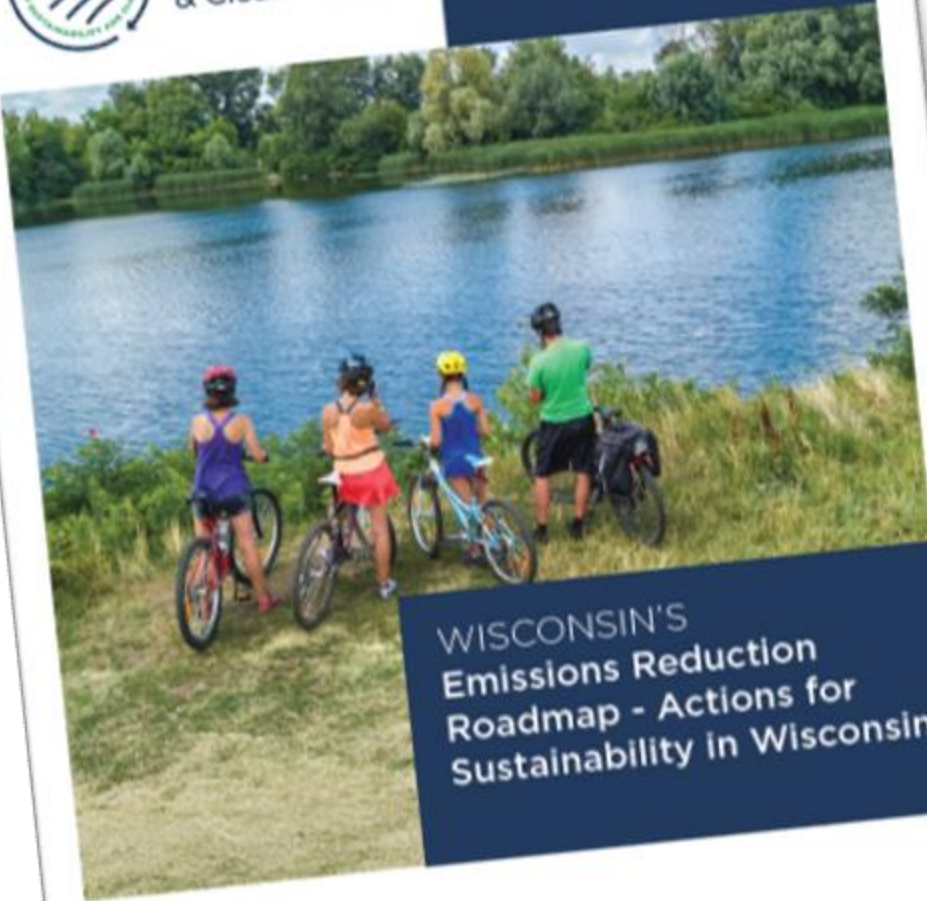




WISCONSIN OFFICE OF
Sustainability
& Clean Energy



WISCONSIN'S
Emissions Reduction
Roadmap - Actions for
Sustainability in Wisconsin

JUNE 2026



WISCONSIN'S EMISSIONS REDUCTION ROADMAP:

ELECTRICITY GENERATION

09.28.2026

WEBINAR OVERVIEW

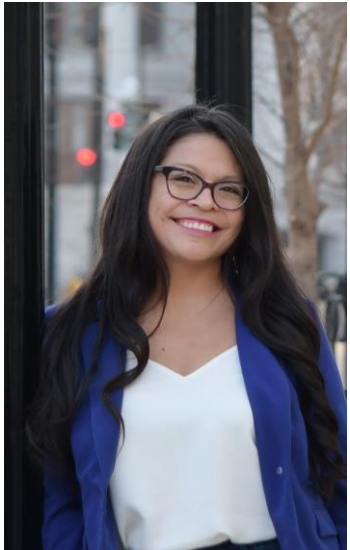
- Climate Action Planning Review
- What is Wisconsin's Emissions Reduction Roadmap?
- Energy Generation Sector Deep Dive
- Webinar Series
- Q&A





MEET THE OSCE TEAM

WISCONSIN OFFICE OF SUSTAINABILITY & CLEAN ENERGY



Maria Redmond
Director



Caity Carmody
CPRG Technical
Coordinator and
Analyst



Eleanor Gagnon
CPRG Outreach
and Engagement
Specialist



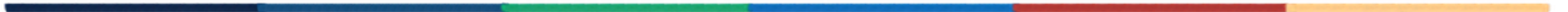
Eneida Hysi
CPRG Grants
Specialist



**Winston
Thompson**
Lead-by-Example
Research Analyst



Dylan Stone
Climate and Clean
Energy Initiatives
Coordinator



CLEAN ENERGY AND CLIMATE ACTION POLICY & PLANNING



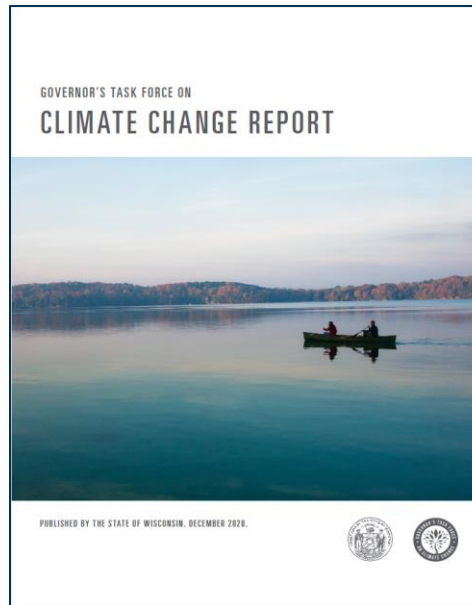
Executive Order
38: Relating to
Clean Energy

Aug 2019

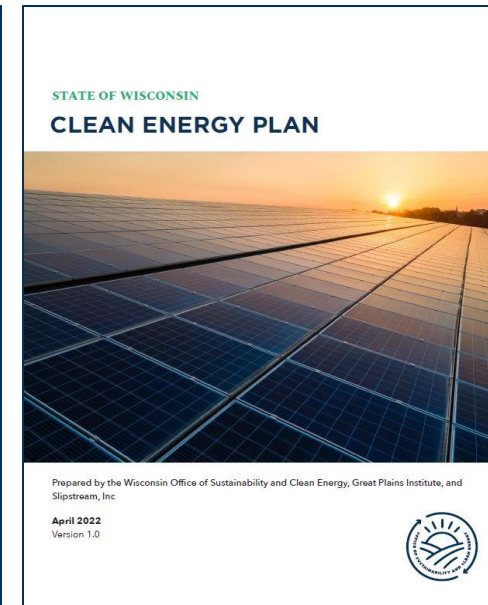


Executive Order
52: Governor's Task
Force on Climate
Change

Oct 2019



Dec 2020



Apr 2022



Executive Order
161: Office of
Environmental
Justice

Apr 2022



CLEAN ENERGY AND CLIMATE ACTION POLICY & PLANNING



Executive Order 195: Green Ribbon Commission

Apr 2023

STATE OF WISCONSIN **CLEAN ENERGY PLAN** Progress Report



Prepared by the Wisconsin Office of Sustainability and Clean Energy

May 2023



May 2023

Wisconsin **Emissions Reduction Roadmap**



Prepared by:
Wisconsin Department of Administration
Office of Sustainability and Clean Energy
101 E Wilson St., 5th FL
Madison, WI 53703
osce@wisconsin.gov

Mar 2024

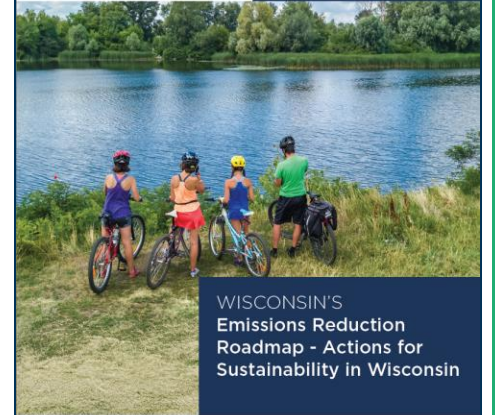
STATE OF WISCONSIN **CLEAN ENERGY PLAN** Progress Report



Prepared by the Wisconsin Office of Sustainability and Clean Energy
August 2024



Aug 2024



WISCONSIN'S
Emissions Reduction
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JUNE 2026

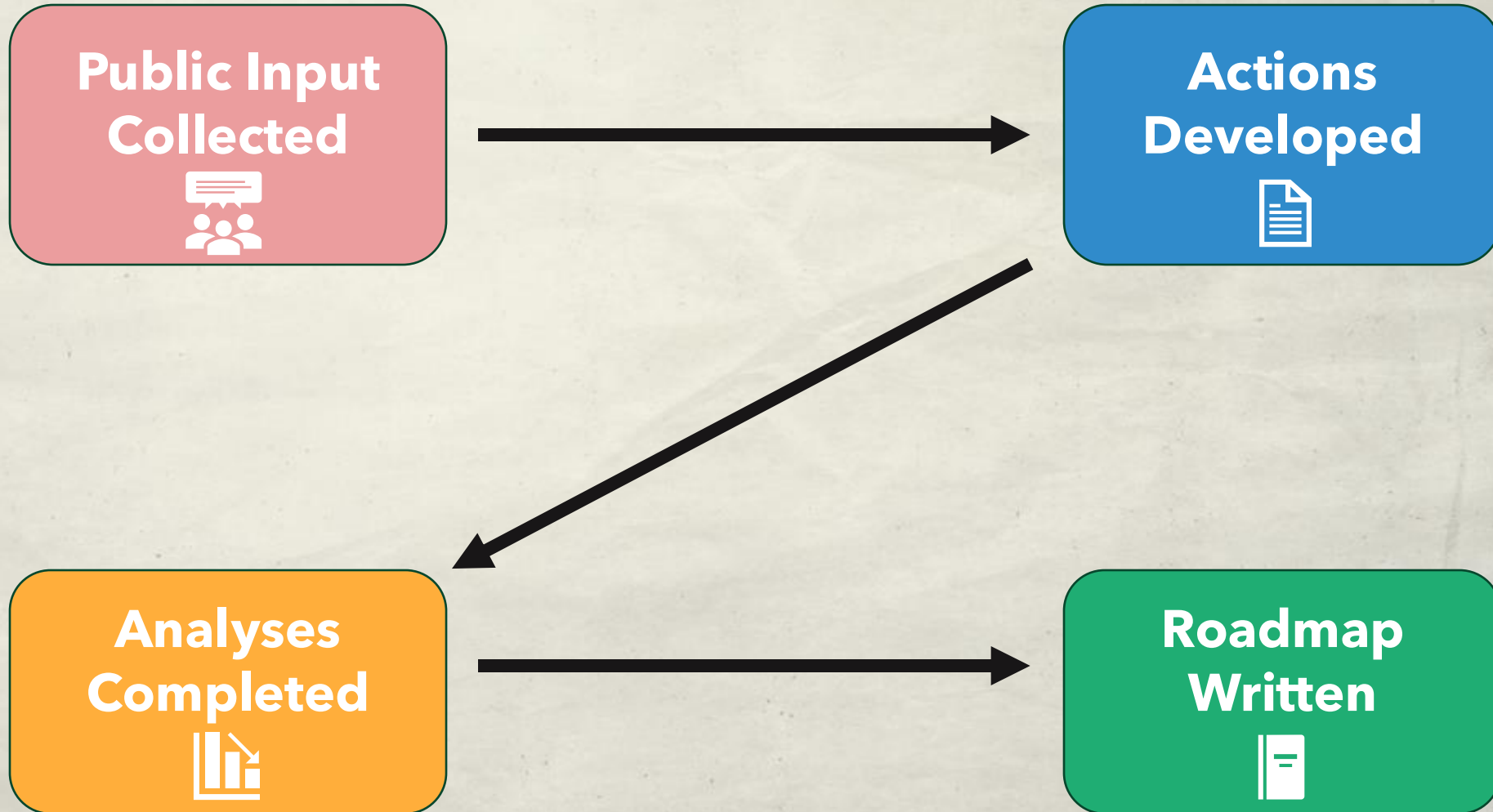
Jun 2026



ROADMAP OVERVIEW

WISCONSIN'S EMISSIONS REDUCTION ROADMAP

- Wisconsin's **first comprehensive climate action plan** tackling emissions reductions actions and targets in all sectors
- Built off the work done through **previous** cross-sectoral planning work and identifying **new opportunities** not previously discussed
- Primary purpose is to **develop policy and programmatic guidance** for state government
- Developed as part of the **\$3 Million** planning grant provided **to OSCE by the U.S. EPA**



MY CLIMATE ACTION PLAN

APPENDIX A: MY CLIMATE ACTION PLAN

Everyone has a role in implementing the state's climate action plan. The OSCE developed this tool to help you consider how you might use this plan as inspiration for your own climate action.

Think about the many hats you may wear and how they may interact with this plan. I am a...

Homeowner

Student

Employee

Landowner

Business/Non-profit owner

Salesperson

Government representative

Teacher

Parent

Other _____

Out of the economic sectors this plan covers, which ones are of most interest to you?

Agriculture

Natural and Working Lands

Buildings

Transportation

Energy Generation

Waste and Materials

Industrial Process and Facilities

Which actions seemed most relevant to your day-to-day life or work?

Considering your roles, is there anything you are currently doing that furthers these actions?

What actions could you take in your current role to make progress on one of the actions identified?

What would you like to do but need more support (financial, technical, etc.) to accomplish?

Do you know any other organizations or people working on this action? If not, where might you find other organizations or people who are working on it?

Need more information or want to share your thoughts? Visit the [OSCE.wi.gov](https://osce.wi.gov) website or email osce@wisconsin.gov



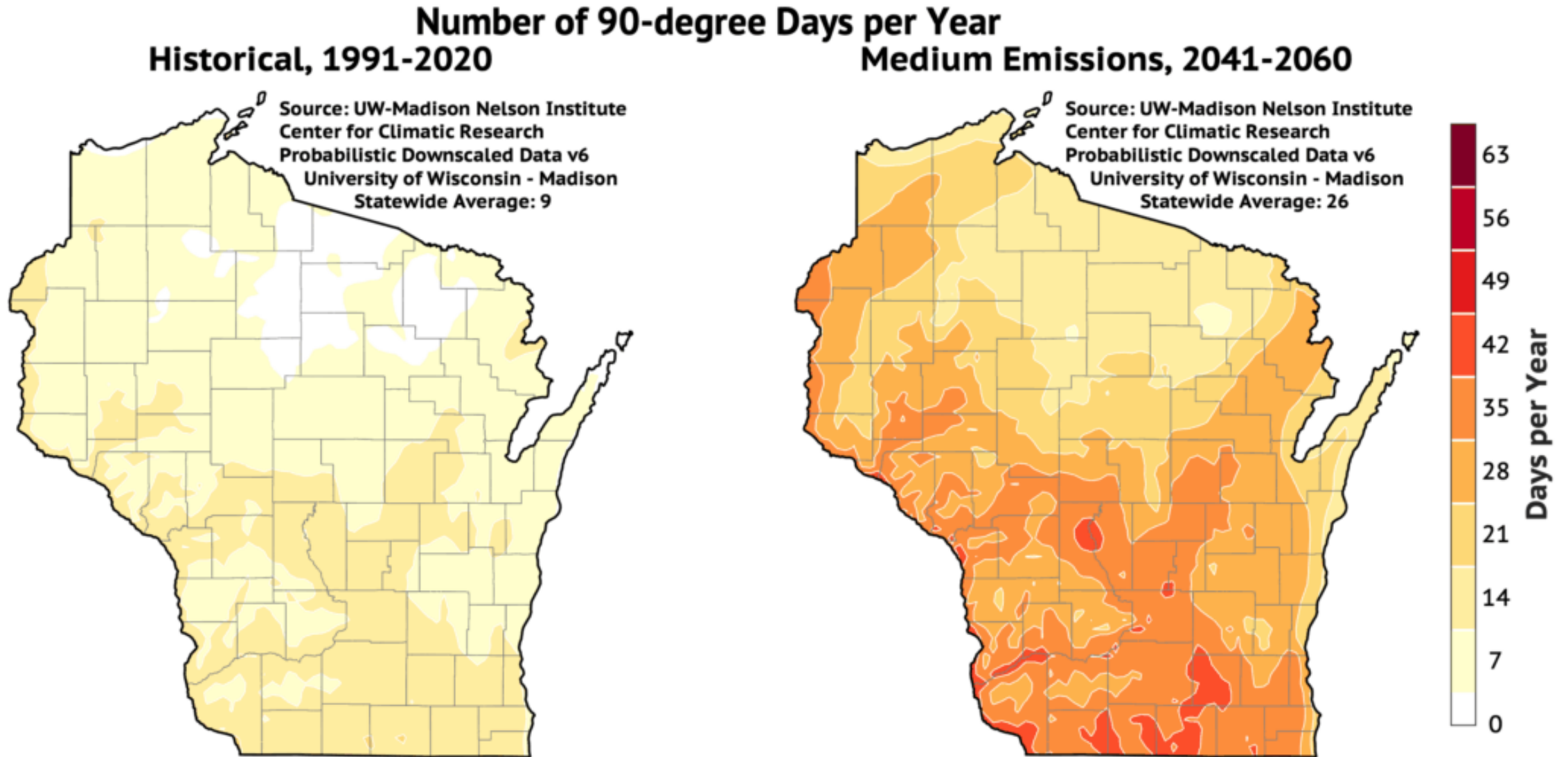
WHY EMISSIONS REDUCTIONS PLANNING?

WHAT ARE “EMISSIONS”?

From the U.S. EPA:

“Greenhouse gases **trap heat** and make the planet warmer. Human activities are responsible for almost all of the increase in greenhouse gases in the atmosphere over the last 150 years. The largest source of greenhouse gas emissions from human activities in the United States is from **burning fossil fuels** for electricity, heat, and transportation.”

HEATING UP



Source: WICCI 2026 Assessment Report

WHAT DOES THIS MEAN FOR OUR WEATHER?



Wetter winters and springs



More frequent and intense extreme precipitation events



Extreme nighttime heat: Muggy nighttime lows



Rapid shifts: Alternating very wet and very dry periods

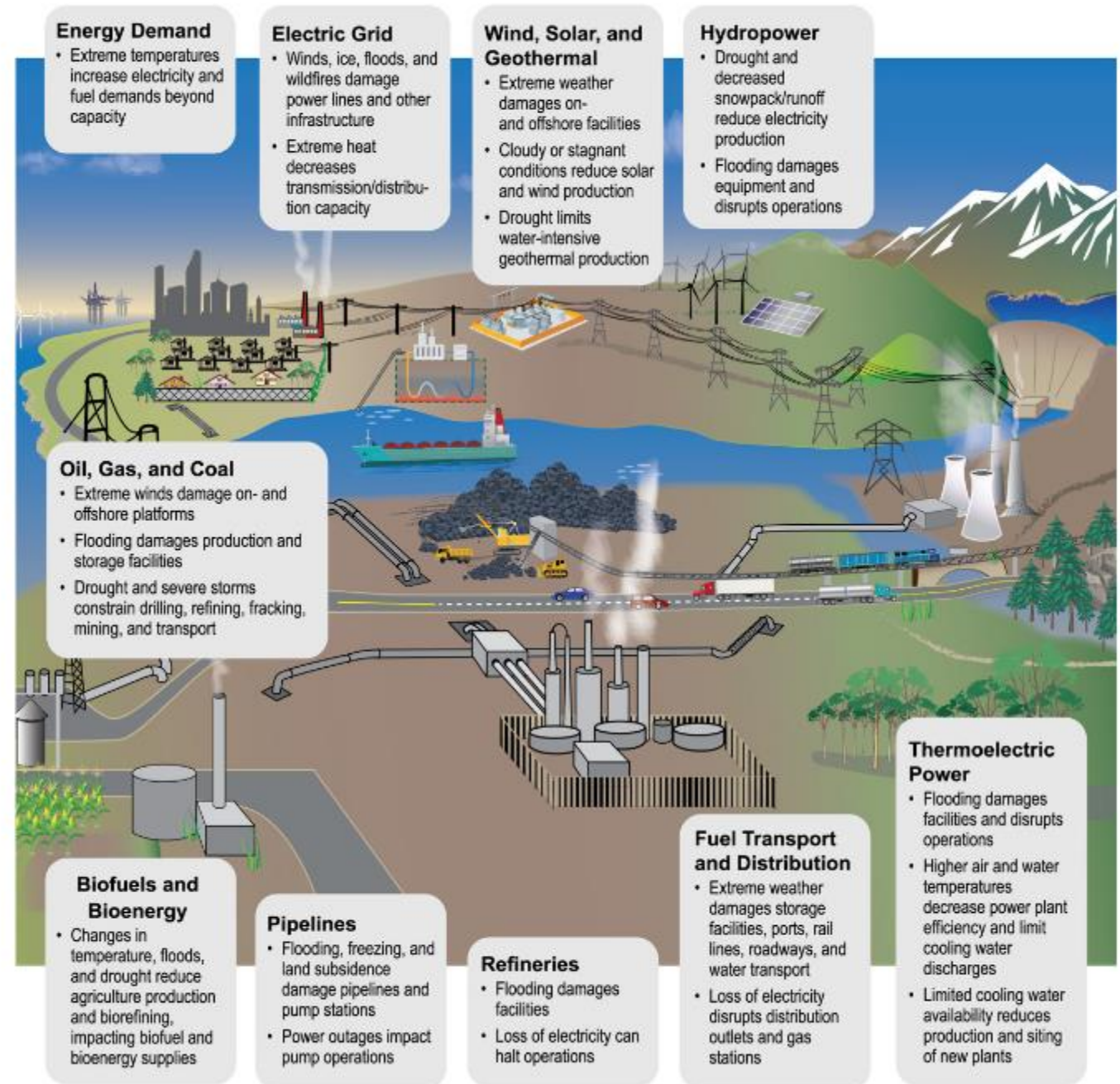


Rising costs: Increasing economic losses from severe weather

Source: WICCI 2026 Assessment Report

HOW MIGHT THIS AFFECT ME?

Climate Change Impacts on the Energy System



SECTORS



Agriculture



Commercial and
Residential
Buildings



Energy



Industry



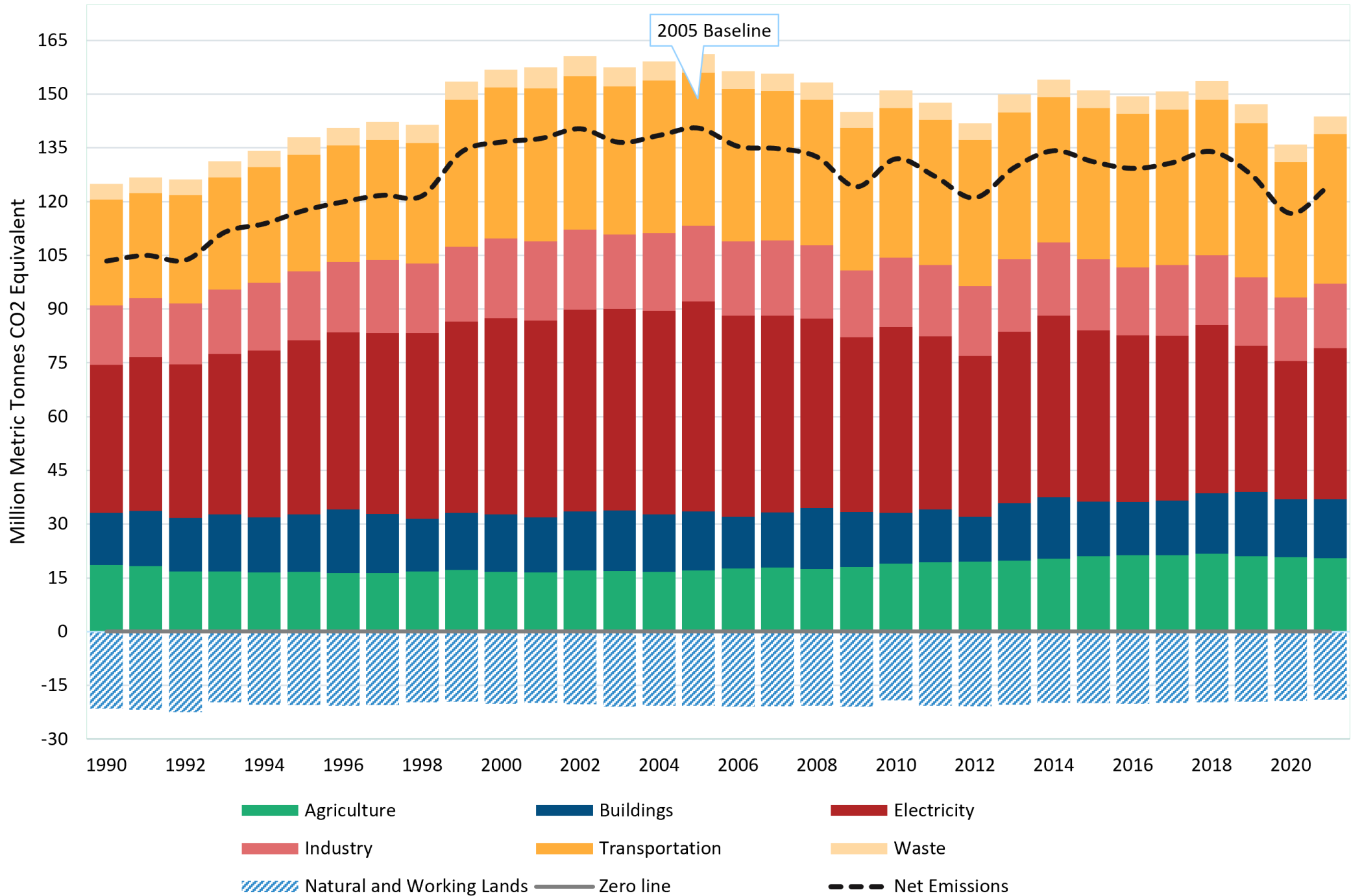
Natural and
Working Lands



Transportation



Waste and
Materials
Management



GREENHOUSE GAS INVENTORY (2024)



ELECTRICITY GENERATION DEEP DIVE

ELECTRICITY GENERATION

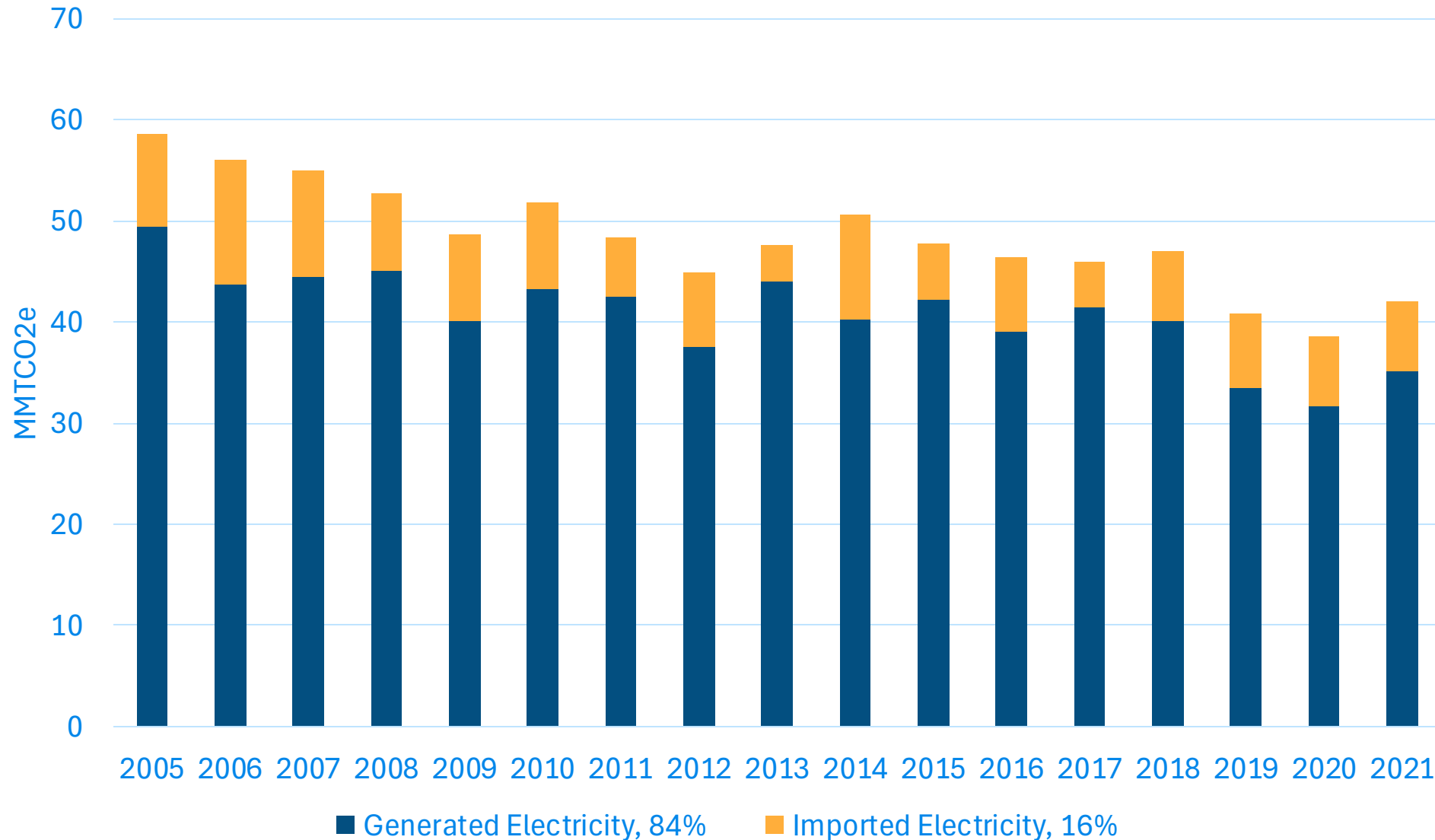


This sector includes both direct emissions from electric generating units (EGUs) located within the state and indirect emissions from imported electricity used in Wisconsin.

Percentage of total inventory in 2021: 29%

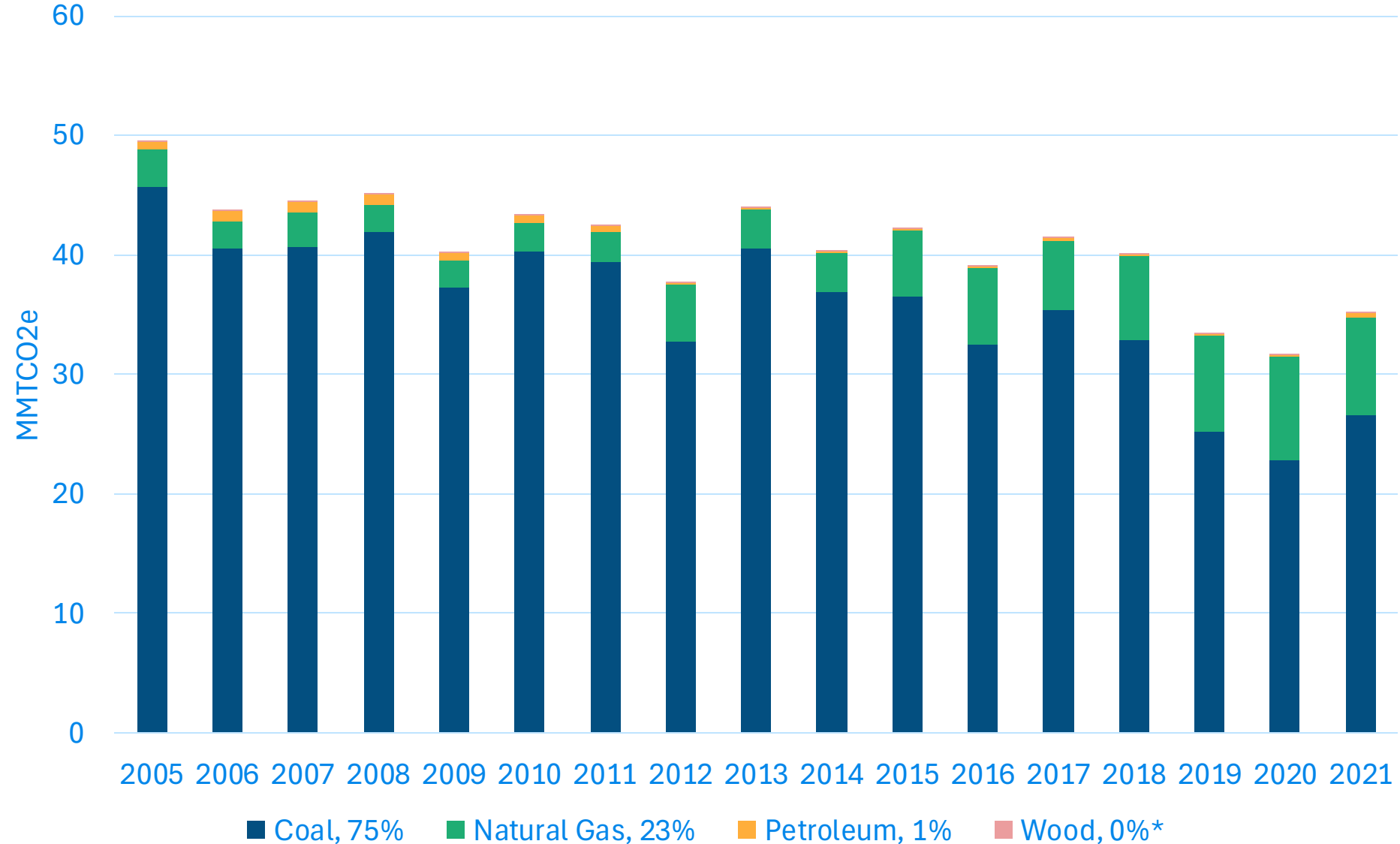
Biggest Opportunity: Supporting Distributed Energy

ELECTRICITY GENERATION EMISSIONS BY SOURCE



Legend includes percent of 2021 total.

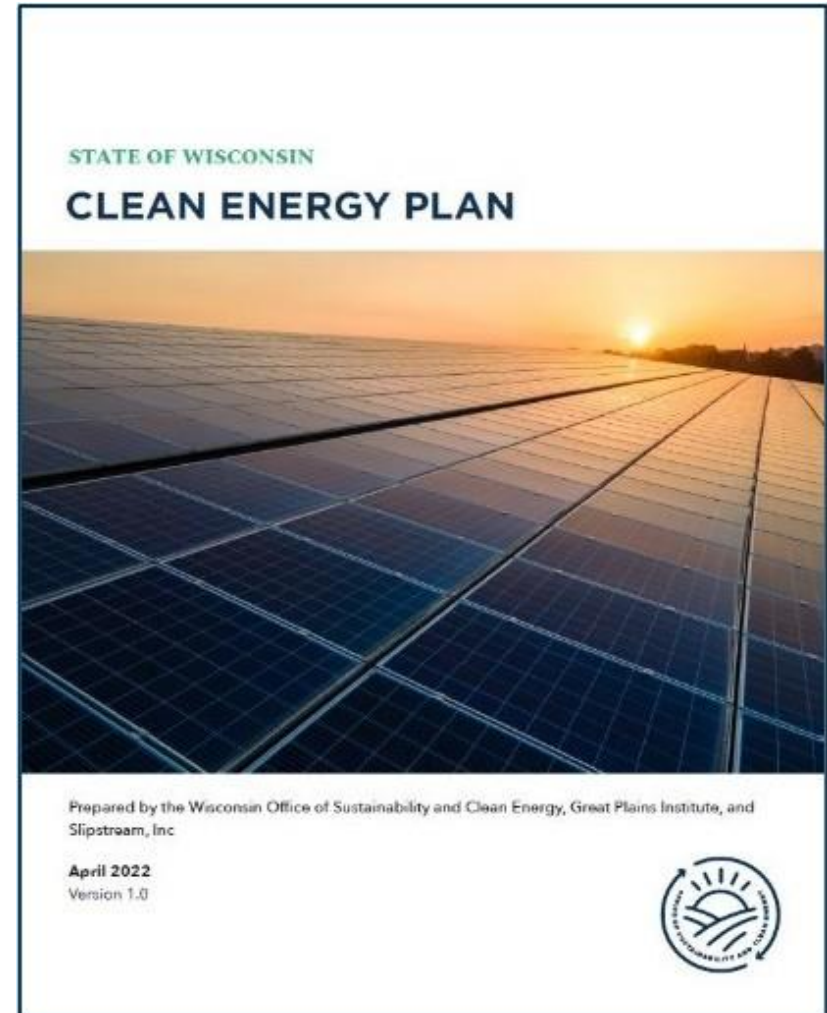
ELECTRICITY GENERATION EMISSIONS BY FUEL TYPE



Legend includes percent of 2021 total. *Non-zero number rounded to zero.

INFLUENCE OF CLEAN ENERGY PLAN

- Published in 2022
- Annual Progress Reports
- Served as core foundational document for the Roadmap
- Modeled on Energy Policy Simulator
- 74 sub-strategies to reduce emissions in buildings, energy, and transportation primarily



ACTIONS FOR REDUCTIONS

#	GHG Reduction Actions	2025-2030	2025-2050
3.1	Support distributed wind, geothermal [heat pumps], biogas, solar, and storage installations	7.42	21.39
3.2	Invest in upgraded systems to enhance emerging technologies	6.21	10.87
3.3	Explore a flexible, market-based program to reduce GHG emissions in the power sector	0.53	1.59

Estimated reductions in MMTCO₂e within the timeframe.

3.1 SUPPORT DISTRIBUTED WIND, GEOTHERMAL [HEAT PUMPS], BIOGAS, SOLAR, AND STORAGE INSTALLATIONS

- Growth of solar and storage primarily, supported with additional wind, biogas, and heat pumps
 - mid-2025, 3,287 MW of solar capacity,
 - 2050, over 52,000 MW
 - wind capacity projected to increase by more than 1,200 MW across utility-scale projects

Reductions in MMTCO ₂ e	
2025-2030	2025-2050
7.42	21.39



3.2 INVEST IN UPGRADED SYSTEMS TO ENHANCE EMERGING TECHNOLOGIES

- Increasing storage capacity
- Increasing demand response
- Load shifting

Reductions in MMTCO ₂ e	
2025-2030	2025-2050
6.21	10.87



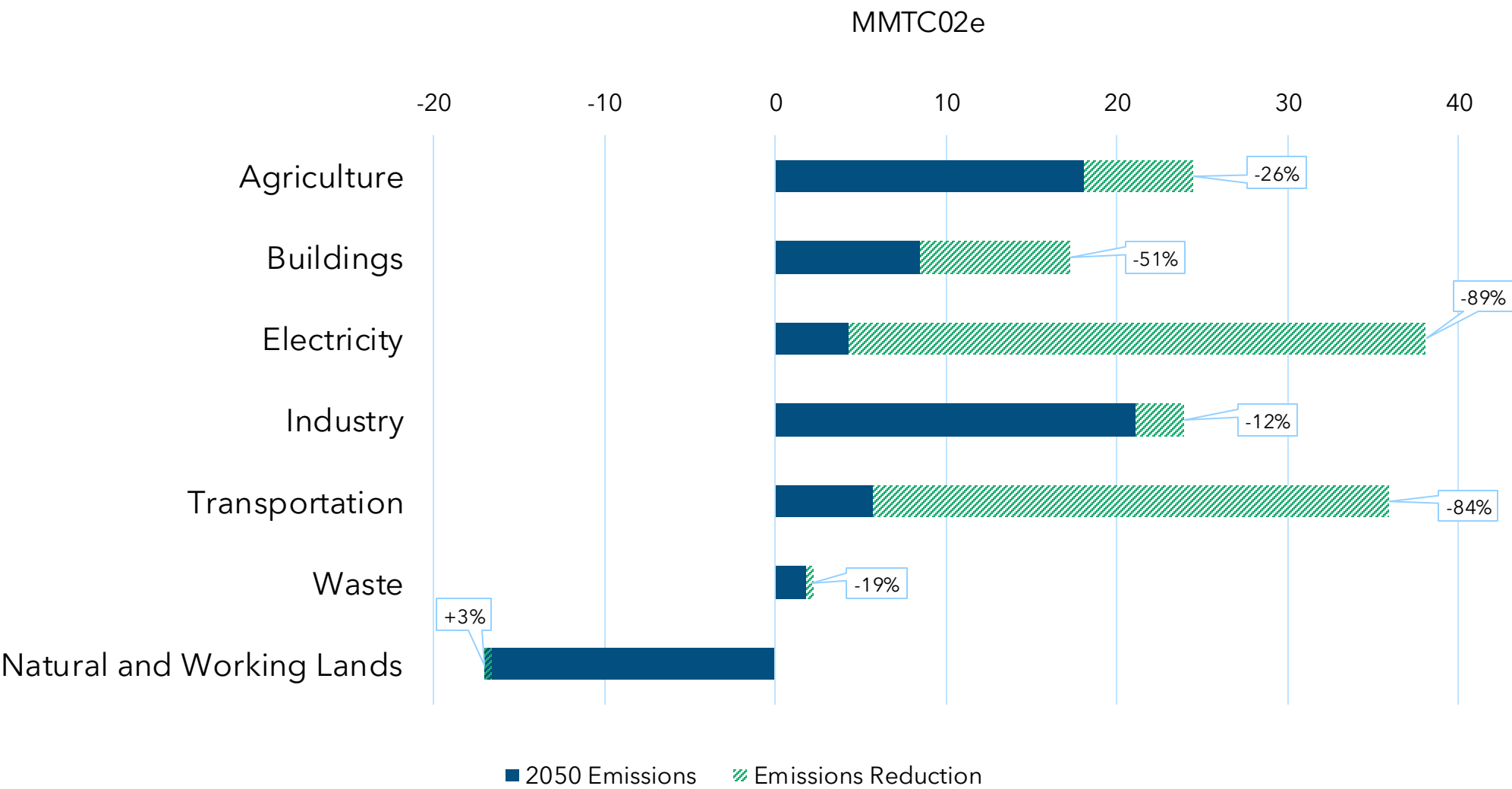
3.3 EXPLORE A FLEXIBLE, MARKET-BASED PROGRAM TO REDUCE GHG EMISSIONS IN THE POWER SECTOR

- Cap and Invest System
 - 5% annual cap decline

Reductions in MMTCO2e	
2025-2030	2025-2050
0.53	1.59

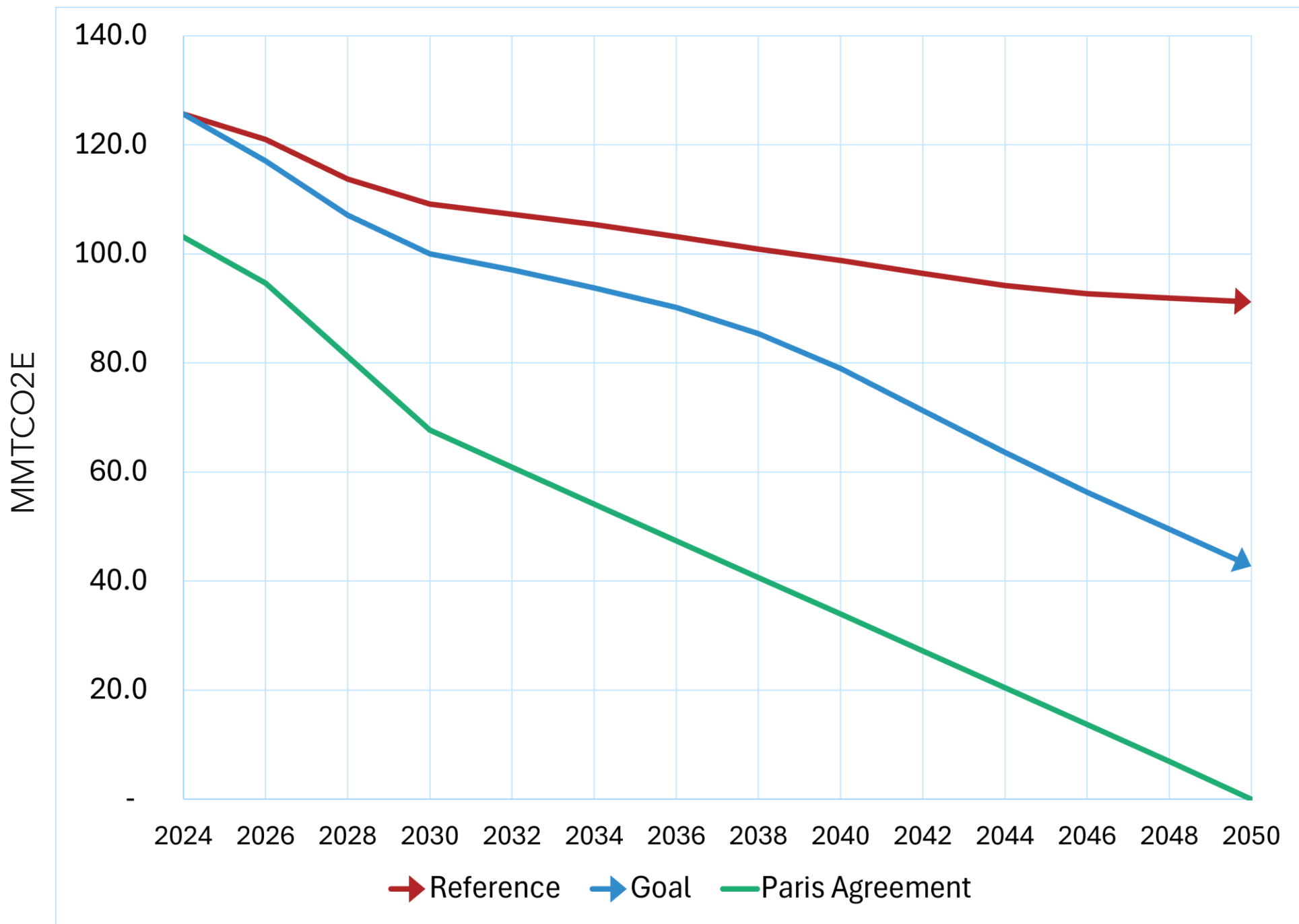


CHANGE IN GHG EMISSIONS FROM ACTIONS 2024-2050



CURRENT SUPPORT FOR ACTIONS

- **Public Service Commission of Wisconsin - Office of Energy Innovation**
 - Energy Innovation Grant Program
 - Grid Resilience Program
 - Focus on Energy®
 - Solar for Homes
 - Renewables for Businesses
- **Wisconsin Economic Development Corporation**
 - Green Innovation Fund
 - Business Development Credit
- **Wisconsin Department of Administration**
 - Energy Savings Performance Contracting



EMISSIONS PROJECTIONS

RESOURCES

- [Clean Energy Plan and Progress Reports](#)
- [Focus on Energy](#)
- [WI Office of Energy Innovation](#)
- [U.S. Energy Information Administration State Profile: Wisconsin](#)
- U.S. Energy Information Administration, [“How much carbon dioxide is produced when different fuels are burned?”](#)
- Clean Wisconsin & RENEW Wisconsin, [“Wisconsin’s Roadmap to Net Zero by 2050”](#)
- National Renewable Energy Laboratory, [“Storage Futures Study”](#)
- U.S. Department of Energy, [“Grid Modernization Strategy 2024”](#)
- [Mid-Continent Independent System Operator \(MISO\) Market Reports](#)
- California Air Resources Board, [“Cap and Trade Program Fact Sheet 2025”](#)
- Washington State Climate Commitment Act, [“Summary of market modeling and analysis of the proposed Cap and Invest Program”](#)



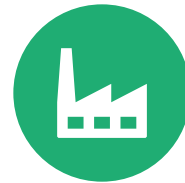
Agriculture
Sep. 14, 630-730PM



Commercial & Residential Buildings
Sep. 21, 630-730PM



Electricity Generation
Sep. 28, 630-730PM



Industry
Oct. 05, 630-730PM



Natural and Working Lands
Oct. 12, 630-730PM



Transportation
Oct. 19, 630-730PM



Waste & Materials Management
Nov. 9, 630-730PM



THANK YOU!

USE THE QR CODE TO
VIEW OUR UPCOMING
WEBINARS

Contact us: osce@wisconsin.gov or OSCE.wi.gov

