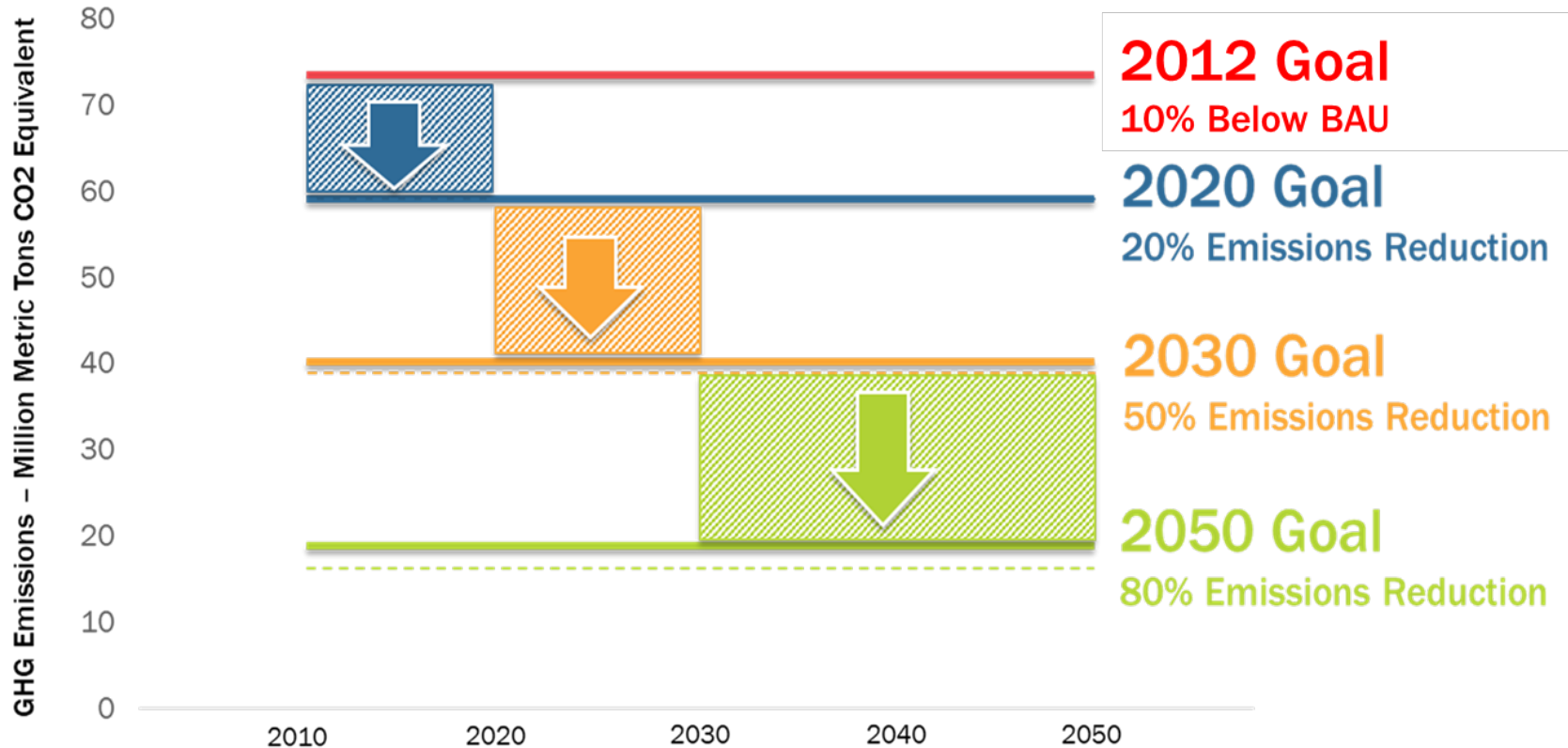


REGIONAL TRENDS TOWARD CLIMATE GOALS

Maia Davis, COG Senior Environmental Planner

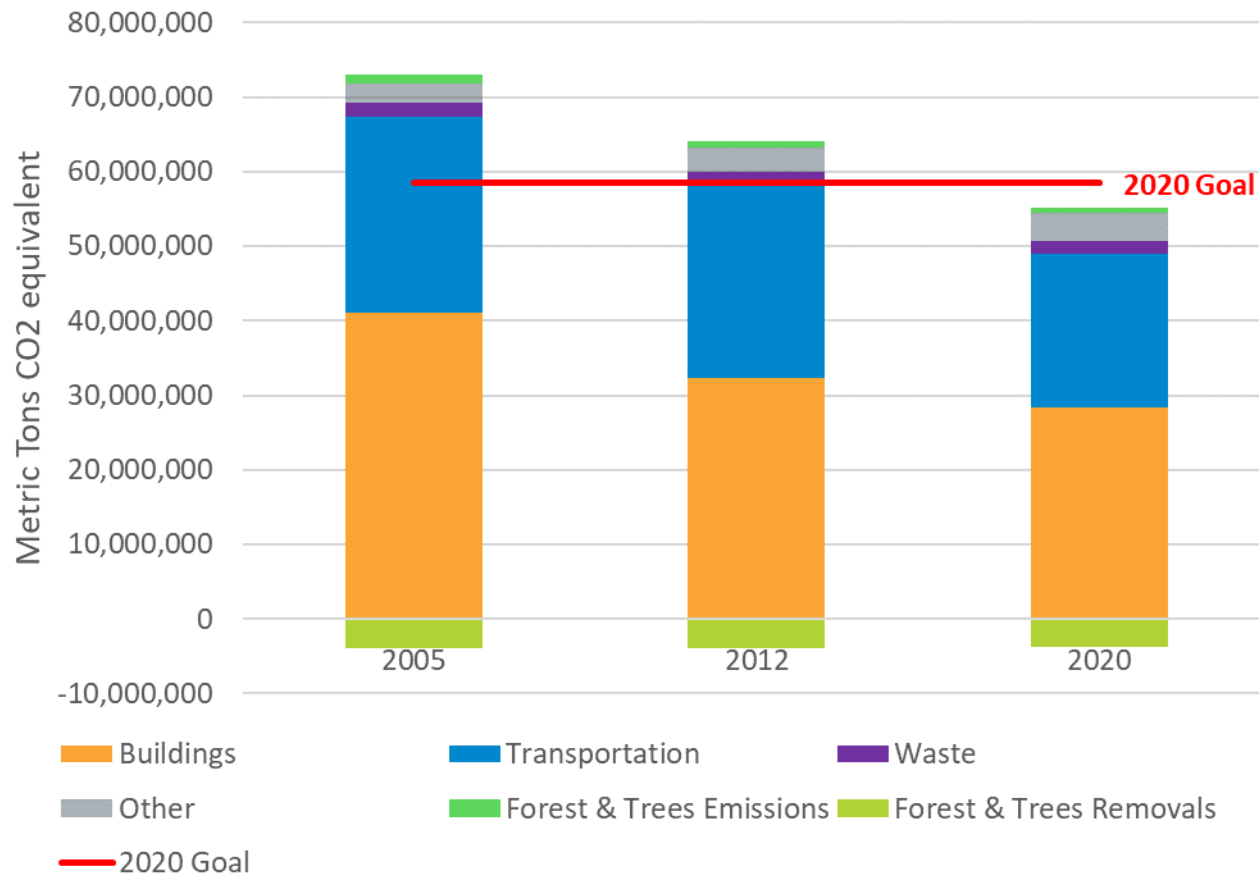
Climate, Energy and Environment Policy Committee (CEEPC) Meeting
November 17, 2022

Regional GHG Reduction Goals



Regional GHG Emission Trends

GHG emissions decreased by **24 percent** from 2005 to 2020 in metropolitan Washington.



Regional GHG Emission 2020 Stats



17.3

million metric tons
CO2 equivalent
emissions reduced
from 2005-2020

*This is the equivalent to
taking 3.3 million homes
off the grid for one year.*



52

percent total GHG
emissions from
energy consumption
in 2020

*31% from commercial
energy consumption and
21% from residential energy
consumption*



38

percent total GHG
emissions from
transportation in
2020

*31% from on-road, 3% from
off-road, 3% from air
passenger travel, <1% from
commuter rail*



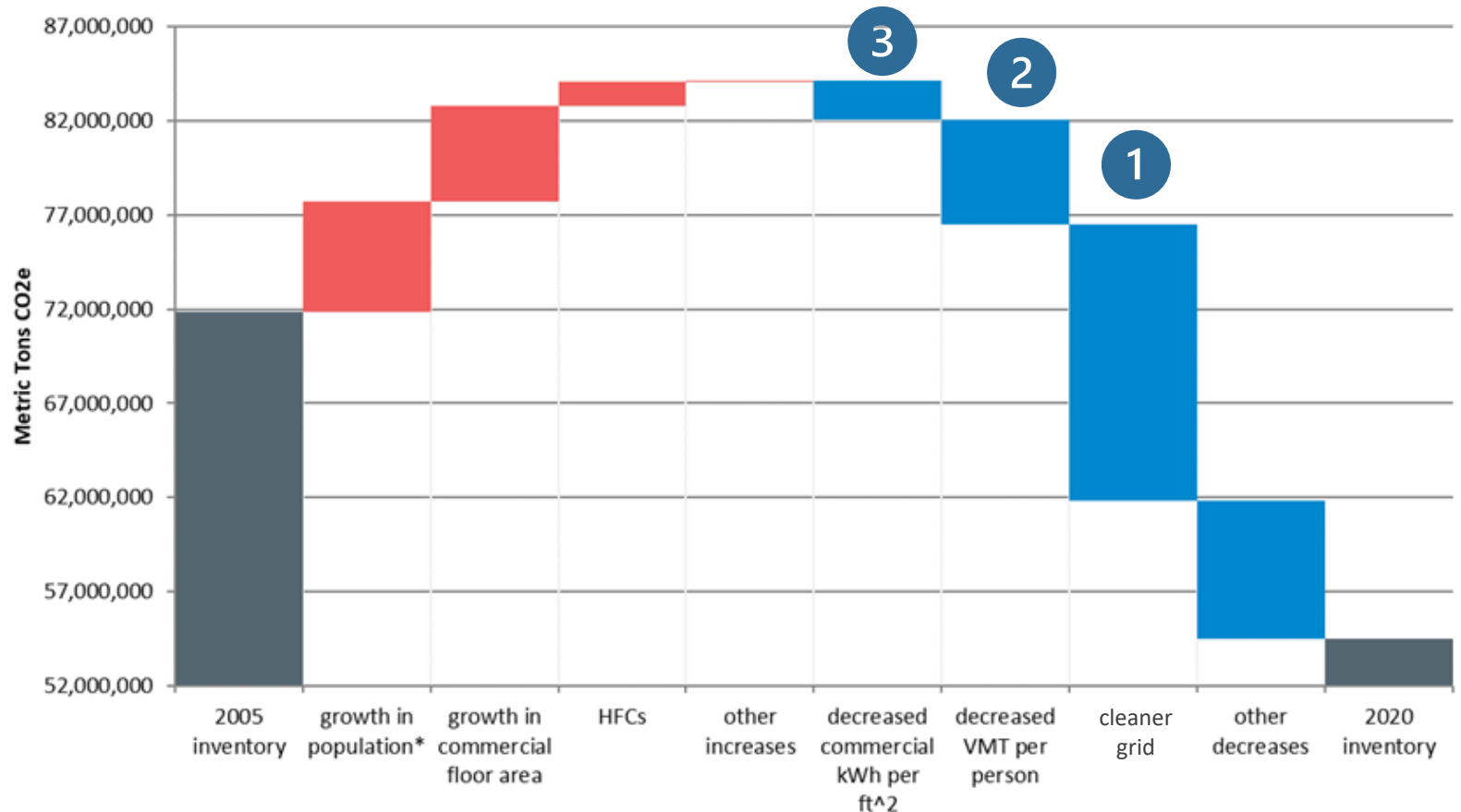
37


percent reduction
of per capita
emissions from
2005-2020

*Per capita emissions
reduced from 15.1 metric
tons of CO2 equivalent in
2005 to 9.6 in 2020.*




GHG Drivers of Change, 2005-2020





Factors decreasing GHG emissions



Factors increasing GHG emissions

KEY PERFORMANCE INDICATORS

2020 Regional Climate Plan



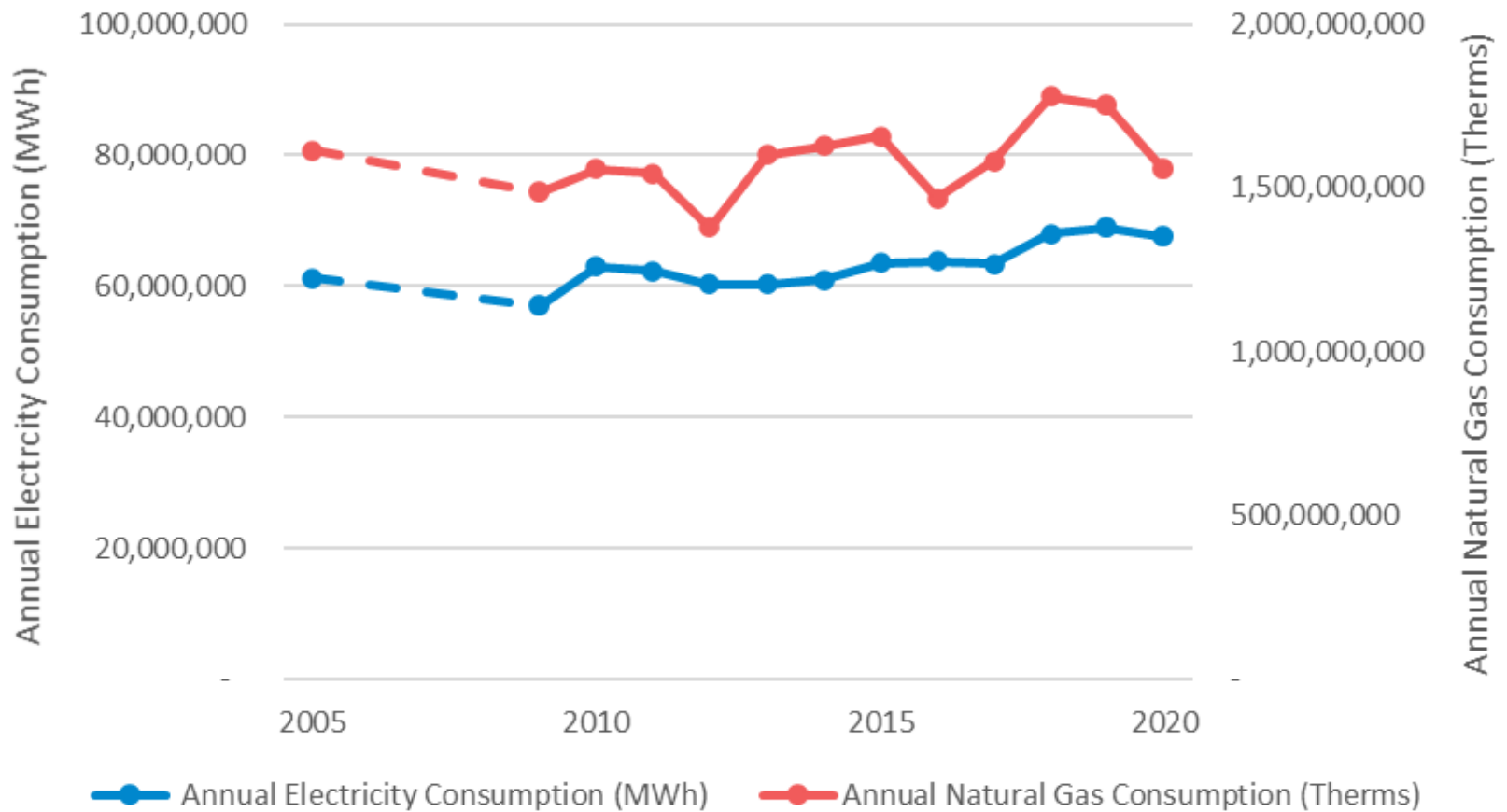
Metropolitan Washington
Council of Governments

eGRID GHG Subregion Emission Rates

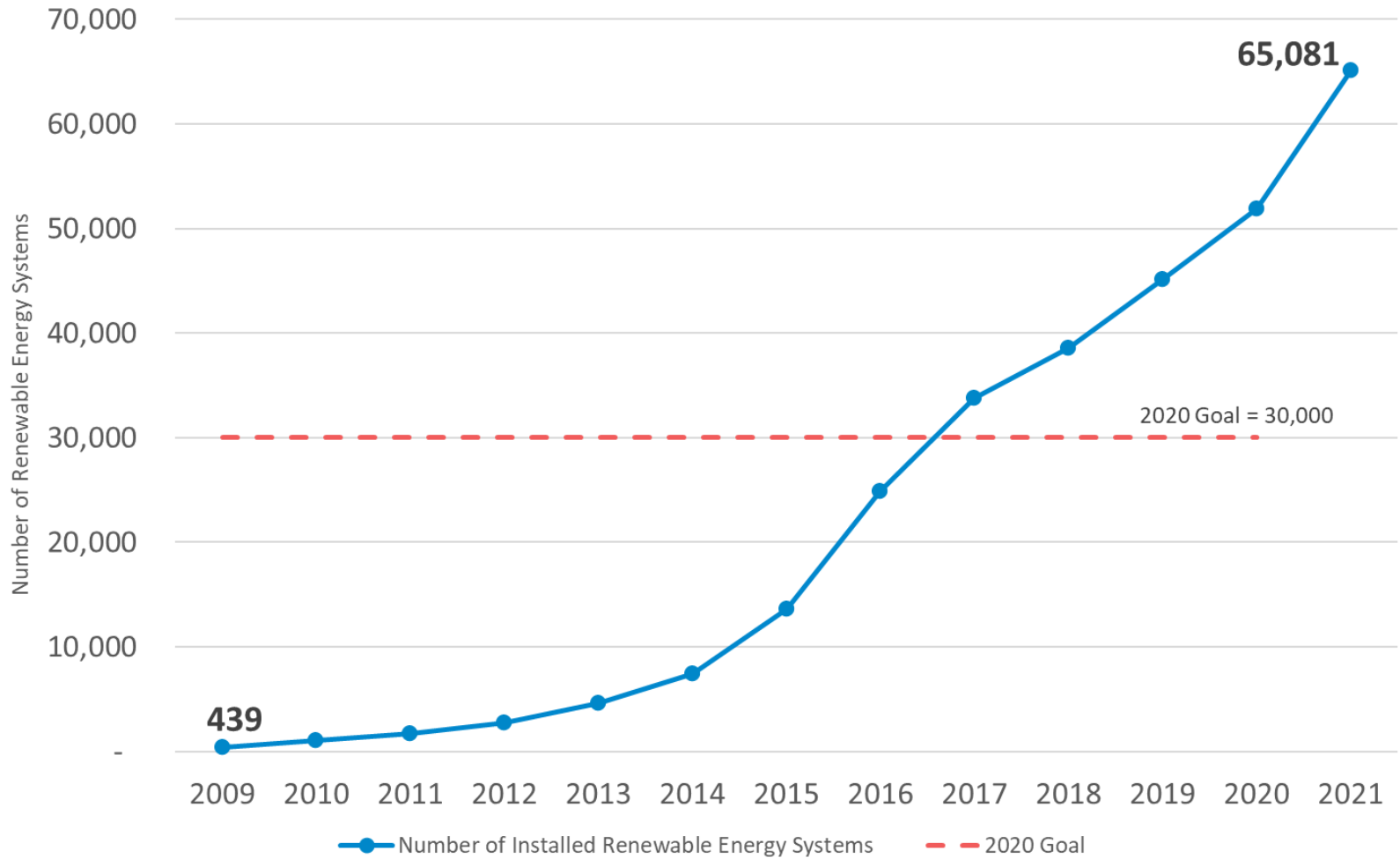
Year	RFCE – Serving DC/MD			SRVC – Serving VA		
	CO ₂ (lbs/MWh)	CH ₄ (lb/GWh)	N ₂ O (lb/GWh)	CO ₂ (lbs/MWh)	CH ₄ (lb/GWh)	N ₂ O (lb/GWh)
2005	1,139.1	30.3	18.7	1,134.9	23.8	19.8
2012	858.6	26.4	11.5	932.9	24	14.6
2016	758.2	50	9	805.3	67	11
2018	716.0	61	8	743.3	67	9
2020	652.5	45	6	623.1	50	7



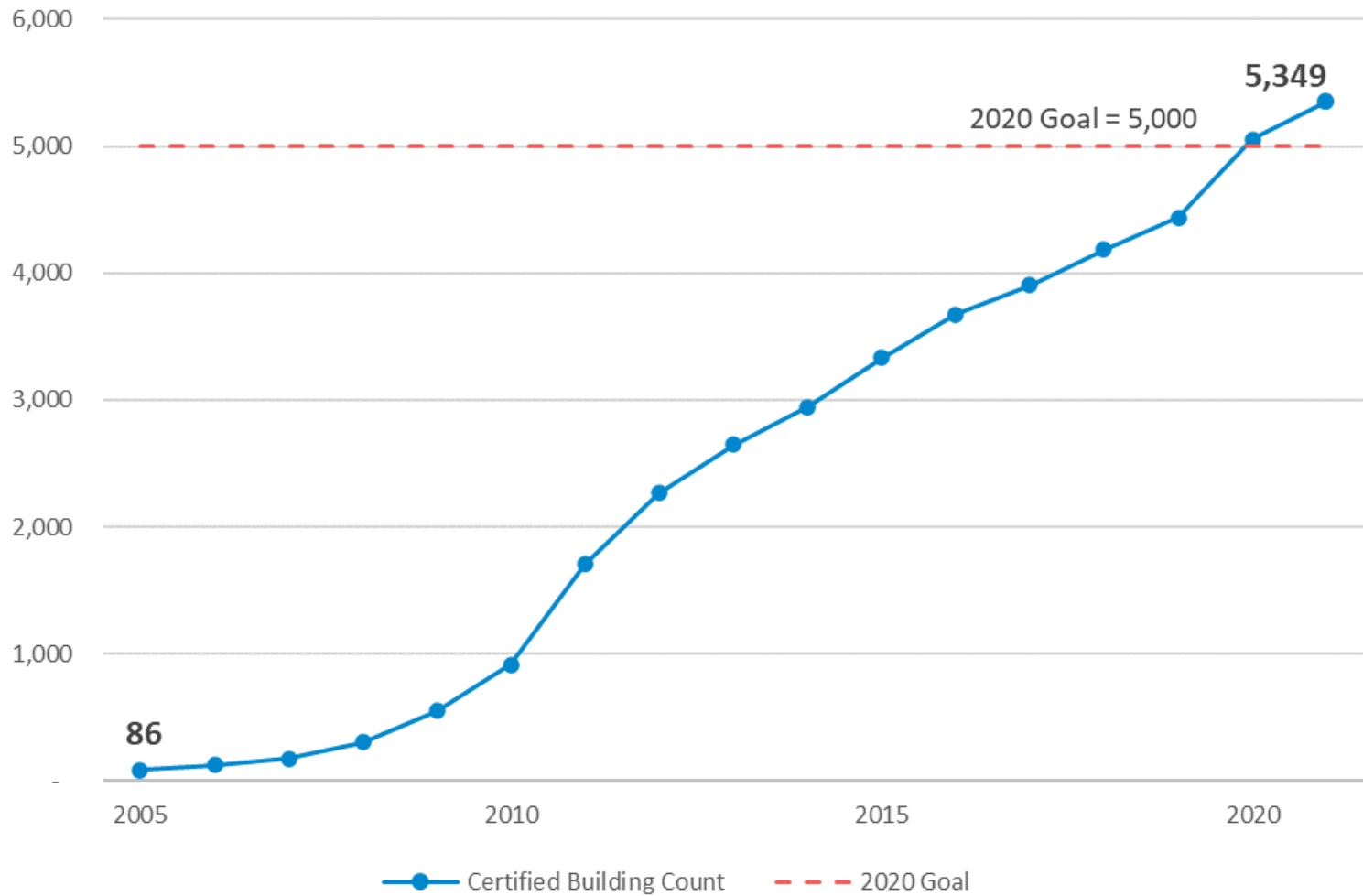
Energy Consumption Trends



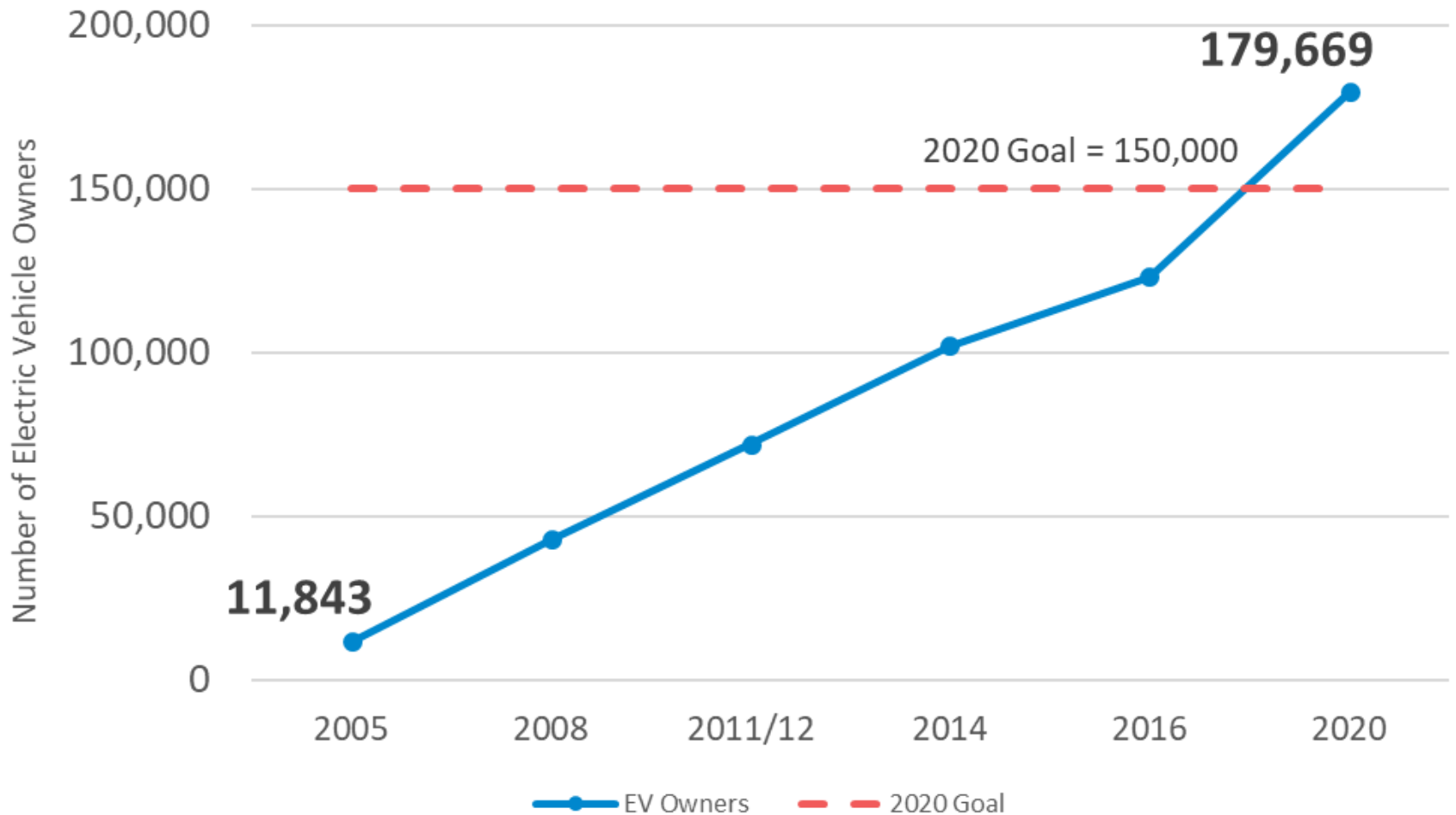
Grid-Connected Renewables Trends



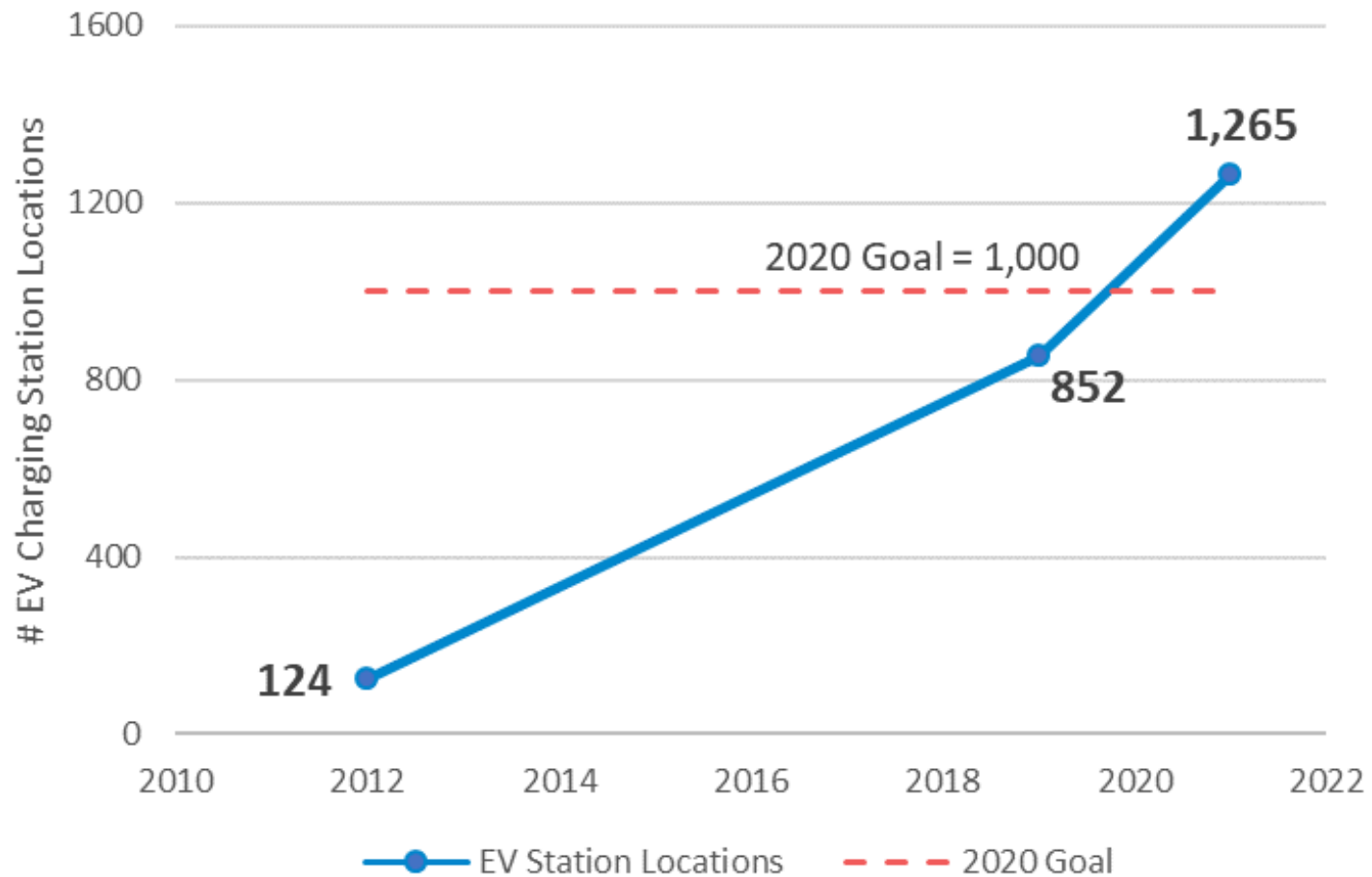
Green Buildings Trends



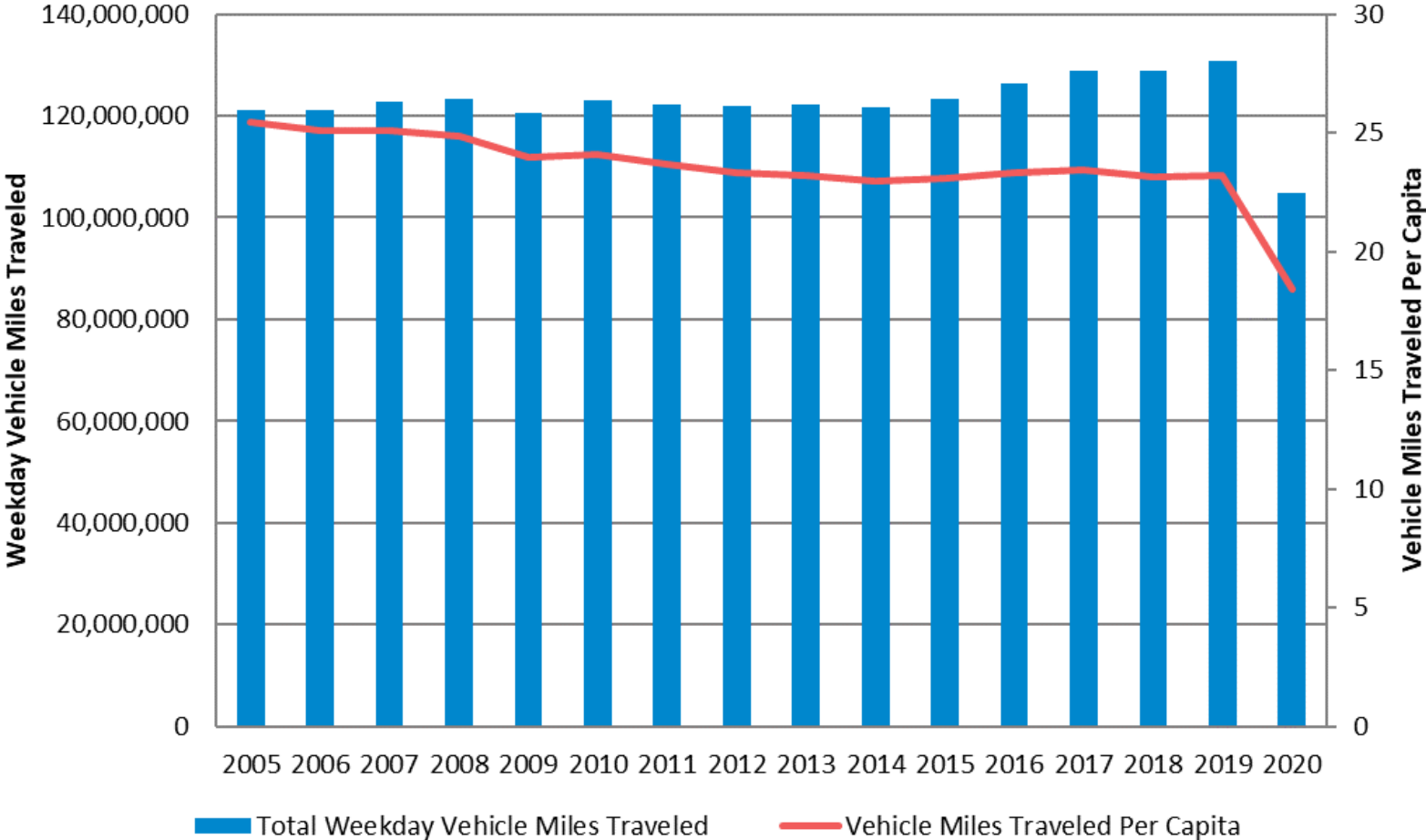
EV Ownership Trends



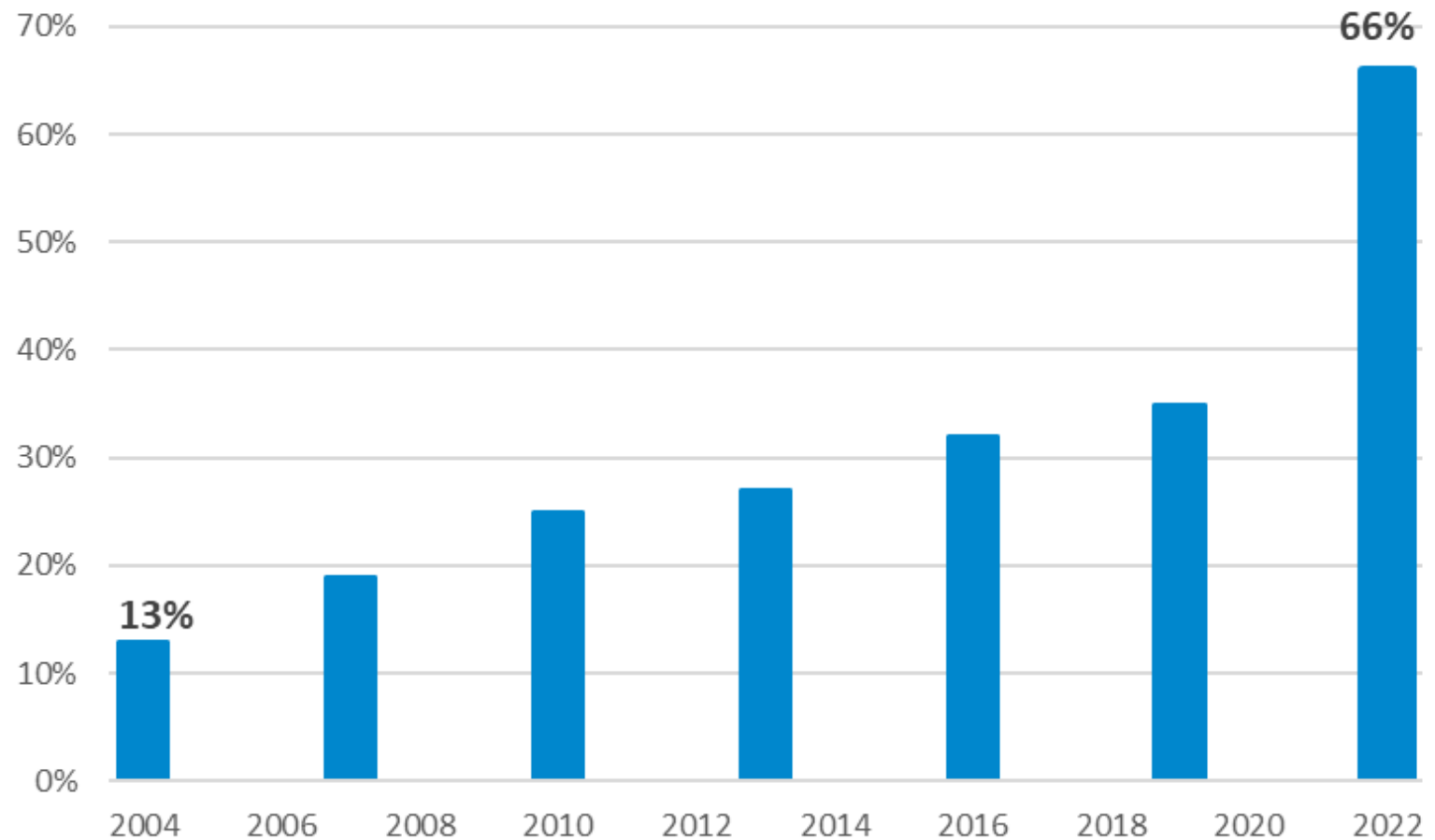
EV Charging Station Trends



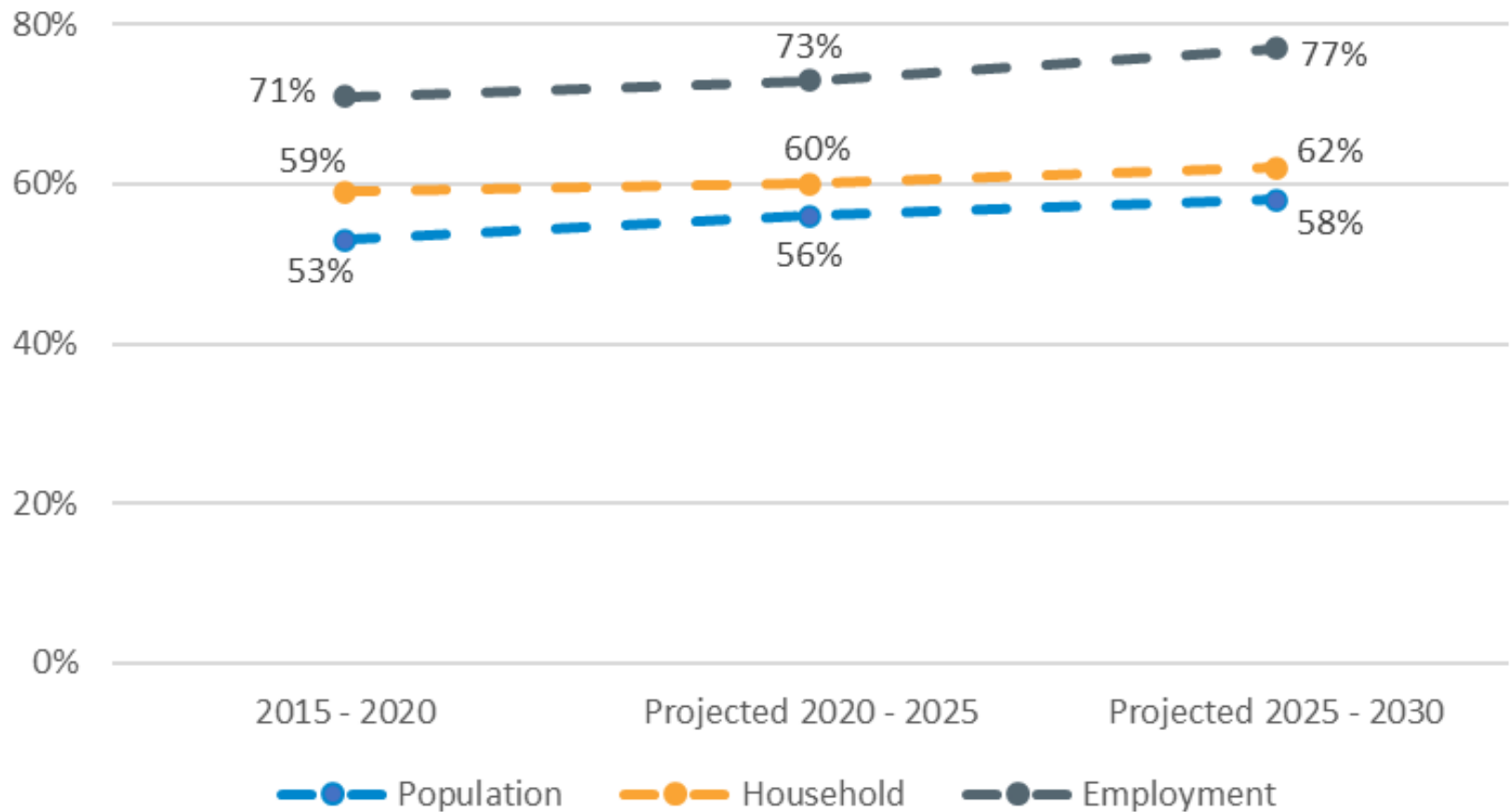
Vehicle Miles Traveled Trends



Telework Trends



% Growth in Activity Centers



2020, COVID-19 and GHGs

- **Buildings:** Emissions were lower than projected for 2020, in part due to the pandemic; however, the grid getting cleaner and weather impacts also played a role.
- **Transportation:** Emissions were lower than previously projected for 2020 because less people were on the roads and flying during the height of the pandemic.
- **Waste:** Solid waste emissions were overall lower than projected for 2020. Waste that would have been generated and collected from businesses were generated within individual residences during the height of the pandemic.

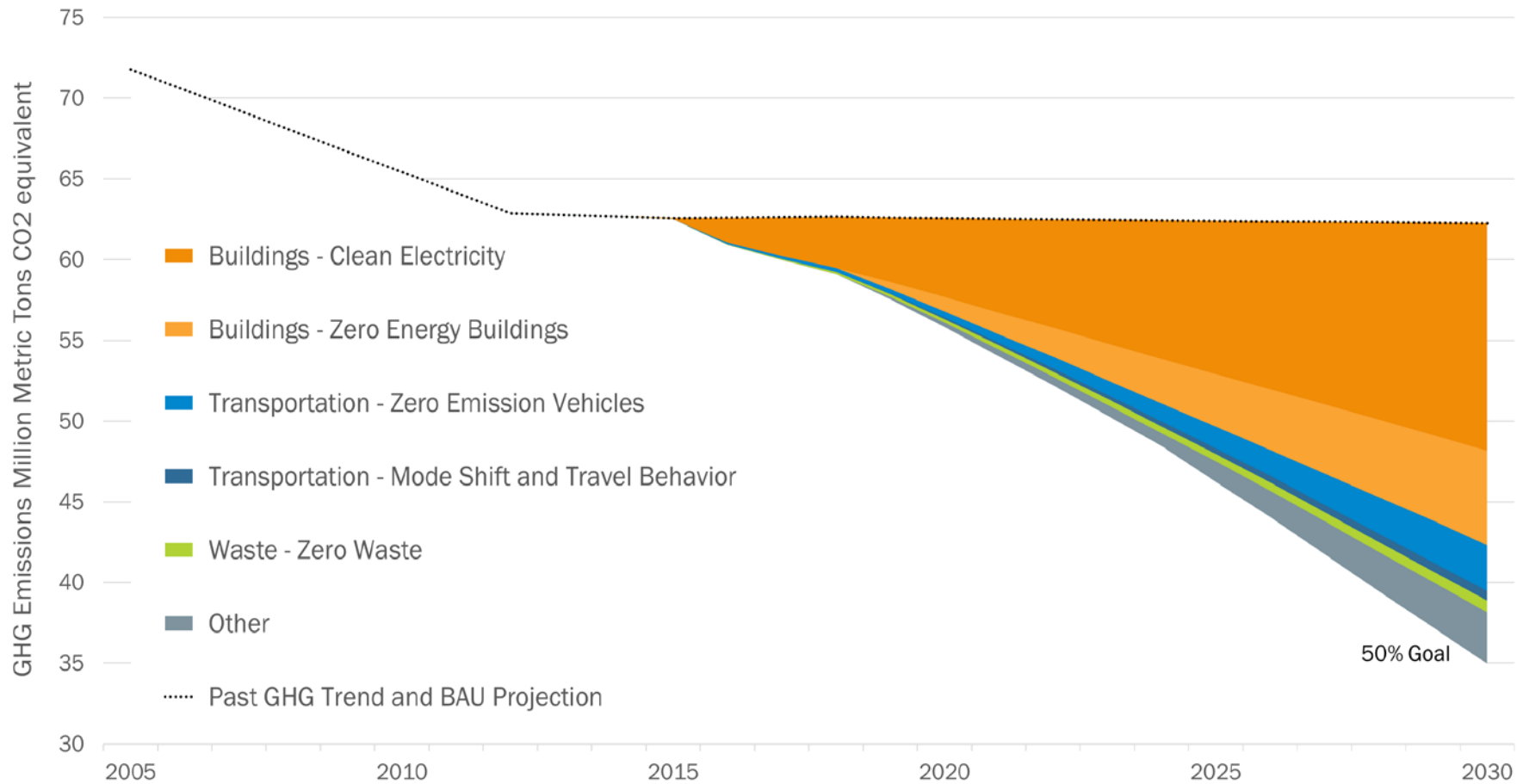
STRATEGIES AND SUPPORT

2030 Regional Climate Plan



Metropolitan Washington
Council of Governments

50% GHG Reduction Strategies by 2030



Climate Planning/Project Support

A. Planning, Policy & Implementation

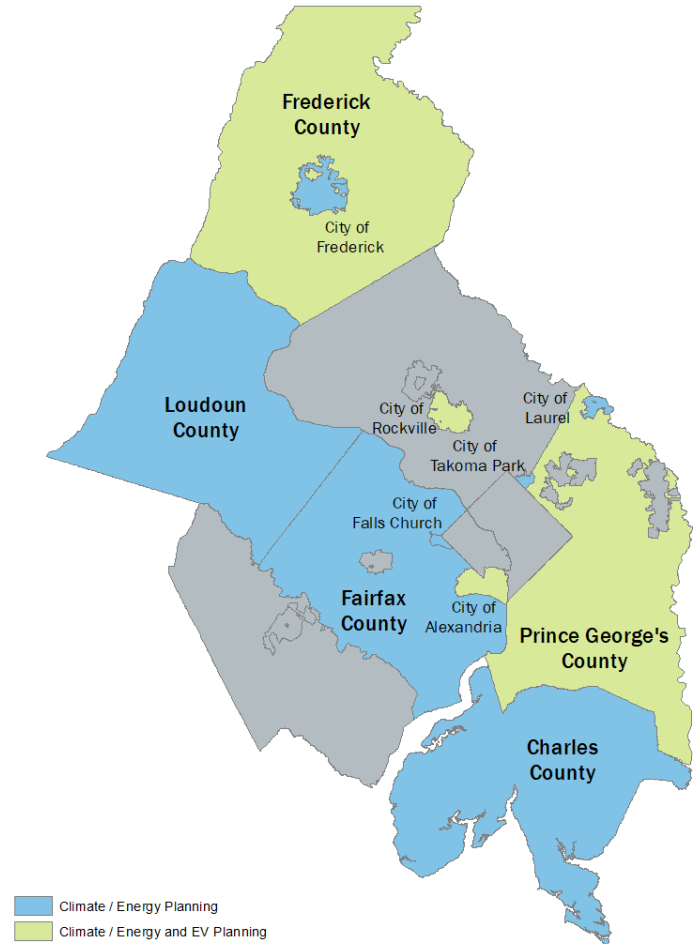
- Local and sub-regional climate and energy, EV planning
- New regional EV Deployment Working Group and Clearinghouse
- Coordinated policy guidance
- Diesel Emission Reduction Act repowers
- Bulk and cooperative procurement

B. Data and Tools

- Clean energy feasibility assessments
- Climate risk and vulnerability assessment tool

C. Outreach and Training

- DMV Climate Partners climatepartners.org
- Technical trainings, capacity building



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