

Climate Change Advisory Committee Meeting

Energy Programs Office
June 24, 2025





Pennsylvania
Department of
Environmental Protection

***This meeting will be recorded in its entirety
for the purposes of drafting meeting minutes.
By participating in this meeting, you are
consenting to the recording, retention, and
use of this session.***

Agenda

- Roll Call, Introduction
- Approval of April Minutes
- Public Comment
- Presentation/Discussion –
Transportation Decarbonization
and Mode Shift
- Break
- Presentation/Discussion – Draft
2025 GHG Inventory
- DEP Updates
- Meeting Wrap Up
- Review August Agenda
- New Business

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Public Comment (15 Min)



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Panel Discussion: Transportation Decarbonization and Mode Shift



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**Break
(10 Min)**



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DRAFT

2025 Pennsylvania Greenhouse Gas Inventory

Energy Programs Office
June 24, 2025





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2025 PA GHG Inventory

- State Inventory Tool (SIT)
 - Made available in January 2025
 - All modules updated with data through 2022
- Fuel consumption data for 2023 included from SEDS
- Additional sources included from EPA's U.S. Greenhouse Gas Emissions and Sinks

2025 PA GHG Inventory

- 2022 shows a small net emissions decrease from 2021.
- Emissions decreased across most sectors, except the residential and commercial sectors.
- State emissions decreased 21.2 percent from the 2005 baseline.

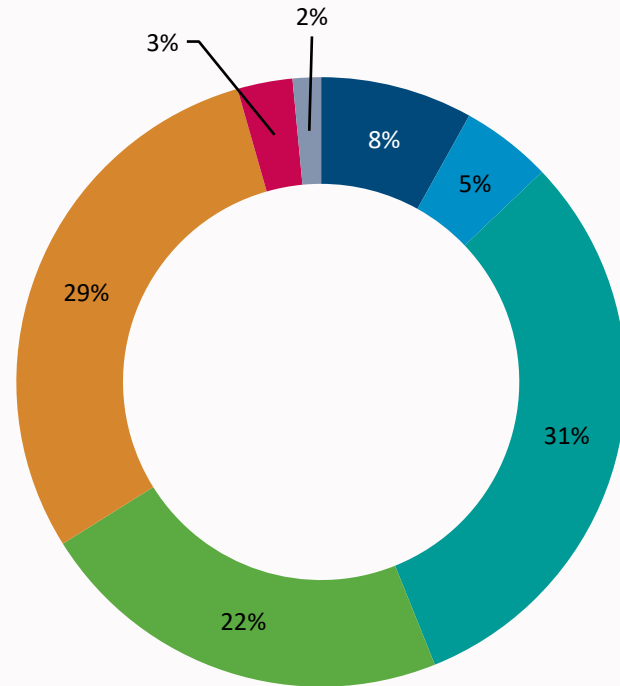
2025 PA GHG Inventory

	2022 Emissions	% Change from 2021		% Change from 2005	
Residential	20.43	↑	4.5%	↓	-15.8%
Commercial	12.18	↑	6.3%	↓	-6.1%
Industrial	78.41	↓	-1.8%	↑	13.8%
Transportation	56.08	↓	-0.1%	↓	-20.8%
Electricity Production	74.52	↓	-4.1%	↓	-41.0%
Agriculture	7.40	↓	-5.7%	↓	-6.4%
Waste Management	3.80	↓	-0.1%	↓	-23.4%
Forestry and Land Use Non-CO ₂ Emissions	0.20	↓	-21.6%	↑	123.1%
Total Gross Emissions	253.01	↓	-1.4%	↓	-20.0%
Forestry and Land Use Net Carbon Flux	-28.42	↓	-1.0%	↓	-9.2%
Total Net Emissions	224.39	↓	-1.5%	↓	-21.2%



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2025 PA GHG Inventory

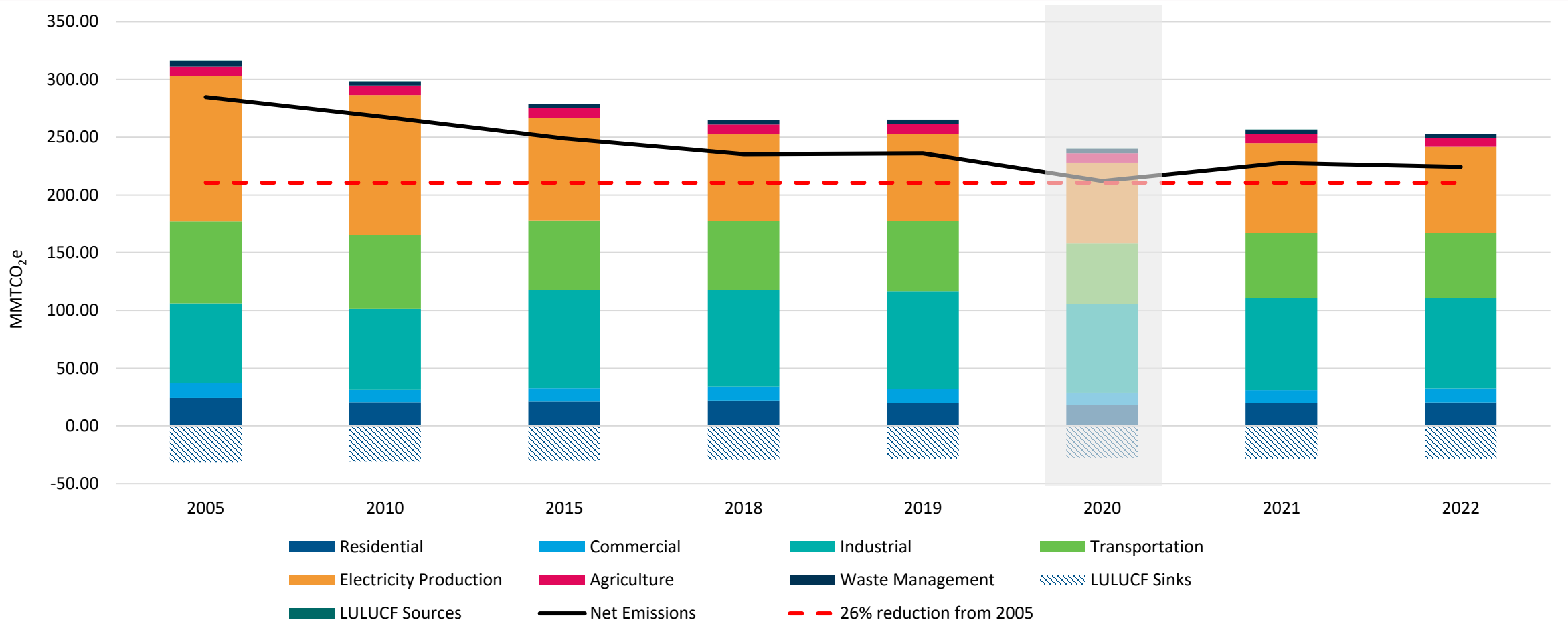


■ Residential ■ Commercial ■ Industrial ■ Transportation ■ Electricity Production ■ Agriculture ■ Waste Management



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2025 PA GHG Inventory

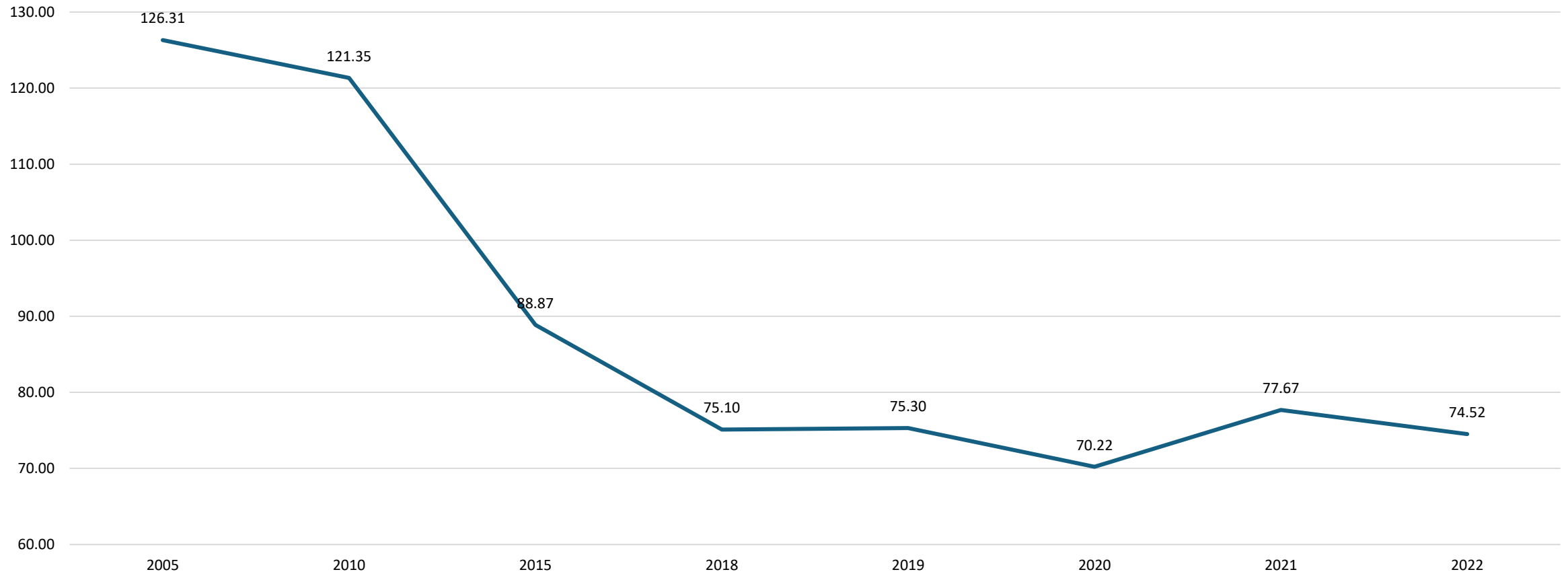




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2025 PA GHG Inventory

GHG Emissions from Electricity Production (MMTCO₂e)

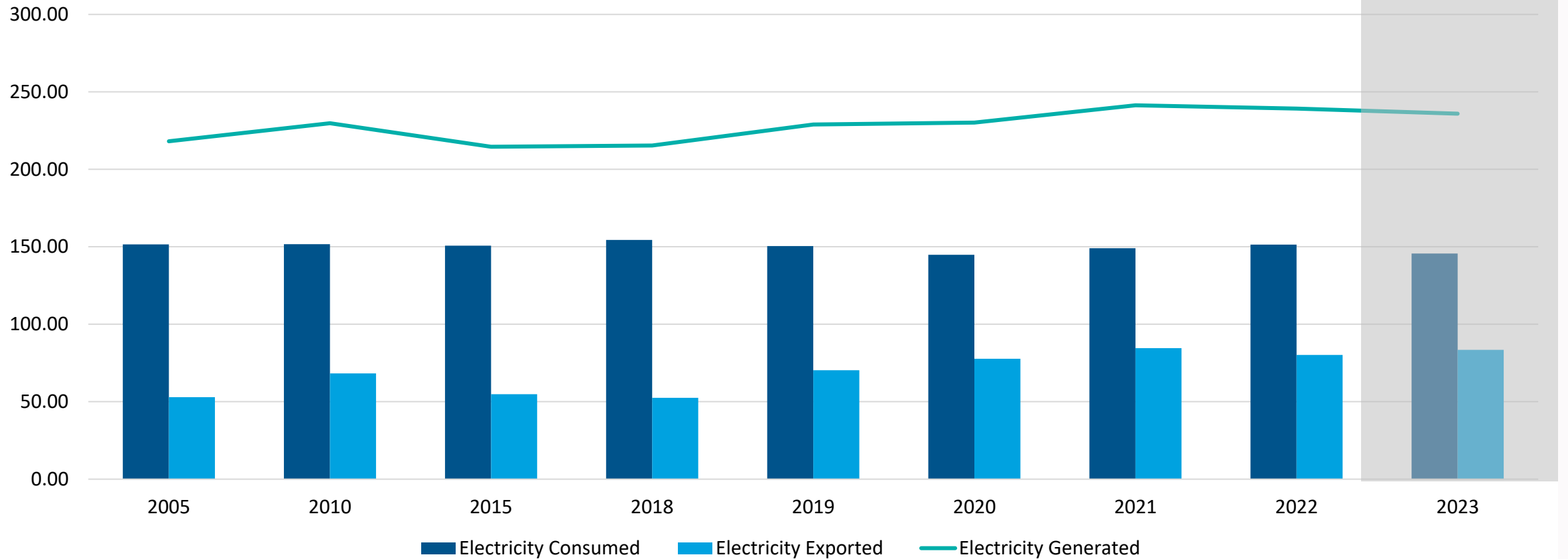




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2025 PA GHG Inventory

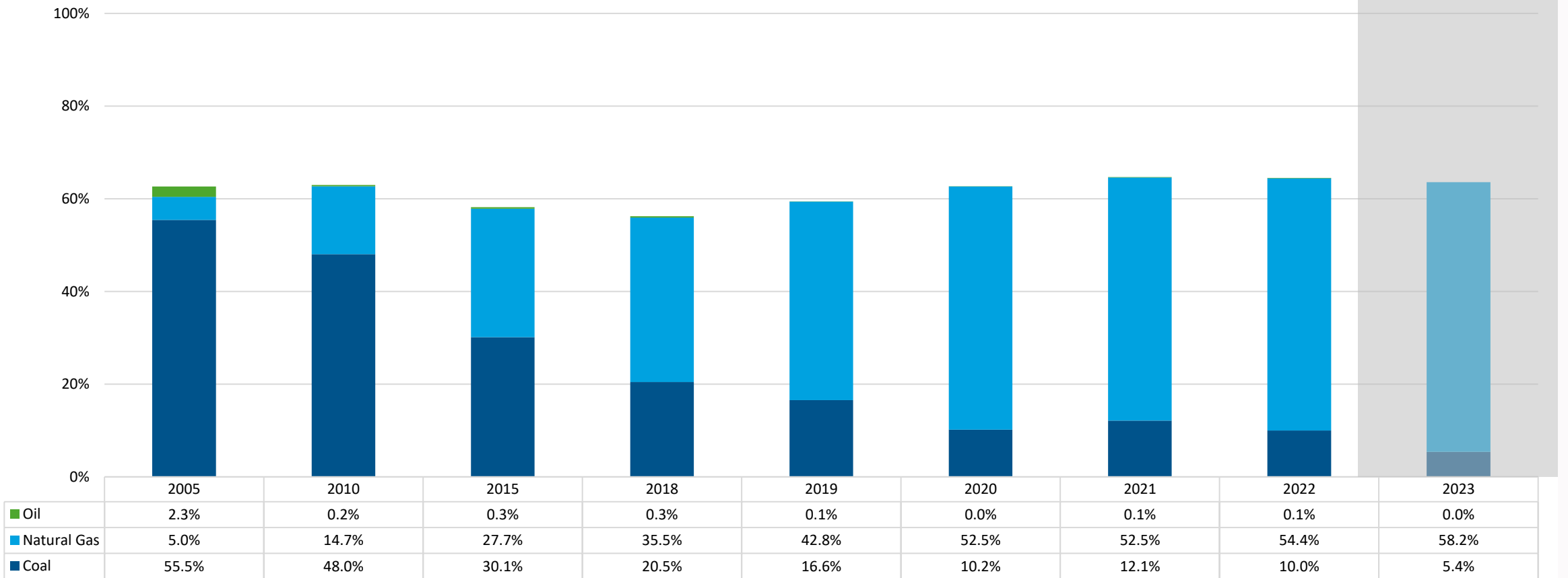
Total Electricity Generated, Consumed, and Exported (TWh)





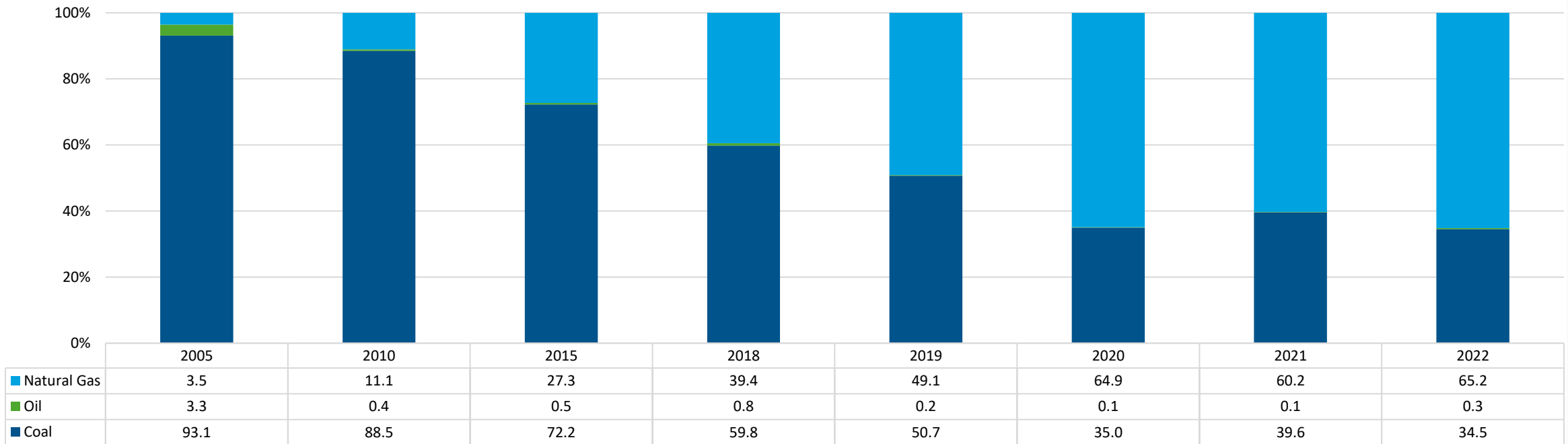
2025 PA GHG Inventory

Percent Electricity Production By Fuel Type



2025 PA GHG Inventory

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

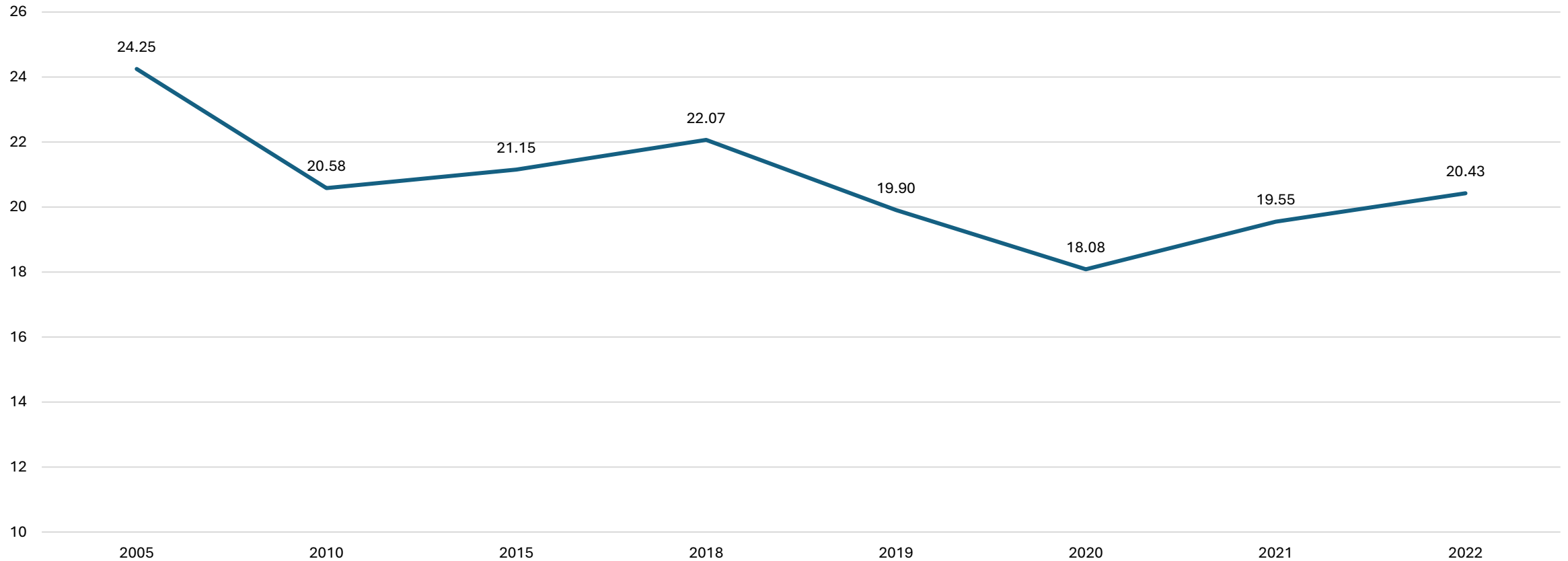




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2025 PA GHG Inventory

GHG Emissions from Residential Sector (MMTCO₂e)



2025 PA GHG Inventory

Residential Emissions by Fuel Type (MMTCO₂e)

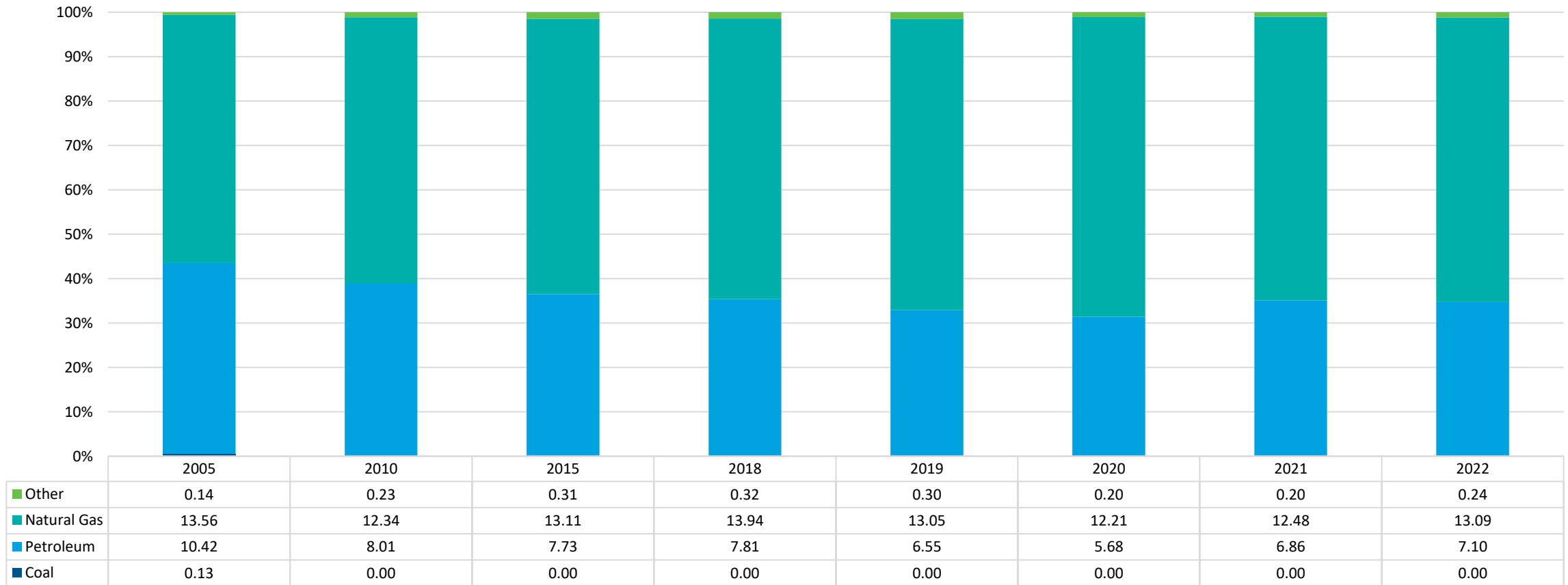


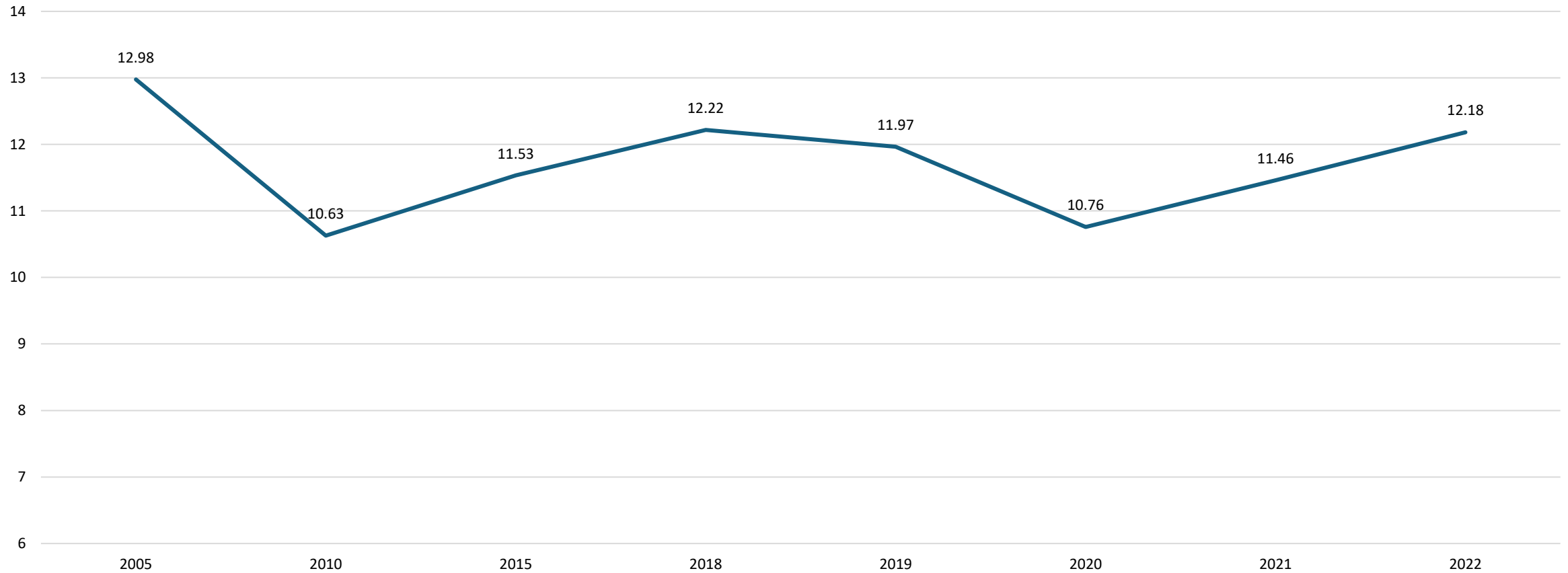
Table values presented in MMTCO₂e



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2025 PA GHG Inventory

GHG Emissions from Commercial Sector (MMTCO₂e)



2025 PA GHG Inventory

Commercial Emissions by Fuel Type (% of Total)



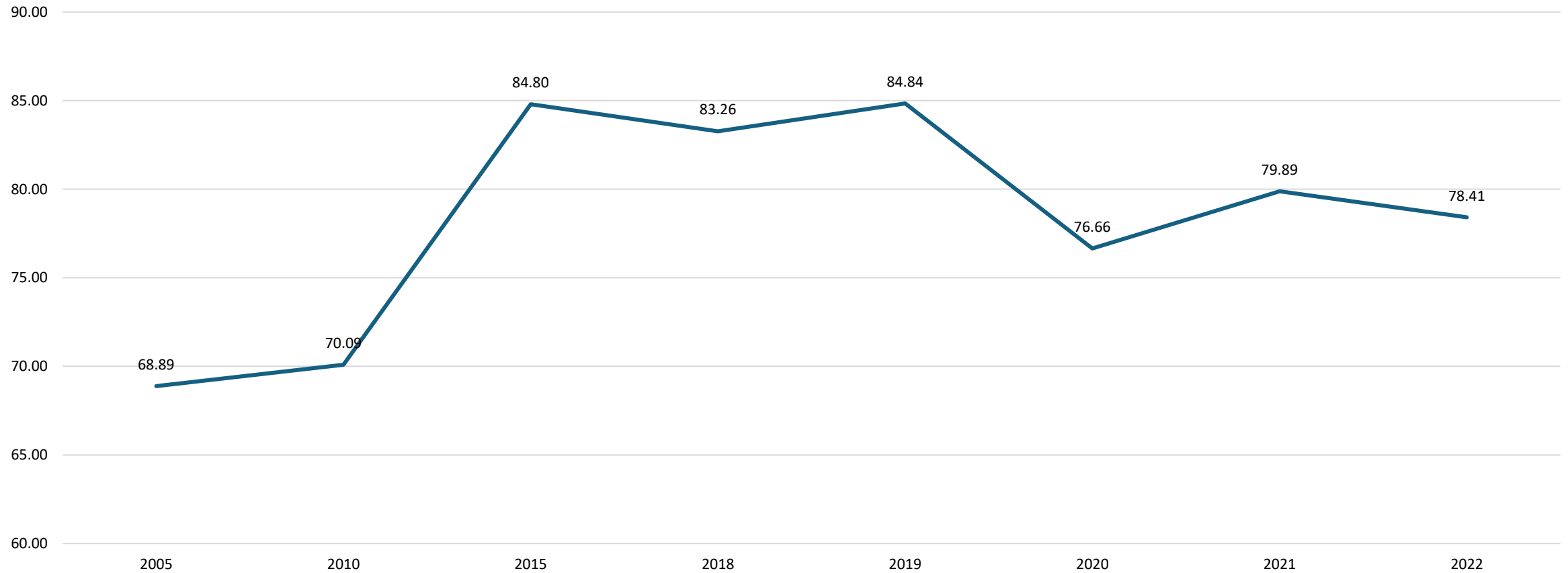
Table values presented in MMTCO₂e



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2025 PA GHG Inventory

GHG Emissions from Industrial Sector (MMTCO₂e)





2025 PA GHG Inventory

GHG Emissions from Industrial Sector by Source (MMTCO₂e)

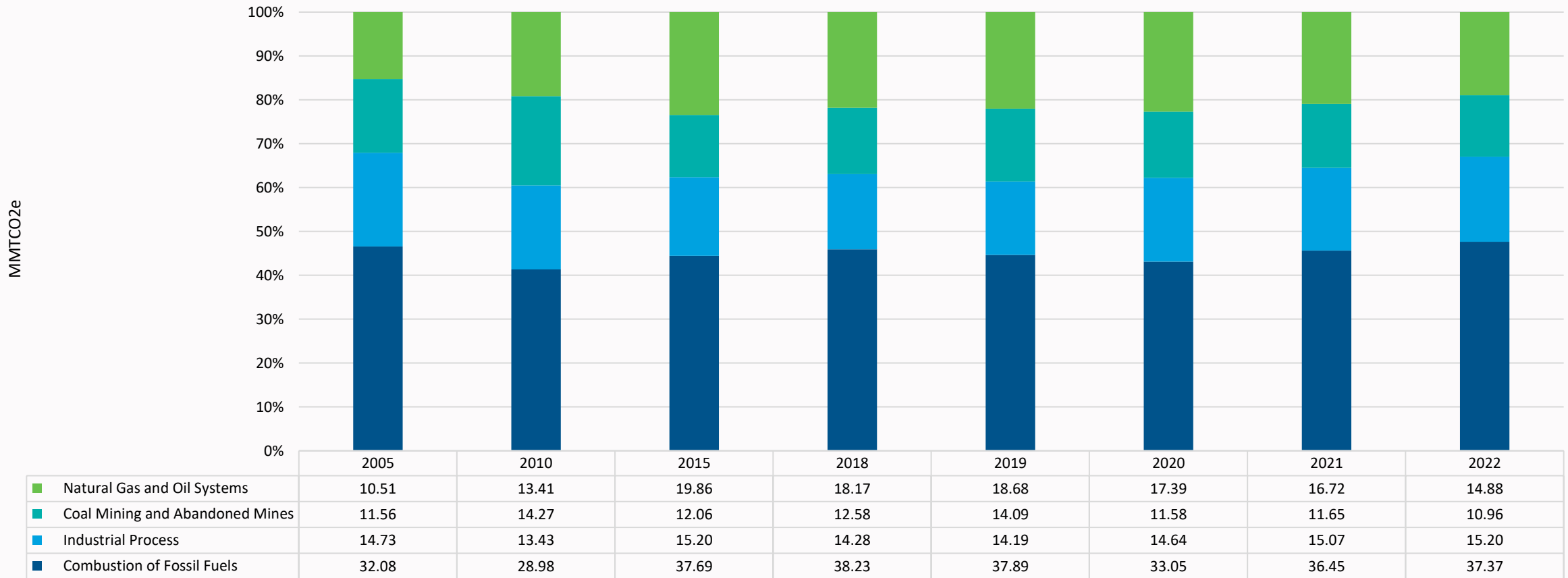


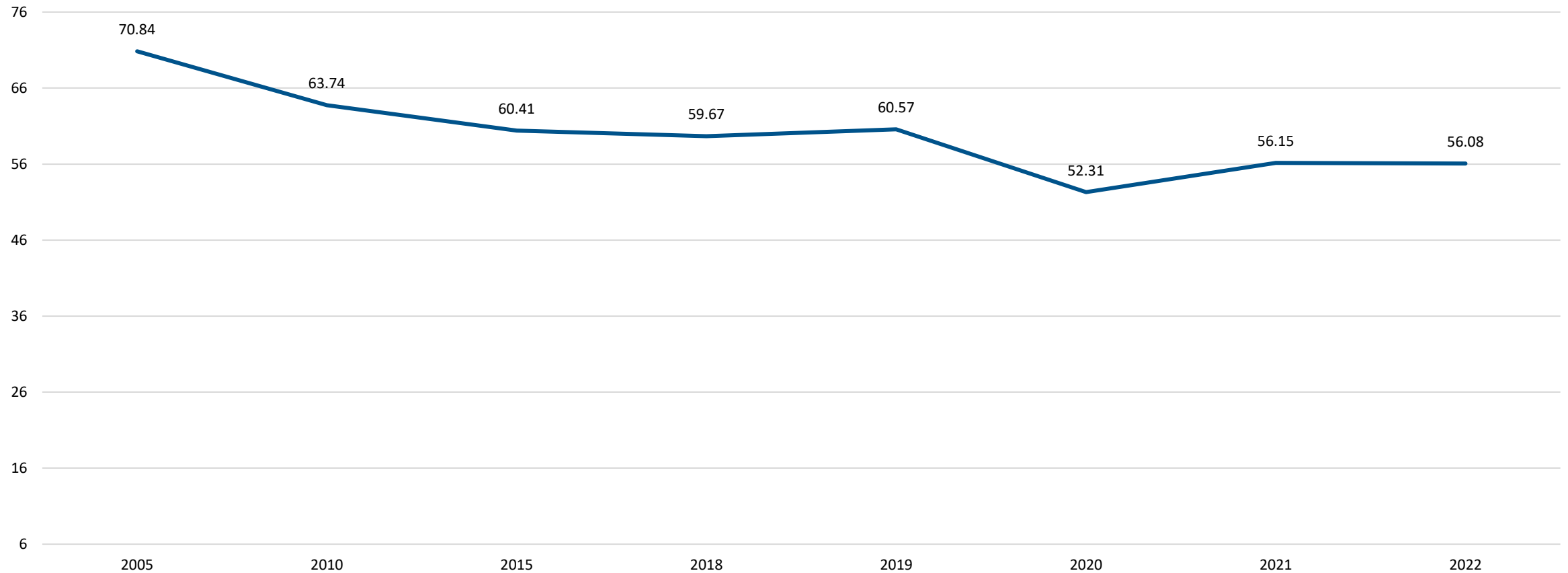
Table values presented in MMTCO₂e



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2025 PA GHG Inventory

GHG Emissions from Transportation Sector (MMTCO₂e)





2025 PA GHG Inventory

Transportation Sector GHG Emissions by Fuel Type (MMTCO₂e)

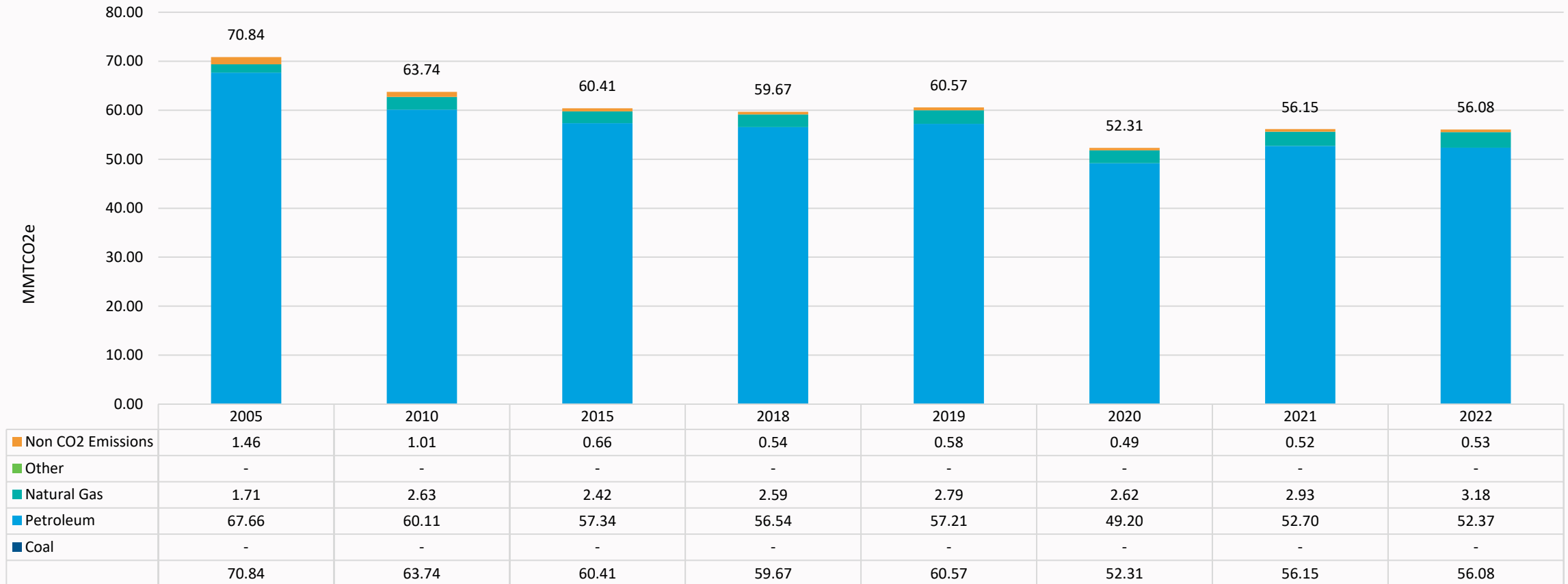


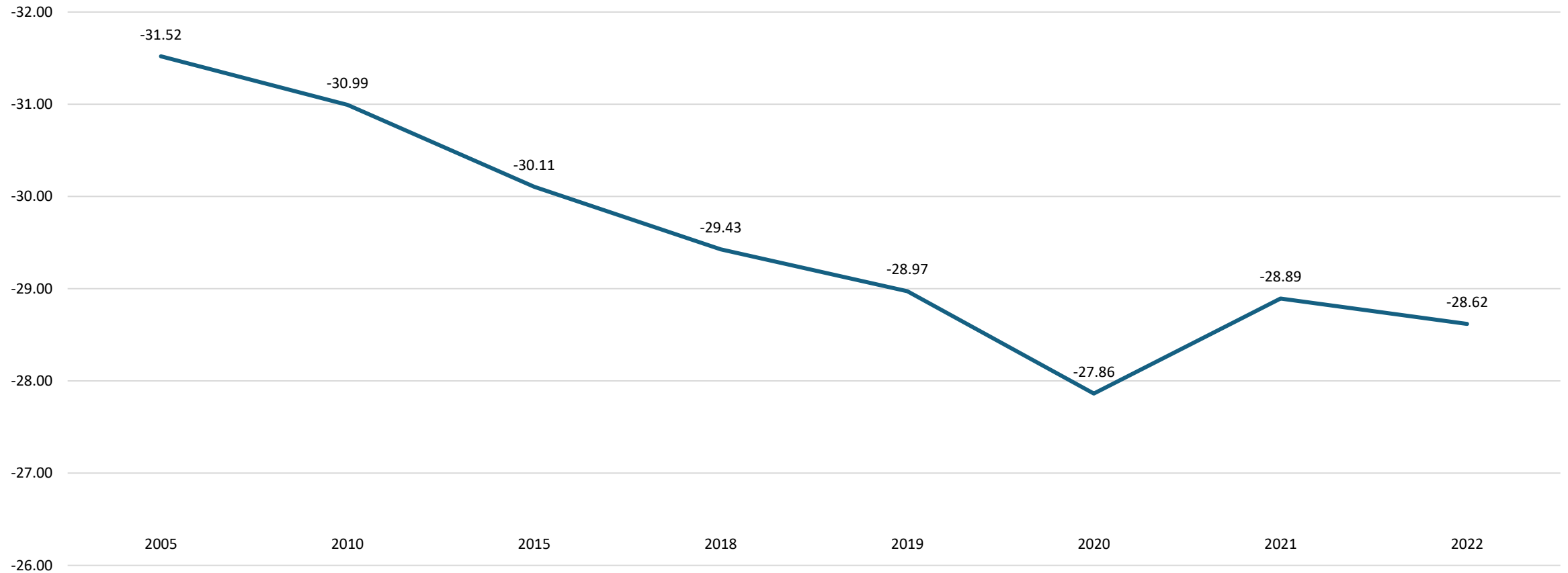
Table values presented in MMTCO₂e



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2025 PA GHG Inventory

GHG Emissions from LULUCF Sector (MMTCO₂e)

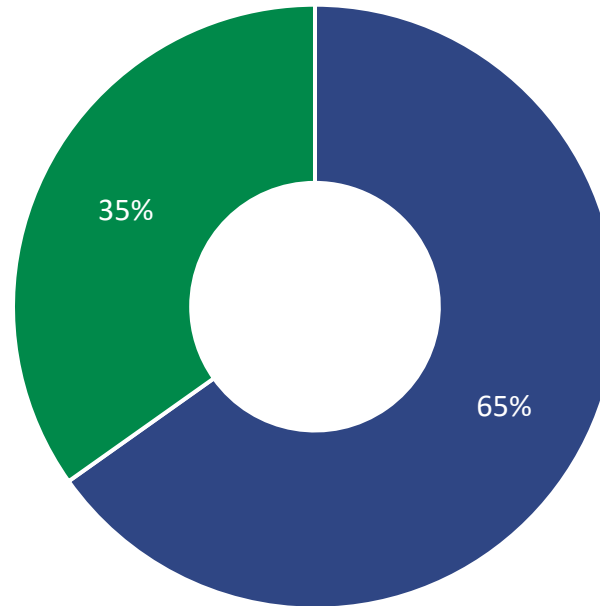




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2025 PA GHG Inventory

GHG Emissions from Waste Management Sector
(Percent of Total)



■ Solid Waste ■ Wastewater

2025 PA GHG Inventory

GHG Emissions from Agricultural Sector by Source (MMTCO₂e)

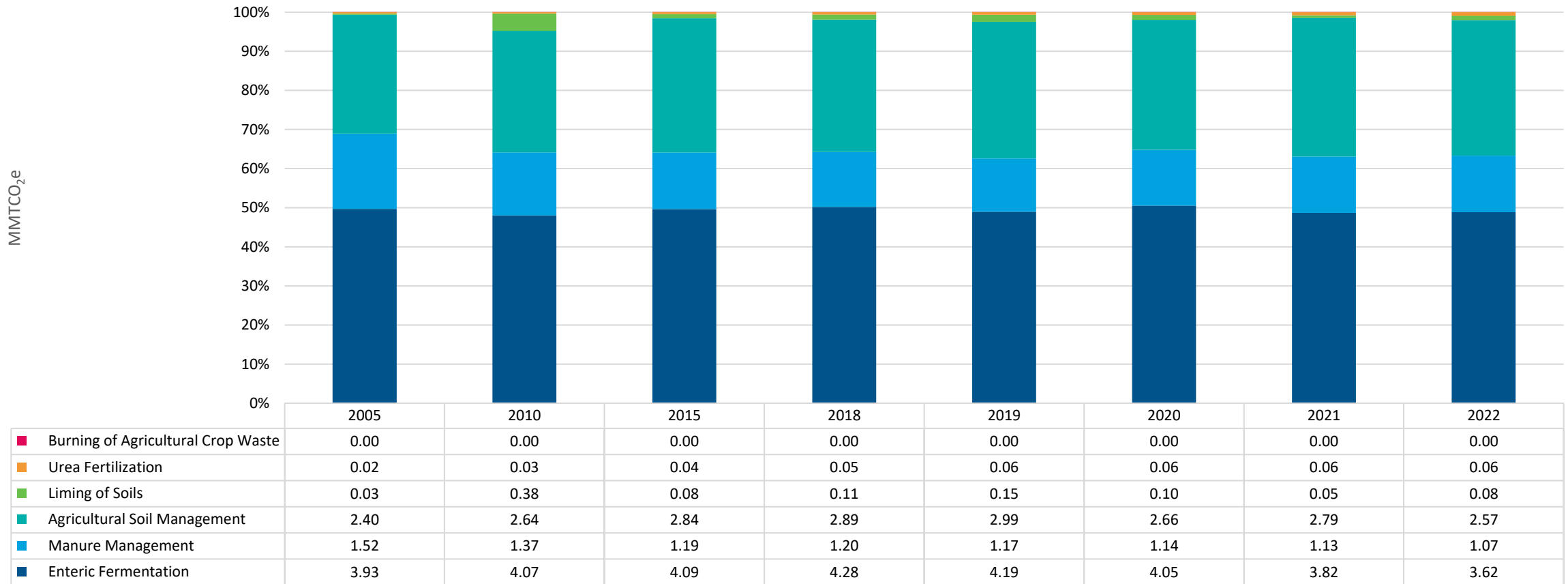
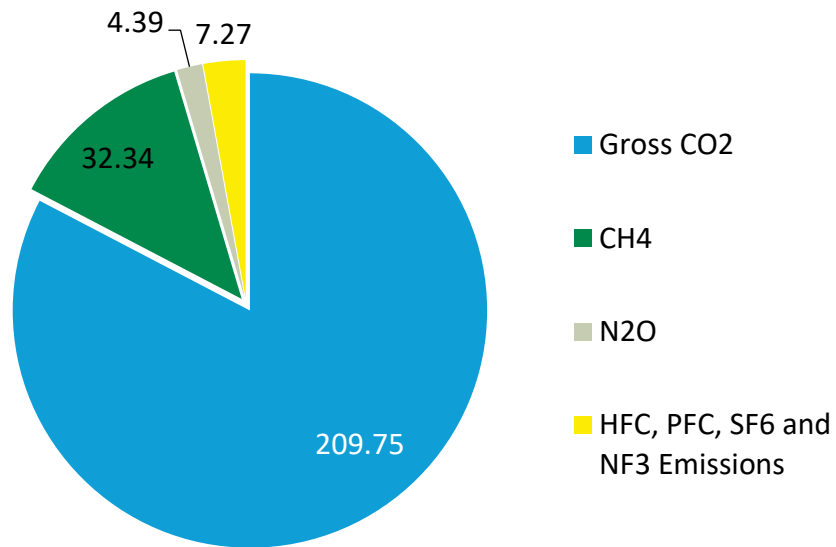


Table values presented in MMTCO₂e

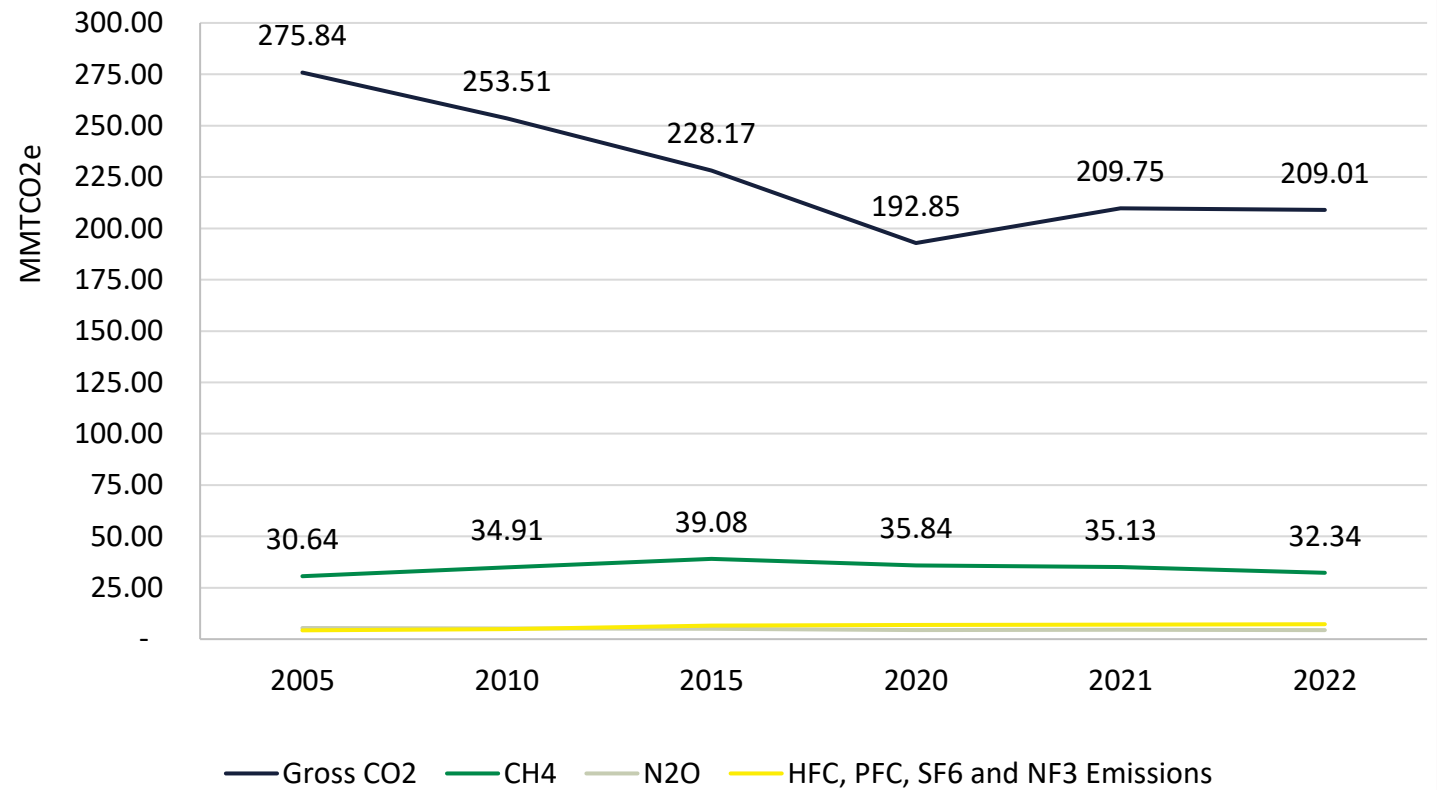


2025 PA GHG Inventory

GHG Emissions by Gas, 2022 (MMTCO₂e)



GHG Emissions by Gas, 2005-2022 (MMTCO₂e)





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DEP Updates

Climate Pollution Reduction Grants (CPRG) – Implementation/ RISE PA: DEP is now accepting applications for medium- and large-scale decarbonization projects at industrial facilities through 11:59 pm on August 29, 2025. The application can be found on DEP's [RISE PA webpage](#). PennTAP is now accepting applications for small-scale projects at industrial facilities through 11:59 pm on August 15, 2025. The application can be found on PennTAP's [RISE PA webpage](#).

Upcoming EPO Events

Dates and topics TBD, Clean Energy Opportunity Spotlight Series: The Spotlights aim to connect participants with resources and information about an array of funding and technical assistance programs designed to help Pennsylvania's homes, businesses, and non-profits thrive in a diversified, affordable clean energy future. Based on feedback from previous Spotlight participants including PA residents, municipal officials, and members of non-profit organizations, the tentative 2025 schedule will include monthly topics such as residential energy auditing, efficiency rebate programs, solar energy topics, and more to be announced.

Pennsylvania Grid Resilience Grant Program

Energy Programs Office
June 24, 2025

JOSH SHAPIRO, GOVERNOR | JESSICA SHIRLEY, ACTING SECRETARY



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What is the Grid Resilience Grant?

- Competitive funding opportunity to implement resilience measures throughout PA intended to mitigate the impact of electric grid disruptive events.
- Funded by a state formula grant from the U.S. Department of Energy (USDOE) through the federal Infrastructure Investment and Jobs Act (IIJA), Section 40101D, titled Preventing Outages and Enhancing the Resilience of the Electric Grid, the Grid Resilience Grant program
- The Department of Environmental Protection (DEP) will be awarding approximately \$8 Million for new awards under round 2 of this competitive grant program.



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Who can apply?

- an electric grid operator;
- an electricity storage operator;
- an electricity generator;
- a transmission owner or operator;
- a distribution provider;
- a fuel supplier;
- and any other relevant entity, as determined by DEP in consultation with DOE.

What Projects are Eligible?

- Weatherization technologies and equipment;
- Fire resistant technologies and fire prevention systems;
- Monitoring and control technologies;
- The undergrounding of electrical equipment;
- Utility pole management;
- The relocation of power lines or the reconductoring of power lines with low sag;
- Advanced conductors;
- Vegetation and fuel load management;
- The use or construction of infrastructure for enhancing system adaptive capacity during disruptive events, including microgrids and battery storage subcomponents;
- Adaptive protection technologies;
- Advanced modeling technologies;
- Hardening of power lines, facilities, substations, or other systems; and
- The replacement of old overhead conductors and underground cables.



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What is an ineligible project/cost?

- Construction of a new
 - electric generating facility; or
 - large scale battery storage facility that is not used for enhancing system adaptive capacity during disruptive events;
- Cybersecurity
- Additionally, the following type of expenditures are ineligible: Costs associated with preparation of the PA GRG application; land acquisition; permits; landscaping; advertising; business start up costs; indirect costs (i.e., general administrative and overhead, contingency funds, etc.); travel, lodging, subsistence; conference or meeting expenses including catering, conference equipment and room rental.

What is the match requirement?

- An eligible entity that receives a grant award under the Program is required to match a minimum of 100 percent of the award amount if they are not considered a “Small Utility”, selling not more than 4,000,000 megawatt hours of electricity per year.
- If the eligible entity sells not more than 4,000,000 megawatt hours of electricity per year, the required minimum match will be one third of the award amount.
- Matching funds means any new public or private investment in the proposed project made by an eligible applicant. Eligible applicants must provide letters documenting the financial commitment. Eligible letters and matching fund use are discussed in the application requirements section of the PA GRG Round 2 Guidance Document.



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What is the application process?

- All applicants will have to submit a concept paper to be considered.
- The DEP will review all concept papers and provide feedback.
- Applicants will then submit a full application.
- The DEP will review and score all applications and select awardees.



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How to apply?

- All Concept Papers, Full Application and Supporting Documentation must be submitted online through DCED's Electronic Single Application (ESA) system. <http://www.esa.dced.state.pa.us/> Emails, hard copy mailings, or faxes will not be accepted.
- Please see Guidance Document, Concept Paper Instructions, and Full Application Instructions for more detailed information.



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How will the project be evaluated?

- Targeting Investments to Worst Performing Circuits
- Improving Grid Reliability and Resilience
- Increasing Economic Resilience
- Ensuring Workforce Benefits
- Improving Environmental Benefits and Decreasing Greenhouse Gases (GHGs)
- Improving Outcomes in Rural and Urban Communities
- Project Readiness



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When to apply?

- Concept Papers will be received any time after the grant opening date of June 2, 2025, until the deadline of August 8, 2025, at 11.59pm*.
- Full Applications will be received any time after the second grant opening date of September 1, 2025, until the deadline of November 1, 2025, at 11:59pm*.



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Resources

<https://www.pa.gov/agencies/dep/programs-and-services/energy-programs-office/pennsylvania-grid-resilience-grant-program.html>



Get In Touch

Jessica Kelly
PA DEP Energy Programs Office
400 Market St
Harrisburg, PA 17101

...

Jessikelly@pa.gov

The Department of Environmental Protection's mission is to protect Pennsylvania's air, land and water resources and to provide for the health and safety of its residents and visitors, consistent with the rights and duties established under the Environmental Rights Amendment (Article 1, Section 27 of the Pennsylvania Constitution).

Upcoming DEP Events

June 25: Oil and Gas Technical Advisory Board, State Board for Certification of Sewage Enforcement Officers

July 8: Citizens Advisory Council, Environmental Quality Board

July 9: Technical Advisory Committee on Diesel-Powered Equipment, Water Resources Advisory Committee

July 16: Cleanup Standards Scientific Advisory Board

July 24: Mining and Reclamation Advisory Board

[Calendar of Events](#)



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Meeting Wrap-Up

How do today's topics tie back to the CAP?

- **Transportation
Decarbonization and Mode
Shift:**
 - T1. Transit and Multimodal Improvements
 - T2. Light-Duty Vehicle Electrification
 - T3. Zero Carbon Medium- and Heavy-Duty Vehicles

- **PA 2025 GHG Inventory Report:**
 - Required by Act 70
 - Assists in identifying priority sectors for GHG reductions.

2025 Meeting Planning

Upcoming Meetings:

- ~~Tuesday, February 18th, 2025~~
- ~~Tuesday, April 22nd, 2025~~
- ~~Tuesday, June 24th, 2025~~
- Thursday, August 21st, 2025
- Tuesday, October 21st, 2025
- Tuesday, December 16th, 2025

Proposed Agenda

August 21, 2025:

- Introduction
- Approval of June Minutes
- Public Comment
- **Presentation/Discussion – TBD**
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