
Policy Close Up #4

100% Electric Cars

Summary: Transportation is a major producer of the greenhouse gas emissions fueling global warming. As the world is moving to ban the sale of new automobiles powered by gasoline, so must New York.

Background: Climate change is the single biggest policy challenge the world faces. The burning of fossil fuels – coal, oil and gas – are the most significant culprits in those human activities. Climate pollution is warming our planet and causing extreme droughts, flooding, wildfires, and superstorms,¹ such as the devastating hurricanes in Puerto Rico and the Gulf Coast, the wildfires in California, and Superstorm Sandy right here in New York.

Our personal vehicles are a major cause of global warming. Cars and trucks emit around 24 pounds of carbon dioxide and other global-warming gases for every gallon of gas. About five pounds comes from the extraction, production, and delivery of the fuel, while the great bulk of heat-trapping emissions—more than 19 pounds per gallon—comes right out of a car’s tailpipe.² For the first time in more than 40 years, the largest source of greenhouse gas pollution in the U.S. isn’t electricity production but transport. Nearly 30 percent of greenhouse gas emissions are generated in the transportation sector. In New York, transportation is responsible for 41 percent of fuel-based CO₂ emissions in the State – almost double of electricity production.³

International Action to End the Sale of New Fossil Fuel Cars: China, the world's largest car market, is working on a plan to ban the production and sale of new vehicles powered only by fossil fuels. In Germany, Chancellor Angela Merkel has hinted that it's only a matter of time before the country that invented the modern car sets an expiration date of its own.⁴ Norway has set that goal for 2025, India by 2030. France and the United Kingdom both announced this summer that they would ban the sale of new gas and diesel cars after 2040.⁵

California’s Auto Emission Standards Under the Clean Air Act: The Clean Air Act allows states to either follow the federal requirements or adopt California’s vehicle emission regulations.⁶ Currently, nine states are following California and implementing Zero Emission Vehicle (ZEV) regulations. These states include Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island and Vermont. The Multi-State ZEV Action Plan that New York is a part of committed to 3.3 million Electric Vehicles (EVs) on the road by 2025, with 850,000 coming from New York State.⁷

California's status under the Clean Air Act enables them to push participating states to move to 100% all-electric vehicles.

In Sept. 2017, Mary Nichols, the head of California's Air Resources Board, suggested the state could move to set a date within the next decade for 100% new electric cars or those running on other renewable energy. California Assemblyman Phil Ting has introduced a bill that would ban the sale of new cars powered by internal-combustion engines after 2040.⁸ California Governor Jerry Brown announced plans to have the state mandate that 5 million zero-emission vehicles be operated on its roads by 2030, up from a planned 1.5 million in 2025.

Action in New York State: There are currently 25,000 EVs in New York State, with 1,700 charging stations.⁹ In his 2018 State of State, the Governor called to increase the number of electric vehicle charging stations to 10,000 by 2021, and invest the \$130 million from the Volkswagen settlement in electric vehicles to replace diesel transit and school buses.¹⁰ NYSERDA's Clean Energy Fund for transportation has thus far dedicated \$51.4 million (with an additional \$20 million from other sources) from 2016 to 2024 toward two initiatives: the EV Rebate and EV Innovation programs. The EV Rebate Program will offer up to \$2,000 per vehicle. The EV Innovation program will help reduce the costs of EV adoption through the development and demonstration of new charging and component technologies, and the installation of fast-charging stations.¹¹

What Needs to Happen: The clearest way for NY to move to 100% new Zero Emissions Vehicles under the Clean Air Act is to have California agree to it.

New York must pledge to both defend California's legal authority to protect the environment and, working with California, it should set a target date to move the state toward banning the sale of new fossil fuels cars.

In concert, these two states should act now to set a clear policy goal to move to new car production and sales to 100% Zero Emissions Vehicles and show what leadership looks like in the face of a rapidly heating planet.

Endnotes

¹ The Climate Reality Project, "Climate 101," <https://www.climate reality project.org/climate-101>, accessed April 9, 2018.

² Union of Concerned Scientists, "Car Emissions and Global Warming," <https://www.ucsusa.org/clean-vehicles/car-emissions-and-global-warming#.Wk0RwjG3IU>, accessed April 9, 2018.

³ NYSRDA, "New York State Greenhouse Gas Inventory: 1990–2014 Final Report," December 2016. Figure S2.

⁴ Petroff, Alanna, CNN, "These countries want to ban gas and diesel cars," September 11, 2017, <http://money.cnn.com/2017/09/11/autos/countries-banning-diesel-gas-cars/index.html>, accessed April 9, 2018.

⁵ Welsh, Teresa, The Sacramento Bee, "France to ban sale of gas cars in favor of electric to meet Paris climate goals," July 06, 2017, <http://www.sacbee.com/latest-news/article159944519.html>, accessed April 9, 2018.

⁶ The United States Environmental Protection Agency, "Vehicle Emissions California Waivers and Authorizations," <https://www.epa.gov/state-and-local-transportation/vehicle-emissions-california-waivers-and-authorizations>, accessed April 9, 2018.

⁷ Office of Governor Andrew M. Cuomo, "Governor Cuomo Announces Multi-State Plan to Increase the Number of Zero-Emission Vehicles in the U.S.," May 29, 2014, <https://www.governor.ny.gov/news/governor-cuomo-announces-multi-state-plan-increase-number-zero-emission-vehicles-us>, accessed April 9, 2018.

⁸ Office of Assemblymember Philip Y. Tang, "AB 1745 Face Sheet," <https://a19.asmdc.org/sites/a19.asmdc.org/files/pdf/ab-1745-clean-cars-2040-fact-sheet.pdf>, accessed April 9, 2018.

⁹ *Supra* 7.

¹⁰ Office of Governor Andrew M. Cuomo, 2018 State of the State, <https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/2018-stateofthestatebook.pdf>, accessed April 9, 2018.

¹¹ New York State Energy Research and Development Authority, "Electric Vehicles," <https://www.nyserda.ny.gov/Researchers-and-Policymakers/Electric-Vehicles>, accessed April 9, 2018.