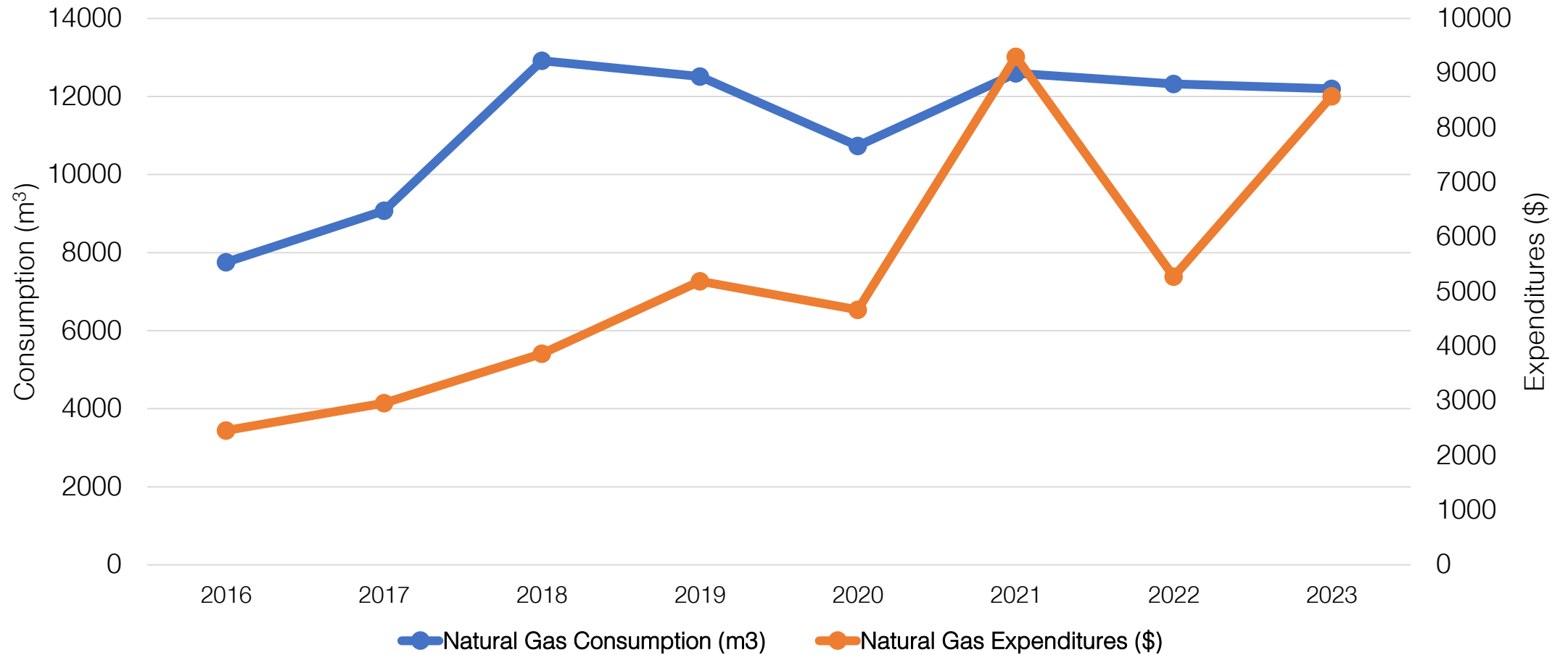
# Buildings & Facilities GHG Emissions by Energy Source



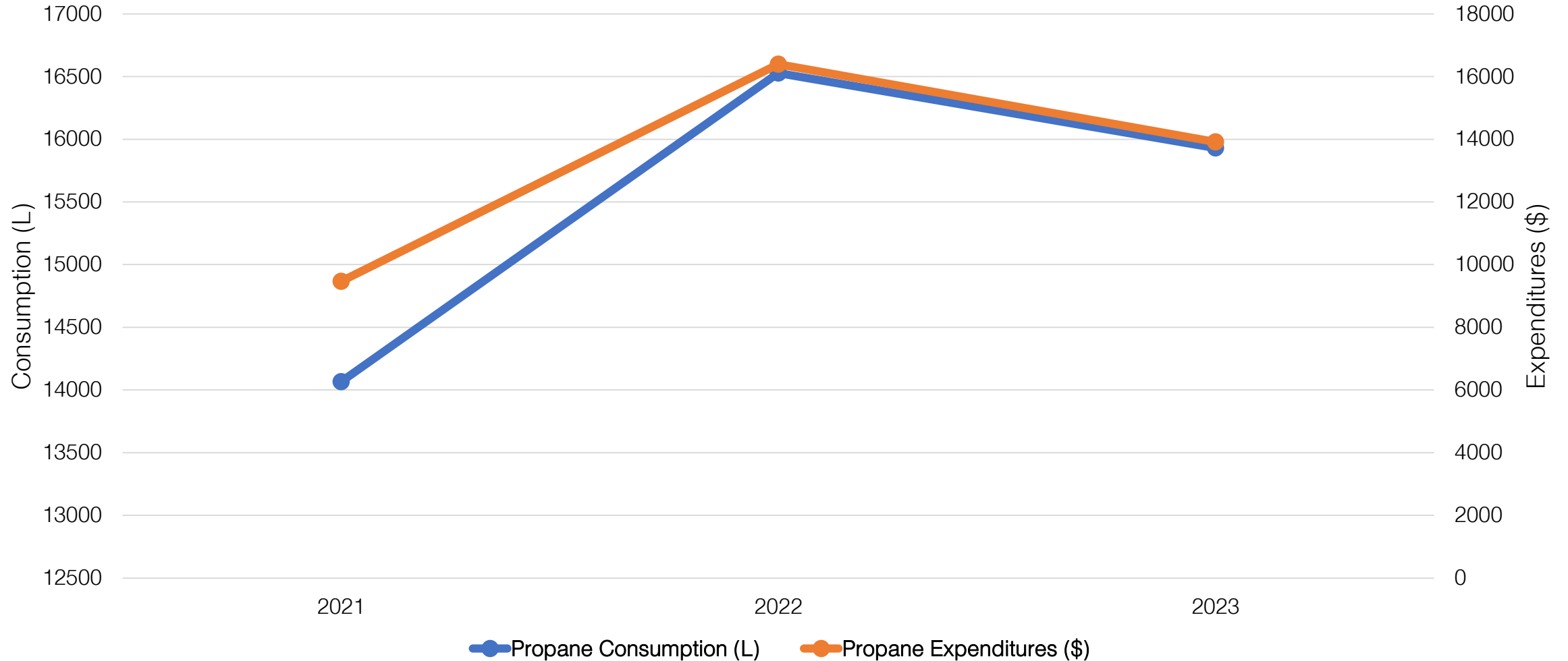
# Electricity Use & Costs



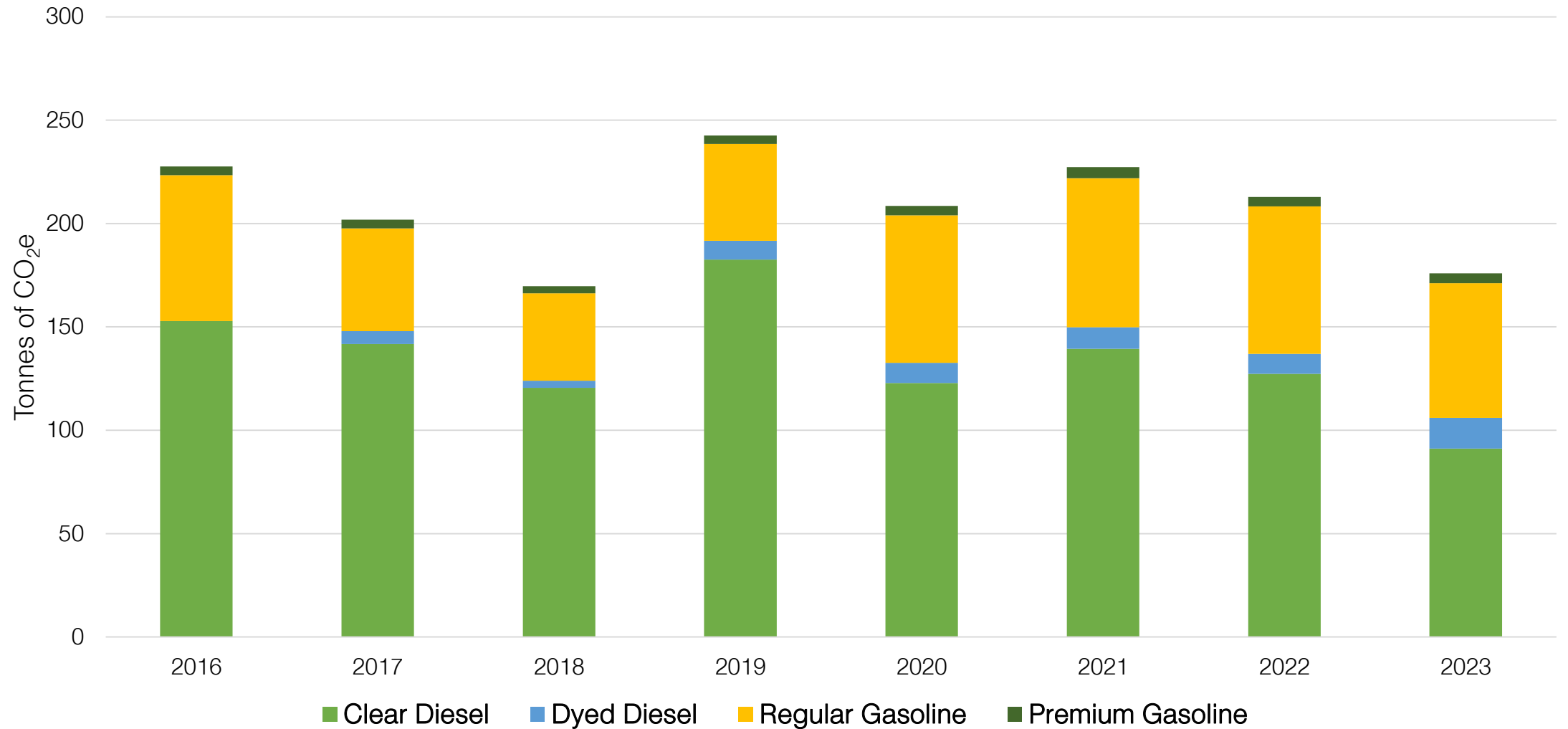
# Natural Gas Use & Costs



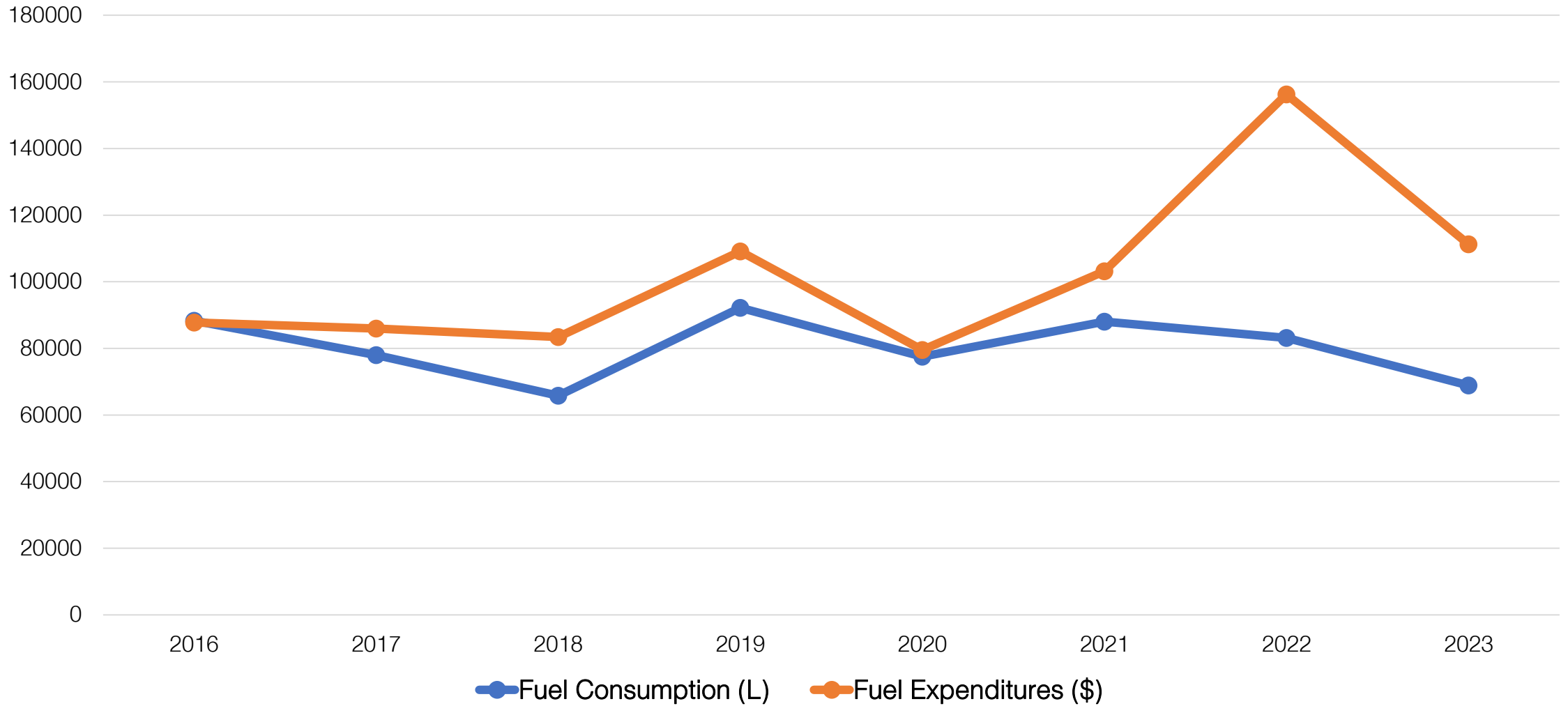
# Propane Use & Costs



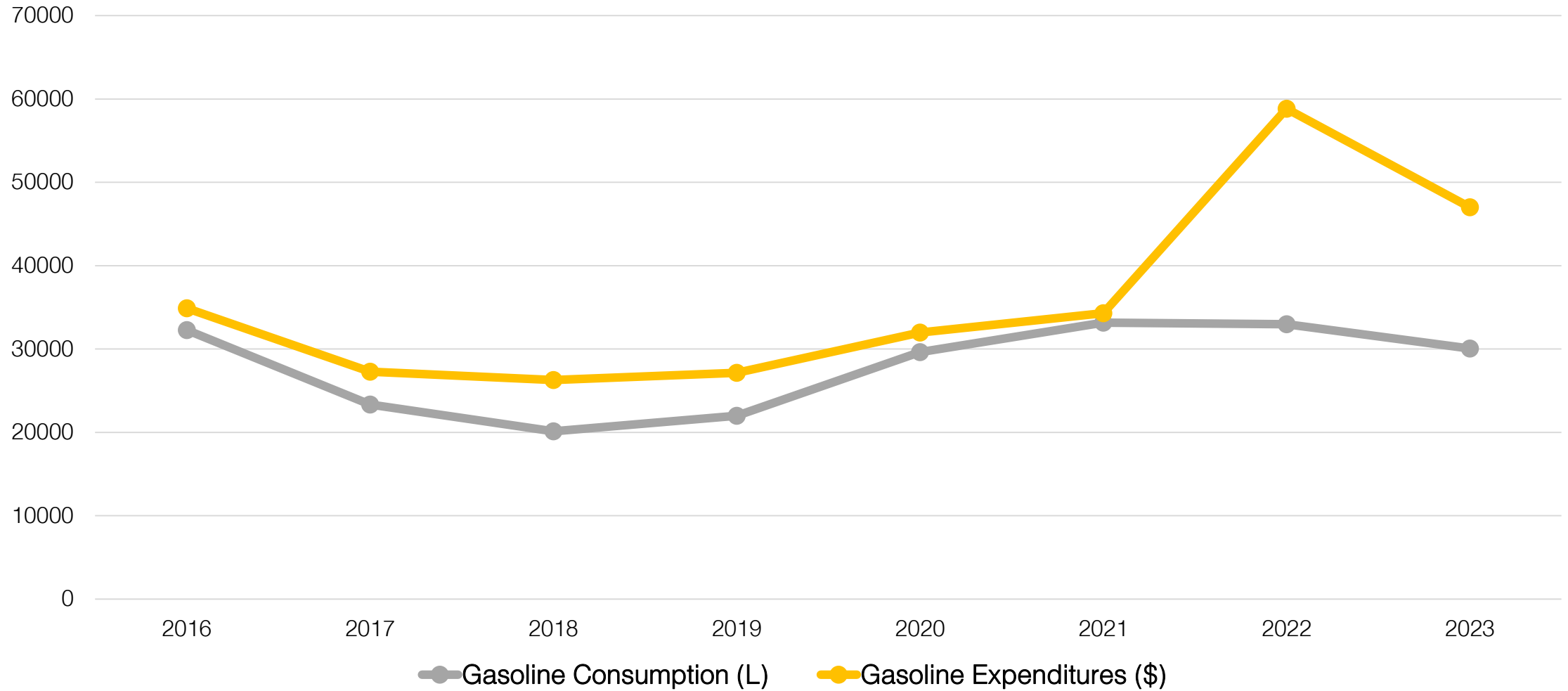
# Fleet GHG Emissions



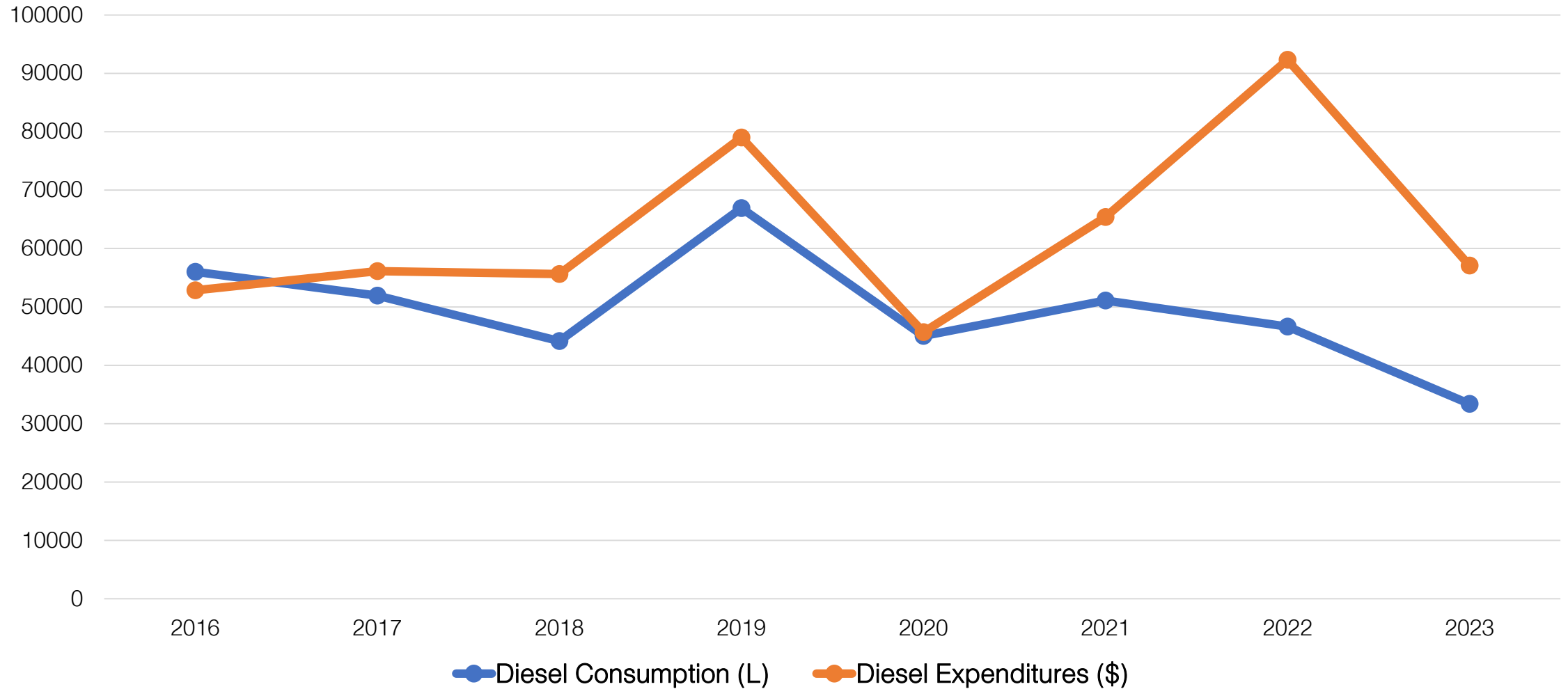
# Total Fleet Fuel Use & Costs



# Total Gasoline Use & Costs

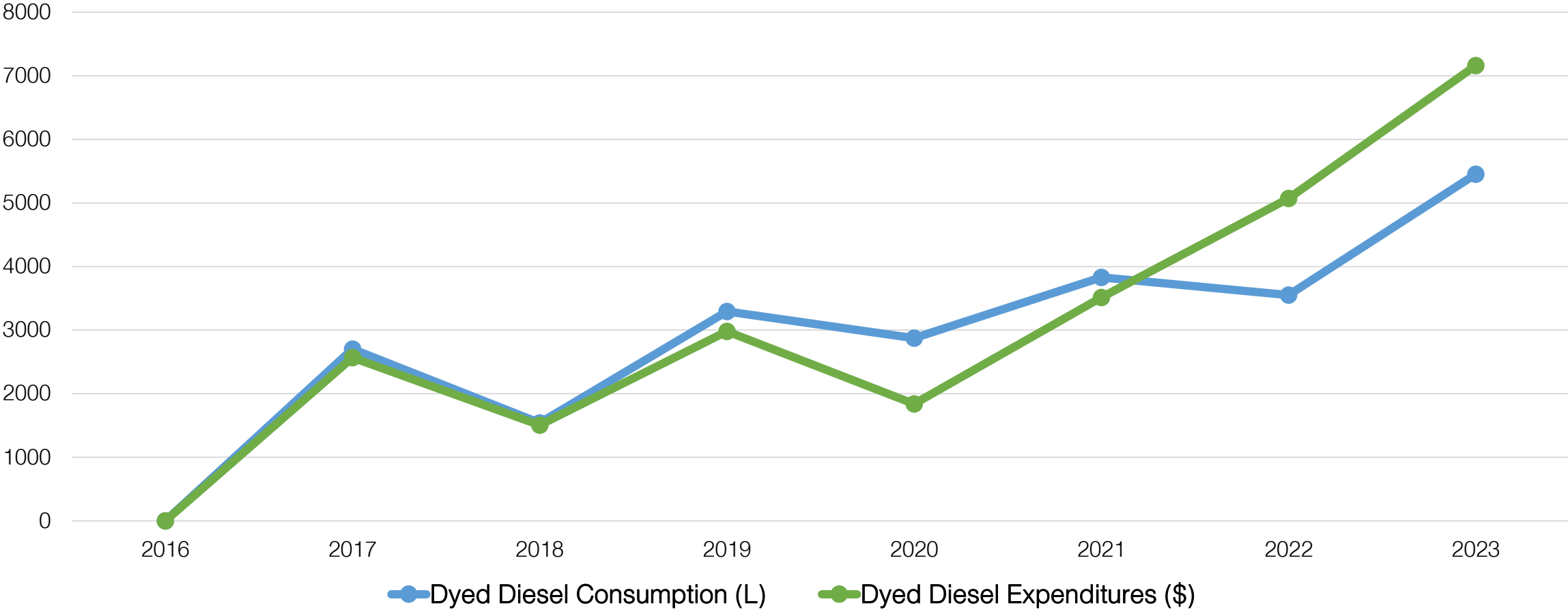


# Total Diesel Use & Costs





# Total Dyed Diesel Use & Costs



# Key Takeaways

1. Emissions are decreasing. Accelerated action needed to reach 2030 target.
2. Efforts to conserve energy, use it more efficiently, and switch energy types have avoided additional expenditures.
3. Cost of energy is increasing. Energy expenditures are increasing.
4. In some cases, energy costs are increasing despite a reduction in energy use.