

From Listening to Leadership:

Convening Results from EGLE and U-M SEAS Collaboration

February 2026

EGLE Office of Climate and Energy Low-Income and
Disadvantaged Community LIDAC Convenings and
Tactical Pillar Implementation Convenings

A summary of the executive project by U-M
School for Environment and Sustainability

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Executive Summary

The Michigan Department of Environment, Great Lakes and Energy (EGLE)'s Office of Climate and Energy (OCE) engaged Dr. Tony Reames and Director Liesl Clark of the University of Michigan School for Environment and Sustainability (U-M SEAS) to provide input into the development of the [Comprehensive Climate Action Plan \(CCAP\)](#) and to help establish a framework for analysis and engagement related to the CCAP's goals for Low-Income Disadvantaged Communities (LIDAC). Upon successful completion of this first phase of the work, EGLE expanded the scope of engagement to include U-M SEAS support for conducting partner engagement across each pillar of the Michigan Healthy Climate Plan (MHCP), as well as additional input on the CCAP document.

Under this second phase, U-M SEAS, in partnership with the OCE, developed and supported a structured partner engagement process across all focus areas of the MHCP. Across both phases, this effort included seven in-person engagement meetings, supplemented by virtual public engagement sessions. The in-person meetings were held in Detroit, Ann Arbor, and Lansing and included State of Michigan officials, nongovernmental organizations, community members, and private-sector representatives.

Background

In 2020, EGLE was tasked with developing the [MI Healthy Climate Plan \(MHCP\)](#) pursuant to [Executive Order 182 of 2020](#). The MHCP is the state's action plan to reduce greenhouse gas emissions and transition toward economy-wide carbon neutrality.

Published in 2022, this action plan outlined a pathway to achieving 100% carbon neutrality in Michigan by 2050, while creating a healthier, more prosperous, equitable, and sustainable state. Six working groups with diverse expertise, including members of the public, were formed to advise the Michigan Council on Climate Solutions in the design of this plan.

The strategies required are organized in six key pillars:

1. Commit to Environmental Justice and Pursue a Just Transition;
2. Clean the Electric Grid;
3. Electrify Vehicles and Increase Public Transit;
4. Repair and Decarbonize Homes and Businesses;
5. Drive Clean Innovation in Industry; and
6. Protect Michigan's Land and Water.

EGLE's Office of Climate and Energy (OCE) led the creation of the MHCP and continues to monitor progress through a variety of supports from the federal government and other sources, including the U.S. Environmental Protection Agency (EPA).

One such program is the EPA's Climate Pollution Reduction Grants (CPRG) program, which provides states, local governments, and Tribal nations with flexible resources to plan for and pursue ambitious greenhouse gas (GHG) pollution reductions to achieve three broad objectives:

1. Tackle damaging climate pollution while supporting the creation of good jobs and lowering energy costs for families;
2. Accelerate work to address environmental injustices and empower community-driven solutions in overburdened neighborhoods; and,
3. Deliver cleaner air by reducing harmful pollution in places where people live, work, play, and go to school.

Through the CPRG program, the State of Michigan received a \$3 million planning grant, which the OCE used to refine and implement the MHCP and prepare Michigan communities to compete for nationwide competitive federal funding competitions.

One step in that process was the development of a [Priority Climate Action Plan \(PCAP\)](#) for near-term, high-priority objectives, and a [Comprehensive Climate Action Plan \(CCAP\)](#) to guide both near- and long-term fulfillment of MHCP goals. The PCAP was submitted to the U.S. EPA in March 2024, and the CCAP was submitted in December 2025.

Phase One: Equitable and Just Climate Action Engagement

To help inform action items under Pillar One (Environmental Justice and a Just Transition), U-M SEAS, under the direction of Liesl Clark and Tony Reames, partnered closely with OCE to convene a Collaborative Planning Session for **Equitable and Just Climate Action** in October 2024. The hybrid session was attended by 174 participants from across Michigan and included representatives from numerous state departments, communities, and industries.

Participants highlighted the importance of education and outreach to enhance **awareness and build trust within** communities, while **encouraging local ownership** of sustainability efforts. The linkage between resilience and sustainability emerged as a dominant theme. Participants emphasized the importance of building community **resilience to climate impacts** and integrating these efforts into broader economic and planning initiatives. The **economic opportunities** associated with climate action - job creation in energy efficiency, building upgrades, and renewable energy initiatives, and the savings in reduced utility costs and increased property values - were discussed extensively. Participants also stressed the need to **upgrade outdated infrastructure**, promote **energy-efficient technology**, streamline **access to utility data**, and expand access to **smart technologies** for improved energy management. Finally, there were numerous calls for stronger policies that prioritize **community health standards**, increase **transparency and accountability in utility and corporate practices**, and enable **community-driven initiatives**, including renewable energy and sustainability projects.

Phase Two: Pillar Engagement



Between November 2024 and January 2025, OCE held five virtual public listening sessions for Pillars 2 through 6. During these sessions, OCE shared information on progress in implementing the MHCP, discussed PCAP action items, and solicited input from Michigan residents on desired actions for the design and implementation of the [CCAP](#). These sessions were attended by 567 participants statewide, engaging a broad cross-section of Michigan residents.

Building on the success of these sessions, the U-M SEAS and OCE teams conducted six in-person partner convenings, one for each pillar, with key government, private sector, community, and academic partners. The goal of these sessions was to align strategies with the overarching MHCP goals and to enhance coordination across agencies. In total, these convenings engaged



nearly 400 participants over a nine-month period, fostering connections among the diverse actors required to achieve the State’s 2050 ambitions.

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Methodology

Each session opened with a welcome from U-M SEAS organizers and an introduction by State of Michigan leadership to establish a baseline for the discussion to follow. The EGLE Chief Climate Officer and OCE team then provided an overview of sector-specific emissions relevant to the pillar, followed by expert presentations on current conditions, opportunities, and constraints.

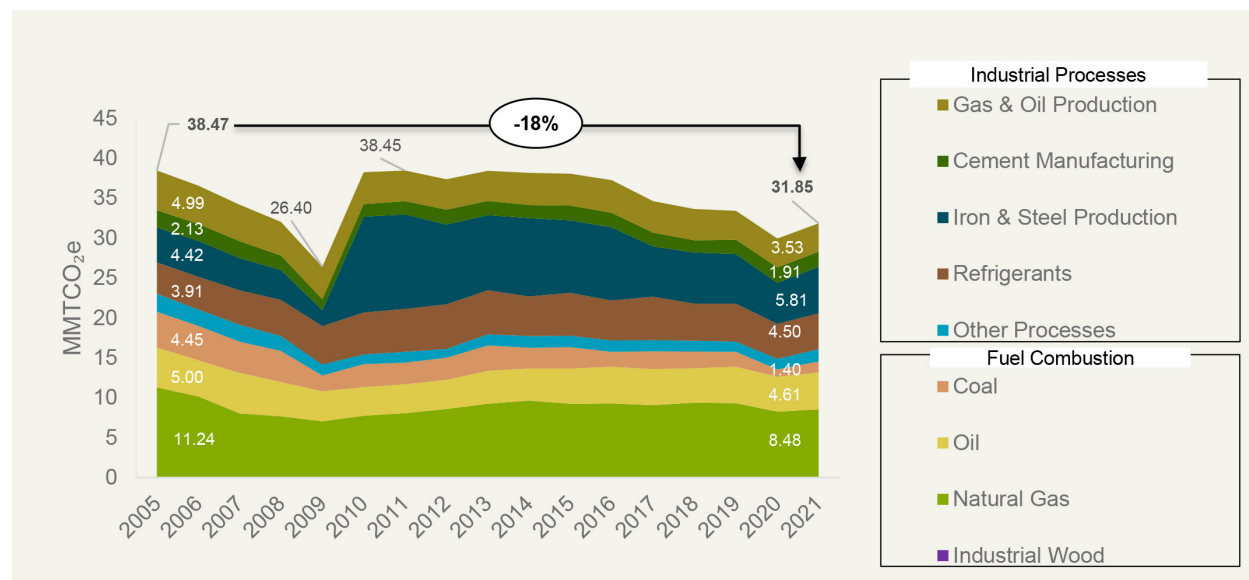
These presentations were followed by a panel discussion featuring representatives from government, private sector, and nonprofit organizations, who explored barriers and opportunities related to sector-specific climate goals. Participants then engaged in small-group discussions focused on key questions shaping CCAP implementation. Note-takers documented key themes without attribution to encourage open and candid dialogue.

U-M SEAS developed curated invitee lists, conducted outreach, hosted two convenings at the University of Michigan campus, and synthesized key takeaways in collaboration with OCE.

This report summarizes the major insights from the public and partner engagement process across the six MHCP pillars, including an analysis of what participants identified as major barriers to overcome, the role the state can play, and pathways forward.

Driving Clean Innovation in Industry

Overall, industrial emissions in Michigan have decreased by 18% since 2005, declining from 38.47 MMTCO₂e to 31.85 MMTCO₂e in 2021. These emissions can be divided into emissions from industrial processes and emissions from industrial fuel combustion ([CCAP](#), EGLE).



Industry GHG Emissions (MMTCO₂e) by Industrial Process, Fuel Type, and Year

Overall, industrial emissions in Michigan have decreased by 18% since 2005, declining from 38.47 MMTCO₂e to 31.85 MMTCO₂e in 2021. These emissions can be divided into emissions from industrial processes and emissions from industrial fuel combustion ([CCAP](#), EGLE).

Most industrial process emissions in Michigan originate from cement manufacturing, iron and steel production, and refrigerants. While emissions from cement manufacturing have declined since 2005, emissions from iron and steel production and refrigerants have increased. Natural gas and oil production emissions, another significant category of process emissions, have also declined over time. Some process emissions pose additional decarbonization challenges because they involve chemical reactions for which scalable alternatives are not yet available ([CCAP](#), EGLE).

Emissions from industrial fuel combustion have also declined since 2005. However, most fuel consumed by Michigan's 90 largest-emitting manufacturing facilities remains fossil-based, including substantial quantities of coal products. Many combustion units at these facilities are large and may require full replacement to enable electrification, presenting a major decarbonization challenge ([CCAP](#), EGLE). Progress under Pillar Two, Cleaning the Electric Grid, is therefore a critical driver of emissions reductions in this sector.

Finally, emissions from waste management in Michigan have declined by 24% since 2005. Increasing material circularity in industrial processes offers additional opportunities to further reduce emissions.

Priority Measures and Public Input

Based on emissions profiling and partner engagement, the [Priority Climate Action Plan](#) identified two priority measures under this pillar:

1. (PCAP reduction measure #9): Encourage industrial innovation to advance energy efficiency, fuel-switching, and deployment of cleaner manufacturing technologies, prioritizing facilities in Low Income and Disadvantaged Communities (LIDACs) that may receive significant benefits from reduced industrial sector emissions.
2. (PCAP reduction measure #10): Reduce methane emissions from various sources, including but not limited to food waste, organics diversion, and wastewater treatment facilities, with a focus on methane reduction strategies that will bring significant benefits for LIDACs.

On January 16 2025, EGLE conducted a public listening session with 90 virtual attendees from across Michigan, in order to discuss these priority measures and seek input on future state programming and implementation of climate goals. Discussion emphasized the **disproportionate impacts of industrial emissions on LIDACs** and the need to address associated **public health burdens**. Participants acknowledged the potential role of **carbon capture as a transitional tool** but stressed the importance of **maintaining focus on renewable energy deployment** and Michigan's 100% clean energy goals. **Innovation hubs** were highlighted as promising mechanisms for advancing solutions in hard-to-decarbonize industries, and **waste management and recycling** were identified as key pathways for emissions reduction.

Partner Convening

In May 2025, equipped with input from the public, EGLE and the U-M SEAS hosted an in-person convening on **Driving Clean Innovation in Industry** at the U-M School for Environment and Sustainability campus in Ann Arbor. The session included 43 participants representing state agencies, private sector, nongovernmental organizations, and academia.

The convening opened with remarks from Liesl Clark (Director, U-M SEAS), Phil Roos (Director, EGLE), Quentin Messer (CEO, Michigan Economic Development Corporation), and Regina Strong (MI Environmental Justice and Public Advocate). Cory Connolly (Chief Climate Office at EGLE) and Elizabeth Boatman (5 Lakes Energy) then presented an industrial emissions profile.

To set the stage for discussion, the team shared draft [CCAP](#) reduction measures for **Driving Clean Innovation in Industry**:

1. Promote and incentivize energy efficiency and electrification across low- to medium-temperature industrial processes.
2. Reduce emissions from limestone, lime, and cement manufacturing.

3. Reduce emissions from iron and steel industries with strategies like electrification, material efficiency, energy efficiency, and fuel switching.
4. Expand and continue emission reduction strategies in gas and oil production, like methane capture and energy efficiency.

Panel and breakout discussions explored the state's role in industrial decarbonization, policy pathways, investment drivers, and key barriers.

Key Barriers to Overcome

Key barriers for industrial decarbonization are financial constraints, infrastructure and technological viability, regulatory and permitting clarity, market demand, and workforce development. Industry faces high upfront costs on decarbonization with long payback period, limited access to flexible capital, and significant market and regulatory uncertainty. In addition, many decarbonization technologies are insufficiently mature and face supply chain and infrastructure insufficiency. Permitting capacity at the local level and uncertainty surrounding future regulations further complicate investment decisions. Moreover, there is a lack of consistency in market demand for greener products, accompanied by a shortage of skilled talent to enable industrial transformation, further limiting industry's capacity to achieve deep decarbonization.

Role of the State and Pathways Forward

The State of Michigan has gained a significant advantage by establishing a decarbonization plan with defined goals and strategic measures. The state can further advance progress by codifying policy pathways, convening partners around specific projects, supporting platform innovation, de-risking investment, and acting as a market facilitator. Importantly, these pathways forward could simultaneously enable incremental solutions while prioritizing long-term transitions.

Additional codification of climate goals and targeted policy interventions would incentivize industry actors and provide greater structure around strategic goals. One pathway toward this objective is creating metrics for industry actors that align with those of other states with similar goals. Other options include establishing legal decarbonization floors, alternative fuel requirements, or a cap-and-trade or invest policy similar to those used in other states.

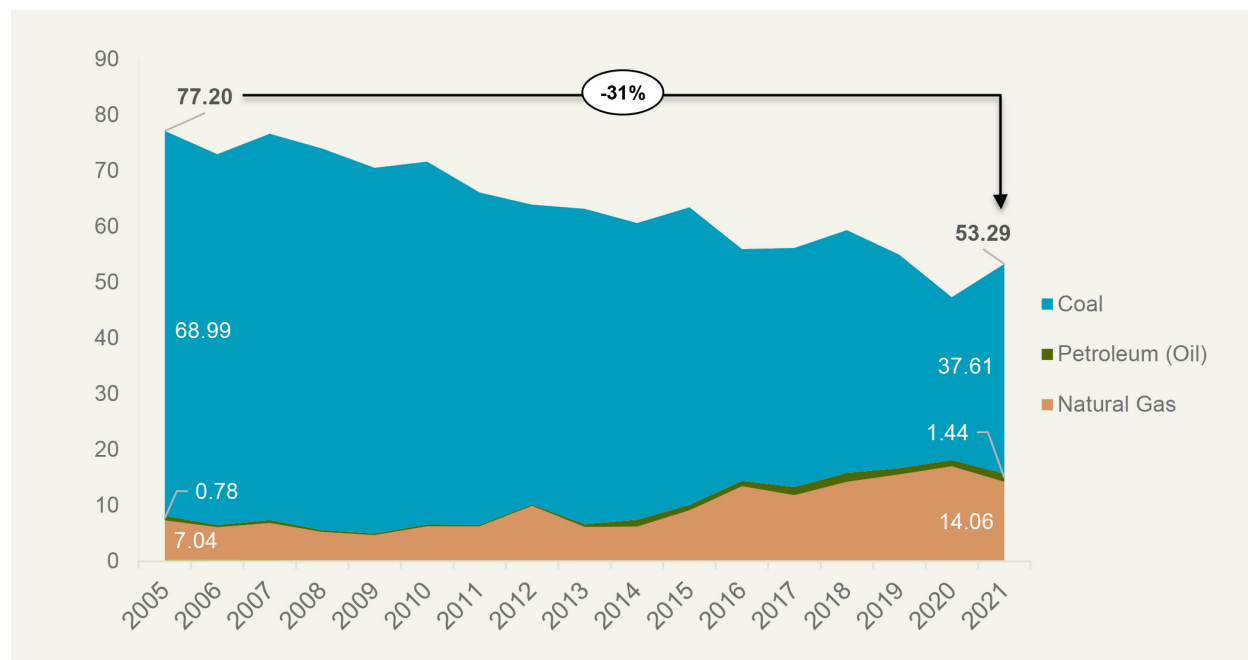
The State could act as a convener of critical partners around specific decarbonization projects. This may include engagement with large emitters, small and medium-sized manufacturers, communities near industrial sites, trade associations, and other relevant actors. The State could bring these groups together to coordinate within specific industries, around affected locations, or toward targeted decarbonization projects to enable systems change. Additionally, the State could serve as a connector among early adopters and potential followers, innovators and those positioned to scale solutions, customers and suppliers, and other complementary actors along the value chain.

Importantly, supporting innovation through innovation hubs, de-risking investment, and highlighting success stories would be highly valuable. Additional options, such as creating economic opportunity zones, and offering gap funding, flexible funding and sequencing, and access to low-cost capital, could help create safe spaces for innovation and protect first movers. Reducing disincentives created by permitting consequences associated with facility changes or the adoption of new technologies would further encourage early adoption.

Finally, industry is highly responsive to customer demand. The State could leverage its procurement power through Buy Clean policies to aggregate demand for key commodities such as low-carbon cement, steel, and refrigerants. It could also support municipalities, local governments, and universities in adopting green purchasing policies. Regional coordination with states that import Michigan products can serve as a powerful signal of consumer demand. Policies such as tax rebates and credits, as well as performance-based purchasing programs, can further stimulate customer demand for industrial decarbonization.

Clean the Electric Grid

Electric-sector emissions in Michigan have declined by 31% since 2005, largely driven by reduced coal use. Coal remains the most emissions-intensive generation source, though nearly all coal emissions originate from three power plants scheduled for closure or repurposing by 2032. Natural gas generation has increased and remains the dominant electricity source across utility and municipal providers ([CCAP](#), [EGLE](#)).



Electricity Generation GHG Emissions (MMTCO₂e) by Source and Year

Zero-emission generation has expanded steadily. Notably, 859.2 MW of renewable energy was added to the generation mix each year between 2021 and 2025. While wind was a preferred resource early in this transition, solar gained dominance in later years due to economics, siting

challenges, and customer preferences. That said, interest in wind energy development is now growing again in Michigan. Siting reforms enacted under [PA 233](#) are expected to accelerate deployment, with an estimated 1,972.4 MW of renewable capacity to be added annually from 2026 to 2032 ([CCAP](#), EGLE).

Michigan ranks first nationally for utility and public benefits energy efficiency programs. In 2023, energy waste reduction programs offset approximately 2 GW of generation and generated \$1.3 billion in savings ([CCAP](#), EGLE).

Priority Measures and Public Input

Informed by this rigorous emissions profiling, as well as intensive engagement with various partners, the [Priority Climate Action Plan](#) identified two priority measures under this pillar:

1. (PCAP reduction measure #1): Drive clean energy deployment, including improving siting for renewable energy and energy storage across Michigan, including on brownfields and former industrial sites, and emphasizing equitable access for Michigan's LIDACs.
2. (PCAP reduction measure #2): Invest in energy storage and necessary electric grid investments to enable earlier coal plant retirements and better integrate renewable energy into the electric grid.

On November 20 2024, EGLE conducted a public listening session with 128 virtual participants from across Michigan to discuss these priority measures and seek input on future state programming and implementation of climate goals. This discussion highlighted the need to **hold utilities accountable** for their role in the energy transition and in ensuring **energy affordability** for Michiganders, particularly in light of **recent increases in electricity costs** and concerns that clean energy plans could further contribute to rate increases. Participants also expressed strong support for **more aggressive energy storage** and **grid reliability solutions** and called for improved infrastructure to support Michigan's energy transition and growing energy needs. Many attendees advocated for a **transition to renewable energy** and emphasized the need for **clearer public communication** regarding the feasibility of renewable energy production in the state. Additionally, the innovation and **adoption of new technologies**, such as small modular reactors, geothermal energy, and the use of brownfields and public buildings for energy generation, were viewed as important pathways for emissions reduction. Finally, participants consistently underscored the importance of centering equity and climate justice in the state's efforts to decarbonize the electric sector, ensuring that all communities can access the benefits of the energy transition.

Partner Convening

In May 2025, equipped with input from the public, EGLE and the U-M SEAS hosted an in-person convening on **Cleaning the Electric Grid** at the U-M School for Environment and Sustainability

campus in Ann Arbor. The session included 46 participants representing state agencies, private sector, nongovernmental organizations, and academia.

The convening opened with remarks from Liesl Clark (Director, U-M SEAS), Phil Roos (Director, EGLE), and Regina Strong (MI Environmental Justice and Public Advocate). Cory Connolly (Chief Climate Office at EGLE) provided a baseline on the state's progress thus far, highlighting state programs in this sector and the emissions profile, and Douglas Jester (5 Lakes Energy) then presented the electric grid emissions trends.

To set the stage for discussion, the team shared draft [CCAP](#) reduction measures for **Cleaning the Electric Grid**:

1. Support clean energy deployment, including siting for renewable energy and increased investments in customer-driven renewable energy.
2. Invest in energy storage to better integrate renewable energy into the electric grid.
3. Promote holistic grid planning, infrastructure investments, and flexible demand programs to enhance grid resilience.

Panel and breakout discussions explored the state's role in grid decarbonization, policy pathways, investment drivers, and key barriers. The key takeaways of these deliberations are summarized below.

Key Barriers to Overcome

Key barriers to grid decarbonization include interconnection challenges, limited transmission capacity, resource adequacy and balance, energy affordability, federal–state–local policy alignment, local siting and permitting, and data availability and transparency.

Interconnection queues are lengthy and burdensome for both utility-scale projects and smaller projects seeking to connect to the distribution network. Michigan's transmission system also has limited capacity to move renewable energy from generation sites to demand centers, and grid upgrades are lagging behind planned generation additions. As the state's three major coal plants retire while electricity demand continues to grow, maintaining resource adequacy may become increasingly difficult. Maintaining an appropriate balance among solar and wind generation, natural gas (with carbon capture, utilization, and storage), and energy storage will also be critical. Each of these challenges may affect energy affordability and reliability, as the costs of grid improvements may be passed on to ratepayers, potentially increasing opposition and exacerbating equity concerns.

Misalignment among federal, state, and local policy goals further contributes to a complex regulatory environment for decarbonization efforts. This complexity is intensified by local siting and permitting delays, community pushback, and limited capacity among local government officials to effectively evaluate and permit projects. Finally, limited access to real-

time grid data, hosting capacity maps, and interconnection status tracking can hinder effective and proactive siting decisions.

Role of the State and Pathways Forward

At the utility-scale level, the 2023 siting reforms have eased pathways for renewable energy development while seeking to address community needs. That said, the State could continue to provide guidance and technical assistance to local governments, help align local ordinances with state-level energy goals, facilitate coordination among producers, utilities, and local governments to reduce conflict and delays, and encourage meaningful community engagement. Programs like the [Renewables Ready Communities Award](#) are essential to successfully balancing permitting ease and community needs.

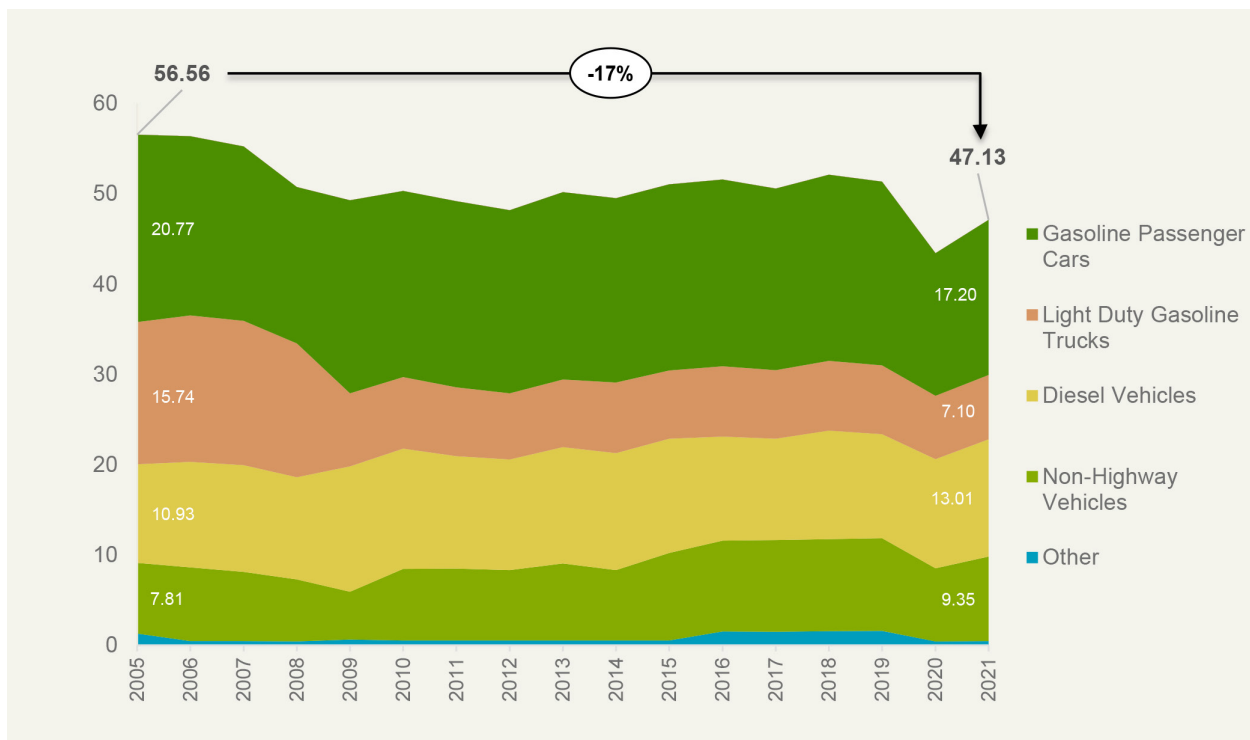
Michigan could also consider initiating interregional coordination to engage with regional transmission organizations such as MISO to ease interconnection challenges. In addition, the State could address barriers to data availability and transparency by hosting capacity maps and providing access to real-time grid data, thereby improving site selection for utility-scale projects.

The State could further encourage and enable greater customer participation and localized grid flexibility through approaches such as virtual power plants, community solar, and demand response programs. Increasing Michigan Public Service Commission oversight of interconnection at the distribution level could also enhance clean energy deployment and support deeper decarbonization.

Finally, the State could continue to ensure that utilities center equity and affordability, grid reliability, and resource adequacy within their integrated resource planning processes.

Electrify Vehicles and Increase Public Transit

Transportation sector emissions in Michigan have declined 17% since 2005. Emissions from gasoline passenger cars and light-duty gasoline trucks have decreased in particular, driven by improvements in fuel efficiency. In contrast, emissions from heavy-duty diesel trucks and other diesel vehicles have increased significantly, accounting for 28% of total sector emissions in 2021. Emissions from non-highway vehicles, including boats, locomotives, farm and construction equipment, aircraft, and utility vehicles, have also increased by 1.6% and accounted for 20% of sector emissions in 2021 ([CCAP](#), [EGLE](#)).



Transportation GHG Emissions (MMTCO₂e) by Vehicle Type and Year

Electric vehicle adoption has increased substantially in recent years. Secretary of State data from 2025 indicate that 85,666 electric vehicles are registered in Michigan, up from 20,001 at a comparable point in 2022. In addition, there are 18,141 plug-in hybrid vehicle registrations, compared with 12,431 in 2022. Much of this growth has occurred within the past year, with the state reporting 35,931 additional EV registrations since June 28, 2024—a 72% increase ([CCAP](#), [EGLE](#)).

Despite this growth, electric vehicles still account for only 1% of the approximately 8 million vehicle registrations in Michigan, according to the Department of State, indicating significant room for further adoption ([CCAP](#), [EGLE](#)).

Priority Measures and Public Input

Informed by this rigorous emissions profiling, as well as intensive engagement with various partners, the [Priority Climate Action Plan](#) identified two priority measures under this pillar:

1. (PCAP reduction measure #6): Electrify state government, municipal, tribal, and other public fleets, prioritizing equitable access for Michigan's LIDACs.
2. (PCAP reduction measure #7): Support just access to public transit and non-motorized transportation options by improving infrastructure, and by increasing routes, frequency, and reliability of available options.
3. (PCAP reduction measure #8): Encourage adoption of electric vehicles by increasing deployment of electric vehicle charging infrastructure, prioritizing equitable access for Michigan's LIDACs.

On December 10 2024, EGLE conducted a public listening session with 98 virtual participants from across Michigan to discuss these priority measures and gather input on future state programming and the implementation of climate goals. The discussion highlighted the need to improve the **accessibility of public transportation** and ensure **equitable access** to these services. Participants expressed **enthusiasm for the state's EV adoption goals** but emphasized the need for **accessible incentives**, such as direct rebates rather than tax credits. They also raised concerns about **charging station accessibility, range anxiety, high vehicle costs, and insufficient infrastructure** as barriers to adoption. There was strong support for ensuring that the benefits of transportation initiatives **reach BIPOC communities** and those most affected by pollution. Many attendees called for **integrating land-use and transportation planning** to promote more sustainable communities, adopting long-term planning approaches to achieve state goals, and **strengthening coordination among EGLE, MDOT, and other government entities**. Finally, participants consistently emphasized the importance of **centering communities in planning and decision-making processes** to ensure that initiatives meet local needs and build public support.

Partner Convening

In August 2025, equipped with input from the public, EGLE and the U-M SEAS hosted an in-person convening on **Electrify Vehicles and Increase Public Transportation** at Newlab Detroit. The session included 53 participants representing state agencies, private sector, nongovernmental organizations, and academia.

The convening opened with remarks from Liesl Clark (Director, U-M SEAS), Phil Roos (Director, EGLE), and Regina Strong (MI Environmental Justice and Public Advocate). Julia Field (Deputy Climate Officer, OCE) then presented the transportation sector emissions profile. Next, Justine Johnson (Michigan's Chief Mobility Officer from the Office of Future Mobility and Electrification) also provided an overview of current efforts in this sector.

To set the stage for discussion, the team shared draft [CCAP](#) reduction measures for **Electrify Vehicles and Increase Public Transit**:

1. Encourage adoption of EVs by increasing deployment of EV charging infrastructure and vehicles.
2. Increase access to public transportation and non-motorized transportation options.
3. Support research and development to expand technologies available to reduce emissions from maritime, aviation, and heavy-duty vehicles (including electrification, fleet optimization, and sustainable aviation fuel).
4. Electrify state government, municipal, tribal, and other public fleets.
5. Support land use and transportation planning that will enable high-density, mixed-use development.

Panel and breakout discussions explored the state's role in transportation decarbonization, policy pathways, investment drivers, and key barriers. The key takeaways of these deliberations are summarized below.

Key Barriers to Overcome

Key barriers to transportation decarbonization include funding gaps and investment uncertainty; fragmented and lagging rules and regulations; infrastructure and technology constraints; and cultural and behavioral barriers to adoption. For transportation electrification, declining federal incentives and grant opportunities have created both an uncertain investment environment and a funding gap, making it more difficult to address the high upfront costs of electrification. With respect to public transit, participants emphasized that most systems remain significantly underfunded, as they are often viewed as businesses rather than as public goods.

In addition, lengthy permitting processes, outdated codes and regulations governing vehicle-to-grid integration and home battery use, the need for equipment standards, and inconsistent assumptions in load-growth planning present significant policy and regulatory challenges. A lack of interoperability across charging systems, vehicle equipment, and software platforms further creates inefficiencies, compounding infrastructure and technology constraints such as supply chain delays, charging infrastructure installation delays, and EV delivery delays.

Finally, cultural barriers, including range anxiety, stigmatization of public transportation, insufficient training and education for dealerships and fleet operators, and limited consumer education, continue to discourage adoption. Collectively, these barriers can affect transportation affordability and accessibility, exacerbating existing equity concerns.

Role of the State and Pathways Forward

The State could play a leadership role in establishing necessary rules, codes, and standards, while expediting permitting, to support the electrification and grid interconnection of transportation systems. Doing so may unlock private investment and expand available infrastructure. The State will also need to strengthen coordination across agencies and address funding gaps through flexible state-level grant programs, pooled or bulk-purchasing initiatives, consumer incentives, and greater permitting and regulatory clarity, in order to mitigate uncertainty resulting from declining federal support. This is particularly important for deeply underfunded public transit systems, which present an opportunity to be treated as public services or utilities rather than profit-driven operations. Rebates and risk-mitigation funds to support behind-the-meter solutions and low-income home charging upgrades would further help close accessibility gaps and expand adoption.

There is also a catalytic opportunity for the State to lead education campaigns targeting both consumers and intermediaries, such as vehicle dealers, local officials, and fleet operators. Clear messaging that normalizes EV use and simplifies concepts related to charging, range, and affordability could significantly reduce barriers to adoption. Empowering local champions and networks to promote adoption in communities where trust and visibility are critical can further enhance accessibility.

Finally, strengthened regional and stakeholder coordination among state governments, utilities, municipalities, and regulatory agencies would help unlock widespread system change.

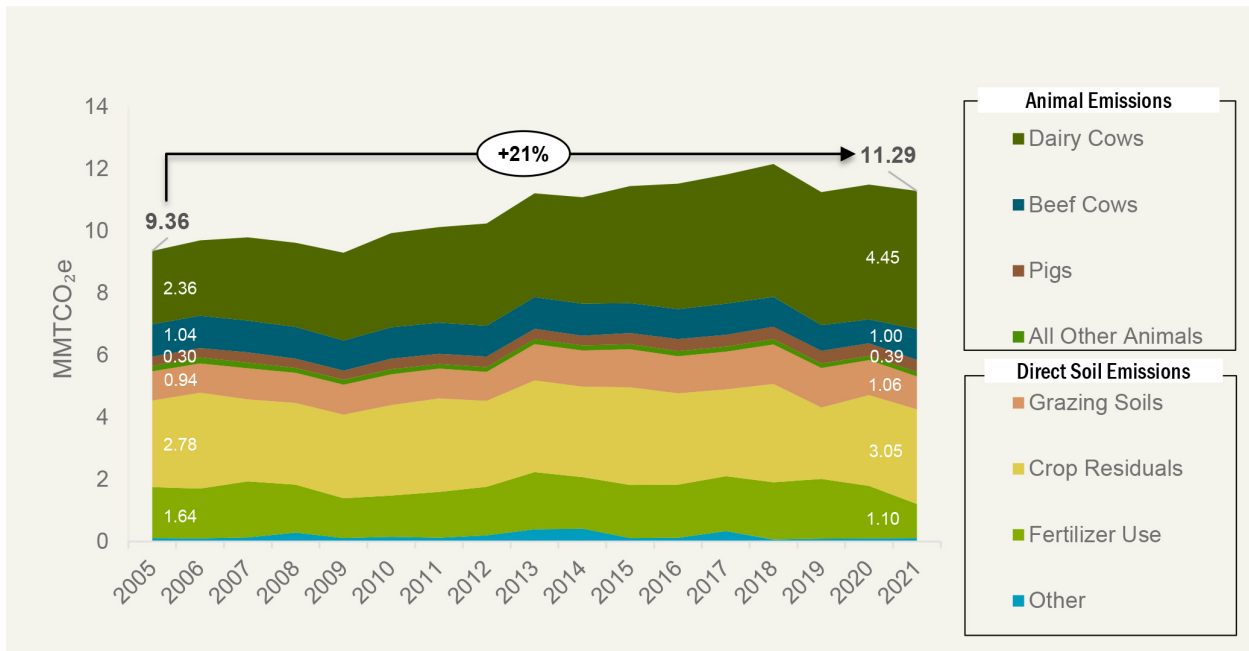
Protect Michigan's Land and Water

Agricultural emissions in Michigan increased by 21% between 2005 and 2021. Major contributors include animal emissions, particularly methane and nitrous oxide, from practices such as manure management and enteric fermentation (i.e., animal belching and flatulence). Direct soil emissions are another significant source, including nitrous oxide from animal manure and urine deposited in soils, as well as emissions from crop residues and fertilizer applications ([CCAP](#), EGLE).

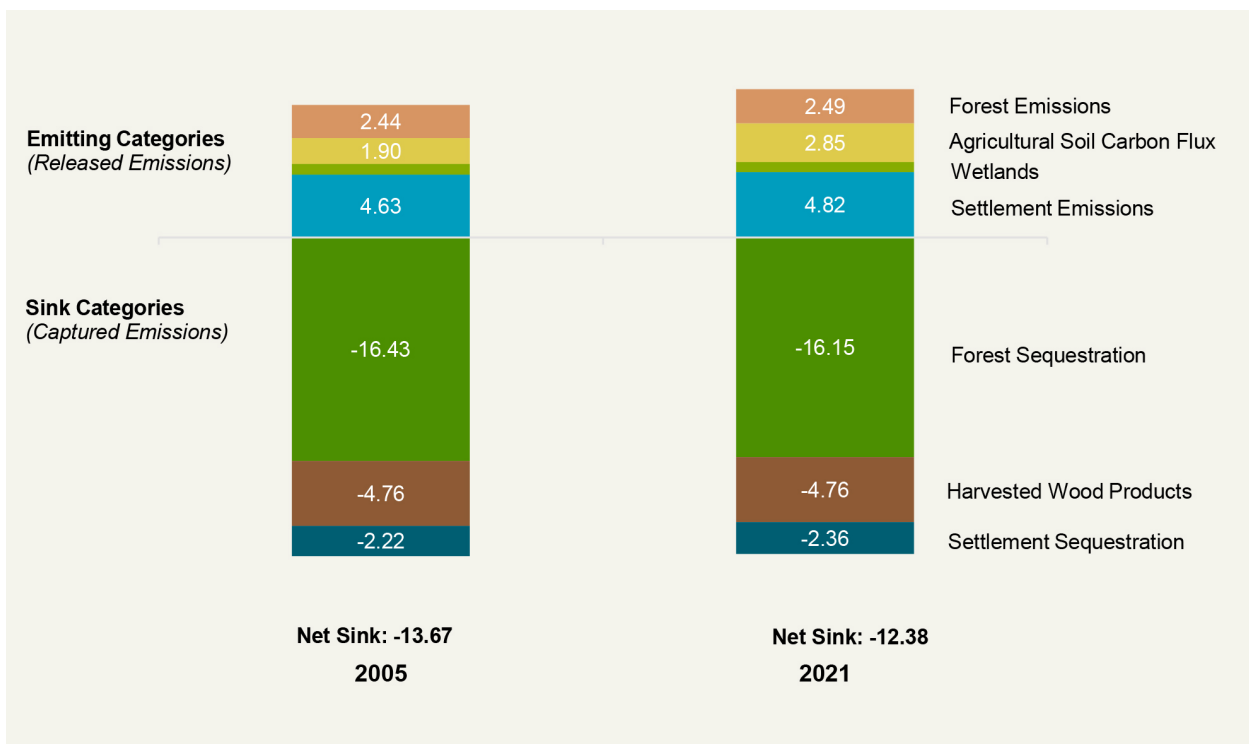
By contrast, Michigan's natural lands function as a net carbon sink, offsetting 12.4 MMTCO_{2e} in 2021. This sequestration capacity has declined since 2005, when it totaled 14.5 MMTCO_{2e}. Key sink categories include forest sequestration, harvested wood products, and settlement sequestration, such as urban trees and yard trimmings in landfills that act as carbon sinks. Emissions from natural lands arise from forest fires, carbon cycling in croplands and grasslands, and releases from wetlands ([CCAP](#), EGLE).

Public Input

On January 22 2025, EGLE conducted a public listening session with 154 virtual participants from across Michigan to gather input on future state programming and the implementation of climate goals.



Agriculture GHG Emissions (MMTCO₂e) by Subsector and Year. Note: Other Animals include turkeys, sheep, goats, chickens, and horses. Other Emissions include those from agricultural residue burning, liming, and urea fertilization.



Natural and Working Lands GHG Emissions (MMTCO₂e) by Subsector and Year

The discussion highlighted concerns about the **environmental and public health impacts of current practices**, including correlations between high cancer incidence and chemical farming, as well as damage caused by industrial disasters and overdevelopment. Participants emphasized the importance of **regenerative agriculture and sustainable farming practices**, noting their benefits for soil and water health. Many attendees underscored the need for **water conservation**, raising concerns about **wastewater management** and calling for improved land-

use practices to protect water resources. Throughout the session, speakers reflected on the importance of **transitioning to clean energy**. However, participants also raised concerns about the **land-use implications of renewable energy projects** and stressed the need for thoughtful planning. Numerous participants offered specific policy and regulatory recommendations, including purchase of development rights programs, conservation easements, and incentives for sustainable farming practices. Overall, the discussion highlighted the wide range of policy mechanisms available to advance climate goals in this sector.

Partner Convening

In September 2025, equipped with input from the public, EGLE and the U-M SEAS hosted an in-person convening on **Protect Michigan's Land and Water** at the Deborah A. Stabenow Building in Lansing. The session included 56 participants representing state agencies, private sector, nongovernmental organizations, and academia.

The convening opened with remarks from Alessandra Carreon (Chief Climate Officer, EGLE), Phil Roos (Director, EGLE), Kathy Angerer (Deputy Director, MDARD), Scott Whitcomb (Deputy Director, DNR), and Katie Lambeth (Tribal Liaison, EGLE). Then Jordan Powers (OCE) presented the emissions profile for the segment.

To set the stage for discussion, the team shared draft [CCAP](#) reduction measures for **Repair and Decarbonize Homes and Businesses**:

1. Encourage climate-smart agricultural practices.
2. Support climate-smart forestry practices alongside proactive forest health management, as well as reforestation and urban tree planting efforts.
3. Support climate-smart forestry practices alongside proactive forest health management, as well as reforestation and urban tree planting efforts.

Panel and breakout discussions explored current efforts, opportunities, and barriers related to decarbonizing the built environment, as well as the role of the State in protecting Michigan's land and water resources, the barriers to achieving this goal, and the key opportunities and drivers for emissions reduction in this sector. The key takeaways of these deliberations are summarized below.

Key Barriers to Overcome

Key barriers to land and water conservation in Michigan include weak economic incentives, competing and expanding land uses, fragmented regulatory and monitoring authority, and limiting policy structures. The current farm economic system incentivizes short-term production over long-term sustainability, and small family farms face significant financial strain and limited access to capital, constraining their ability to transition to alternative land management and farming practices. Urban expansion and industrial development, including clean energy growth and increasing demand from data centers, place additional financial

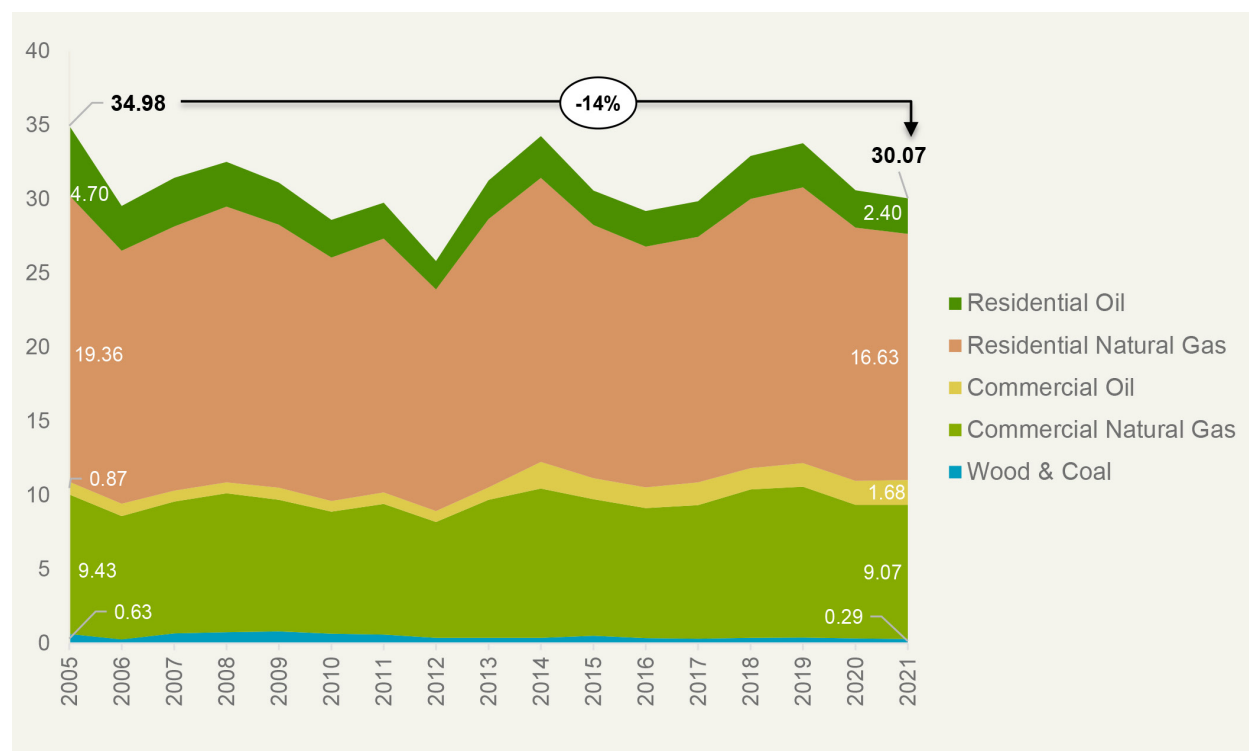
pressure on farmers and intensify development pressures on forested lands. Responsibility for managing water, agriculture, and natural lands is distributed across numerous state and local entities, yet limited coordination among initiatives and inconsistent data and measurement practices reduce efficiency and hinder progress tracking. Moreover, environmental regulation remains politically divisive, and the current reliance on voluntary programs has struggled to achieve scale. Public disinterest and the loss of generational knowledge related to land and water stewardship further challenge the effectiveness of these voluntary efforts.

Role of the State and Pathways Forward

Michigan's leadership on Great Lakes issues is well established, and the State could leverage this position to coordinate local, state, and regional efforts in land and water conservation. The State also has an opportunity to embed land and water stewardship into economic policy by linking conservation outcomes to public priorities such as food security, community resilience, and public health. Developing durable policy frameworks that make it cost-effective for stakeholders, including farmers, to adopt sustainable farming and land management practices is essential to maintaining long-term momentum. Importantly, the State could proactively engage in policy development to protect farmland and forestland, including through zoning and land-use planning that balances against excessive urban expansion and industrial development. The State could also strengthen education and public engagement efforts by creating training resources for improved practices and by fostering broader interest in conservation efforts statewide.

Repair and Decarbonize Homes and Businesses

Emissions from the building sector in Michigan have fluctuated over time but declined by 14% between 2005 and 2021. The largest contributor to building-sector emissions is the use of natural gas for space heating, water heating, and cooking in homes and businesses. Oil-based fuels, such as heating oil and propane, are also used in place of natural gas in rural and northern regions of Michigan and represent a secondary share of sector emissions (CCAP, EGLE).



Commercial and Residential Buildings GHG Emissions (MMTCo_{2e}) by Building Classification, Fuel Type, and Year

While natural gas remains the primary fuel for space and water heating in Michigan’s residential buildings, more than 45% of units use electricity for clothes drying and cooking. Fuel switching is therefore likely to drive a significant increase in annual electricity demand, and the resulting emissions impacts will depend on the pace and success of electric grid decarbonization (CCAP, EGLE).

In commercial buildings, overall building function and ventilation systems are the primary drivers of energy use. Natural gas remains the dominant heating fuel across this building stock (CCAP, EGLE).

Priority Measures and Public Input

Informed by this rigorous emissions profiling, as well as intensive engagement with various partners, the [Priority Climate Action Plan](#) identified two priority measures under this pillar:

1. (PCAP reduction measure #3): Drive building electrification and fuel-switching in existing buildings including an emphasis on LIDACs and electrifying households that currently rely on delivered fuels such as propane and home heating oil.
2. (PCAP reduction measure #4): Reduce household fossil energy use through home repairs, electrical upgrades for building and vehicle electrification, weatherization, and other energy waste reduction investments with an emphasis on ensuring equitable access.
3. (PCAP reduction measure #5): Decarbonize government and nonprofit facilities and infrastructure, with an emphasis on LIDACs, by reducing energy waste, investing in decarbonization solutions, and reducing emissions from fossil fuel combustion.

On December 18 2024, EGLE conducted a public listening session with 97 virtual participants from across Michigan to discuss these priority measures and gather input on future state programming and the implementation of climate goals. The discussion emphasized the need to **improve energy efficiency** in homes and businesses through the use of heat pumps, renewable energy, and weatherization. In this context, many participants strongly underscored the importance of **directing resources to LIDACs** to improve the affordability and accessibility of energy-efficiency upgrades and decarbonization measures. Attendees highlighted the need for **collaboration among state agencies**, utilities, and community organizations to enable successful decarbonization in this sector. There was also a strong focus on **education and outreach to ensure awareness of available programs and resources**. Importantly, participants expressed enthusiasm for both the **environmental and economic benefits** of energy efficiency and decarbonization in the built environment, citing **cost savings** and **job creation** opportunities.

Partner Convening

In October 2025, equipped with input from the public, EGLE and the U-M SEAS hosted an in-person convening on **Repair and Decarbonize Homes and Businesses** at the Deborah A. Stabenow Building in Lansing. The session included 56 participants representing state agencies, private sector, nongovernmental organizations, and academia.

The convening opened with remarks from Tony Reames (U-M SEAS), Phil Roos (Director, EGLE), and Amy Hovey (Director, Michigan State Housing Development Authority). David Gard (5 Lakes Energy) then provided an overview of building stock, and Natalie Lyijynen (Michigan Energy Innovators Business Council) provided an overview of a roadmap under development for this pillar.

To set the stage for discussion, the team shared draft [CCAP](#) reduction measures for **Repair and Decarbonize Homes and Businesses**:

1. Support electrification in residential buildings, including emphasis on households that rely on delivered fuels such as propane and home heating oil.
2. Reduce household energy use through home repairs, weatherization, and other energy waste reduction investments.
3. Reduce emissions from commercial buildings through energy efficiency enhancements, electrification, sustainable design, and retrofitting.
4. Support electrification and energy waste reduction efforts for government and nonprofit facilities.

Panel and breakout discussions Both the panel and breakout examined current efforts, opportunities, and barriers related to decarbonizing the built environment, as well as the role of the State in repairing and decarbonizing homes and businesses, the barriers to achieving this goal, and the key opportunities and drivers for emissions reduction in this sector. The key takeaways of these deliberations are summarized below.

Key Barriers to Overcome

Key barriers to decarbonizing the built environment include financing and affordability challenges; workforce development and deployment constraints; policy and regulatory gaps; behavioral barriers; and a lack of reliable, aggregated data.

The cost of repairs, retrofitting, and fuel switching remains a significant barrier to adoption and disproportionately affects LIDACs. Programs such as [Michigan Saves](#) primarily finance single-family housing improvements, leaving gaps in support for multifamily housing. Incentives for multifamily housing construction and development are limited, and renovations to this building stock are often complex. Importantly, the potential impacts on rental prices and the affordability of improved units should be carefully considered.

Gaps in building codes, along with inconsistent enforcement, represent additional barriers to decarbonization in this sector. At the same time, a significant workforce shortage limits the capacity to meet repair and decarbonization goals for buildings. Misalignment between training programs and the effective deployment of trained workers further constrains the pace and scale of transformation.

Dynamics between landlords and tenants, including the distribution of costs and benefits of repairs and decarbonization, misaligned incentives, and logistical challenges associated with maintaining housing availability during renovations, also pose significant obstacles. Behavioral factors, such as resistance to transitioning away from gas stoves and reluctance among professionals and businesses to alter established systems and practices, continue to hinder progress.

Finally, these challenges are compounded by insufficient data transparency and the lack of consistent benchmarking of energy use. These gaps make it more difficult to adopt a systems-based approach to addressing this complex challenge.

Role of the State and Pathways Forward

The State could take a leadership role in education and public engagement around the value of repair and decarbonization. Highlighting economic benefits such as cost savings and resilience, and simplifying information about available tools and resources, can help increase adoption and reduce resistance to change. Using public buildings as demonstration projects to normalize heat pumps, geothermal systems, and all-electric energy use could further enhance public trust and responsiveness.

Modernizing energy codes and improving their enforcement are essential to driving systemic change. These regulatory efforts could be paired with expanded funding opportunities, including innovative financing tools such as pre-development loans, green banks, and direct incentives. Importantly, these tools could address the disproportionate burden on LIDACs and improve access to repair and decarbonization measures in these communities.

The State could also serve as a convener of resources to support meaningful workforce development by consolidating training opportunities, providing funding and equipment support, and ensuring alignment between trained workers and deployment opportunities. Emphasizing growth potential and economic benefits can help engage contractors and designers in advancing the goals of this pillar.

Finally, the State could strengthen data transparency and benchmarking by encouraging utilities to provide access to aggregated energy-use data, requiring disclosure of benchmarking data from commercial buildings, and improving the visibility and accessibility of such information. These efforts can help individuals and businesses better understand their energy use and visualize the cost benefits of transformation.

Environmental Justice in Climate Action

Emissions and Environmental Justice

In Southeast Michigan alone, approximately 1.4 million residents—living in 500 census tracts across 60 municipalities, meet or exceed established criteria for equity and environmental justice burdens, representing about 15% of the state’s population (Southeast Michigan Council of Governments). Importantly, achieving Michigan’s emissions reduction goals offers co-benefits such as improved public health outcomes, economic gains, increased climate resilience, and progress in addressing environmental injustices, thereby helping to alleviate the environmental justice burdens experienced by communities statewide.

Partner Convening

In January 2026, equipped with input from the public, EGLE and the U-M SEAS hosted an in-person convening on Environmental Justice in Climate Action at the IBEW NetZero Center in Detroit. The session included ~100 participants representing state agencies, private sector, nongovernmental organizations, and academia.

The convening opened with remarks from Tony Reames (U-M SEAS), Phil Roos (Director, EGLE), and Regina Strong (EGLE - Office of Environmental Justice Public Advocate). Alessandra Carreon (Chief Climate Officer, EGLE) and Jordan Power (OCE EGLE) then presented a state emissions profile, as well as progress updates on the [CCAP](#). Tyler Klifman from the Southeast Michigan Council of Governments also provided insight into the status of environmental justice concerns in the region and the proposed Southeast Michigan Climate Action Plan.

This was followed by small-group discussions among attendees to deliberate over current efforts, opportunities, and barriers; the future role of the state in advancing environmental justice and energy equity, as well as the resources needed to advance the state's goals in this area. The key takeaways of these deliberations are summarized below.

Takeaways

The table discussions captured a wide range of topics, programs, and highlighted community groups. Across Michigan, decentralized and local environmental justice initiatives form a robust network of grassroots organizations, municipal governments, nonprofit organizations, educational institutions, and regional collaborations, all working to advance the State's environmental justice goals. Ongoing local efforts include pilot programs focused on energy efficiency, composting, home decarbonization, lead abatement, and recycling. At the state level, initiatives include [Environmental Justice Impact Grants](#) to support local efforts, community environmental health impact assessments, the statewide [MI EJ Screen](#), extensive community engagement activities, the Survive and Thrive Community Resiliency Planning Pilot, and close collaboration with the OCE to embed equity across all emissions reduction efforts. Leading climate action through an environmental justice lens means that infrastructure improvements, resilience and remediation efforts, climate education, transportation system changes, and land management initiatives pursued statewide in support of climate goals are likely to yield measurable improvements in environmental justice outcomes.

Community members emphasized that the future of environmental justice in Michigan must be bottom-up, equitable, and community-led. Clean air, water, energy, and access to nature should be treated as fundamental rights, with every Michigander entitled to equal access. To achieve this vision, it was recommended that decision-making authority must reside with those most affected, and funding should align with community-identified priorities. Participants expressed that polluters must bear the costs associated with climate impacts and barriers to equitable access to a healthy environment and natural resources. Participants expressed that opportunities must be created for all individuals, particularly BIPOC and Tribal communities, to participate in and benefit from a just, low-carbon economy.

Finally, participants stressed that realizing this future will require overcoming political inertia and barriers created by complex systems, uneven access to information and influence, and a lack of trust. The State could establish clear environmental justice plans, ensure equitable access to funding, increase transparency in health, environmental, and energy data, support community-centered decision-making, and direct resources toward communities facing the greatest environmental burdens. Achieving these goals will require sustained community engagement, clear and transparent communication, innovative financing approaches, and deep cross-sector and cross-agency collaboration.

Conclusion

The January 2026 engagement marked the final public engagement meeting conducted by EGLE, with support from U-M SEAS, to engage Michiganders and gather input on how best to achieve the state's climate goals. Insights from these meetings shaped the development of Michigan's Comprehensive Climate Action Plan and will guide state agencies and their partners in its implementation. Together, these efforts will help Michigan achieve 100% carbon neutrality by 2050, avert the worst impacts of the climate crisis, create good-paying jobs, and build a healthier, more prosperous, equitable, and sustainable future for all Michiganders.