

GREENHOUSE GAS DRIVERS OF CHANGE

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Air and Climate Public Advisory Committee
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Metropolitan Washington
Council of Governments

Tracking Progress Towards Shared Goals

- Region Forward
- Regional Greenhouse Gas Reduction Goals
- National and International Pledges, such as Compact of Mayors and Paris Agreement
- Reporting Initiatives such as CDP, STAR Communities, Sustainable MD



Drivers of GHG Change Project

- MWCOG is a partner on a national grant team under the US Department of Energy CLEAP (Cities Leading through Energy Analysis and Planning) Program. Two main tasks include:
 - Develop new inventory (2015) and condition last inventory (2012).
 - Support development of a *GHG drivers of change model and toolkit* for local community-scale inventories. Test model with 2 regional inventory years.



Project Timeline

Month	Activities
October – December 2017	<ul style="list-style-type: none">• GHG Inventory Work Session• One-on-one meetings with local jurisdictions• Adjustments/additions to 2012, 2015 inventories
January – March 2018	<ul style="list-style-type: none">• Complete 2005 GHG inventory conditioning• Review GHG inventory and drivers of change results and draft report with committees
April – June 2018	<ul style="list-style-type: none">• Final ClearPath entries• Final spreadsheets and fact sheets to local govts• Final GHG Inventory Methodology Guide• Finalize Regional GHG Trends Report
July 2018	<ul style="list-style-type: none">• GHG drivers of change workshop



GHG Methodology Basics

- US Communities Protocol and Global Protocol for Communities
- Global Warming Potential Factors from IPCC 4nd Assessment
- Activities-based inventory
- Consistent, reliable data sources for all years, all COG members

Emissions Types

Built Environment

Transportation and Mobile

Wastewater Treatment

Agriculture

Solid Waste Treatment

Some Process and Fugitive

Greenhouse Gases

Carbon dioxide (CO₂)

Methane (CH₄)

Nitrous oxide (N₂O)

Hydrofluorocarbons (HFCs)

Perfluorocarbons (PFCs)

MWCOG Team

Project Advisors: Steve Walz, Jeff King

Project Manager: Maia Davis

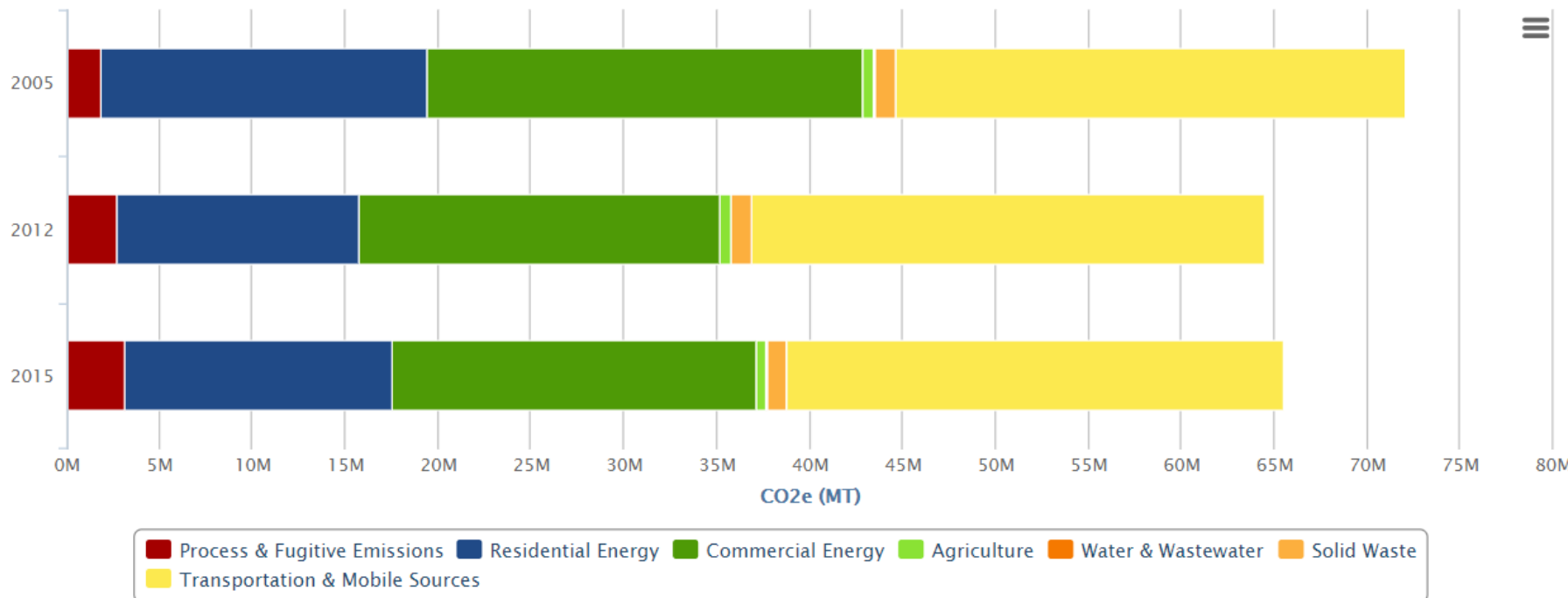
Emissions Types	Staff
Built Environment	Maia Davis, Alex Bonelli, Tim Masters
Transportation and Mobile	Sunil Kumar, Ron Milone, Dusan Vuksan, Jinchul Park, Rick Roisman, Arianna Koudounas, Abdul Mohammed, Maia Davis, Alex Bonelli
Wastewater Treatment	Tanya Spano, Mukhtar Ibrahim, Nasser Ameen, Maia Davis
Agriculture	Tanya Spano, Mukhtar Ibrahim, Lindsey Smith, Jimmy Shue, Maia Davis
Solid Waste Treatment	Maia Davis, Tim Masters, John Snarr
Process and Fugitive Emissions	Maia Davis, Alex Bonelli



Regional GHG Trends, 2005 - 2015

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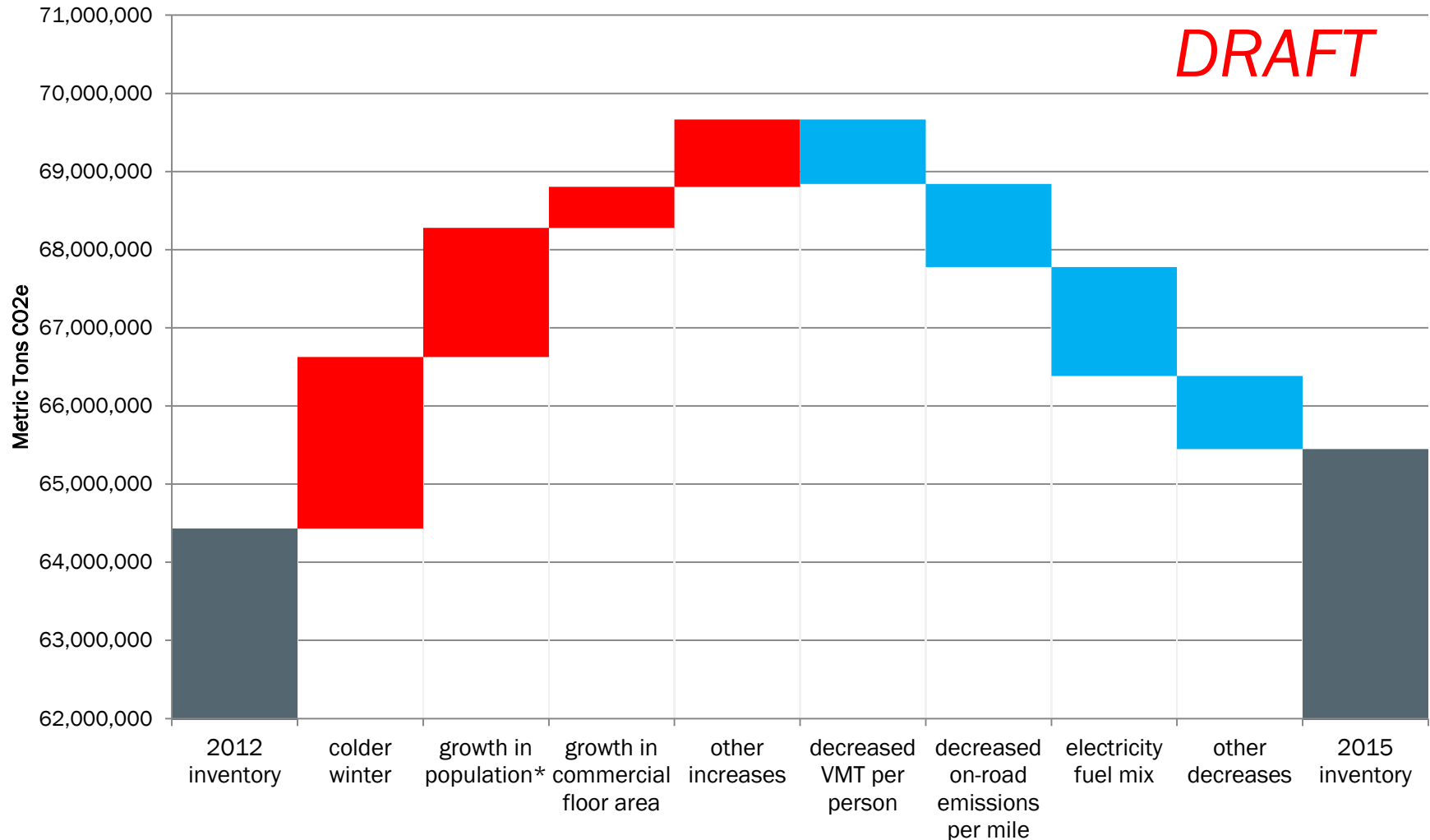
- GHG emissions decreased 10%
- Per capita emissions decreased 19%



Highcharts.com

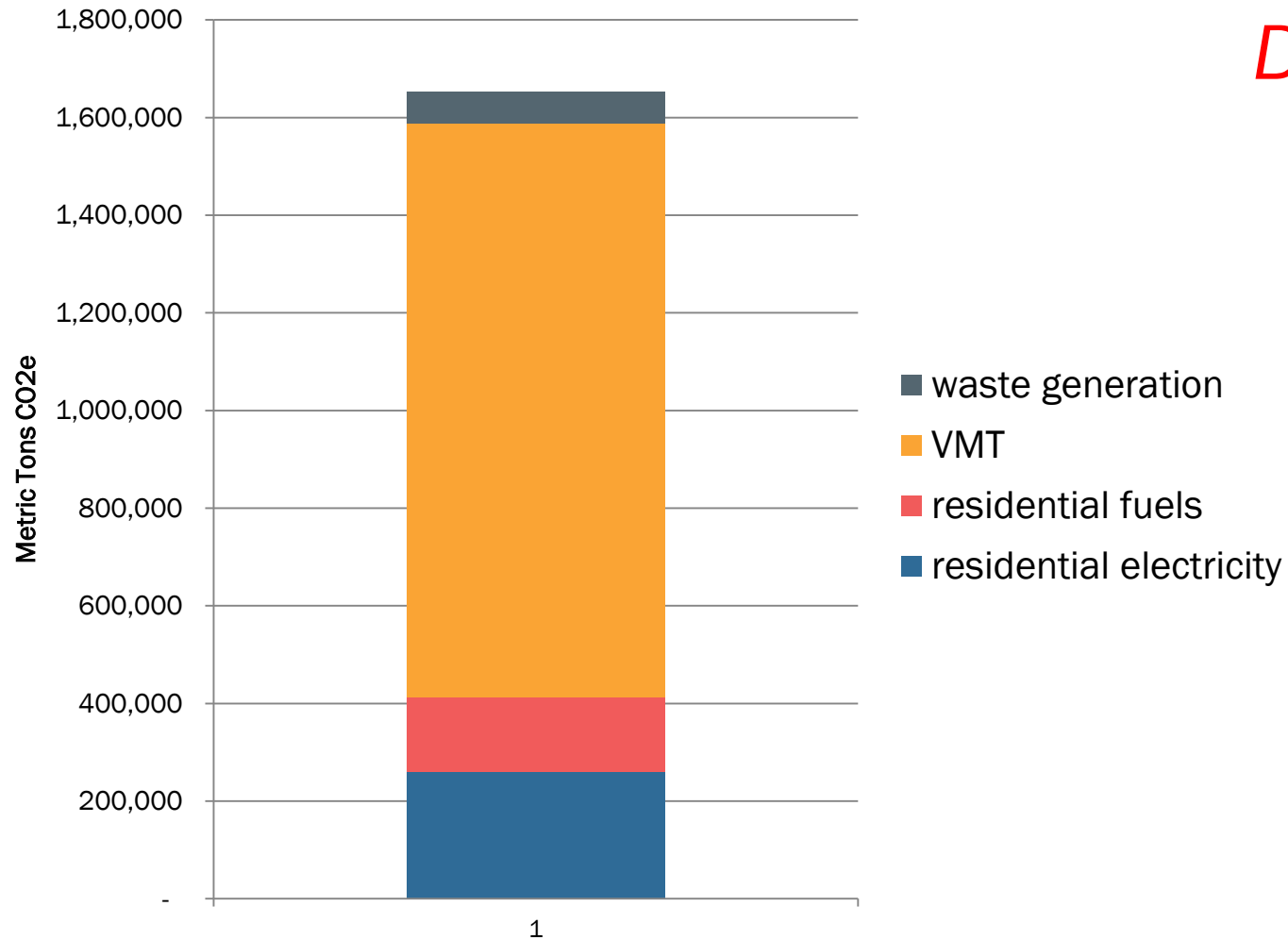


Leading Drivers of Change, 2012-2015



Population Drivers, 2012-2015

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