CITY OF SOUTH PORTLAND
Sustainability

SUSTAINABILITY OFFICE

CASHEL STEWART
Sustainable Transportation Coordinator

August 17, 2023

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,

I writing in support of implementing the Advanced Clean Cars II (ACC II) Program before the end of 2023.

The ACC II program is necessary for the City of South Portland to meet its local climate action goals.

The transportation sector is responsible for over half of Maine's greenhouse gas emissions and in South Portland, it's responsible for 32% of our emissions. We took critical, forward-thinking action in 2020 when we passed our local climate action plan *One Climate Future*. The plan sets a number of actions and milestones aimed at reducing emissions from the transportation sector, including:

- 30% of new light-duty vehicle sales are electric vehicles by 2030
- 60% of new light-duty vehicle sales are electric vehicles by 2040
- 100% of new light-duty vehicle sales are electric vehicles by 2050
- All new light-duty vehicle purchases for the municipal fleet are electric 2028
- Zero-carbon municipal fleets by 2040

Many of these dates are in the near-term, within 10 years, but we have yet to see cost parity between ZEVs and ICE vehicles. For our municipal fleet, we have relied on grant and rebate opportunities to offset these costs. While there has been a number of great opportunities for our municipal fleet that have made it possible to electrify 10 of our light-duty vehicles, we have not seen the same for our residents. Availability and cost are the two most common limitations we hear from our constituency.

While we have made our commitment to pursue alternatives for our municipal fleet and do the best we can to encourage our residents to buy ZEVs, there are limits to what a municipality can do to drive larger market forces. We view the ACC II program as an important step Maine can take to help guide manufacturers towards the development of more ZEVs and to reduce our statewide emissions.

CITY OF SOUTH PORTLAND Sustainability

SUSTAINABILITY OFFICE

CASHEL STEWART
Sustainable Transportation Coordinator

Adoption of the ACC II program 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 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

---

[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.

[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), at 3.

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

[8] Governor's Energy Office, Governor's Office on Policy, Innovation and the Future, Cadmus, *Maine Clean Transportation Roadmap* (Dec. 2021) ("Clean Transportation Roadmap") at 53.

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.

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 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.[9] Maine's roughly 1.13 million light-duty vehicles drive around 13.4 billion miles annually[10] and were responsible in 2022 for nearly 3,000 metric tons of nitrogen oxides and nearly 800 metric tons of particulate matter.[11] 40% of Maine counties that reported air quality data received poor grades due to high ozone days from the American Lung Association.[12] 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.

The ACC 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.[13] 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.

---

[9] American Lung Association, *Zeroing in on Healthy Air* (Mar. 2022) ("Zeroing in on Healthy Air") at 3.

[10] Clean Transportation Roadmap at 9.

[11] 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.

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

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

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.[14] 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.[15]

But cost savings attributable to EVs don't inure to EV drivers alone. In fact, EVs have been shown to contribute greater revenues to utilities than associated costs, thereby driving down rates for all customers.[16] 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.[17] 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.[18] 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 program 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%.[19] The number of EVs registered in the state by October 2022 increased 26% over 2021.[20] But market supply has hampered consumers' ability to get the passenger cars and trucks they want.[21]

---

[14] 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.

[15] 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.

[16] 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.

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

[18] E2, *Clean Jobs America 2022* (Aug. 2022), at 10.

[19] Maine Climate Council, *Maine Won't Wait Progress Report* (Dec. 1, 2021) ("Progress Report"), at 6.

[20] 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.

[21] *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.

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.[22] 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.[23] 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.

Maine must act with haste to reduce emissions from transportation.

Sincerely,

Cashel Stewart
Sustainable Transportation Coordinator
City of South Portland, Maine
207-767-7611 ext. 7546
cstewart@southportland.org

[22] Clean Transportation Roadmap at 2.

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