



COMMUNITY DEVELOPMENT • 1140 Terex Road • Hudson, Ohio 44236 • (330) 342-1790

MEMORANDUM

To: Greg Hannan, Community Development Director
From: Emily Fernandez, Management Analyst
CC: Thom Sheridan, City Manager, Jeff Knoblauch, Asst City Manager
Date: June 9, 2023
Subject: Follow-Up on Greenhouse Gas Emissions (GHG) Inventory

Staff is providing additional information regarding greenhouse gas (GHG) inventory programs as a follow up to the workshop discussion on May 23, 2023. Staff also notes that the Environmental Awareness Committee (EAC) passed a vote of support on June 5 for Council to move forward with a GHG inventory.

What is a Greenhouse Gas Emissions (GHG) Inventory?

A greenhouse gas (GHG) inventory is a data collection effort to define the amount of greenhouse gas emissions produced in a defined geographic area. Inventories help organize a community's data on electricity and natural gas consumption, vehicle travel, energy used for water and wastewater, and solid waste, among other factors. Much of the data may already be tracked, but completing an inventory allows a community to estimate its emissions based on the data. Inventories are typically updated annually, though they may be updated less frequently in the first several years of collection as procedures are established.

ICLEI, a national leader in emissions inventories, has developed a standard 'U.S. community protocol' to ensure data can be compared between cities. Examples of metrics are:

- residential and commercial energy consumption (i.e. kWh of electricity per household/business)
- energy portfolio (i.e. percent of electricity from renewable resources)
- solid waste (i.e. tons of waste sent to landfill per household)
- tree planting or removal (number of trees per area such as square mile)

Why Communities Complete GHG Inventories

Inventories are completed to establish baseline data about a community's emissions. Once baseline data is known, a community may set *emissions reduction goals*. An inventory is considered the first step in tracking future sustainability projects or considering climate action plans (CAP). While a GHG inventory is a data collection effort typically completed

by a consultant with staff assistance, a CAP is a community-driven effort to set goals based on the data discovered in the GHG inventory. A GHG inventory relates to sustainability efforts the way an existing conditions report relates to a comprehensive plan. Sustainability planning is growing in government and private industry due to its financial implications, such as:

CREDIT RATING

The Government Finance Officers Association (GFOA) reports that “an exposure to climate risk and other environmental factors” is one of three key factors affecting a government’s credit profile. The others are social and governance issues. Collectively, the factors are called ESG (Environmental-Social-Governance). The emphasis of Environmental has grown significantly in the last decade. GFOA notes that governments can improve their chances of high ratings by clearly reporting action plans to mitigate ESG risks, rather than leaving third-party sources to interpret the government’s progress. ([link](#)) Moody’s reports that “climate risk is business risk” ([link](#)). The agency has integrated ESG factors into its standard risk analysis ([link](#)). City staff has started tracking information about the City’s environmental efforts, but ESG reporting to the rating agencies has not been formalized. A GHG inventory would be a strong example to track in our credit agency reporting.

CAPITAL PLANNING

In 2022, GFOA revised its *Multi-Year Capital Planning* best practice guidance to include integrating ESG into planning. Municipalities that clearly demonstrate ESG considerations in their capital planning will attract more investors, which increases competition for debt and drives down the cost. A focus on ESG metrics in early planning phases may also result in more resilient infrastructure. Resilient infrastructure decreases maintenance risks and risks to quality of life, such as flooding. ([link](#))

WORKFORCE & BUSINESS RETENTION

According to Deloitte’s 2023 Gen Z and Millennial Survey, climate change is one of the top three concerns for young professionals. With Millennials projected to comprise 75% of the workforce by 2025, environmental responsibility has increasing importance for employee attraction and retention ([link](#)). Around 90% of S&P 500 companies have invested in ESG reporting, typically including GHG inventories. The City may be better positioned to attract and retain high-performing companies, and the workforces they need, by demonstrating aligned values through sustainability planning.

Regional Context

- Some data indicates that Hudson and other suburbs emit more carbon dioxide *per household* than denser cities. This is why Hudson may look ‘worse’ on carbon emissions maps that account for density ([link to map](#)).
- Regional or national data such as above make a compelling case for Hudson to perform its own detailed inventory to understand why the City is represented this way.
- City of Kent and City of Bexley staff note that the GHG inventory was primarily completed for its environmental benefits but that financial benefit is also anticipated. Staff is awaiting response from City of Athens.
- City of Kent staff note that a GHG inventory provides ranked emissions sources, which

informs investment efforts (Ex. perhaps residential energy use is a large source of emissions, indicating that energy education could provide utility savings for residents; Ex. perhaps the city fleet is a low source of emissions, indicating that investment in fleet electrification would be a lower priority than other efforts).

- Hudson is reputed as an area leader in city planning; a GHG inventory contributes to the reputation of Hudson as an innovative city with strong foresight.
- In addition to business attraction, environmental efforts are increasingly attractive to young families as they consider where to live