



What Is Clean Cars Minnesota?

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Clean Cars Minnesota is an initiative to tackle air pollution from passenger cars and trucks in Minnesota that will also reduce fuel costs for consumers.

Clean Cars will make owning a new car or truck cheaper, saving drivers \$1,600 over the lifetime of their vehicle.

Transportation is now the number one source of climate pollution in the state.¹ The initiative is composed of a new package of vehicle emission standards that will reduce transportation pollution and improve the options Minnesotans have for buying zero- and low-emission vehicles that save consumers money.

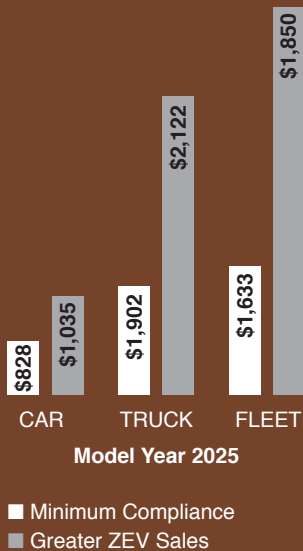
Governor Tim Walz has directed the Minnesota Pollution Control Agency (MPCA) to begin establishing the Clean Cars Minnesota Rule.² The agency is undertaking a public process to consider input on rules for automakers that would ensure vehicles meet Low Emission Vehicle (LEV) and Zero Emission Vehicle (ZEV) requirements analogous to those that have already been adopted in 11 states. Three additional states and the District of Columbia have adopted just the LEV component of the regulations.³

The LEV standard requires automakers to continue introducing, over time, cleaner and more fuel-efficient vehicles that emit less greenhouse gas, smog-forming pollutants, and fine particulate matter. The ZEV program requires manufacturers to offer consumers an increasing number of cars, SUVs, and pickup trucks that are powered by electricity. The requirements are directed toward vehicle manufacturers, not car dealerships, and will increase the number of cleaner, more fuel-efficient models from which consumers can choose.

The Benefits

An independent consultant report by Shulock Consulting, *Clean Cars Minnesota: An Analysis of Its Feasibility and Impact on Consumers and the Environment*, shows that adoption of clean car standards in Minnesota will deliver tremendous benefits to the state and its residents.⁴

Lifetime Savings Per Vehicle



Savings for vehicle owners

The study finds that lower-emission vehicles will save new vehicle purchasers in Minnesota an average of \$1,600 over the life of a new vehicle purchased in 2025, due mainly to lower fuel bills. The figure below breaks down the overall savings. The “Minimum Compliance” estimate reflects savings if industry meets just the minimum requirements of the Clean Cars Minnesota program now being considered. The “Greater ZEV Sales” estimate shows the potential additional savings for a scenario where ZEV sales exceed the minimum required level.

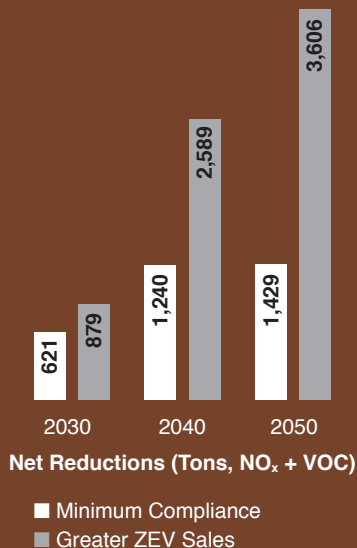
For the 85 percent of Americans who finance their new passenger vehicles, monthly expenditures for a typical six-year loan will be lower from day one even when including the incremental costs of the cleaner, more fuel-efficient technology. When these individual savings are combined, statewide savings will range from \$200 million to \$500 million annually by 2040.

Reduced emissions of smog-forming pollutants

Many respiratory diseases, such as asthma, are associated with and worsened by air pollution. Cars and trucks that run on fossil fuel emit many health-threatening pollutants such as oxides of nitrogen (NOx) and volatile organic compounds (VOCs), which react together to create smog. These pollutants disproportionately impact those who live near freeways, often low-income households and communities of color. Low-emission and zero-emission vehicles will reduce these pollutants, as well as avoid emissions from producing gasoline, leading to improvements in public health.

The Shulock Consulting study found that the program will result in significant reductions in smog-forming pollutants (NOx and VOCs).⁵ These reductions will result in fewer respiratory-related illnesses and improved public health.⁶

Smog-Forming Pollutants



Reduced emissions of climate pollutants

Climate pollution threatens Minnesotans’ way of life via higher temperatures, more extreme storms, and changes to ecosystems.⁷ In the Twin Cities region, the annual average temperature increased by 3.2 degrees Fahrenheit between 1951 and 2012. Although it may not seem like a large jump, this increase is already impacting the lives of Minnesotans and the state’s animals and ecosystems. For example, due to the urban heat island effect, parts of the city can spike 9 °F higher than other parts. Northern Minnesota is warming more quickly. This temperature increase is especially harmful to northern habitats and their species.⁸

Shulock Consulting found that Clean Cars Minnesota will deliver greenhouse gas reductions of about 1 million metric tons (MMT) in 2030 and about 2.5 MMT in 2050. The Greater ZEV Sales scenario would achieve reductions of about 7 MMT in 2050. A stronger push for cleaner, more fuel-efficient vehicles will result in more pollutants being taken out of our air, lessening their damage to us and the planet even more.

*Clean Cars
Minnesota will cut
carbon pollution
by millions of tons
every year.*

Other benefits

The savings noted above generally will be spent by consumers in ways that can stimulate Minnesota's local economies, leading to positive social and financial impacts throughout the state.

By putting more electric vehicles (EVs) on the road, Minnesota can also attract additional investments in charging infrastructure, helping spur more jobs associated with its installation and operation. As of the end of 2019, Minnesota had more than 61,000 jobs in the clean energy economy, with nearly 3,900 of those jobs in the clean vehicles and fuels category.⁹

More electric vehicles on the road will also help drive Minnesota's electricity rates down for everyone.¹⁰ That's because EVs tend to be charged overnight, when people are sleeping and there is plenty of spare capacity on the grid. Better utilization of the electricity grid means lower costs for everyone. A study by MJ Bradley & Associates shows that by 2050, these savings could have net cumulative benefits of \$10 billion in reduced electricity bills for all Minnesotans.¹¹



The Truth About the Clean Cars Minnesota Initiative

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Opposition to clean car standards has come from lobbying groups associated with the oil industry that are fighting policies that reduce the amount of gasoline consumers need to buy.¹² Other opponents, such as auto dealer associations, are also concerned that their members will only be able to offer specific types of low-emission vehicles, such as electric vehicles. We dispel some of the misinformation and fears that have come from these opponents. The truth is that:

Clean Cars Minnesota sets pollution standards on the manufacturers of passenger vehicles, not dealers

Automakers have already been introducing cleaner vehicles, including electric vehicles, that pollute less and save consumers money. The program would ensure manufacturers continue those trends in the future amidst the recent rollback to federal clean car standards.¹³ Both auto dealers and the public can continue to purchase the types of cars, SUVs, and pick-up trucks they want, but with even more cleaner models and technologies from which to choose.

Clean Cars will reduce costs for low-income families as well as rural families.

Clean Cars Minnesota will not impact farming equipment

Clean Cars Minnesota only affects new passenger cars and light-duty trucks for sale. It does not apply to heavy-duty vehicles like farming equipment or big rigs.¹⁴

Clean Cars Minnesota will not make owning a car, SUV, or pickup truck more expensive

The lifetime cost of owning a vehicle meeting the standards will be \$1,600 lower on average, even accounting for the incremental up-front costs. For those who drive larger vehicles that use more fuel, such as SUVs and pickup trucks, the savings will be even greater. And those who are in the market for an EV will have a growing array of products as automakers bring more models to Minnesota. With rapid improvements in technology, EVs are beginning to approach initial cost parity with their gasoline counterparts while having lower fuel costs.¹⁵

Clean Cars Minnesota will help reduce costs for low-income families as well as rural families

Cleaner, more fuel-efficient vehicles are not just for urban or wealthier drivers. People living in rural areas tend to drive longer distances and have larger vehicles (e.g., pickup trucks), so their savings on fuel will be even greater.¹⁶ Lower-income families tend to spend a larger proportion of their income on fuel than do higher-income families; this means that the operating cost savings from the program will provide a greater benefit to lower-income households.¹⁷ According to the Shulock Consulting study, lower-income households disproportionately buy from the used car market. Those used vehicles will retain the same fuel savings without much of the incremental cost of new technology, which typically gets absorbed by the first owner.

People are interested in electric vehicles but have too few choices

A 2019 Consumer Reports survey of Minnesotans found that 6 out of 10 of prospective vehicle buyers have interest in buying an electric vehicle and that 66 percent of those prospective buyers want automakers to provide more EV options.¹⁸ As production increases, automakers are indeed planning to make more EV models available. It is estimated that by 2023, there will be more than 100 electric vehicles on the market, of which more than 60 percent will be crossover vehicles, SUVs, and pickup trucks. But in Minnesota, a July 2020 survey of dealership inventories by MN EV Buyer found only 19 plug-in models available within a 200-mile radius of the Minneapolis metropolitan area, as compared with 43 models available near dealerships in San Jose, California.¹⁹



*The program will
result in more
EVs being available
in Minnesota.*

Auto dealers have not documented hardships in other states that have implemented clean car programs

A 2018 study conducted by Shulock Consulting compared revenue for dealers in states that adopted the ZEV program versus states that did not.²⁰ It found that revenue growth from 2012 through 2017 was more rapid in ZEV states than in non-ZEV states, even while controlling for personal income, and that any negative impacts were not discernable in the data. Some dealers have raised concerns that the regulations would limit their ability to trade cars between states or buy cars out of state. A thorough investigation of such issues by parties in Colorado found that cross-border trade and registrations can still occur, dealers can continue shipping vehicles to and from other states, and residents can keep purchasing vehicles in the state or in other states.²¹

The program provides industry with multiple years of lead time

The MPCA has stated that due to Covid-19 delays the earliest this program can be finalized will be in 2021, which means that it would first be enforced for model year 2025 vehicles.²² This provides automakers with significant lead time to supply cleaner vehicles while also ensuring auto dealers receive adequate training and information about electric vehicle models that will be offered.

What Are the Next Steps?

The public can engage in the rulemaking process in the fall of 2020. Public input will be considered by the MPCA, and then by the administrative law judge (ALJ) overseeing the rulemaking. If approved by the ALJ, the rule will be sent to the MPCA to be put in final form before being reviewed and approved by the Governor's Office and signed by the MPCA commissioner.

If you'd like to make your voice heard, keep posted at [Minnesotansforclean cars.com/join-our-movement](https://minnesotansforclean cars.com/join-our-movement) and become aware of when the next Covid-19-conscious public hearings are set to happen. *We must act now and quickly* to ensure Minnesotans will reap the public health, financial, and environmental benefits that Clean Cars will provide.



ACKNOWLEDGEMENTS:

Special thanks to Evelyn Correa, Simon Mui (Natural Resources Defense Council), and Anjali Bains (Fresh Energy) for the development of this document and Chuck Shulock (Shulock Consulting) for his review.

ENDNOTES

- 1 Minnesota Pollution Control Agency (hereinafter MPCA), Minnesota Department of Commerce, “Greenhouse Gas Emissions in Minnesota: 1990–2016,” January 2019, <https://www.pca.state.mn.us/sites/default/files/Iraq-2sy19.pdf>.
- 2 MPCA, “About Clean Cars Minnesota,” <https://www.pca.state.mn.us/air/clean-cars-mn-about> (accessed July 21, 2020).
- 3 Minnesota Protection Agency, “Rulemaking: Clean Cars Minnesota,” <https://www.pca.state.mn.us/air/clean-cars-mn-rulemaking> (accessed July 24, 2020).
- 4 Charles Shulock, *Clean Cars Minnesota: An Analysis of Its Feasibility and Impact on Consumers and the Environment*, Shulock Consulting, August 2020, the consulting report was commissioned by the Natural Resources Defense Council with input from Fresh Energy, Minnesota Center for Environmental Advocacy, and Shift2Electric, <https://minnesotansforclean cars.com/An-Analysis-of-Its-Feasibility-and-Impact-on-Consumers-and-the-Environment>.
- 5 Ibid.
- 6 Simon Mui and Amanda Levin, “Clearing the Air: The Benefits of the Clean Air Act,” NRDC, May 2020, <https://www.nrdc.org/resources/clean-air-acts-benefits-map>.
- 7 MPCA, “Effects of Climate Change in Minnesota,” <https://www.pca.state.mn.us/air/effects-climate-change-minnesota> (accessed August 1, 2020).
- 8 Ibid.
- 9 E2, *Clean Jobs America 2020: Repowering America’s Economy in the Wake of COVID-19*, April 2020, <https://e2.org/wp-content/uploads/2020/04/E2-Clean-Jobs-America-2020.pdf>.
- 10 Max Baumhefner, “Electric Vehicles Are Driving Rates,” NRDC Expert Blog, July 2020, <https://www.nrdc.org/experts/max-baumhefner/electric-vehicles-are-driving-rates-down>.
- 11 Dana Lowell, *Electric Vehicle Cost-Benefit Analysis: Minnesota*, MJ Bradley and Associates, August 2018, <https://www.mjbradley.com/reports/electric-vehicle-cost-benefit-analysis-minnesota>.
- 12 Anjali Bains, “What’s Up With Clean Car Standards and Why Do They Matter to Minnesotans?” Fresh Energy, July 2020, <https://fresh-energy.org/whats-up-with-clean-cars/>.
- 13 Luke Tonachel, “Six Facts About Trump’s Clean Cars Rollback,” March 31, 2020, <https://www.nrdc.org/experts/luke-tonachel/six-facts-about-trumps-clean-cars-rollback>.
- 14 Ibid.
- 15 Nic Lutsey and Michael Nicholas, “Update on Electric Vehicle Costs in the United States Through 2030,” International Council on Clean Transportation, April 2019, https://theicct.org/sites/default/files/publications/EV_cost_2020_2030_20190401.pdf.
- 16 Shulock, *Clean Cars Minnesota*.
- 17 David Greene and Jilleah Welch, *The Impact of Increased Fuel Economy for Light-Duty Vehicles on the Distribution of Income in the United States*, Oak Ridge National Laboratory and the Energy Foundation, September 2016, http://bakercenter.utk.edu/wp-content/uploads/2016/09/Equity-Impacts-of-Fuel-Economy-Report_final.pdf.
- 18 Union of Concerned Scientists and Consumer Reports, *Electric Vehicle Surveys Findings and Methodology: Minnesota*, September 2019, <https://advocacy.consumerreports.org/wp-content/uploads/2019/09/Electric-Vehicle-Survey-Minnesota-1.pdf>.
- 19 MN EV Buyer, “Save Some Green!” <https://www.mnevbuyer.com/economics> (accessed July 27, 2020). Cars.com, “New and Used Vehicles for Sale,” https://www.cars.com/for-sale/searchresults.action/?page=1&perPage=50&rd=100&searchSource=GN_BREADCRUMB&sort=relevance&zc=94088 (accessed July 27, 2020).
- 20 Charles Shulock, *Comparison of Automobile Sales in States That Have Adopted a Zero Emission Vehicle Regulation Versus States That Have Not Adopted*, Shulock Consulting, May 2018, 2, <https://www.shulockconsulting.com/reports-and-presentations>.
- 21 Environmental Coalition, *Rebuttal Prehearing Statement in the Matter Regarding Proposed Addition of Regulation Number 20*, 2018, 26-30, <https://earthjustice.org/sites/default/files/files/ConservationGroupsREB.pdf>.
- 22 Bains, “What’s Up with Clean Car Standards.”