

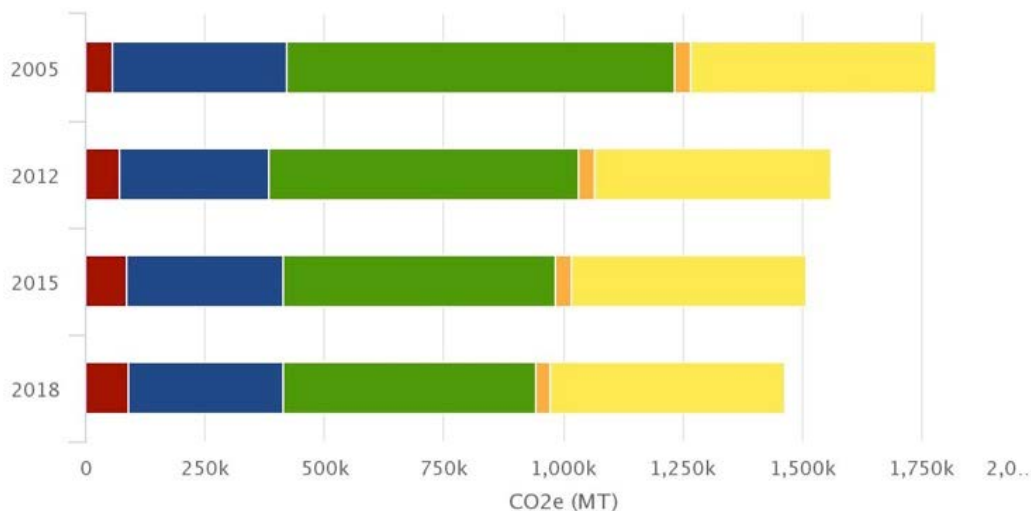
COMMUNITY-WIDE GREENHOUSE GAS INVENTORY SUMMARY

City of Alexandria, Virginia

EMISSIONS SUMMARY

The City of Alexandria community-wide greenhouse gas (GHG) emissions decreased by 18% between 2005 and 2018.

- Despite a 17% growth in population, GHG emissions reduced from 1.78 MMTCO₂e (million metric tons of carbon dioxide equivalent) in 2005 to 1.47 MMTCO₂e in 2018.
- Per capita emissions decreased 30% between 2005 and 2018; from 13.3 MTCO₂e in 2005 to 9.4 MTCO₂e in 2018.
- In 2018, energy consumption (residential and commercial) accounted for 58% of GHG emissions and transportation and mobile sources accounted for 34%.



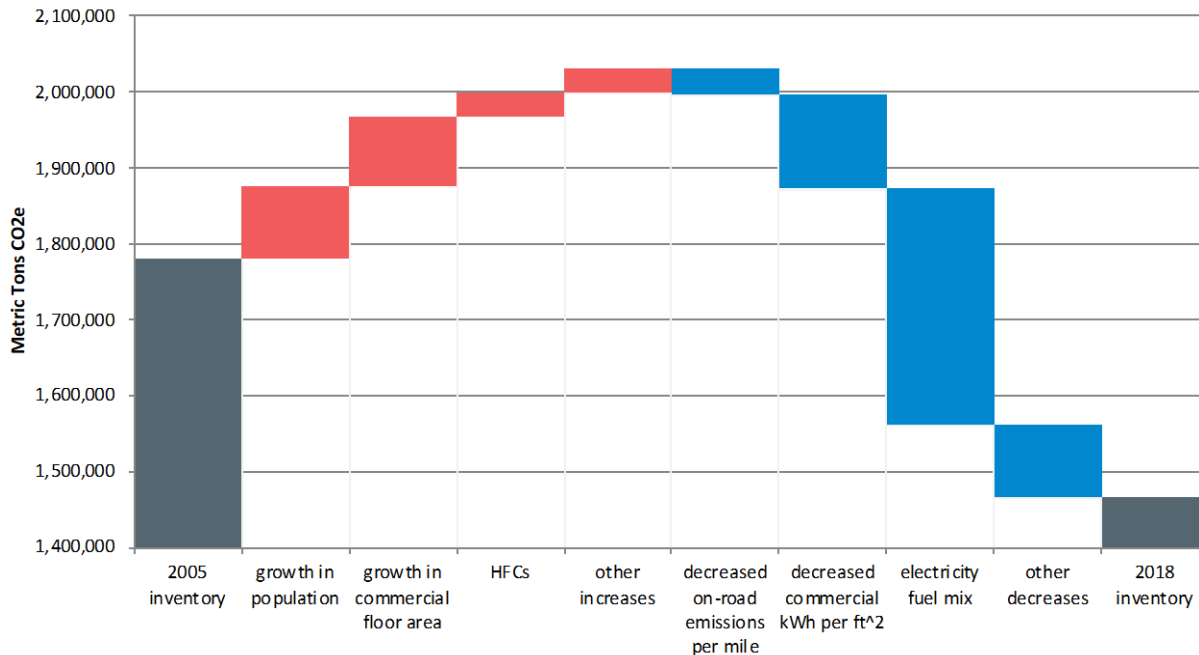
● Water & Wastewater ● Solid Waste ● Transportation & Mobile Sources

Sources: ICLEI ClearPath Tool and COG GHG Inventories

Note: Process & Fugitive Emissions refer to emissions associated with the release of Hydrofluorocarbons and emissions resulting from local natural gas system losses within the community.

GHG CONTRIBUTION ANALYSIS

ICLEI's GHG Contribution Analysis Tool evaluates the biggest drivers influencing GHG performance of cities, counties and regions. The metropolitan Washington GHG Contribution Analysis results show what has driven increases and decreases in emissions between inventory years 2005 and 2018. The graph on the following page shows the main drivers increasing emissions (red bars) are growth in population, commercial space, and emissions from hydrofluorocarbons (HFCs). Driving down emissions (blue bars) is mainly a cleaner grid, decreased commercial electricity energy intensity, and more fuel-efficient vehicles.



Sources: ICLEI's Contribution Analysis Model and COG GHG Inventories

INVENTORY BACKGROUND AND METHODOLOGY

In 2008, the Metropolitan Washington Council of Governments (COG) and local governments across metropolitan Washington collaboratively established the regional GHG emission reduction goals of: 10% below business as usual projections by 2012 (back down to 2005 levels); 20% below 2005 levels by 2020; and 80% below 2005 levels by 2050. Metropolitan Washington met the 2012 goal, demonstrating that GHG reductions are possible even as the population and economy grows. In 2020, COG and its member jurisdictions set a new interim GHG emission reduction goal of 50% below 2005 levels by 2030 and continues to work toward these goals.

COG completes GHG community-scale inventories for all 24 local government members and metropolitan Washington. COG GHG inventories strive to be compliant with both the U.S. Communities Protocol for Accounting and Reporting Greenhouse Gas Emissions (USCP) and Global Protocol for Community-Scale Greenhouse Gas Inventories (GPC). The inventories measure GHG-emitting activities undertaken by residents, businesses, industry, and government located in metropolitan Washington, as well as emissions from visitors. More information about the inventory methodologies can be found in Appendix F of the [Metropolitan Washington 2030 Climate and Energy Action Plan](#).

RESOURCES

- [Metropolitan Washington Climate Energy and Environment Policy Committee](#)
- [Metropolitan Washington Council of Governments Climate and Energy Programs](#)
- [Eco-City Alexandria](#)
- [Alexandria's 2019 Environmental Action Plan 2040 with Green Building Policy in Appendix A](#)

