

Mount Vernon 2018 Environmental Summit

Reducing Greenhouse Gas Emissions: Are We doing Our Part?

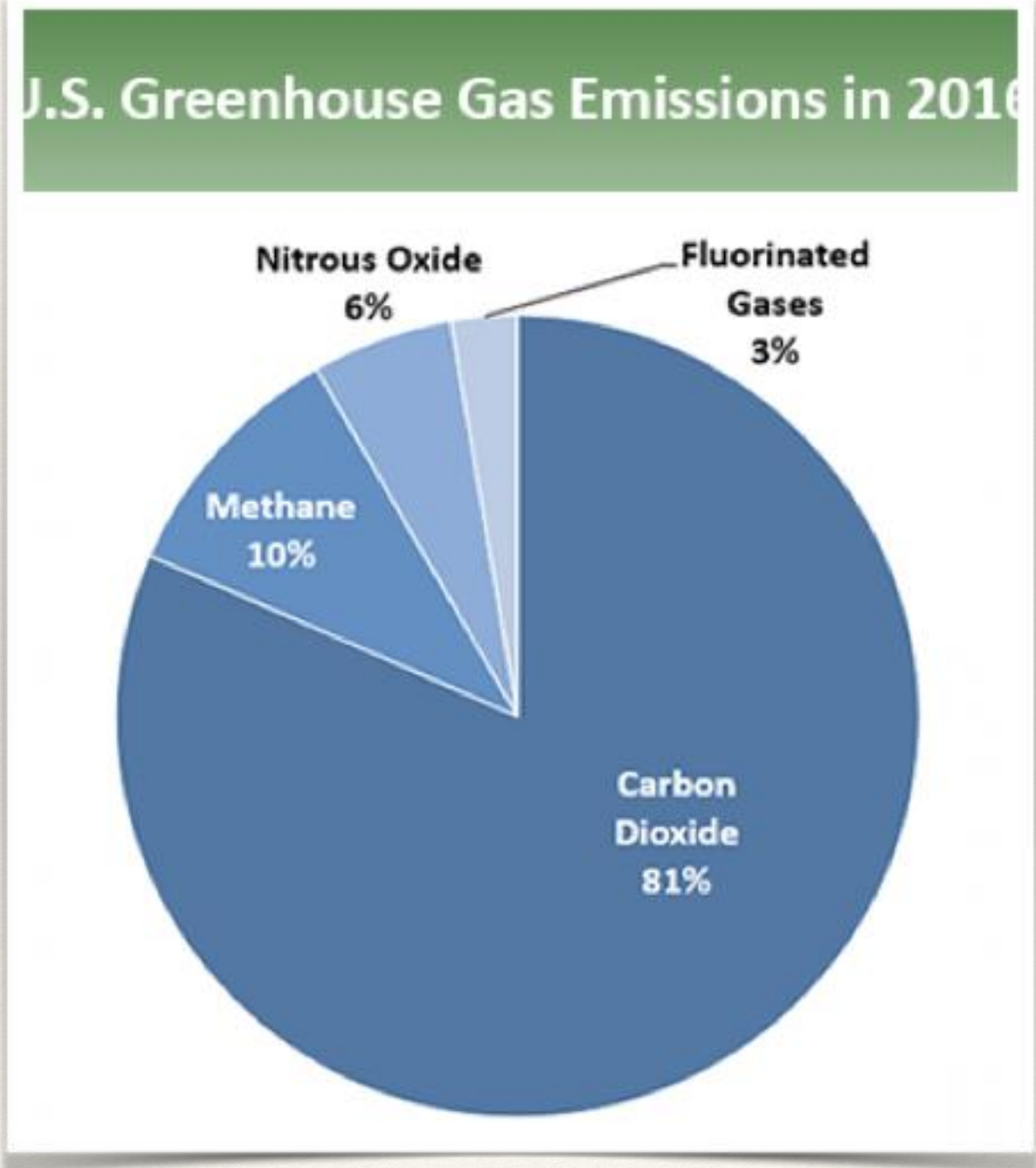
Dr. Larry Zaragoza
November 8, 2018

Goals of Presentation

- Review why it is important to Reduce Greenhouse Gas Emissions
- Review the Greenhouse Gas Emissions Inventory
- Help you to see how you can reduce your “carbon dioxide” footprint

What are Greenhouse Gases and Why do we Care?

- Greenhouse Gases trap heat in the atmosphere.
- Greenhouse Gases include carbon dioxide, methane, nitrous oxide and fluorinated gases.
- The impact of greenhouse gases will vary depending on the global warming potential of the gases emitted.
- Anthropogenic activities have altered the natural balance of greenhouse gases in the atmosphere so that they are warming the atmosphere in a manner that is not natural.



Impacts of Climate Change

- Temperatures will continue to rise,
- Frost-free season (and growing season) will lengthen,
- Changes in precipitation patterns,
- More droughts and heat waves,
- Hurricanes will become stronger and more intense, and
- Global changes in sea level are predicted to rise 1 to 4 feet by 2100.

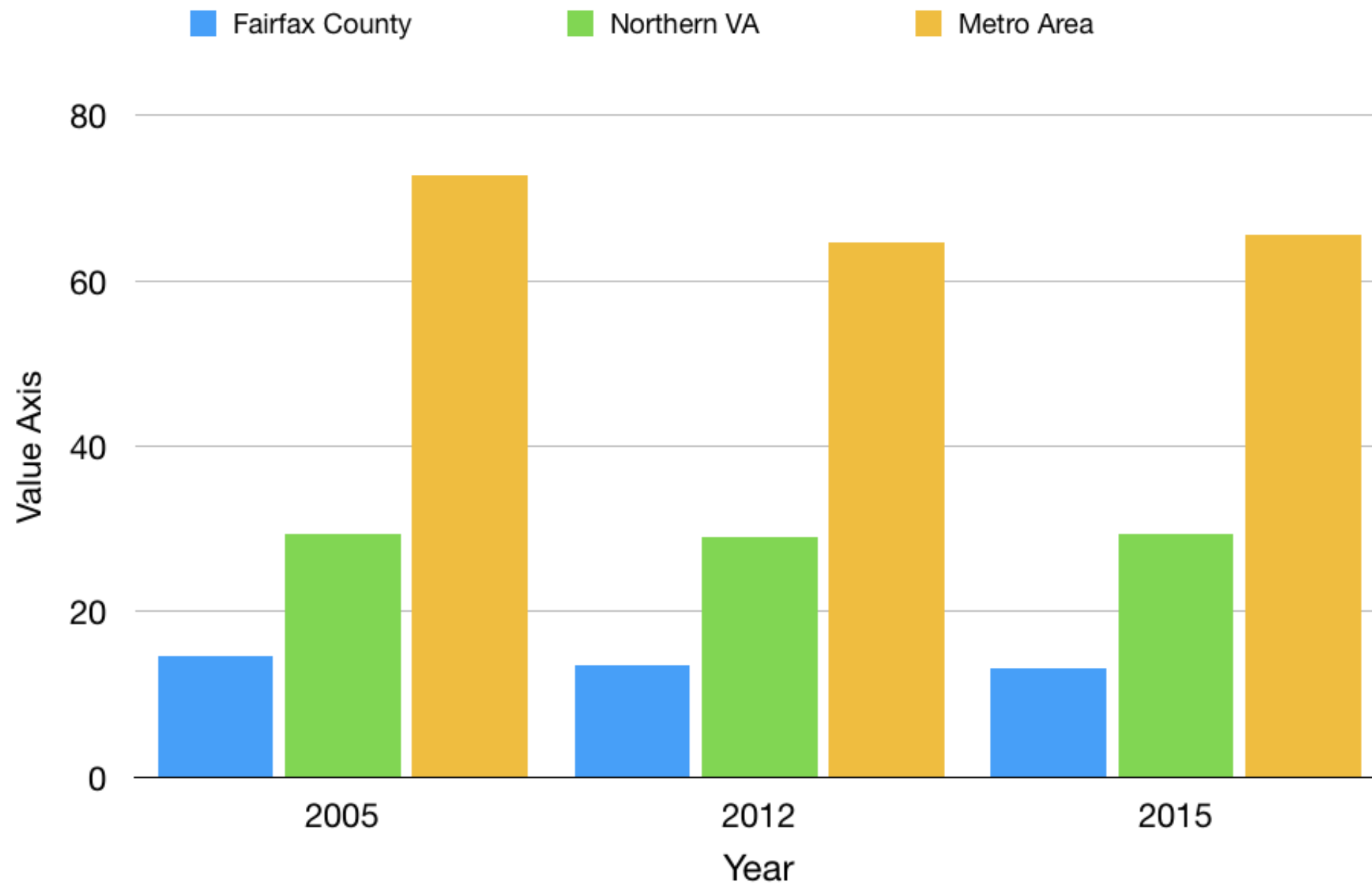
Fairfax County Board

- The goal of a reduction of county geographical emissions of 20 percent below 2005 levels by 2020 and 80 percent below 2005 levels by 2050 is a shared goal with neighboring counties. Cool Counties also specifically calls for the achievement of a 10 percent reduction of GHG emissions every five years after 2010 through to 2050.
- The second element of Cool Counties calls for signatories to work with regional partners to reduce their community-wide GHG emissions through the development of regional plans establishing short-, mid- and long-term GHG reduction targets.
- The third element of Cool Counties asks local governments to continue to urge Congress and the Administration to enact specific requirements, market-based limits and incentives, including a specific Corporate Average Fuel Economy standard.

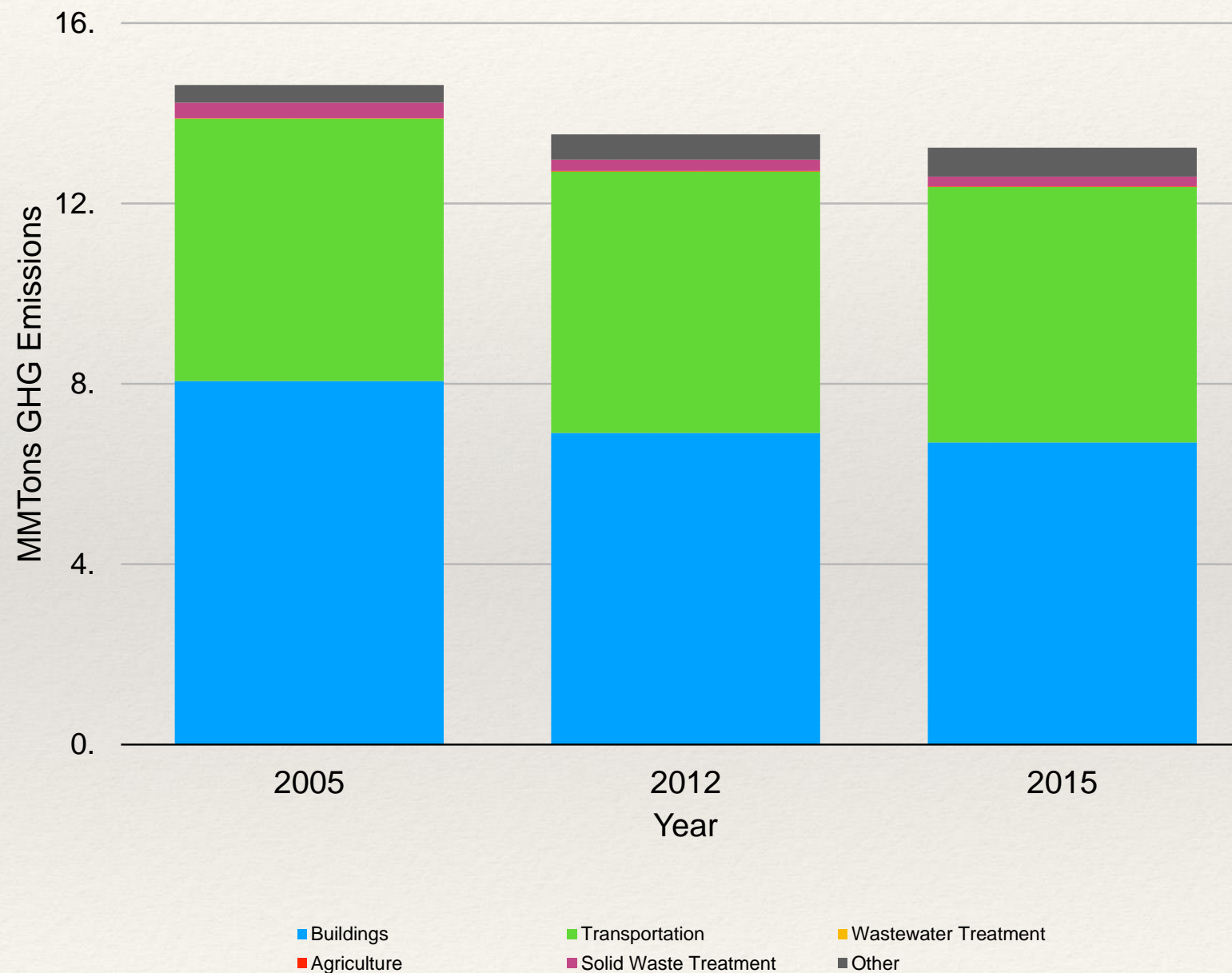
MWCOG is Tracking the Following

- Progress towards Metropolitan Washington's GHG goals,
- Progress towards reducing energy consumption,
- Progress towards increasing high performance buildings,
- Progress towards increasing renewables as a percent of total energy consumption,
- Progress towards increasing grid-connected renewables,
- Progress towards reducing transportation sector GHG emissions,
- Progress towards increasing electric vehicle ownership,
- Progress towards reducing vehicle miles travelled,
- Progress towards increasing growth rates in activity centers,
- Projected increases in average annual temperature and
- Projected increases in sea level rise.

Carbon Dioxide Emissions (MM Tons)



Fairfax County Wide GHG Emissions by Category



How can You Make a Difference?

- Everyone has the opportunity to reduce their carbon footprint
- Reducing carbon dioxide equivalent emissions can work at an individual, population or governmental level
- Be informed, get involved and take action

Suggested Pledge: Reduce Your Greenhouse Gas Footprint

- Undertake an energy audit of your home and take actions to reduce energy use,
- Telework when you can,
- Carpool and take public transportation,
- Ride a bike to get around close to your home,
- Use Renewable Energy and
- Help plan for a more energy efficient future in your community.

