

**COUNCIL SUSTAINABILITY  
COMMITTEE**

**OCTOBER 6, 2022**

**DOCUMENTS RECEIVED AFTER  
PUBLISHED AGENDA**



**DATE:** October 6, 2022  
**TO:** Mayor and City Council  
**FROM:** Director of Public Works  
**THROUGH:** City Manager  
**SUBJECT:** 2020 Greenhouse Gas Emissions Inventory (**ACT 22-088**)

**RECOMMENDATION**

That the Council Sustainability Committee accept an amendment to ACT 22-088, correcting Table 1, Page 1 of 12, GHG Emissions by Sector (MT CO<sub>2</sub>e), row titled "Total Emissions/Capita".

*Recommended by:* Erik Pearson, Environmental Services Manager

Approved by:

A handwritten signature in black ink, appearing to read "Kelly McAdoo".

---

Kelly McAdoo, City Manager



**DATE:** October 6, 2022  
**TO:** Council Sustainability Committee  
**FROM:** Director of Public Works  
**SUBJECT** 2020 Greenhouse Gas Emissions Inventory

**RECOMMENDATION**

That the Council Sustainability Committee (CSC) reviews and comments on this report.

**SUMMARY**

The Council-adopted General Plan includes greenhouse gas (GHG) emission reduction targets for the community. This report provides the results of the calendar year 2020 inventory and compares it to the previous six inventories. Table 1 summarizes the emissions totals for the eight sectors – electricity, natural gas, transportation, public buses (AC Transit), BART, off-road vehicles, waste, and water and wastewater. Emissions are displayed in metric tons of carbon dioxide equivalent<sup>1</sup> (MTCO<sub>2</sub>e). The table shows that, in 2020, emissions were reduced by 42.7% since 2005. In 2020, the largest reductions occurred in the transportation sector due to the stay-at-home orders and economic disruptions related to the COVID-19 pandemic.

**Table 1: GHG Emissions by Sector (MT CO<sub>2</sub>e)**

	2005	2010	2015	2017	2018	2019	2020	% Change from 2005
Electricity	185,536	165,172	141,814	74,919	47,452	12,467	23,038	-87.6%
Natural Gas	189,995	191,526	176,803	186,111	187,991	176,649	166,334	-12.5%
Transportation	529,317	467,725	450,925	445,769	440,914	420,995	309,168	-41.6%
Off-Road Vehicles	14,889	17,004	27,267	27,019	21,830	24,287	22,924	+54.0%
Waste	50,924	38,338	38,148	47,555	52,209	46,187	34,628	-32.0%
Water and wastewater	4,715	4,311	3,466	2,738	2,726	2,702	2,516	-46.6%
<b>Total</b>	<b>975,376</b>	<b>884,076</b>	<b>838,423</b>	<b>784,111</b>	<b>753,122</b>	<b>683,287</b>	<b>558,608</b>	<b>-42.7%</b>
Hayward Population	140,530	143,921	155,753	159,623	159,603	160,197	162,954	14.1%
<b>Total Emissions/ Capita</b>	<b><del>7.76.9</del></b>	<b><del>6.96.1</del></b>	<b><del>6.25.4</del></b>	<b><del>5.74.9</del></b>	<b><del>5.44.7</del></b>	<b><del>5.14.2</del></b>	<b><del>4.93.4</del></b>	<b><del>-36.34%</del> <b>49.8%</b></b>

<sup>1</sup> Carbon dioxide is not the only gas that contributes to climate change. Each greenhouse gas causes varying amounts of warming. For example, one ton of methane (CH<sub>4</sub>) causes the same amount of warming as 23 tons of CO<sub>2</sub> (1 ton of CH<sub>4</sub> = 23 tons CO<sub>2</sub>e). To simplify reporting, it is standard practice to report carbon equivalent emissions (CO<sub>2</sub>e) as opposed to the actual emissions of each gas.