



**pennsylvania**

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Air Quality

# **DRAFT 2018 Pennsylvania Greenhouse Gas Emission Inventory**

Climate Change Advisory Committee

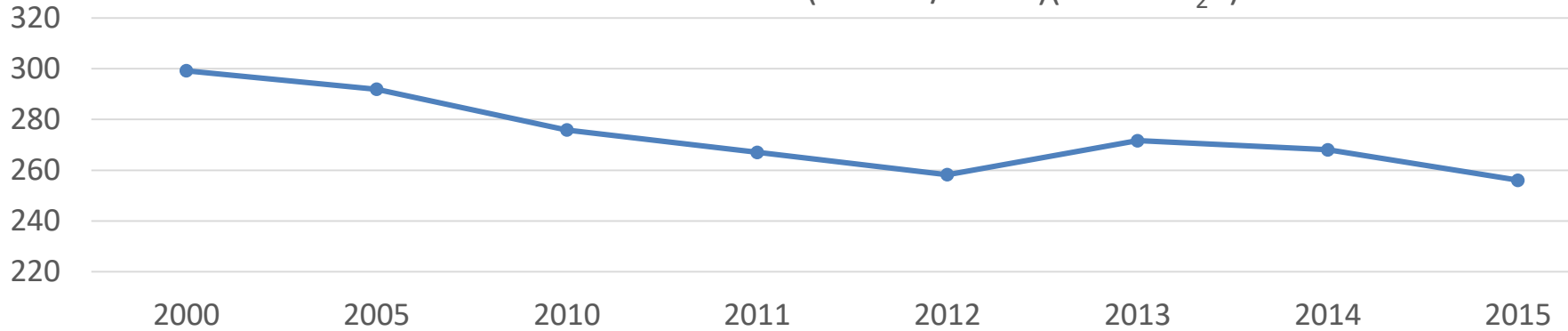
December 4, 2018

# GHG Emission Inventory

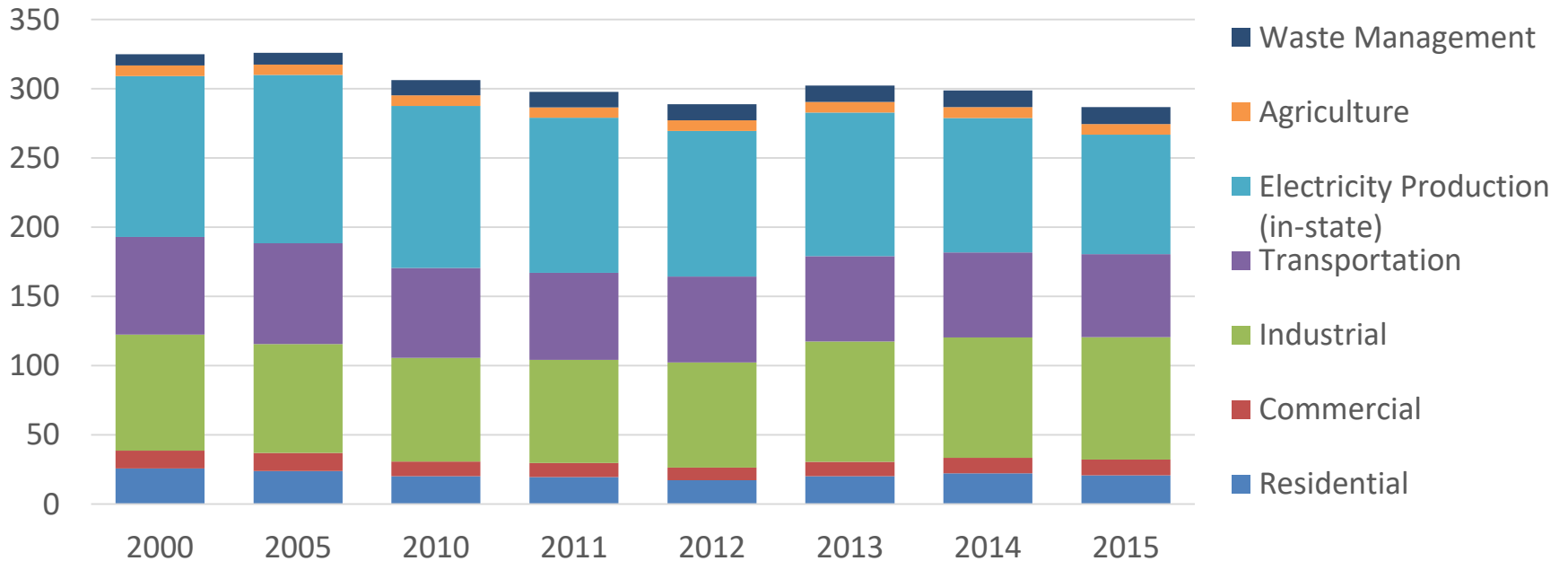
- State Inventory Tool:
  - Made available on April 13, 2017.
  - Updated all 11 modules with data through 2015.

# GHG Inventory Results

Total Statewide Net Emissions (Prod w/ Sinks)(MMTCO<sub>2</sub>e)

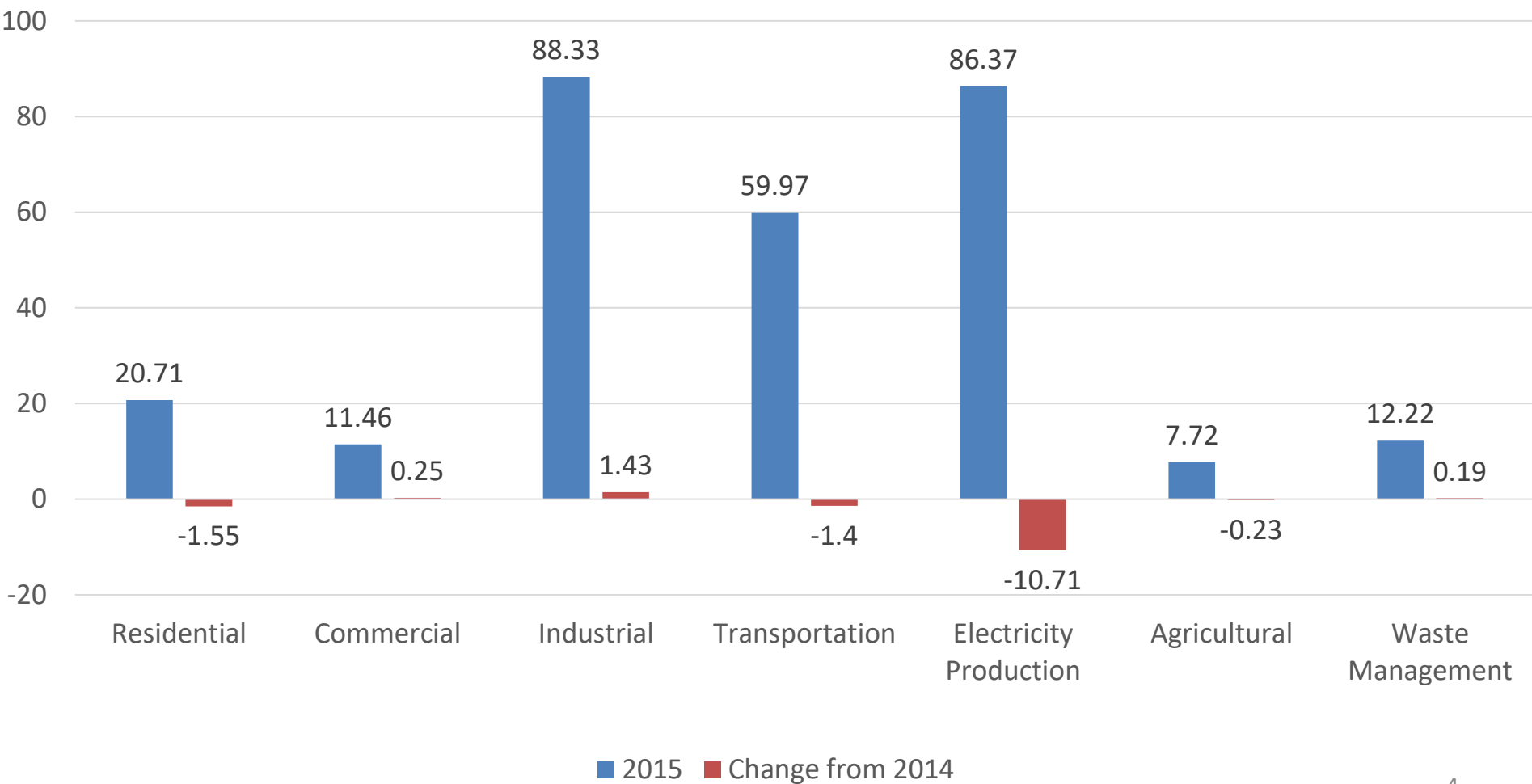


GHG Emissions (MMTCO<sub>2</sub>e) by Sector



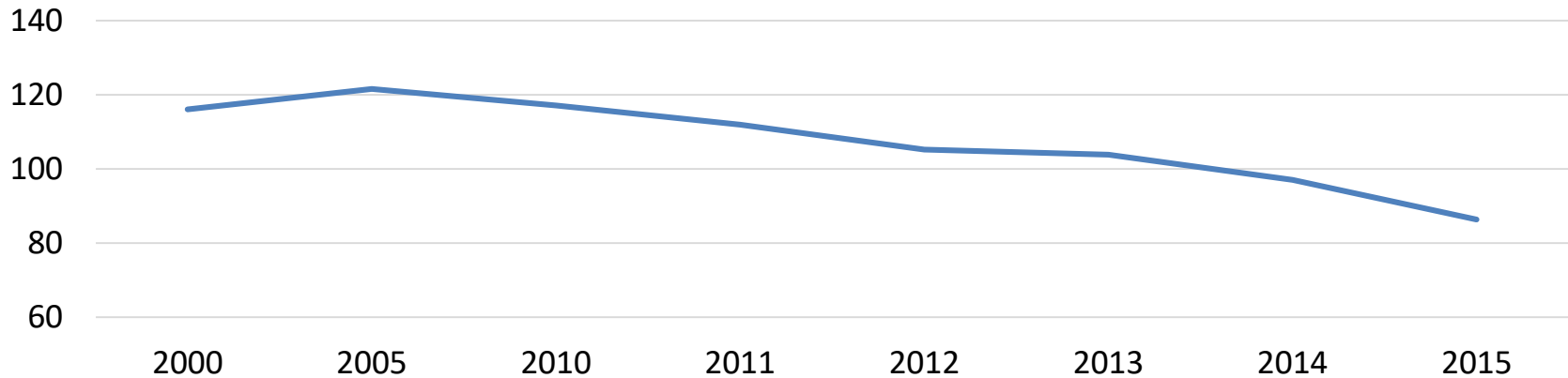
# Results By Sector

2015 GHG Emissions By Sector (MMT<sub>CO<sub>2</sub>e</sub>)

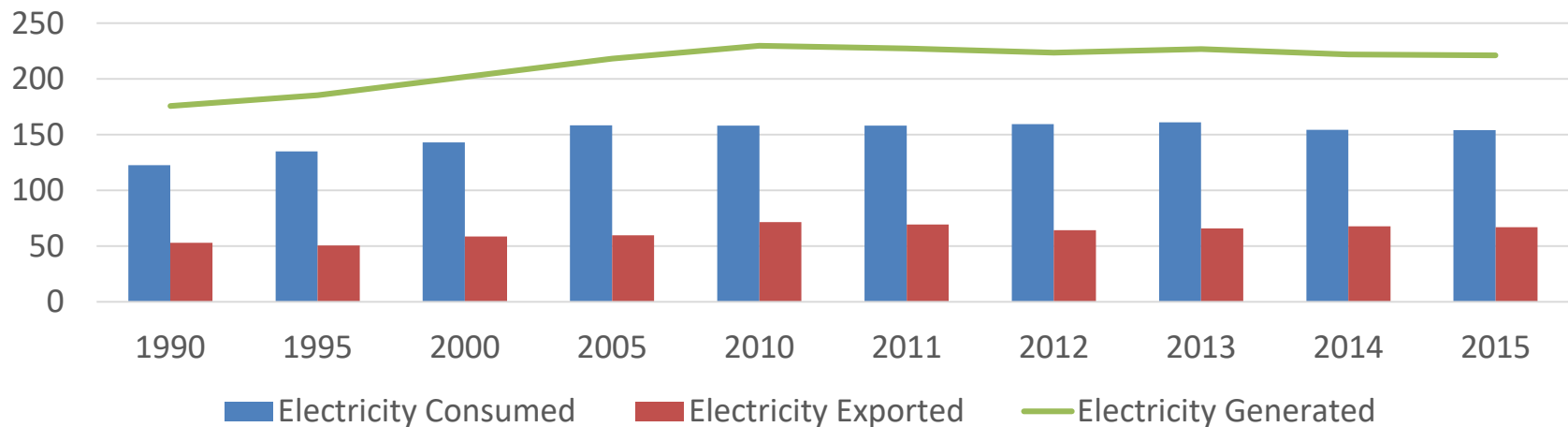


# Electricity Production

GHG Emissions from Electricity Production (MMTCO<sub>2</sub>e)

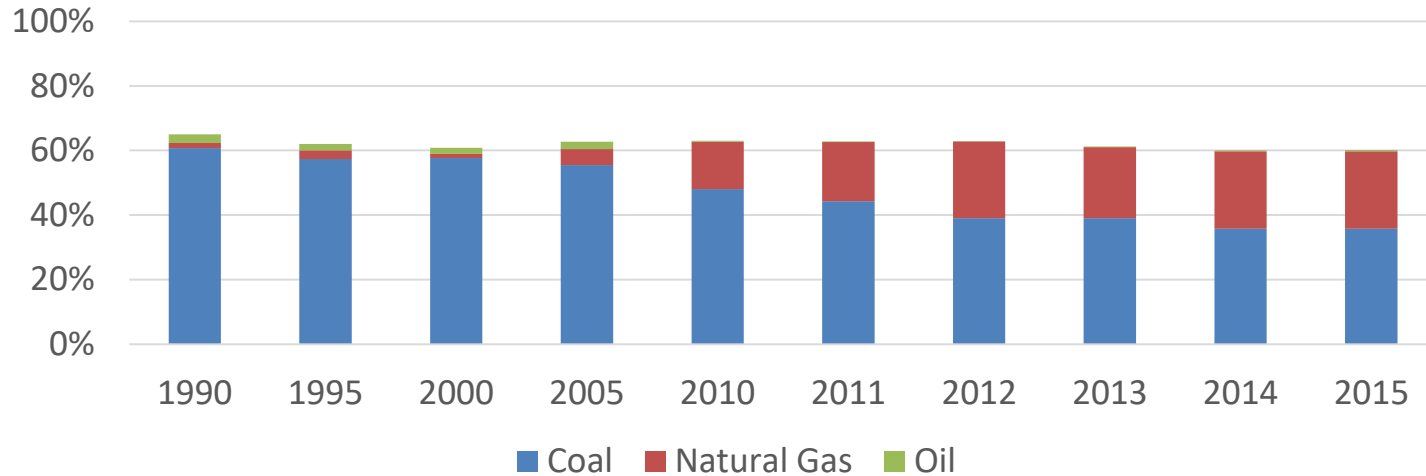


Total Electricity Generated, Consumed, and Exported (TWh)

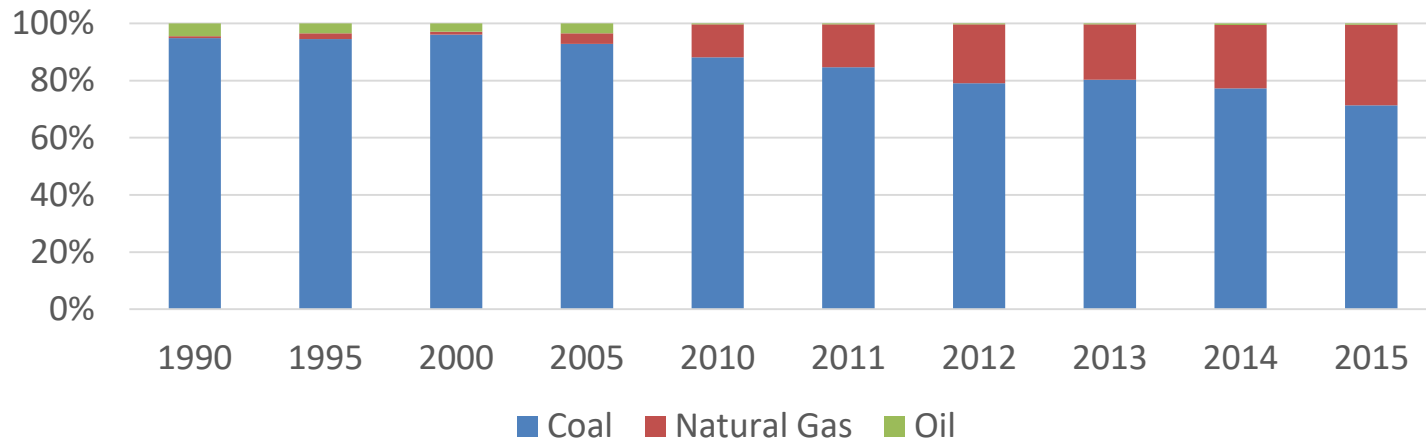


# Electricity Production Emissions

## Percent Electricity Production By Fuel Type

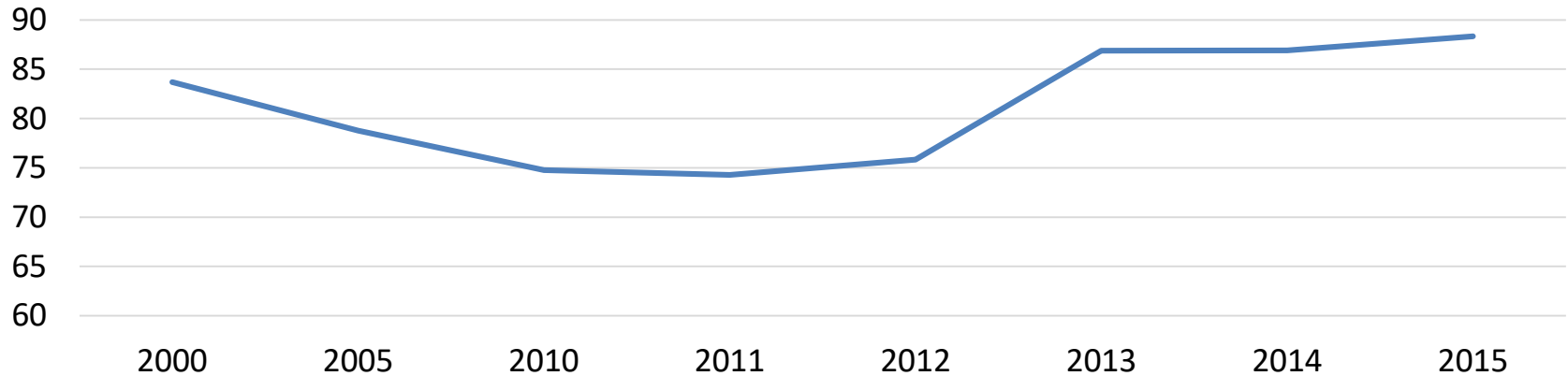


## GHG Emissions from Electricity Production Sector by Source (% of Total)

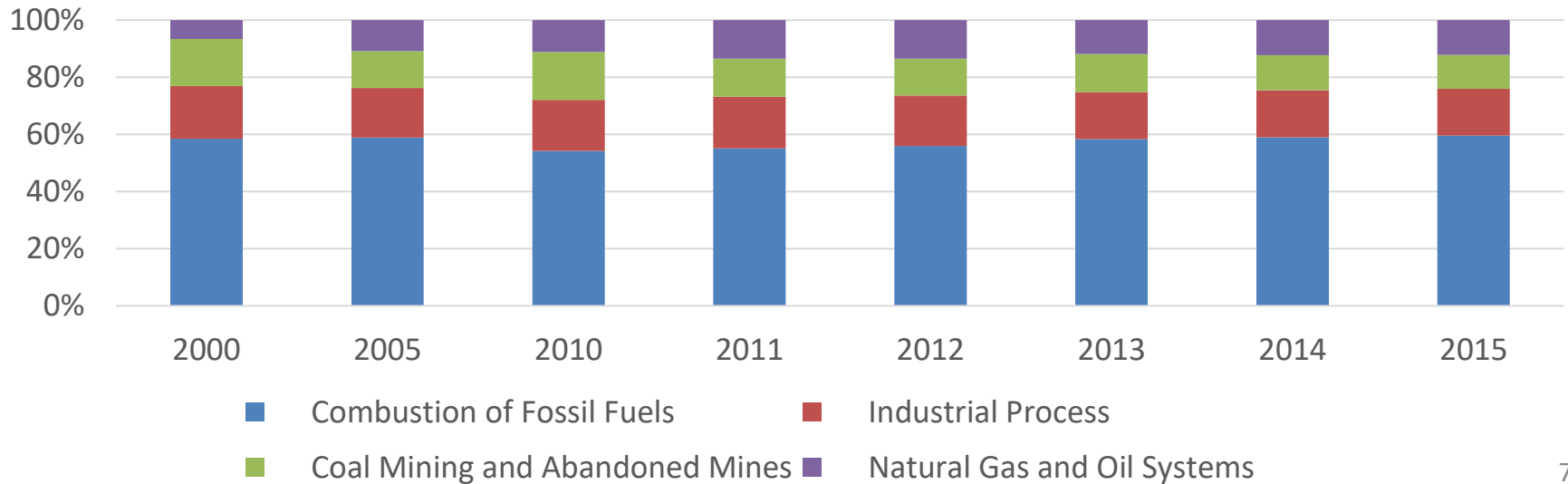


# Industrial Sector Emissions

GHG Emissions from Industrial Sector (MMT $\text{CO}_2\text{e}$ )

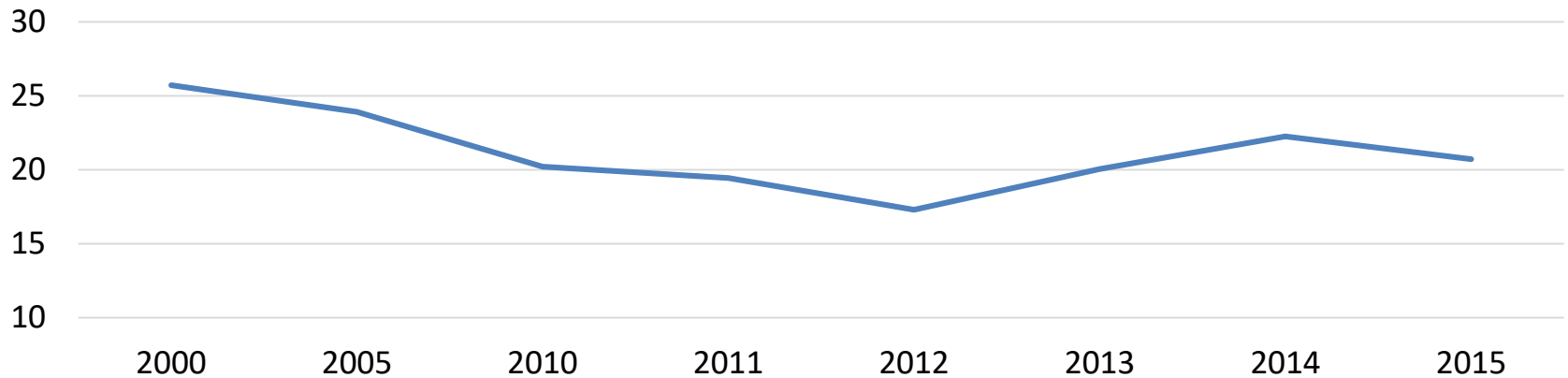


GHG Emissions from Industrial Sector by Source (% of Total)

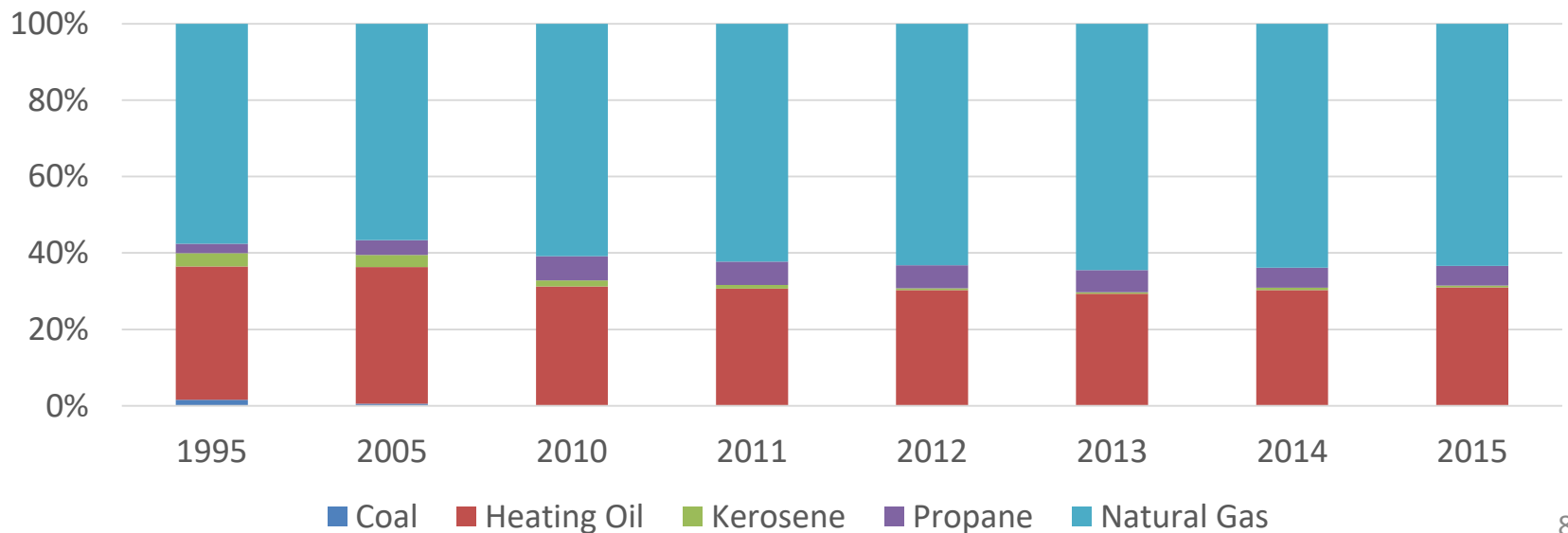


# Residential Sector

## GHG Emissions from Residential Sector (MMT<sub>CO<sub>2</sub>e</sub>)



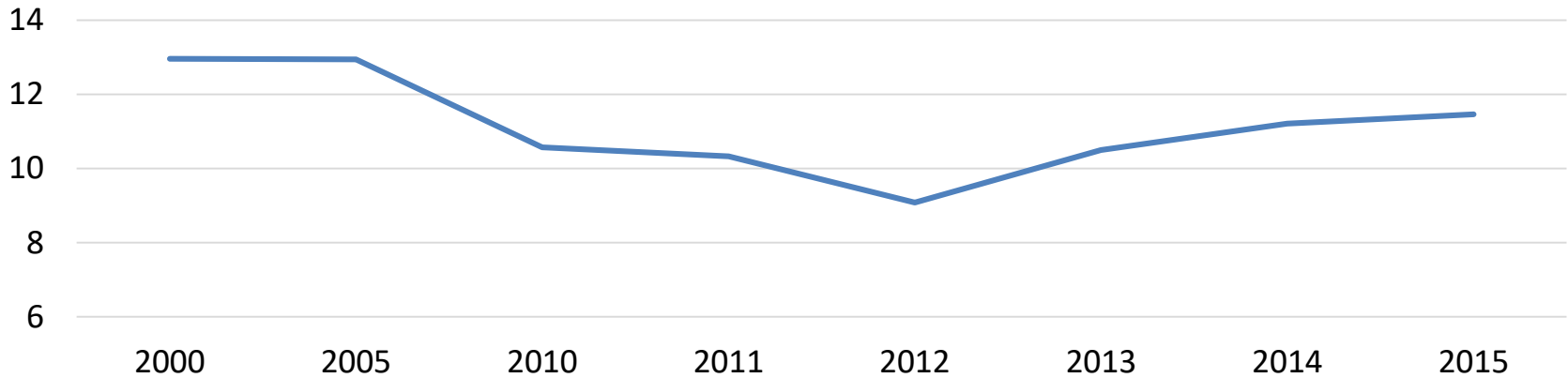
## Residential Emissions by Fuel Type (% of Total)



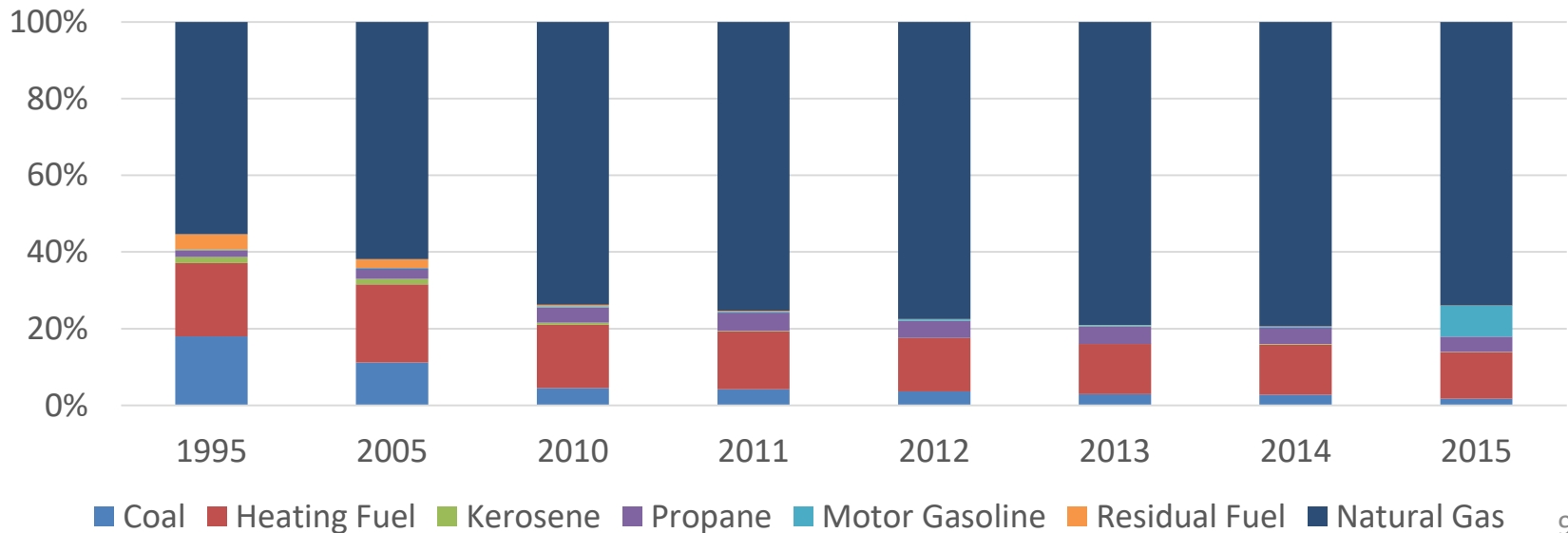


# Commercial Sector

GHG Emissions from Commercial Sector (MMT<sub>CO<sub>2</sub>e</sub>)

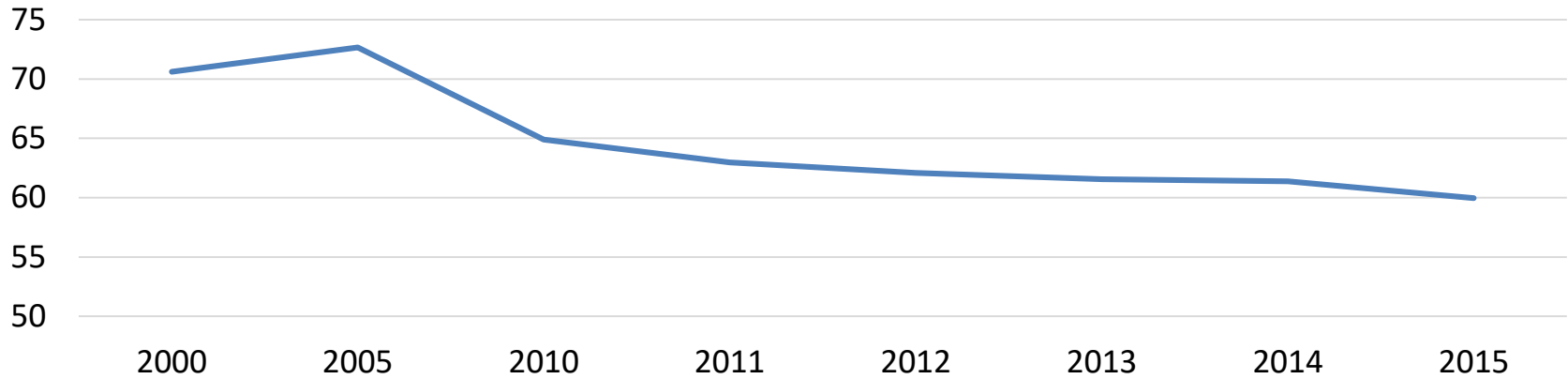


Commercial Emissions by Fuel Type (% of Total)

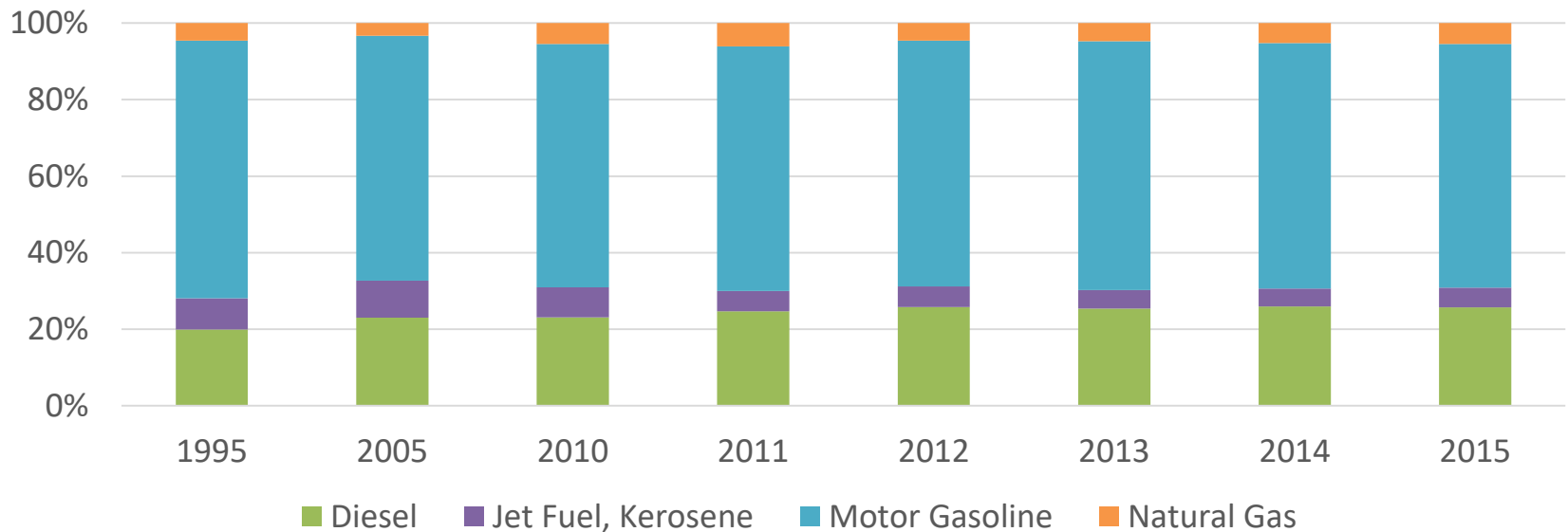


# Transportation Sector

## GHG Emissions from Transportation Sector (MMT<sub>CO<sub>2</sub>e</sub>)

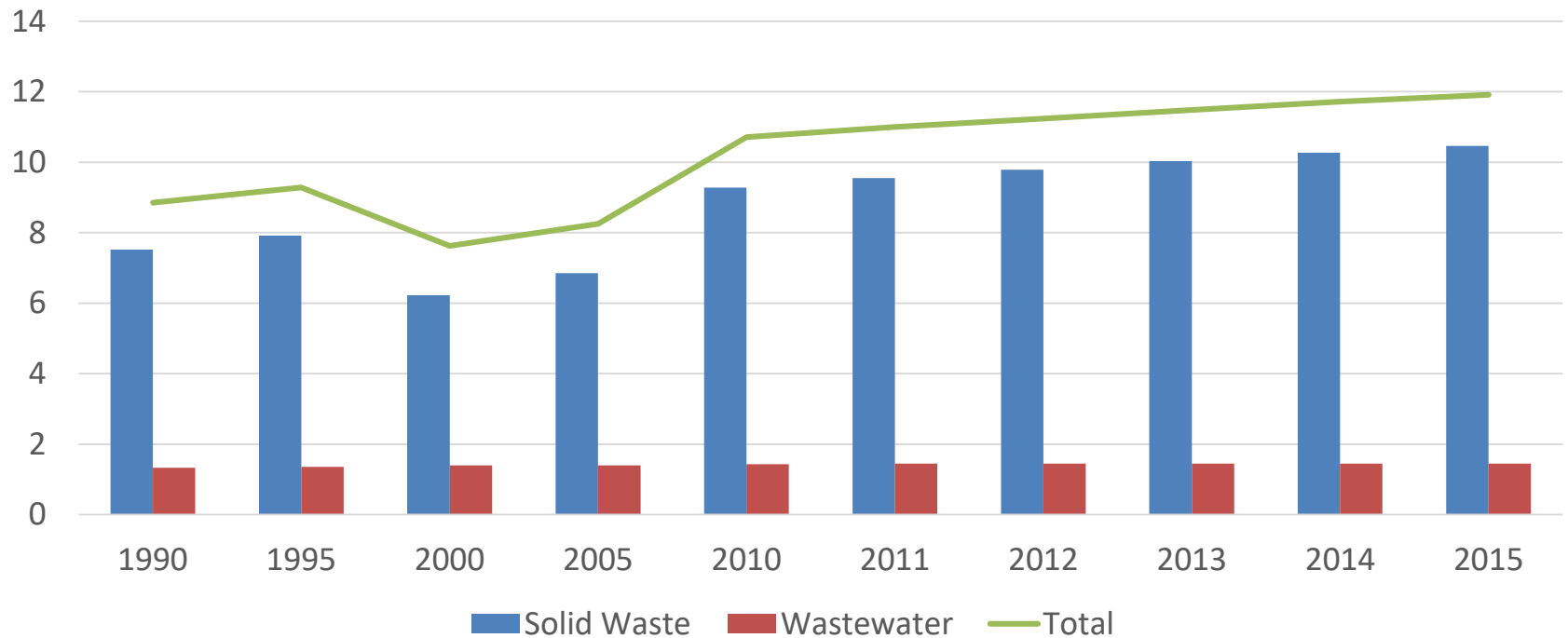


## Transportation Emissions by Fuel Type (% of Total)



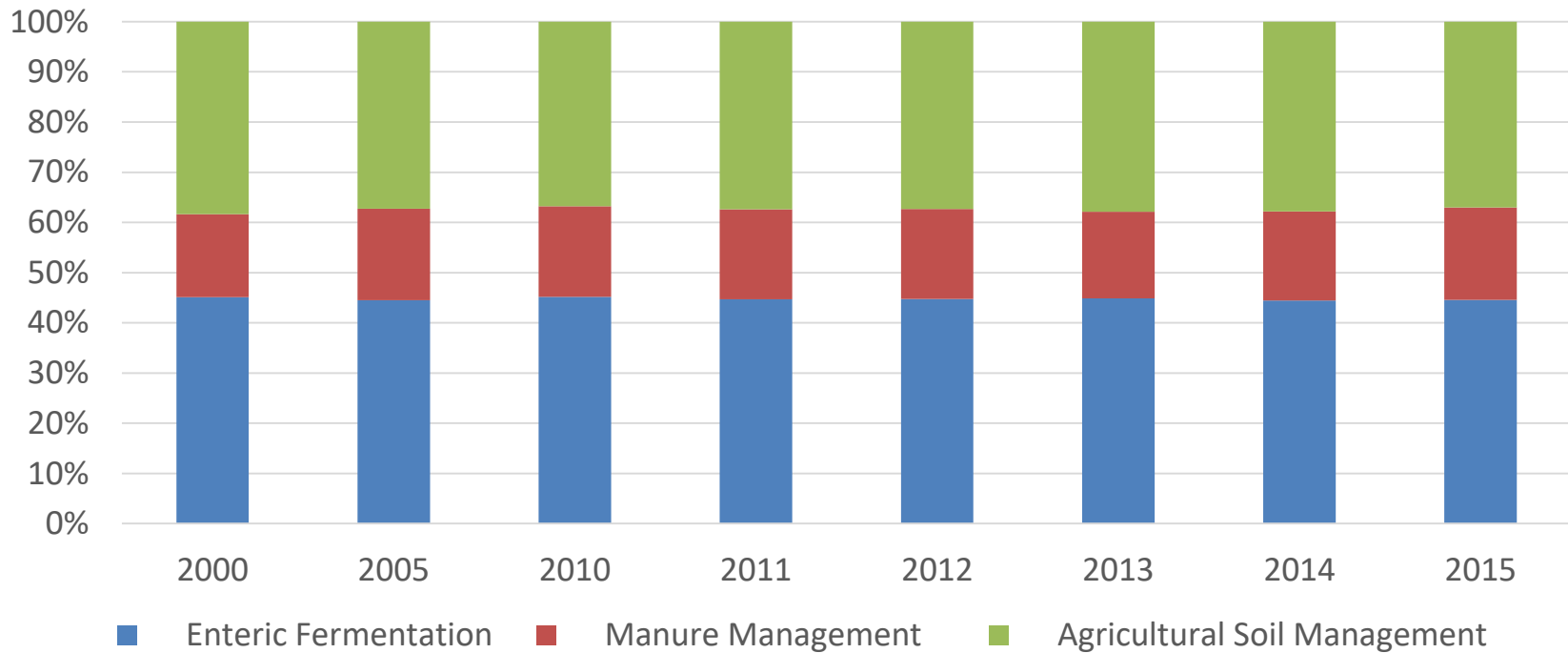
# Waste Management Sector

GHG Emissions from Waste Management Sector (MMT $\text{CO}_2\text{e}$ )



# Agriculture Sector

GHG Emissions from Agricultural Sector by Source (% of Total)



# Emission Inventory

- The 2018 GHG Inventory (2015 data) shows a continued trend of overall decreased emissions from 2000.
- Net emissions continue to tick downward.
- The biggest decreases since 2014 came from the Electricity Generation sector, with a decrease of 10.71 MMTCO<sub>2</sub>e and the Residential sector with a decrease of 1.55 MMTCO<sub>2</sub>e.
- This decrease counteracted increases from the Commercial (0.25 MMTCO<sub>2</sub>e), Industrial (1.43 MMTCO<sub>2</sub>e), and Waste Management (0.19 MMTCO<sub>2</sub>e) sectors.



**pennsylvania**

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Air Quality

# Thank You

**Lindsay A. Byron, P.G.**

Environmental Group Manager

Energy Programs Office

Department of Environmental Protection

[lbyron@pa.gov](mailto:lbyron@pa.gov)

Phone: 717.783.8411