Competitive Fuels Policy - Enhancing Air Quality and Well-Being

Transportation emissions are the leading source of climate and air pollution, both of which contribute to significant health impacts for Michiganders.

Implementing a competitive fuels policy is projected to result in a **27% deeper reduction in emissions** from the transportation sector by 2035 compared to maintaining the current business-as-usual approach.

With a Competitive Fuels Policy, Michiganders can breathe easier.
The policy will incentivize using cleaner transportation fuel options, reducing harmful emissions of nitrogen oxides (NOx) and particulate matter (PM2.5), which can cause respiratory and other serious health issues.

- Analysis of light-duty and heavy-duty vehicle use shows that a Competitive Fuels Policy would reduce NOx emissions by 10%.
- The EPA COBRA model projected that the reduction in PM2.5 created by a Competitive Fuels Policy would reduce premature mortality with benefits valued at about $275 million annually.

Fewer harmful emissions mean more dollars in Michiganders' pockets, too. The EPA model attributed $3.4 million in annual benefits to counties on average, with some counties realizing as much as $93 million in annual benefits by 2035.

These benefits will spread to all Michiganders. Every single county will experience improvements in air quality. Areas that have the most significant air quality benefits include those that have higher populations and more traffic.

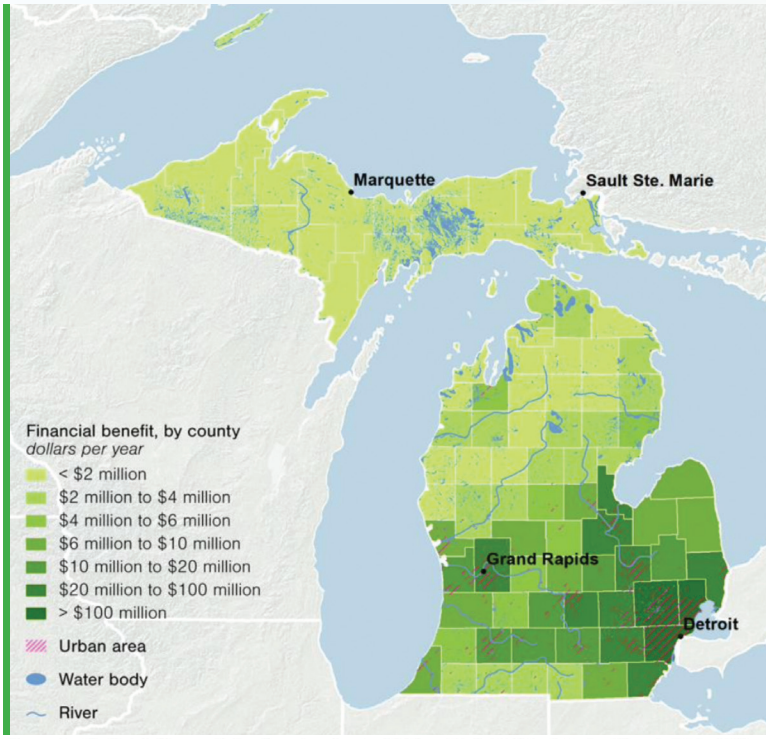

Figure authored by Elizabeth Abramson, Horizon Climate Group based on COBRA modeling by Paul Meier, University of Wisconsin (October 2023).

STUDY METHODOLOGY

The CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool (COBRA), an Environmental Protection Agency screening model, was used to assess how a Competitive Fuels Policy in Michigan would impact air pollution and human health. This analysis was completed by Paul Meier, P.E., PhD., Holloway Group at the University of Wisconsin-Madison's Center for Sustainability & Global Environment. Data and Sources used include:

- Transportation Sector Vehicle Fleet and Emissions – EPA MOVES model, 2021
- Ethanol Emission Factor Adjustment – Kazemiparkouhi, et. al., 2022
- Michigan Power Plant Emissions – EPA Clean Air Markets Program Database, 2022
- Power Plant Retirements – U.S. Energy Information Administration Form 860, 2023
- Electricity Decarbonization Goals – Michigan Healthy Climate Plan, 2022
- Health Benefits Calculation – EPA Co-Benefits Risk Assessment (COBRAv4.1) tool

Competitive Fuels COALITION

competitive.cleanfuelsmi.org

The UW-Madison study was funded by the Great Plains Institute with support from the McKnight Foundation, the Ecology Center, and the Stolte Family Foundation.
Report available at: https://hollowaygroup.org/project/health-benefits-of-clean-energy

The Michigan Competitive Fuels Coalition comprises more than 70 companies across many industries dedicated to advancing clean mobility. For more information, visit competitive.cleanfuelsmi.org.