



October 19, 2021

COUNCIL ON CLIMATE SOLUTIONS

Council Discussion:
Recommendations of the Transportation and Mobility Workgroup

Agenda

1:00 p.m. – Welcome, Attendance, Business

1:15 p.m. – Overview by Workgroup Co-Chairs

1:25 p.m. – Introduction to Discussion by GPI

1:30 p.m. – Council Discussion of Recommendations

2:55 p.m. – Next Steps

Welcome, Attendance, Business

- Attendance
- Approval of today's agenda
- Approval of 9/28 minutes
- Charge of the Task Force
- Transportation and Mobility

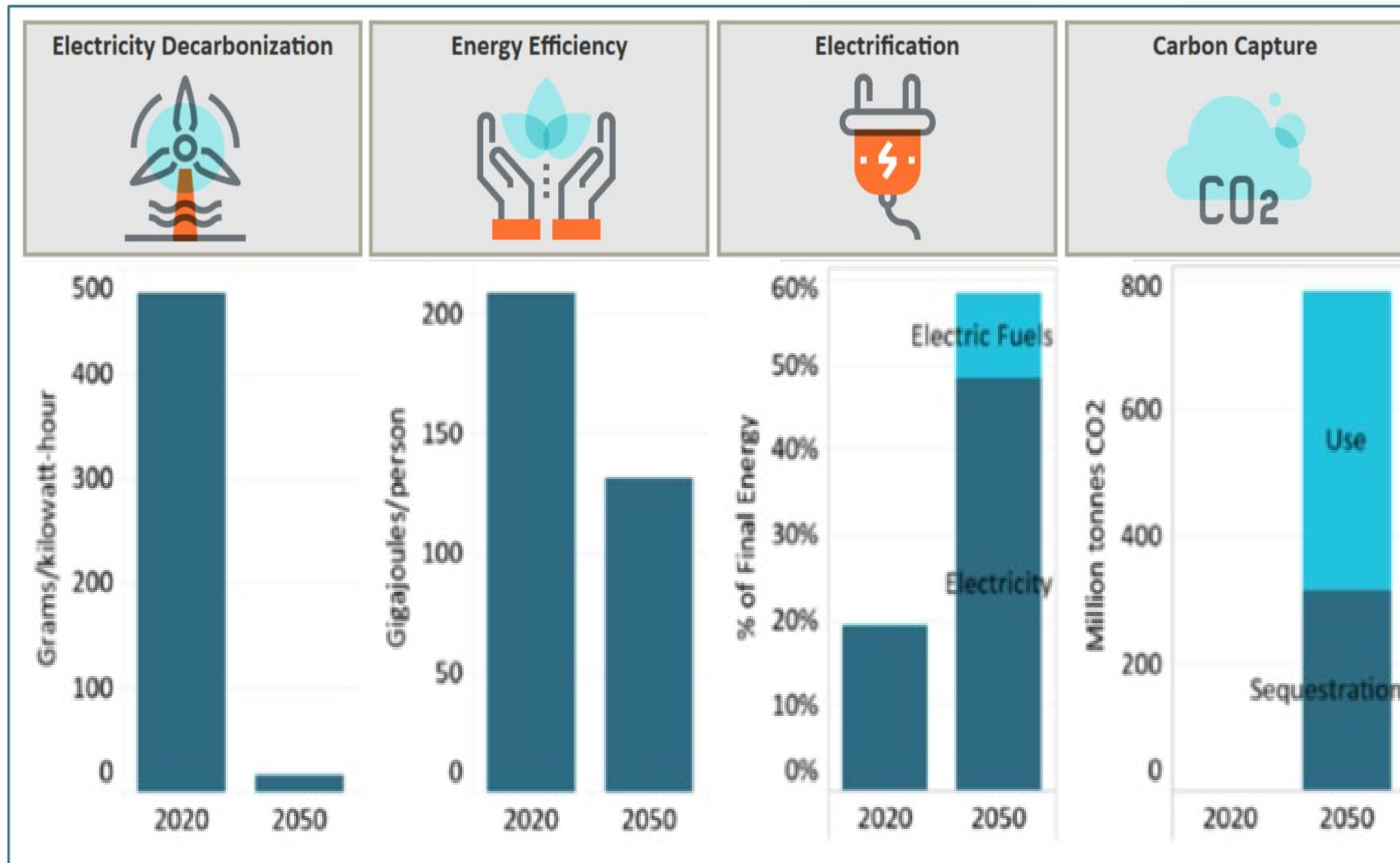
Charge to the Council

Executive Order 2020-182

The Council must act in an advisory capacity to the governor and the Department, and must do the following:

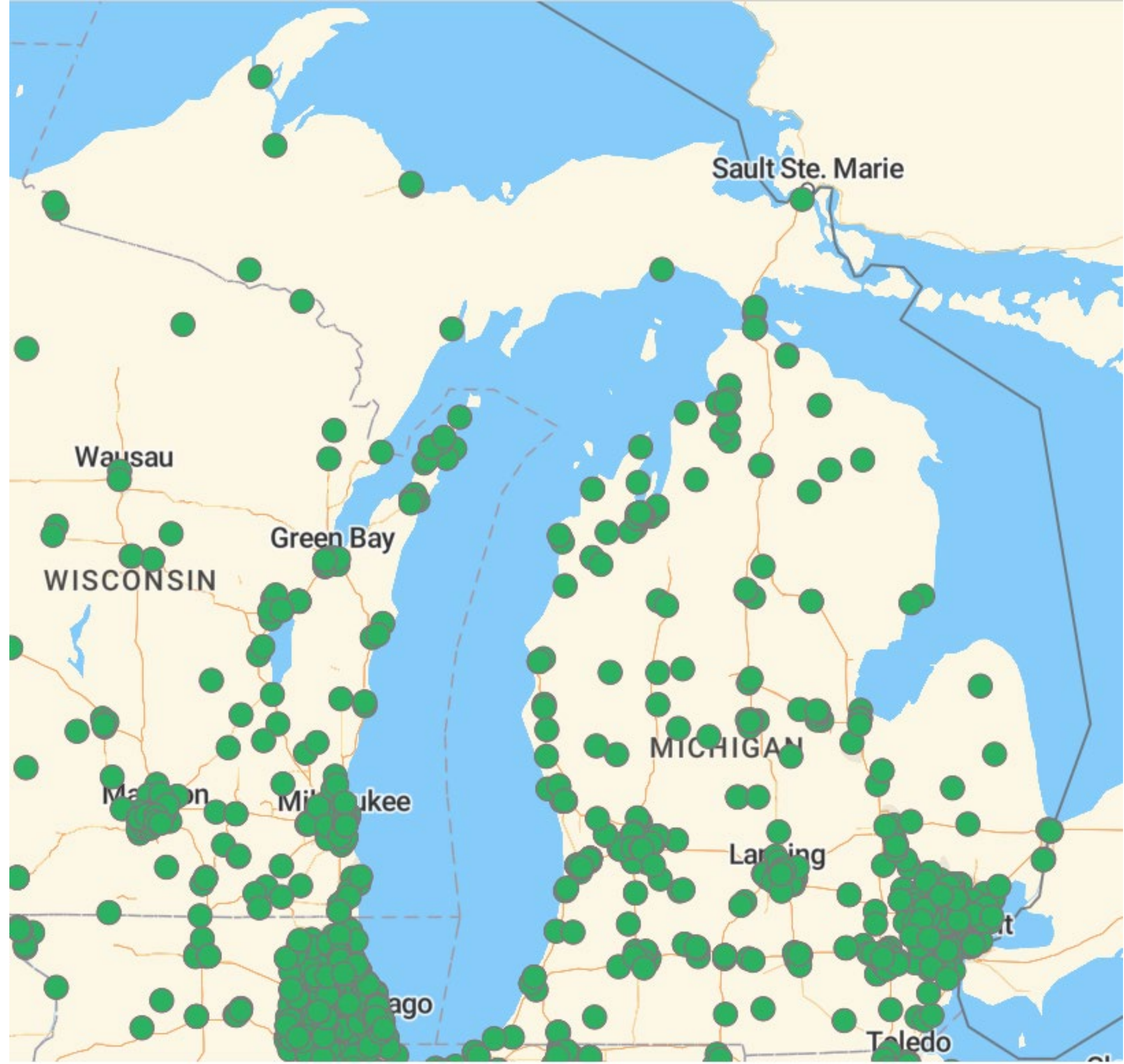
- Advise the Department in formulating and overseeing the implementation of the MI Healthy Climate Plan, which will serve as the action plan for this state to reduce greenhouse gas emissions and transition toward economywide carbon neutrality. This work must include, but is not limited to:
 - Identifying and recommending opportunities for the development and effective implementation of emissions-reduction strategies.
 - Identifying solutions to resolve impact disparities across Michigan and recommending targeted solutions for communities disproportionately impacted by the changing climate.

FOUR strategies to transform the U.S. energy system to zero-carbon



Alternative Fueling Station Locator

[Alternative Fuels Data Center:
Alternative Fueling Station Locator
\(energy.gov\)](https://energy.gov/alternative-fuels-data-center/alternative-fueling-station-locator)



Overview by Workgroup Co-Chairs

Charles Griffith
Judd Herzer

Transportation and Mobility Workgroup



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Transportation and Mobility Workgroup

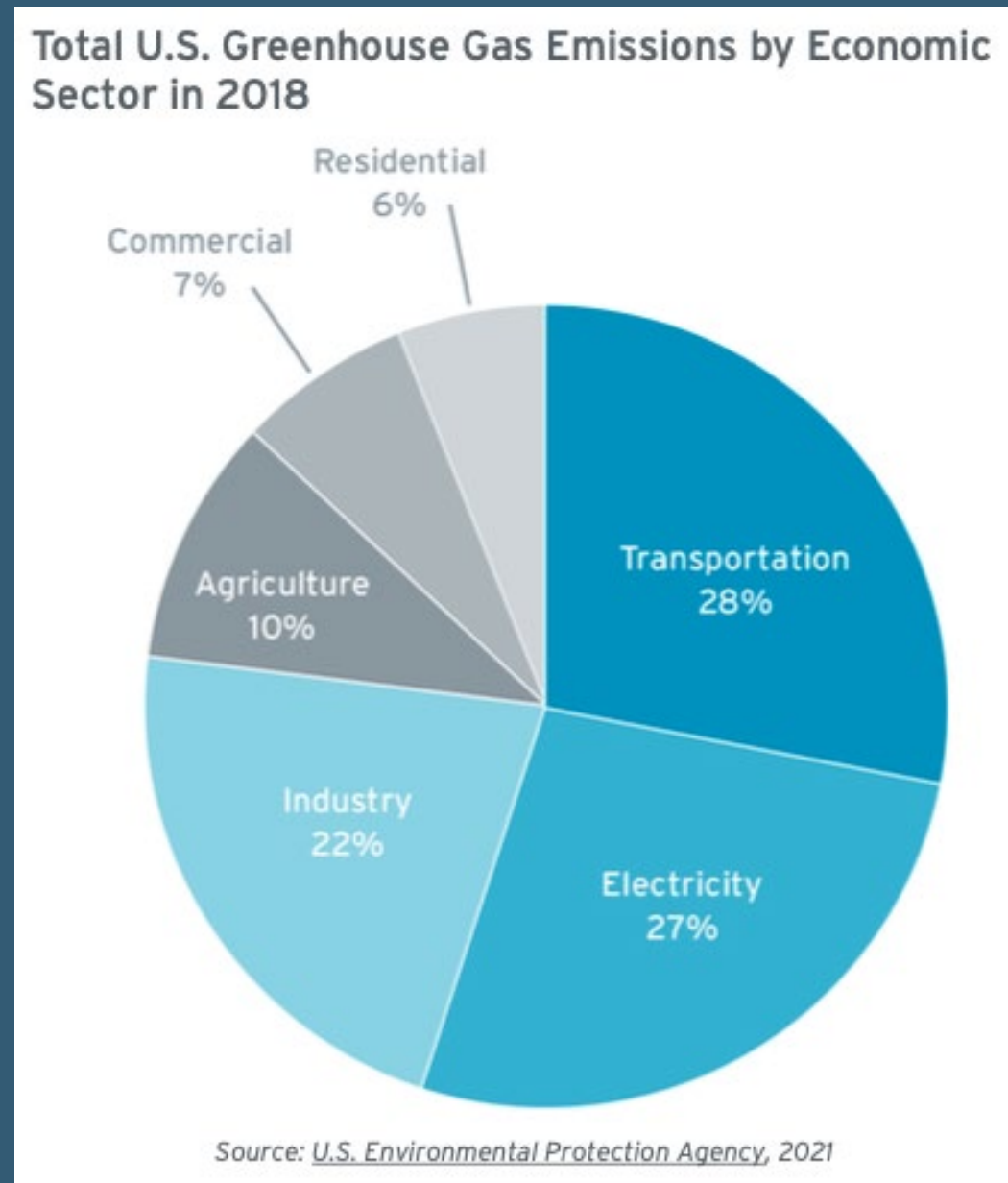
CHARLES GRIFFITH, ECOLOGY CENTER

JUDSON HERZER, MICHIGAN DEPARTMENT OF LABOR AND ECONOMIC
OPPORTUNITY/OFFICE OF FUTURE MOBILITY AND ELECTRIFICATION

FACILITATED BY GREAT PLAINS INSTITUTE: BRENDAN JORDAN AND TREVOR DRAKE

OCTOBER 19, 2021

Transportation GHG Emissions- Michigan



Michigan's transportation sector is the leading source of GHG emissions.

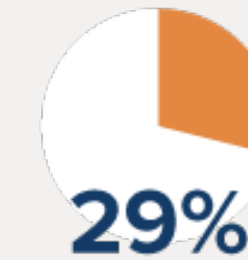
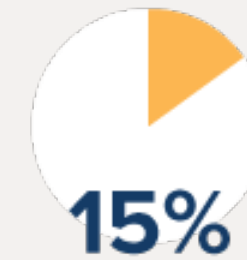
To hold to 1.5°C rise, US transportation emissions must decrease 45% by 2030

Assumes:

- Light Duty Vehicles
 - 20% less vehicle miles traveled
- Medium & Heavy Duty Vehicles
 - 50% increase vehicle miles traveled
 - 25% increase fleets
- 85% Carbon-free grid
 - 75% Renewable
 - 10% Nuclear
 - 15% Natural Gas

Light Duty Vehicle emission reductions are critical

Percentage of Sector Electrification



Stakeholder Process

- Held (7) stakeholder meetings
- Level-Setting Presentations from Regional and National Experts
- Worked in subgroups to develop recommendations:
 - Vehicle Electrification and Low-Carbon Fuels
 - Vehicle-Miles Traveled (VMT) Reduction and Shared Mobility
- Reviewed draft recommendations in the full group to request input and identify areas of concern
- Co-chairs incorporated workgroup member feedback as they finalized the recommendations

Top 5 Recommendations

*NOTE, THESE ARE IN NO PARTICULAR ORDER.

Establish a Comprehensive Transportation Electrification Plan



Rationale: Electrifying the transportation sector won't happen overnight and simply adopting another state's strategy doesn't always translate easily. A strategic plan for how Michigan will equitably approach electrification, with clear goals for what we will strive towards, and the sequence of the work to be done to reach them is essential. A map is always a useful tool to help get to where you're going.



Recommendation: Michigan should establish a coordinated and comprehensive transportation electrification plan, supportive of national goals, and allocation of sufficient resources and personnel to responsible state offices to create the plan.

Establish Electric Vehicle Purchase Incentives



Rationale: An accelerated transition to EVs is critical for Michigan to reach its climate goals. Unfortunately, EVs represent only a small fraction of Michigan's auto market today. In 2020, just 0.62 percent of all vehicles sold in Michigan were EVs. One of the key barriers to widespread uptake today is the higher purchase cost typically associated with these vehicles



Recommendation: Michigan should establish a consumer and fleet electric vehicle (EV) incentive program, including new and used EVs, medium- and heavy-duty electric vehicles, as well as e-bikes and other micro-mobility vehicles to support a rapid and accelerated transition to EVs. Incentives should also be tiered to provide a bonus for lower-priced vehicles and low-income buyers to make more equitable. Dealers who assist with the EV incentive program should also be provided a modest incentive.

Adopt a Michigan Clean Fuels Standard



Rationale: Clean fuels standards do more than just reduce transportation sector GHG emissions, they can also result in positive economic benefits, including job creation and expanding business opportunities for advanced and emerging fuels including electricity, hydrogen, and biofuels. Clean fuels standards provide support for the emerging transportation electrification sector, which offers significant GHG emission reduction opportunities. At the same time, the policy can also incentivize lower-carbon liquid fuels that can be deployed in today's vehicles and during the transition.



Recommendation: Michigan should adopt a clean fuels standard as part of a comprehensive approach to reducing greenhouse gas emissions (GHG) in the state, and as a potential revenue source for enhancing low/no carbon mobility options to more Michiganders.

Develop GHG Budgets for Transportation Plans



Rationale: In order to address the GHG emissions from the transportation sector, Michiganders need safe and convenient alternatives that enable them to drive less, including more public transit, trains, and bicycle amenities, as EV adoption will not ramp up quickly enough to achieve the necessary carbon reductions. A key component of reducing emissions is reducing the amount of time people spend in personal vehicles, often measured as vehicle miles traveled (VMT). This can be done through many approaches while allowing those who wish to keep driving a personal vehicle.



Recommendation: MDOT, and regional and local road agencies should develop plans for implementing GHG budgets into their transportation planning. Five-year plans would need to meet the state's GHG budget for transportation by prioritizing projects that will achieve the needed GHG reductions, which would decline over time. They would need to show that their plans do comply, or risk losing funding. This reprioritization of investments would serve to decrease VMT, and projects that increase VMT would therefore become ineligible for funding without significant mitigations elsewhere.

Expand Access to Convenient, Zero-Emission Public Transit



Rationale: Personal driving is a leading source of climate pollution, yet most Michiganders feel they have no option but to drive everywhere they need to go. The first step in decreasing emissions from transportation must be to ensure all Michiganders have access to public transportation that is safe, reliable, affordable, and accessible. That ensures people have a real choice in how to get around and can choose to drive less often or choose not to drive at all, thus substantially cutting their GMG emissions.



Recommendation: The Michigan Department of Transportation, MPO's and local transit providers should develop comprehensive plans to expand access to convenient, zero emission public transit throughout the state of Michigan, with a goal of increasing the state's investment by an amount great enough to support the mobility needs of the state's residents.

Equity in Transportation Decarbonization

- **Access:** The proposals to increase access to transit, walking and biking inherently addresses disparities in transportation, since many Michiganders do not have access to personal vehicles to get to work, school or health care.
- **Equity in Transportation Electrification:** A comprehensive transportation electrification plan will ensure that the benefits of transportation electrification are shared equitably by all Michiganders – including the most vulnerable communities.
- **EV Incentives:** A well-designed EV incentive program would increase EV adoption in historically underserved communities while improving air quality in communities that are most affected by transportation emissions. If the EVs themselves are made more affordable, they can also provide an affordable mobility option, due to their lower fuel and maintenance costs.
- **Cleaner Fuels:** Because transportation emissions come from mobile sources that travel on major highways and arterial roads that disproportionately traverse or border BIPOC, low income, and frontline communities, clean fuels policies have enormous potential to improve air quality where it is needed most.

Other Key Themes

- **Not just a light-duty vehicle problems:** Heavy and medium-duty vehicles also key, in particular from an equity perspective due to their higher air quality impact on low-income and BIPOC communities, in addition to GHG impacts and opportunities.

- **No silver bullet:** Electrification is certainly a central decarbonization strategy, but this transition will still take a couple of decades and we need other strategies to complement and assist electrification in the interim to meet GHG targets, including getting more people into transit, biking, and other forms of shared mobility, as well as cleaner fuels for the legacy fleet of internal combustion vehicles.

Need for state-based strategies: Federal policy will continue to play a major role in transportation and vehicle policy, but states are clearly providing a lot of the leadership right now in advancing key electrification, fuels and VMT reduction strategies for reducing GHG emissions in the sector. States providing this leadership are also more likely to make effective use of federal funding opportunities that are hopefully coming our way.



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Charles Griffith, charlesg@ecocenter.org

Judson Herzer, herzerj1@michigan.gov

800-662-9278 | Michigan.gov/EGLE

Introduction to Discussion of Recommendations from the Transportation and Mobility Workgroup

Trevor Drake

Great Plains Institute

Council Member Discussion
of
Recommendations from the Transportation and
Mobility Workgroup



NEXT STEPS

- **Small Group Meeting of Council Members on the topic of Circular Economy, Recycling, Food Waste.** Interested council members, please email EGLE-ClimateSolutions@Michigan.gov. Tentatively planning small group meetings for weeks between Nov. 1 meeting and Nov. 23 meeting.
- **Next Meetings of the Council**
 - Tues., October 26, from 3-5 p.m.
 - Mon., Nov. 1, from 1-3 p.m.

Reach Us Online

WEBSITE

Michigan.gov/Climate

EMAIL ADDRESS

EGLE-ClimateSolutions@Michigan.gov