

August 28, 2023

via e-mail

Maine Board of Environmental Protection
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333

Subject: Comments Regarding Proposed Chapter 127-A, *Advanced Clean Cars II Program*

Dear Chair Lessard and Members of the Board of Environmental Protection,

On behalf of the undersigned groups, we write to thank the Board of Environmental Protection (“Board”) and Department of Environmental Protection (“Department”) for commencing the stakeholder engagement process in consideration of proposed Chapter 127-A, *Advanced Clean Cars II (ACC II) Program*. We strongly support adoption of the proposed rule before the end of 2023 to ensure that Maine gets on track to hit its mandatory 2030 climate objective. In addition, to avail Mainers of the rule’s full suite of climate, health, and economic benefits while enhancing certainty for Maine’s people, businesses, utilities, and regulators, we urge you to go further than the proposal which stops short of its full potential by running only through 2032. Like every other state that has adopted the rule so far, Maine should continue ramping up zero-emission vehicle (ZEV) requirements, culminating with a 100% requirement for 2035 and beyond. Recent modeling projects that adoption of the full rule through 2035 would avail Mainers of an additional \$4 billion by 2050 in terms of ZEV owner savings, utility customer savings, climate benefits and air quality benefits on top of what’s proposed. The state is ready for the ACC II, and we cannot afford to delay implementation of this crucial standard – or cut it short.

Adoption of the full *Advanced Clean Cars II* regulation is necessary to combat the climate crisis and meet the state’s statutory climate pollution levels.

The impacts of climate change are unavoidable this summer, as news of broken heat records across the globe proliferate. July is on track to be Earth’s warmest month on record.¹ The month before was Earth’s hottest recorded June.² And news just broke that melting Arctic ice threatens the Atlantic Ocean’s circulation system which could collapse within the next few decades, leading to yet more severe weather impacts.³ The need to address climate change has never been more urgent.

Climate scientists agree that at least net-zero GHG emissions must be achieved by midcentury to have the best chance at averting the worst effects of climate change. This decade is our final opportunity to get on an adequate trajectory. While Maine’s emissions represent only a fraction of those contributing

¹ Copernicus, European Union’s Earth Observation Programme, *July 2023 sees multiple global temperature records broken* (July 27, 2023), available at <https://climate.copernicus.eu/july-2023-sees-multiple-global-temperature-records-broken>.

² D. Erdenesanaa, *New York Times*, *June Was Earth’s Hottest on Record. August May Bring More of the Same.* (July 20, 2023), available at <https://www.nytimes.com/2023/07/20/climate/hottest-june-in-history-noaa.html>.

³ R. Zhong, *New York Times*, *Warming Could Push the Atlantic Past a ‘Tipping Point’ This Century* (July 25, 2023), available at <https://www.nytimes.com/2023/07/25/climate/atlantic-ocean-tipping-point.html>.

to the global climate crisis, it is imperative for our state government to confront this challenge. Maine has committed to binding statutory decarbonization targets to do our part to mitigate this catastrophe.

These mandatory climate benchmarks demand that the state adopt the proposed ACC II rule this year. The law requires Maine to cut greenhouse gas emissions 45% below 1990 levels by 2030, and charges the Department with ensuring compliance with those levels.⁴ The Department cannot comply with that directive without addressing emissions from the transportation sector, which accounts for nearly half of Maine’s carbon dioxide equivalent (“CO₂e”) emissions from fossil fuels,⁵ with light-duty vehicles contributing about 60% of that.⁶ Thus, *Maine Won’t Wait, A Four-Year Plan for Climate Action* set forth aggressive electrification goals for passenger vehicles based on pathway modeling showing that rapid and widespread distribution of electric vehicles (EVs) is necessary to reduce emissions in accordance with the law.⁷ Charged with setting forth a plan to hit those goals, the Maine Clean Transportation Roadmap emphasized the ACC II as “critically important” and as having a “profound impact on GHG emissions from the transportation sector.”⁸ The ACC II program will rapidly cut light-duty vehicle emissions by requiring an increasing number of vehicles sold each year to be zero-emission, starting with model year 2027 (if adopted this year). Thus, to comply with Maine’s mandatory 2030 climate benchmark—now less than seven years away—there can be no delay; the state must adopt the proposed rule this year.

But Maine’s climate benchmarks and electrification goals don’t end in 2030. Rather, the law requires the state to continue cutting greenhouse gasses down to an 80% reduction by 2050.⁹ To do so, Maine’s light-duty fleet must achieve “near-zero emissions,” according to the Maine Clean Transportation Roadmap.¹⁰ And that’s why our commitment to clean personal cars and trucks can’t stop short of 100%. The Clean Transportation Roadmap shows that adoption of the ACC II through 2035 is a critical strategy for cleaning our transportation sector, one that we cannot afford to compromise on; it also shows that the state needs to complement it with additional policies, for instance to cut vehicle miles traveled.¹¹ Even with the ACC II in place, internal combustion engine vehicles will continue to make up a significant portion of on-road vehicles in 2035 and beyond.¹² To comply with the state’s mandatory short- and long-term climate targets, we urge the Board to ensure that a *full* transition to clean cars and trucks in Maine starts *now*.

The transition to zero-emission vehicles is good for Mainers’ health.

Gas-powered vehicles not only contribute to climate change, they are a significant source of toxic pollutants that are harmful to human health. Adopting the ACC II is an important step to mitigating these impacts by accelerating the number of zero-emission cars on our roads and increasing the

⁴ 38 M.R.S. § 576-A (1), (4).

⁵ Maine Department of Environmental Protection, Bureau of Air Quality, *Ninth Biennial Report on Progress toward Greenhouse Gas Reduction Goals* (July 2022), at 10.

⁶ Governor’s Energy Office, Governor’s Office on Policy, Innovation, and the Future, Cadmus, *Executive Summary: Maine Clean Transportation Roadmap* (Dec. 2021) (“Clean Transportation Roadmap”), at 3.

⁷ Maine Climate Council, *Maine Won’t Wait, A Four-Year Plan for Climate Action* (Dec. 2020), at 107.

⁸ Clean Transportation Roadmap at 53.

⁹ 38 M.R.S. § 576-A (3).

¹⁰ Clean Transportation Roadmap at 1.

¹¹ See Clean Transportation Roadmap at 30.

¹² Maine Board of Environmental Protection, *Staff Briefing on Transportation Related Matters* (July 20, 2023), slide 90, available at <https://www.maine.gov/dep/bep/calendar.html>.

stringency of standards for gasoline passenger vehicles to reduce smog-forming emissions. Exposure to air pollution can lead to health problems including increased risk of asthma, lung disease and cancer.¹³ Maine's roughly 1.13 million light-duty vehicles drive around 13.4 billion miles annually¹⁴ and were responsible in 2022 for nearly 3,000 metric tons of nitrogen oxides and nearly 800 metric tons of particulate matter.¹⁵ 40% of Maine counties that reported air quality data received poor grades due to high ozone days from the American Lung Association.¹⁶ Tailpipe greenhouse gas emissions contributing to climate change also harm Mainers' health, for instance by increasing the risk of more extreme weather events, including heat waves like the sort we're seeing around the globe today, that further degrade air quality.

It is imperative that the state adopt the ACC II this year to start reducing vehicle air pollution and cleaning up the air we breathe. But the Board should go even further by adopting the ACC II through 2035. Adoption of the full ACC II has been projected to avail Mainers of an additional \$110 million worth of health benefits by 2050, beyond those attributable to the rule as proposed.¹⁷

The Advanced Clean Cars II Program promises economic benefits for Mainers.

In addition to cleaning up the environment and protecting public health, the ACC II rule will help drive economic growth in Maine. Transitioning to ZEVs will enable significant fuel and maintenance cost savings for consumers, attract large charging infrastructure investments, create high-paying jobs, and put downward pressure on electricity rates for all customers.

By bringing more ZEVs to Maine, the ACC II rule will allow more people and businesses to benefit from the cost savings of driving these vehicles. A survey completed in 2020 by Consumer Reports found that battery electric vehicle and plug-in hybrid electric vehicle owners pay around half as much to maintain and repair their vehicles compared to owners of conventional cars.¹⁸ The study also found that fuel savings alone for an electric vehicle compared to a gasoline powered vehicle can be \$4,700 or more over the first seven years. A U.S. Department of Energy study found that the estimated scheduled maintenance cost for a light-duty battery-electric vehicle totals about 6.1 cents per mile, while a conventional gasoline powered vehicle is around 10.1 cents per mile, which amounts to roughly 40% cost savings on maintenance on a per mile basis for electric vehicle drivers.¹⁹ These savings are only expected to grow over time. An EV purchased in 2026 will cost \$3,216-\$4,267 less than a traditional vehicle over a 10-year lifespan, and an EV purchased in 2035 will cost \$7,659-\$8,835 less over the same time period.²⁰

¹³ American Lung Association, *Zeroing in on Healthy Air* (Mar. 2022), at 3.

¹⁴ Clean Transportation Roadmap at 9.

¹⁵ U.S. Environmental Protection Agency, *Air Pollutant Emissions Trends Data* (last visited Aug. 7, 2023), available at <https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>.

¹⁶ American Lung Association, *Report Card: Maine* (last visited Aug. 3, 2023), available at <https://www.lung.org/research/sota/city-rankings/states/maine>.

¹⁷ ERM, *Comparison of Maine Adoption of ACC II Results: Through 2032 vs. 2035* (Aug. 17, 2023), at 10, available at <https://www.clf.org/wp-content/uploads/2023/08/ME-ACCII-FullStudy.pdf>.

¹⁸ B. Preston, Consumer Reports, *EVs Offer Big Savings Over Traditional Gas-Powered Cars* (Oct. 8, 2020), available at <https://www.consumerreports.org/hybrids-evs/evs-offer-big-savings-over-traditional-gas-powered-cars/>.

¹⁹ Argonne National Laboratory for U.S. Department of Energy, Energy Systems Division, *Comprehensive Total Cost of Ownership Quantification for Vehicles with Different Size Classes and Powertrains* (Apr. 2021), at 83.

²⁰ California Air Resources Board, *Public Hearing to Consider the Proposed Advanced Clean Cars II Regulations, Staff Report: Initial Statement of Reasons* (Apr. 12, 2022), at 144-45.

But cost savings attributable to EVs aren't for EV drivers alone. In fact, EVs have been shown to contribute greater revenues to utilities than associated costs, thereby driving down electricity rates for all customers.²¹ Thus all Mainers—even those that don't purchase an EV to drive—will reap the monetary benefits of Maine's transition to clean transportation.

Moreover, electrified transportation is a fast-growing source of high-paying jobs.²² In 2020–2021, Maine saw a 4.8 percent increase in clean energy jobs, with more than 915 new workers employed in the clean vehicles sub sector alone.²³ Strong policy signals like the ACC II rule can help catalyze the public investments we need to create more good, permanent, clean economy jobs.

The ACC II regulation is designed to provide market certainty and zero-emission technology investments to Maine.

Mainers want electric cars. These clean vehicles are already on the road all across the state with more and more joining the fleet each year. From 2019 to 2021, the number of battery electric and plug-in hybrid electric vehicles increased by 90%.²⁴ The number of EVs registered in the state by October 2022 increased 26% over 2021.²⁵ But market supply has hampered consumers' ability to get the passenger cars and trucks they want.²⁶

The ACC II has an important role to play in getting those clean vehicles into the state: according to the Maine Clean Transportation Roadmap, adoption of the rule would send clear, long-term signals to automakers to increase deliveries of EVs.²⁷ In fact, historically, EV market share has been roughly twice as high in states that follow California emission regulations, illustrating effectiveness of vehicle sales requirements.²⁸ While adoption of the rule as proposed is preferable to no rule at all, adoption of the ACC II through 2035 would ensure that Maine is sending an unequivocal message to manufacturers. No other state has adopted a truncated version of the ACC II. The impact of partial rule adoption and the potential for sending mixed messages to manufacturers has not been explored. To ensure that the ACC II functions as designed to influence investments in Maine, the Department should go all the way to the 100% zero-emission new sales requirement.

²¹ Synapse Energy Economics, *Electric Vehicles Are Driving Electric Rates Down* (June 2020 Update), available at https://www.synapse-energy.com/sites/default/files/EV_Impacts_June_2020_18-122.pdf#:~:text=EVs%20hold%20significant%20potential%20to%20reduce%20electric%20rates,the%20day%20when%20the%20electric%20grid%20is%20underutilized;see%20also%20ERM,Comparison%20of%20Maine%20Adoption%20of%20ACC%20II%20Results%20Through%202032%20vs.%202035 (Aug. 17, 2023), at 12, available at <https://www.clf.org/wp-content/uploads/2023/08/ME-ACCII-FullStudy.pdf>.

²² U.S. Department of Energy, Office of Energy Jobs, *United States Energy & Employment Report 2023* (Jun. 2023), at vi-vii.

²³ E2, *Clean Jobs America 2022* (Aug. 2022), at 10.

²⁴ Maine Climate Council, *Maine Won't Wait Progress Report* (Dec. 1, 2021), at 6.

²⁵ Maine Climate Council, *Maine Won't Wait Dashboard* (last visited July 27, 2023) ("Maine Won't Wait Dashboard"), available at <https://www.maine.gov/climateplan/dashboard>.

²⁶ See, e.g., P. Wright, Maine Public, *The supply of electric vehicles hasn't kept pace with Maine's exploding demand* (May 11, 2023), available at <https://www.mainepublic.org/climate/2023-05-11/the-supply-of-electric-vehicles-hasnt-kept-pace-with-maines-exploding-demand>.

²⁷ Clean Transportation Roadmap at 2.

²⁸ Center for American Progress, *Plug in Electric Vehicles: Evaluating the Effectiveness of State Policies for Increasing Deployment* (June. 2018), at 17.

Maine is ready for the full ACC II.

The ACC II is technically feasible and cost-effective, with numerous compliance flexibilities built in to help manufacturers meet the requirements. These mechanisms enable the rule to account for market fluctuations and other challenges to EV sales, and include:

- early compliance credits that allow manufacturers to earn credits on vehicles sold in the state two years prior to the start of the program;
- allowing manufacturers to use credits earned in Advanced Clean Cars I to meet up to 15% of the annual ZEV requirements for Model Years 2026-2030;
- environmental justice credits which allow manufacturers to earn credits through Model Year 2031 by making ZEVs more accessible to low-income residents; and
- pooling ZEV credits that allow manufacturers to use excess credits earned in California or another section 177 state from the same or a prior Model Year to help meet their annual Maine ZEV requirement up to a certain amount for Model Years 2026-2030 (25%, 20%, 15%, 10%, and 5%, respectively).

These flexibilities will lower stringency to help manufacturers meet their annual ZEV sales requirements in the early years of the program and will phase out as the market for EVs improves and expands over time.

Further, the clean cars are ready. Vehicle manufacturers and battery makers already plan to invest \$210 billion into the US to support the electric vehicle transition.²⁹ Nearly every car manufacturer has committed to increasing the number of ZEV models in their fleets. Adoption of the ACC II rule—particularly the full rule through 2035—will support and accelerate the industry’s transition to ZEVs, one that is already well underway.

Finally, Maine’s charging infrastructure is well on its way to supporting the electrification called for by the ACC II. Adopting the 100% ZEV sales requirement now will provide enhanced certainty beyond the proposed rule with its mid-term review, enabling more confident investment in charging infrastructure by private and public entities. The predictable trajectory of ZEV deployment will also enable superior grid planning and preparation. While the majority of electric vehicle drivers will charge their vehicles overnight at home and at their workplaces, the state is working to extend charging infrastructure corridors across the state and fill gaps. In 2022, there were 389 public EV chargers in Maine, a 32% increase over 2021.³⁰ The number of public EV chargers increased 32% between 2021 and October 2022.³¹ Maine’s network of public chargers will be significantly bolstered by millions of dollars of federal funds under the Inflation Reduction Act and Infrastructure Investment and Jobs Act, and the state just announced awards to support development of new chargers at twelve locations.³² While the move towards 100% ZEV sales by 2035 will require more infrastructure to support those vehicles on the road,

²⁹ N. Gabriel, E.V. Hub, *\$210 Billion of Announced Investments in Electric Vehicle Manufacturing Headed for the U.S.* (Jan. 12, 2023), available at https://www.atlasevhub.com/data_story/210-billion-of-announced-investments-in-electric-vehicle-manufacturing-headed-for-the-u-s/.

³⁰ Maine Climate Council, *Maine Won’t Wait Progress Report* (Dec. 1, 2021), at 6.

³¹ Maine Won’t Wait Dashboard (last visited Aug. 19, 2023), available at <https://www.maine.gov/climateplan/dashboard>.

³² Maine DOT, *Recharge Maine Announces Planned Awards of More Than \$6 Million in Bids to Further Extend Maine’s Electric Vehicle Charging Infrastructure* (Aug. 1, 2023), available at https://www.maine.gov/tools/whatsnew/index.php?topic=DOT_Press_Releases&id=11496493&v=article2015.

the regulation's foreseeable, year-over-year ramp up provides the State with ample notice to ensure that there is a robust charging network available to drivers.

Maine must act with haste to reduce emissions from transportation.

We strongly support the Board of Environmental Protection's adoption of the ACC II rule before the end of 2023. Further, we urge the Board to amend the proposed rule to include zero-emission vehicle requirements for model years after 2032, culminating with a 100% requirement for 2035 and beyond. Adopting the full rule, consistent with all other states that have so far adopted the ACC II, offers Mainers a projected additional \$4 billion in cumulative net societal benefits through 2050.³³ We also request that in this rulemaking and the concurrent one regarding proposed Chapter 128, the Advanced Clean Trucks rule, participation at hearings be permitted either in-person or virtually; challenges arising from COVID-19 hindered labor, climate, public health, and environmental justice organizations from providing supportive comments at the Advanced Clean Trucks hearing in the previous rulemaking.

Failure to adopt the Advanced Clean Cars II rule by the end of 2023 would mean Maine would lose out on a year of implementation,³⁴ imperiling our ability to comply with the state's 2030 climate target. Adopting the rule as proposed is undoubtedly better than not adopting the ACC II but would leave significant health and economic benefits on the table while imperiling Maine's efforts to hit its mandatory 2040 and 2050 greenhouse gas objectives. The climate emergency is here, right now. There is no time to lose. We thank the Board and the Department for their work to advance this important rule.

Sincerely,

Acadia Center
Appalachian Mountain Club
Center for an Ecology-based Economy
Conservation Law Foundation
Friends of Casco Bay
Maine Audubon
Maine Climate Action Now
Maine Council for Trout Unlimited
Maine Public Health Association
Maine Youth Action
National Parks Conservation Association
Natural Resources Defense Council
Physicians for Social Responsibility
Rivian
Sierra Club Maine
Southern Maine Conservation Collaborative
Union of Concerned Scientists

³³ ERM, *Comparison of Maine Adoption of ACC II Results: Through 2032 vs. 2035* (Aug. 17, 2023), at 16, available at <https://www.clf.org/wp-content/uploads/2023/08/ME-ACCII-FullStudy.pdf>.

³⁴ Under the federal Clean Air Act, Maine must adopt within calendar year 2023 to impact model year 2027.