



Vermont Greenhouse Gas (GHG) Inventory 2023

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What is the GHG Inventory?

Global Warming Solutions Act, 2020 (GWSA)

Created legally binding emissions reduction requirements

- 26% below 2005 levels by 2025
- 40% below 1990 levels by 2030
- 80% below 1990 levels by 2050

The GHG Inventory is the legal backstop to the GWSA and is the metric by which we measure progress towards the goals stated in the GWSA

Sectors include:

Transportation

Residential/Commercial/Industrial (RCI) Fuel Use

Agriculture

Industrial Processes

Electricity

Waste

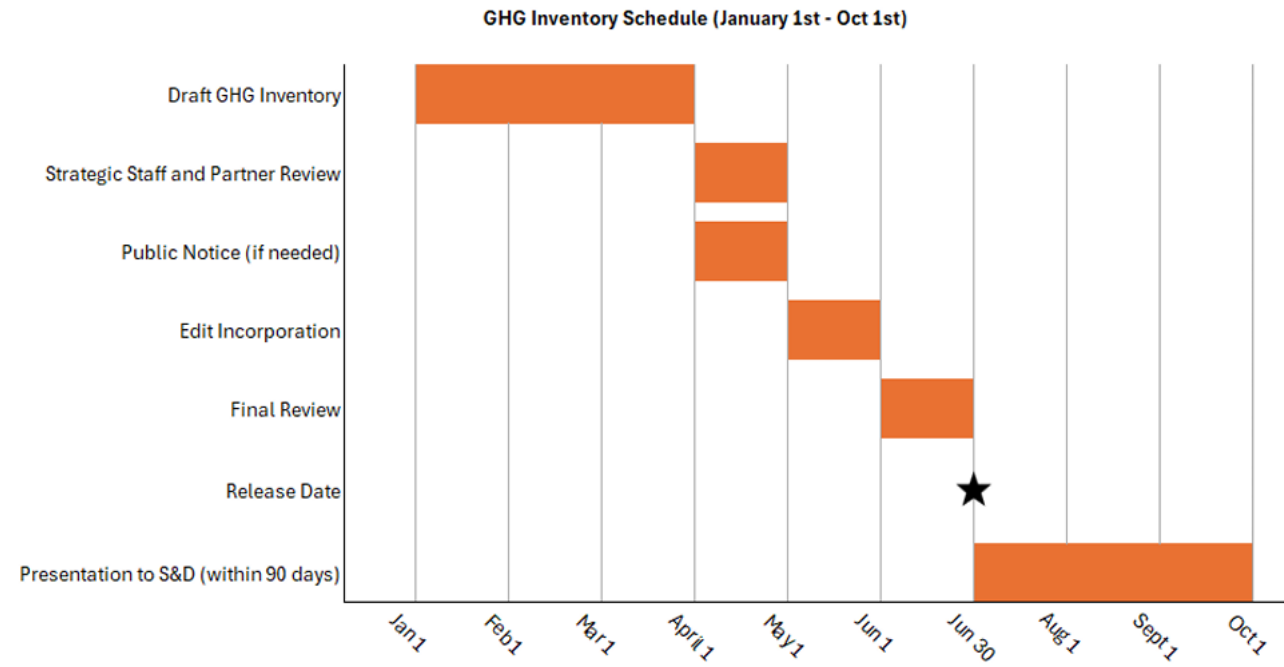
Fossil Fuel Industry

Land-use, land-use change, and Forestry

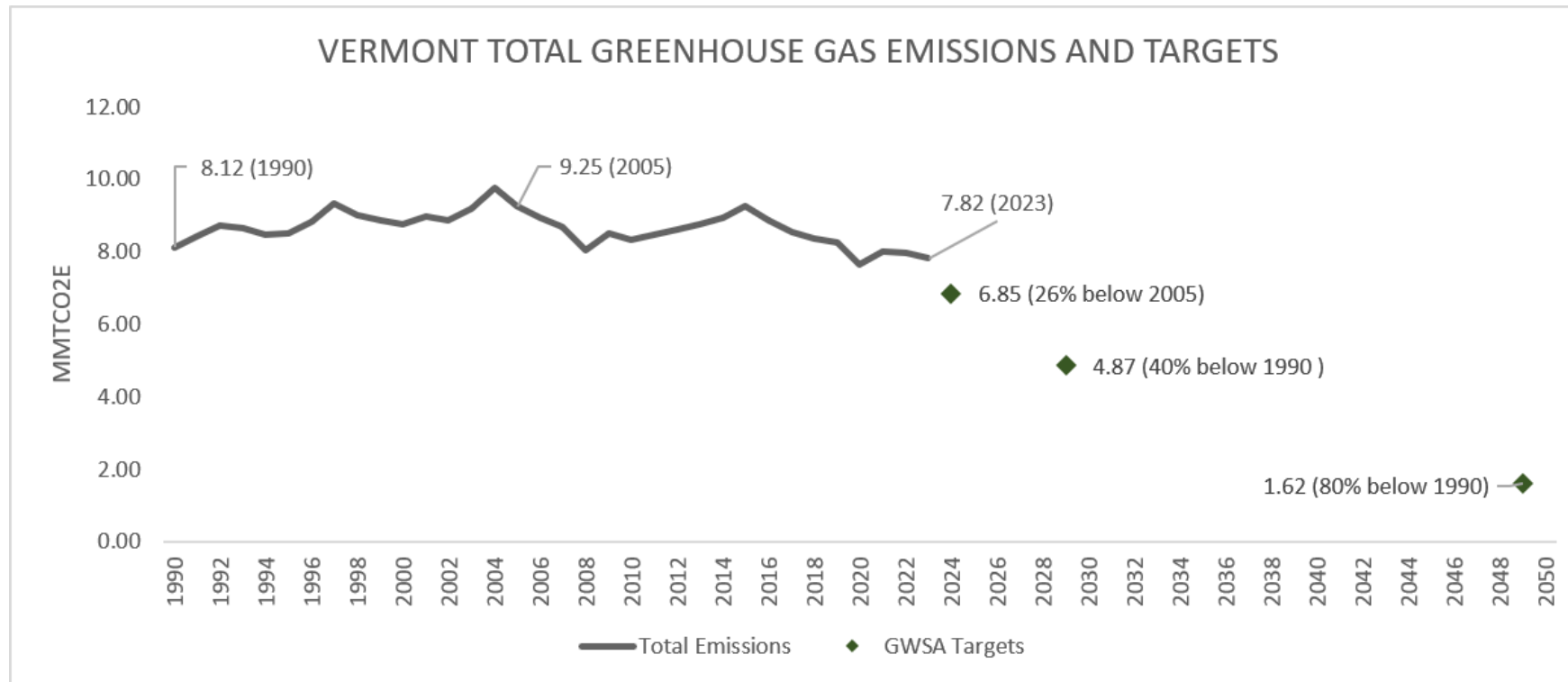


What is the GHG Inventory?

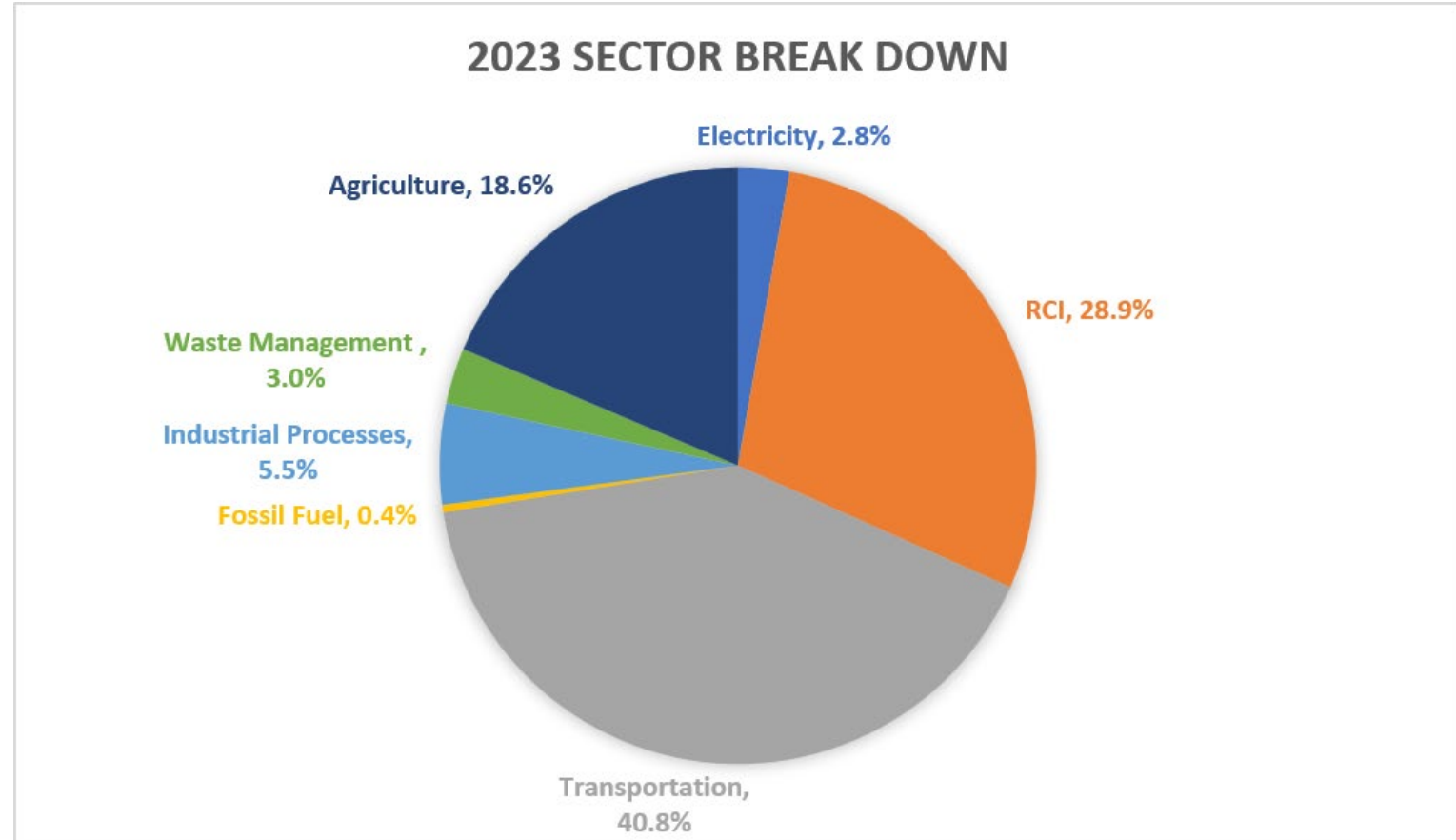
- A Standard of Practice was developed to provide consistency and transparency, however federal actions have eroded the availability of critical data sources and tools
- Center for Global Sustainability, University of Maryland has taken on the continuation of tools and data needed for this work but timeline for release is still not standardized



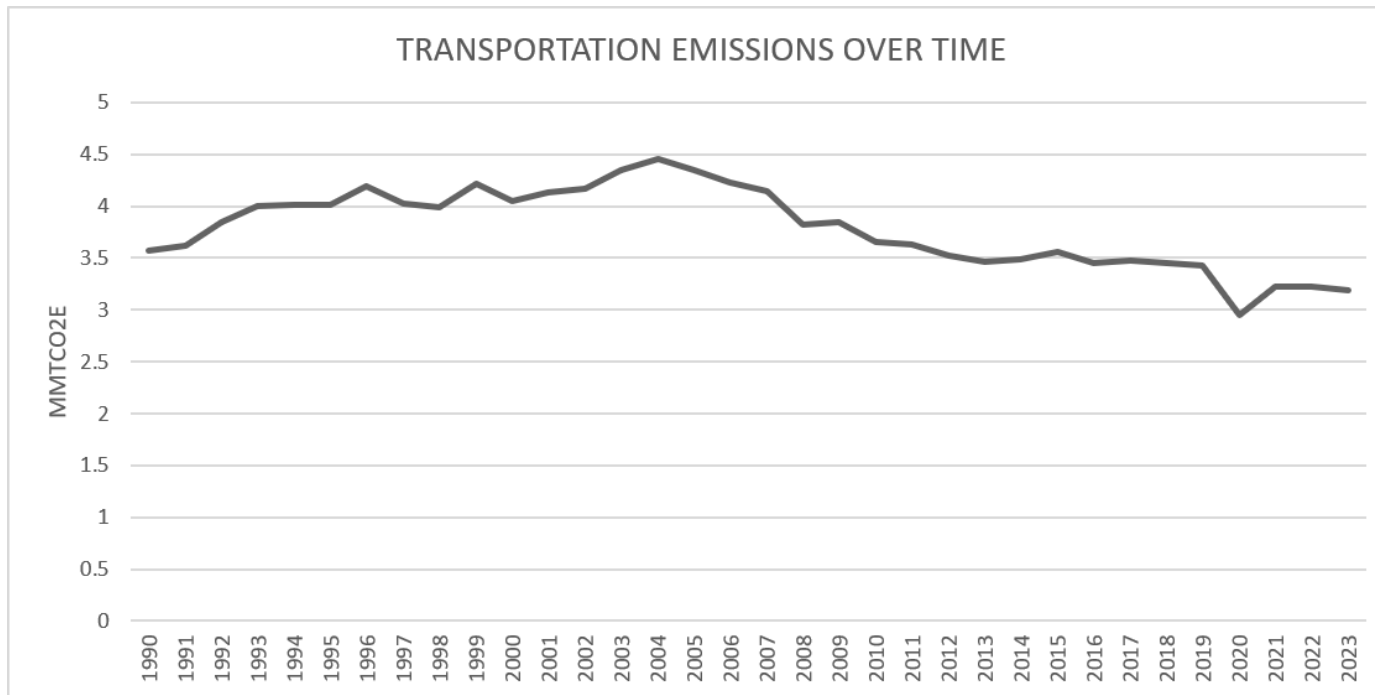
Total GHG Emissions



Emissions Contributions By Sector

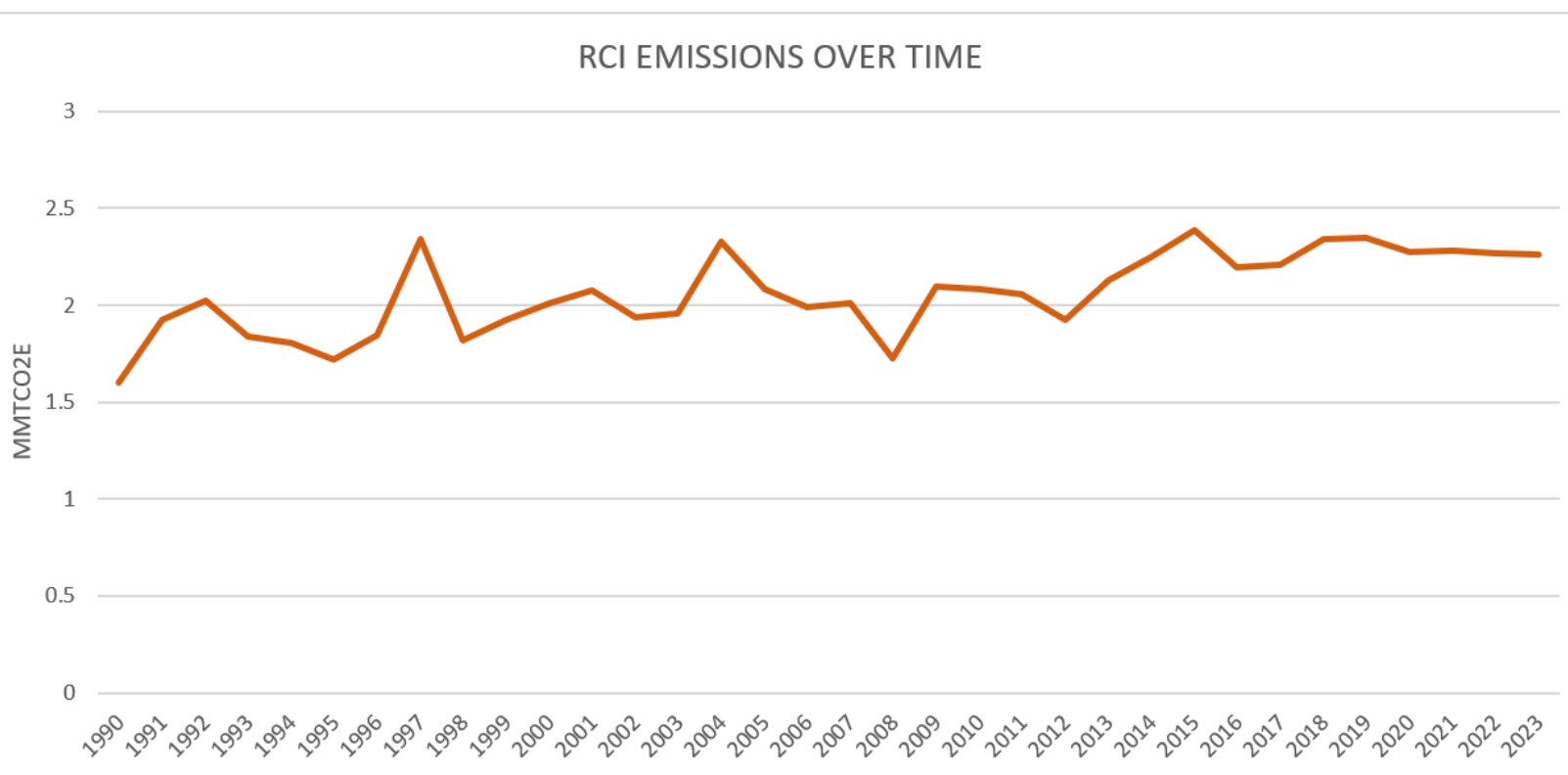


Transportation



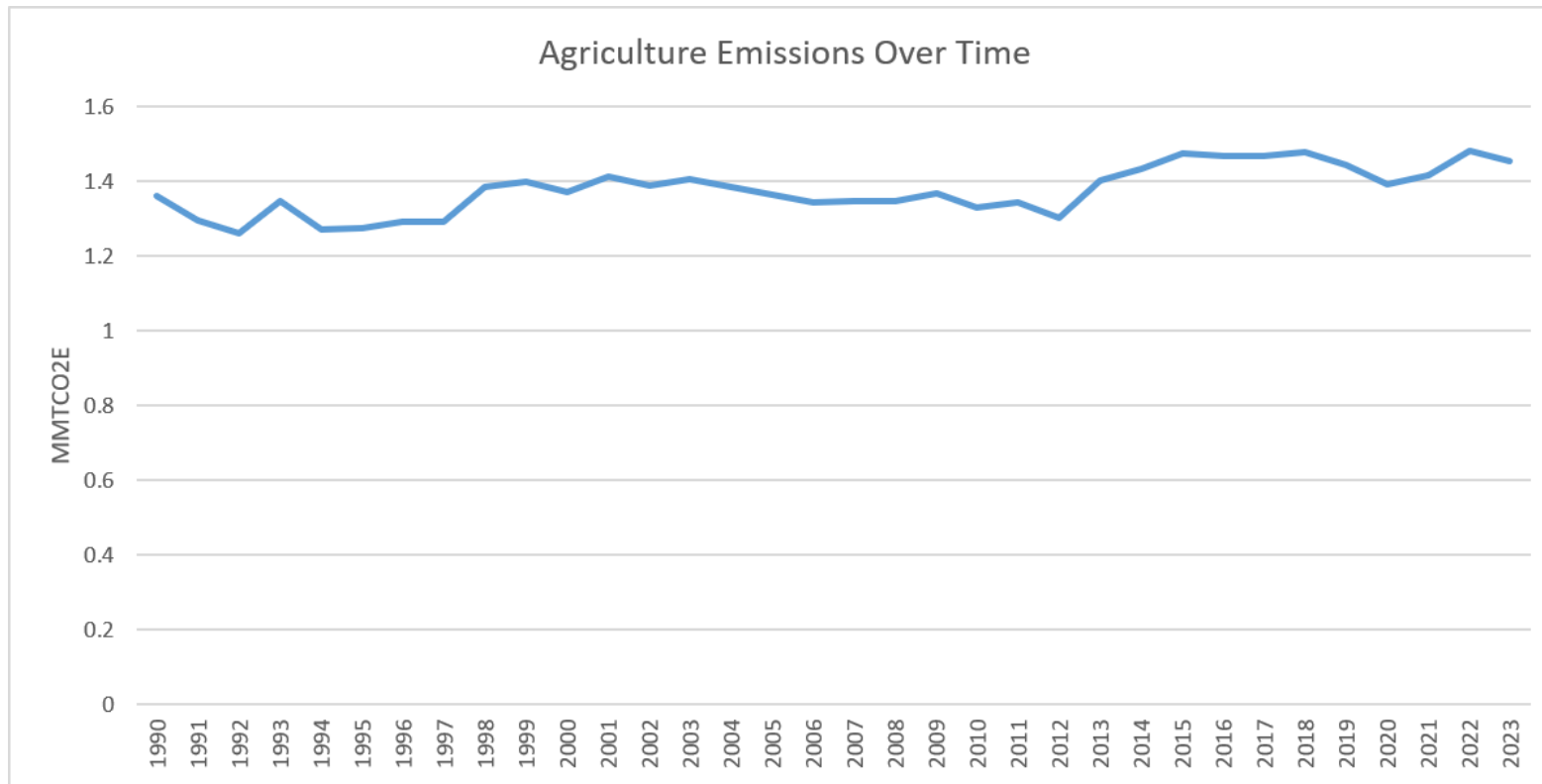
- 40.8% of total emissions in 2023
- Light duty vehicles is largest source of emissions

Residential, Commercial, Industrial (RCI)



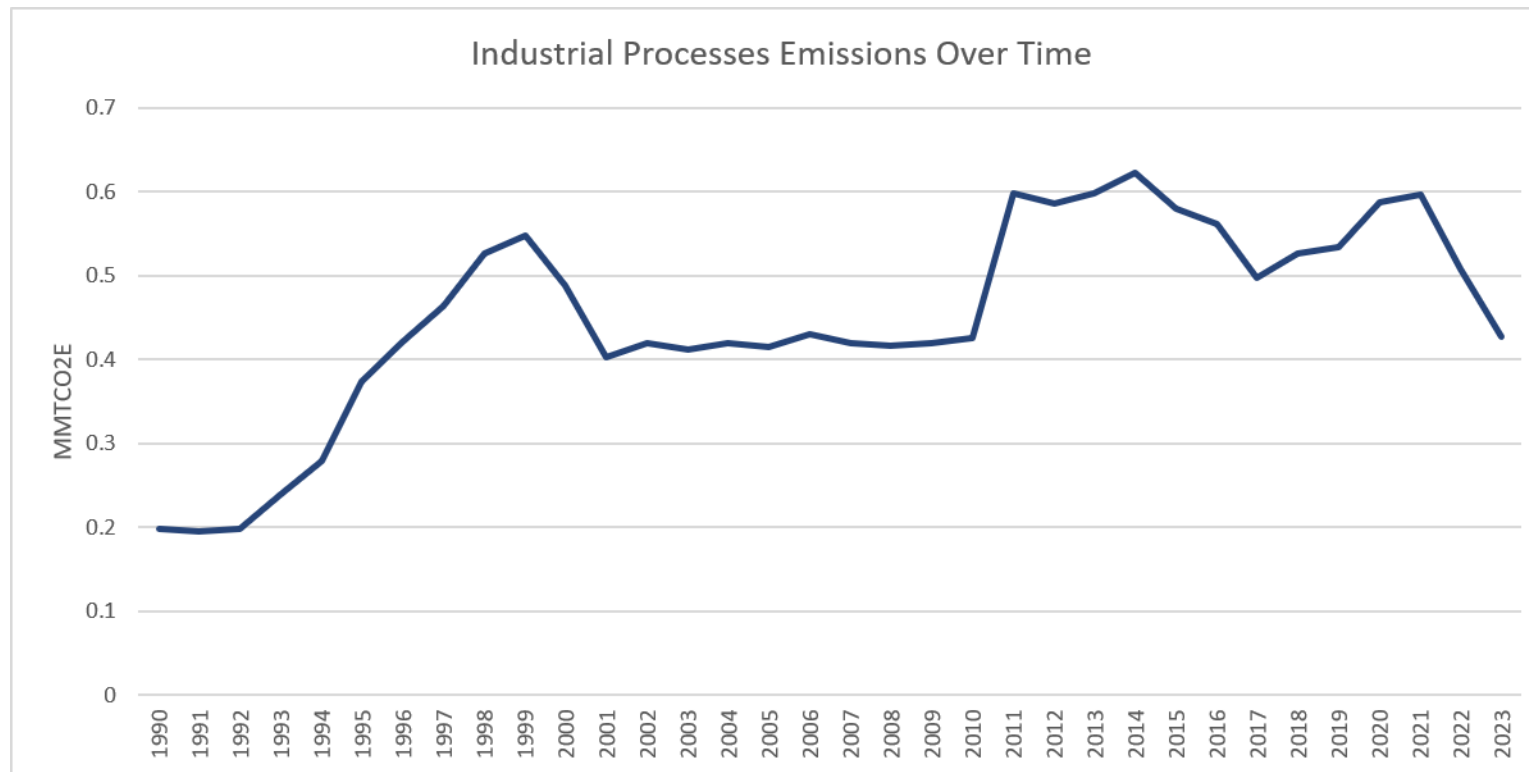
- 28.9% of total emissions in 2023

Agriculture



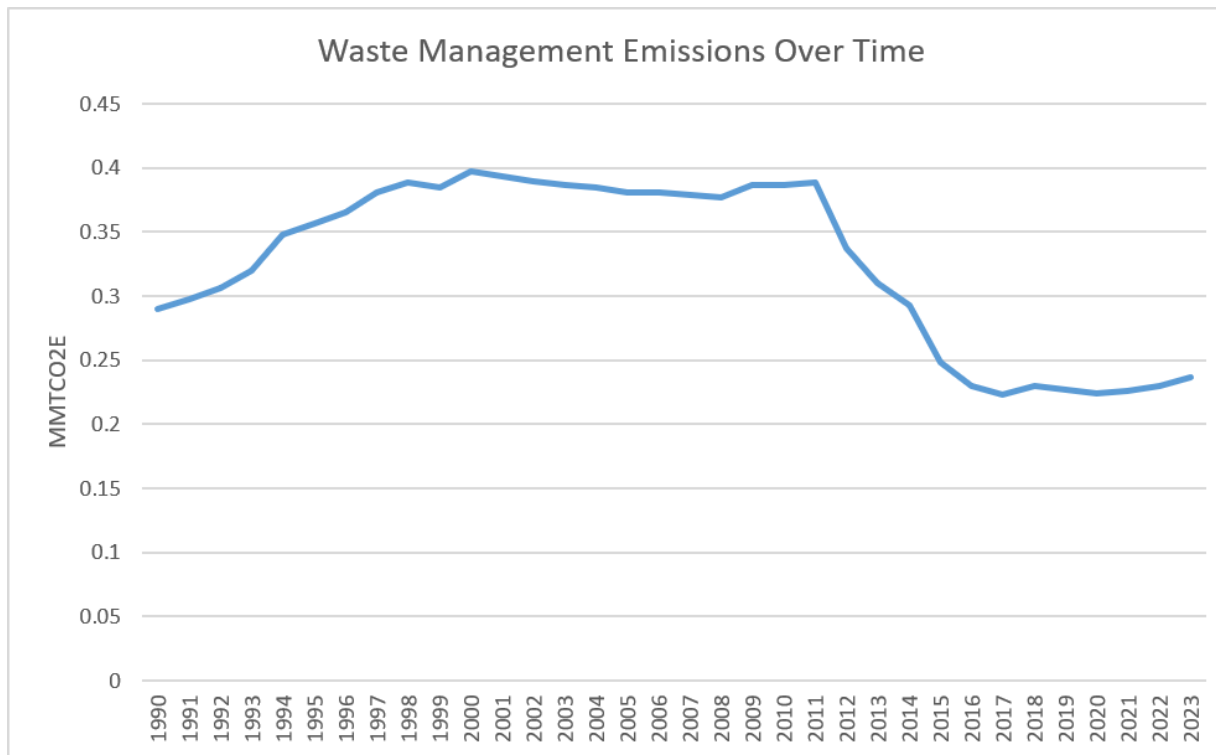
- 18.6% of total emissions in 2023

Industrial Processes



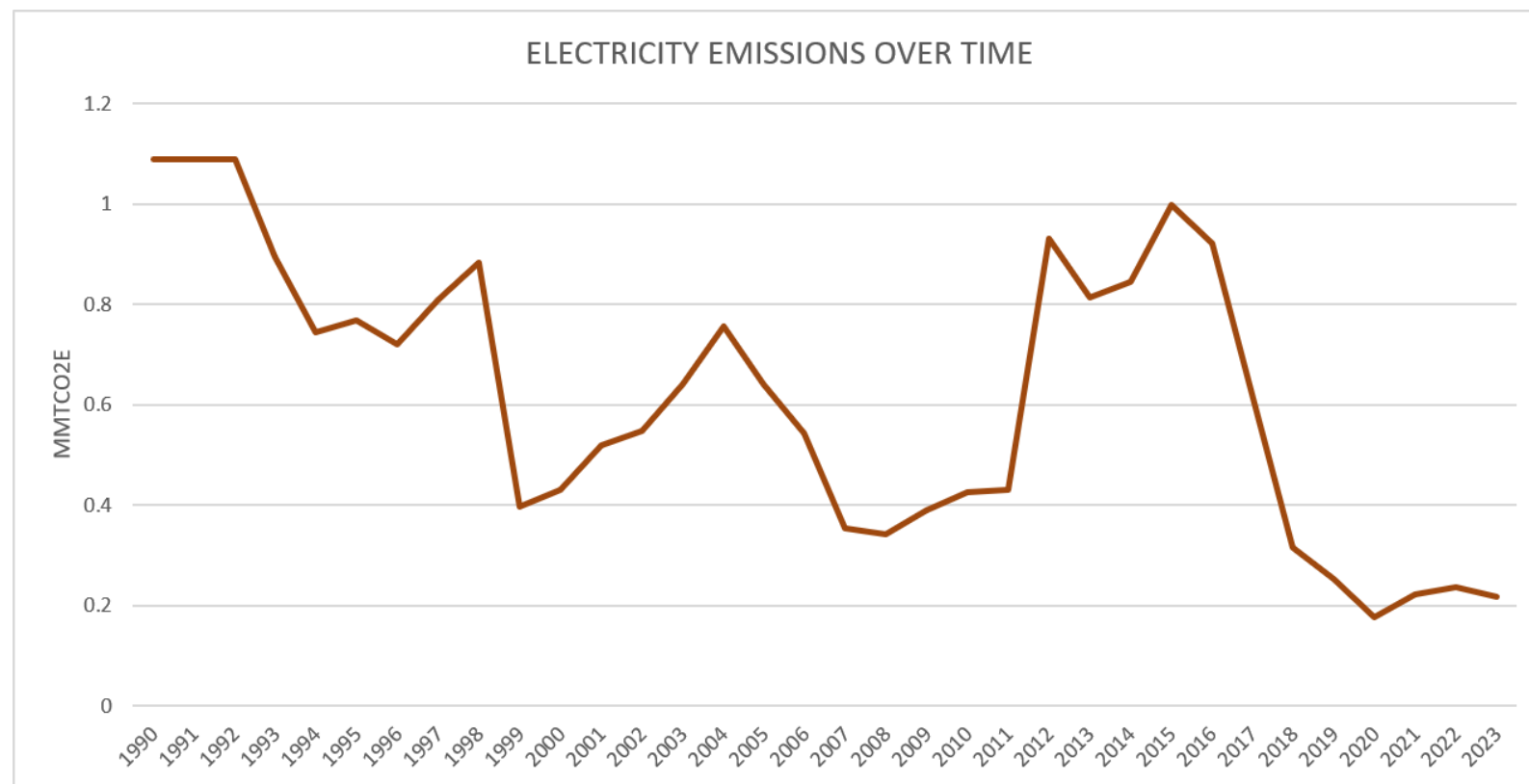
- 5.5% of total emissions in 2023

Waste Management



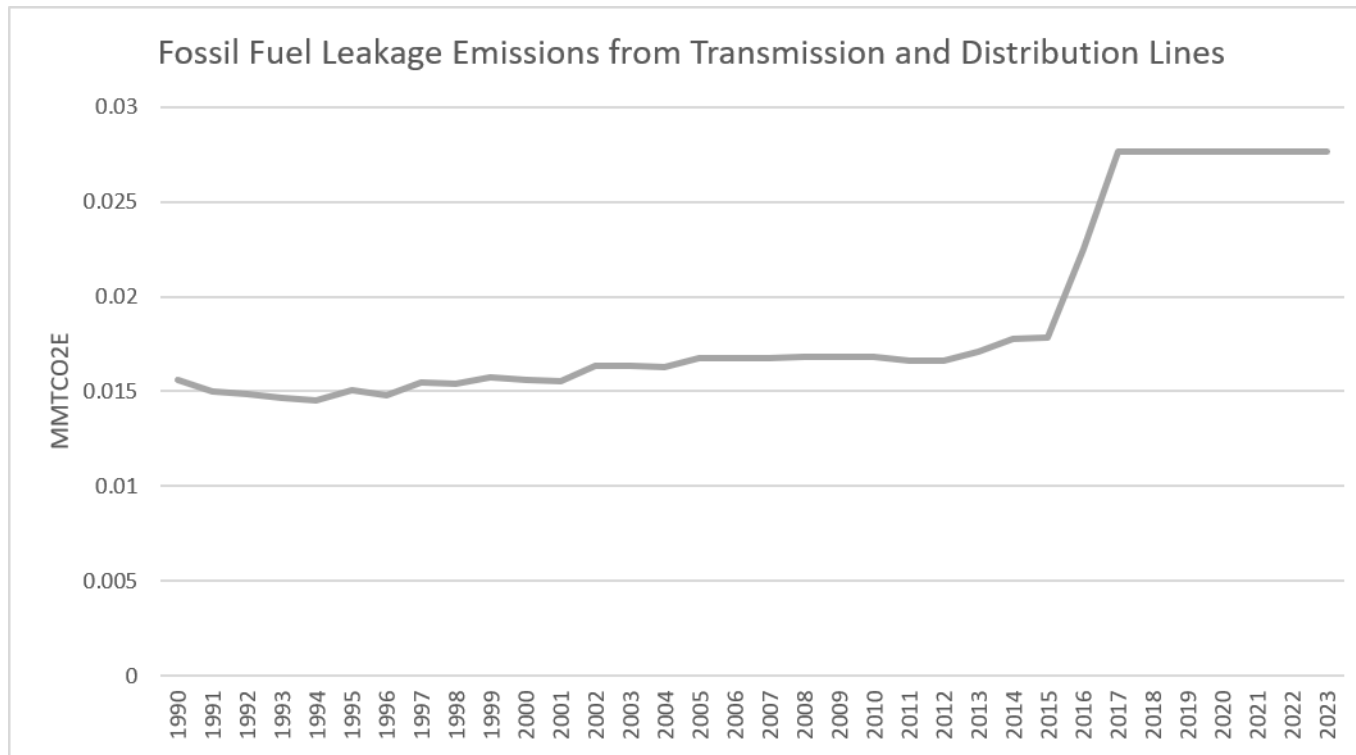
- 3% of total emissions for 2023

Electricity



- 2.8% of total emissions in 2023

Fossil Fuel



- Additional transmission line mileage and addition of a compressor accounts for the jump
- 0.4% of total emissions for 2023

Land use, Land-use Change, and Forestry (LULUCF)

- Currently verifying data!
- Quantifies carbon sequestration and emissions based on the maintenance and conversion of various land use types, including forestland, cropland, grassland, settlements, and wetlands.
- This sector functions mainly as a carbon sink, with forestland remaining forestland accounting for the majority of this sequestration. Urban trees in Settlements Remaining Settlements is the second largest sink.