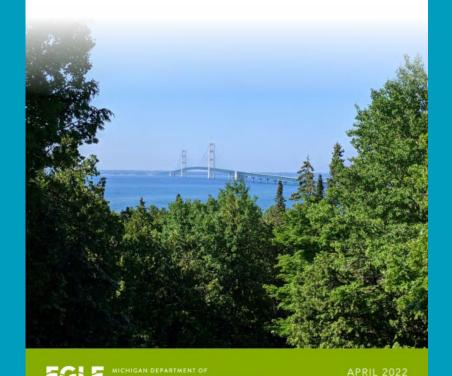
Just Transition to a Carbon Neutral Economy: A Welcome to Michigan and Inside Look at the MI Healthy Climate Plan

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MI HEALTHY CLIMATE PLAN



Goals:

- Carbon neutrality by 2050
- 52% emission reductions by 2030

OBJECTIVES



Mitigate the worst impacts of climate change



Spur economic development and create goodpaying jobs



Capture economic development and create good-paying jobs



Protect and improve the health of Michiganders

OBJECTIVES OF THE MI HEALTHY CLIMATE PLAN



Position Michigan as a leader in climate action



Protect our natural resources and wildlife



Make Michigan energy independent



Address environmental injustices 17

Council on Climate Solutions meetings held to date (open to public) 2

Consultations with Tribal government 10+

Presentations from experts at Council meetings

6 TOPICAL WORKGROUPS



Energy production, Transmission, Distribution, and Storage



Transportation and Mobility



Energy Intensive Industries



Buildings and Housing



Natural and Working Lands and Forest Products



Materials Decarbonization (ad hoc)

1929 PUBLIC COMMENTS RECEIVED ON DRAFT PLAN

243

Original emails

1,570

Form message emails

2

Regular mail

114

Via 3 listening sessions

7 LISTENING SESSIONS 2021-2022

April 22, 2021 May 5, 2021 December 1, 2021 December 2, 2021

January 26, 2022 February 8, 2022 February 14, 2022

The process



The climate crisis in Michigan is real and costly

Compared to 1900, Michigan is almost 3 degrees warmer and gets around five more inches of rain per year.

The MI Healthy Climate Plan focuses on six action areas

Commitment to
environmental justice
principles and a
just transition that supports
displaced workers.

Clean energy production and modernizing the electrical grid.

Electrifying vehicles and enhancing public transit.

Repairing and decarbonizing homes and businesses.

Driving clean-energy jobs and innovation.

Protecting Michigan lands and water.



Addressing environmental justice

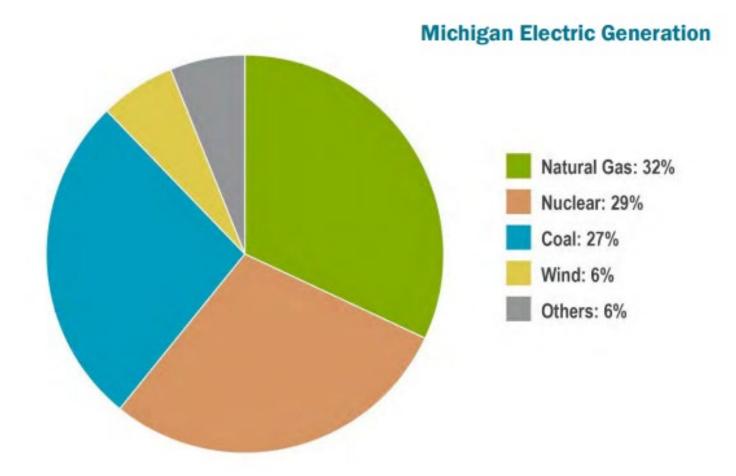
Investments in adaptation pay off: Every \$1 the state commits to climate adaptation will avert \$4-\$11 worth of future damages from climate-related emergencies.

Commit to Environmental Justice and Pursue a Just Transition

Ensure that at least 40 percent of state funding for climate-related and water infrastructure initiatives benefit Michigan's disadvantaged communities (in line with the federal government's Justice40 guidelines for federal funding)

Develop Justice40 guidelines in partnership with leaders in disadvantaged communities

Emphasize a just transition for all workers through proactive engagement, job training, and workforce development



Clean energy production and modernizing the electrical grid

Renewable energy is cost effective:

The <u>levelized cost of electricity</u> from new resources coming online in 2023 was \$25.55 per megawatt hour (MWh) for onshore wind and \$25.89 per MWh for solar, compared with \$34.78 per MWh for new combined-cycle natural gas units. Adding new wind and solar resources is comparable to – and in many cases cheaper than – the cost of running existing power plants.

Clean the Electric Grid

Generate 60 percent of the state's electricity from renewable resources by 2030

Retire all coal-fired power plants in the state by 2030

Limit energy burden from powering and heating homes to not more than 6 percent of annual income for low-income households



Electrifying vehicles and enhancing public transit

Electric vehicles offer savings:

Owners of electric vehicles are expected to save \$6,000-\$10,000 over the life of the vehicle, compared to a gasoline-powered vehicle, because charging is half as expensive as the equivalent amount of gasoline, and electric vehicles require half as many repairs and cost half as much to maintain.

Electrify Vehicles and Increase Public Transit

Build the infrastructure necessary to support 2 million electric vehicles on Michigan roads by 2030

Increase access to clean transportation options – including public transit – by 15 percent each year



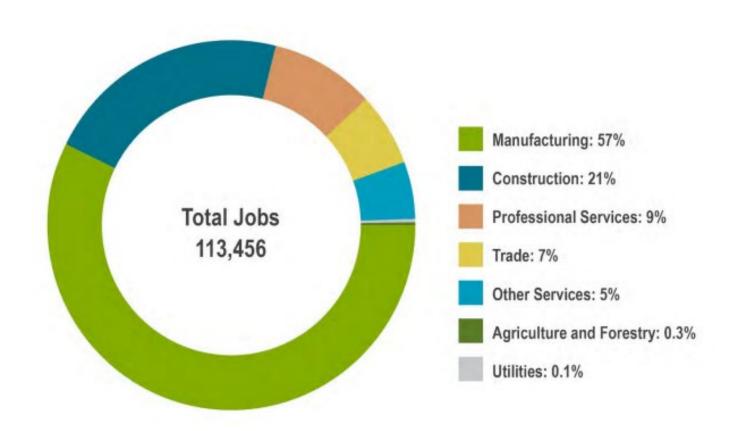
Repairing and decarbonizing homes and businesses

Actions at home save money: Every \$1 Michiganders invest in reducing energy waste at home through weatherization, more efficient windows and lighting, and energy-saving technologies will save homeowners more than \$3.30 in reduced future energy bills.

Repair and Decarbonize Homes and Businesses

Reduce emissions related to heating Michigan homes and businesses by 17 percent by 2030

Increase investments in repairing and improving buildings to reduce costs for working families and small businesses



Driving clean-energy jobs and innovation

Michigan is home to more than 113,000 clean energy jobs, with the majority in manufacturing (57%) and construction (21.7%).

Drive Clean Innovation in Industry

Encourage clean innovation hubs where private enterprises strategically colocate and collaborate to develop and deploy new, cleaner manufacturing technologies and conduct research and development to reduce emissions from hard to decarbonize industries

Triple Michigan's recycling rate to 45 percent by 2030

Cut food waste in half by 2030



Protecting Michigan lands and water

Nature does its part: The Michigan Department of Natural Resources manages 4.6 million acres of public lands, 3.86 million of which are forested, and the state contains roughly 5.5 million acres of wetlands. Michigan's forests currently store approximately 537 million tons of live tree carbon and 2,045 million tons of total forest ecosystem carbon, sequestering additional carbon from the atmosphere each day.

Protect Michigan's Land and Water

Protect 30 percent of Michigan's land and water by 2030 to naturally capture GHG emissions, maintain and improve access to recreational opportunities for all Michiganders, and protect biodiversity

Leverage innovative strategies to support climate-smart agriculture



How will the MI Healthy Climate Plan be implemented?

ACTION IS ALREADY UNDERWAY.

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Questions?

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