

Maine State Legislature  
Committee on Environment and Natural Resources  
March 20, 2024

**Testimony of Conservation Law Foundation in Opposition to L.D. 2261,  
*An Act Designating New Motor Vehicle Emissions Rules as Major Substantive Rules***

Chair Brenner, Chair Gramlich, and members of the Committee on Environment and Natural Resources, my name is Emily K. Green and I am a Senior Attorney with the Conservation Law Foundation (CLF). CLF appreciates the opportunity to submit this testimony in opposition to L.D. 2261.

CLF is a member-supported nonprofit advocacy organization working to conserve natural resources, protect public health, and build healthy communities in Maine and throughout New England. In Maine for almost four decades, CLF works to ensure that laws and policies are developed, implemented and enforced that are good for Maine's economy and environment, equitably address the climate crisis, and restore and protect air quality.

L.D. 2261 provides that new motor vehicle emission standards adopted by the Department of Environmental Protection (Department) are major substantive rules. The bill is retroactive to May 22, 2023 and provides that proposed rules before the Board on or after January 1, 2024 to incorporate the Advanced Clean Cars II and Advanced Clean Trucks regulations are major substantive rules.

L.D. 2261 is pointedly designed to undermine a specific rulemaking before the Department of Environmental Protection (Department): proposed Chapter 127-A, the Advanced Clean Cars II Program (ACC II). As of this afternoon, that rulemaking is no longer pending, as the Board of Environmental Protection (Board) voted not to adopt it. The retroactivity portions of this bill are therefore effectively moot. This testimony does not address those components of the bill, though we would have argued that retroactive application of this bill was bad policy designed to undermine an extensive public process.

*New Motor Vehicle Emission Standards Are Appropriately Routine Technical Rules*

The Department of Environmental Protection initially adopted more stringent new motor vehicle emissions standards by routine technical rulemaking because the statutory authorization in 38 M.R.S. § 585-D predated the state's system of categorizing rules. The Legislature changed the rules' designation to major substantive for a time,<sup>1</sup> but in 2005, the Legislature intentionally (and with bipartisan support) made adoption of new motor vehicle emission standards routine technical, removing language subjecting such rules to legislative review.

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<sup>1</sup> See P.L. 1997, ch. 364 § 38.

This designation makes sense because rules adopted under section 585-D are not like other Department rules. The statute allows Maine to “adopt and enforce standards that meet the requirements of the federal Clean Air Act, Section 177, 42 United States Code, Section 7507 relating to control of emissions from new motor vehicles or new motor vehicle engines.”<sup>2</sup> And Section 7507 of the Clean Air Act provides in relevant part:

any State which has plan provisions approved under this part may adopt and enforce for any model year standards relating to control of emissions from new motor vehicles or new motor vehicle engines and take such other actions as are referred to in section 7543(a) of this title respecting such vehicles *if—*

*(1) such standards are identical to the California standards for which a waiver has been granted for such model year. . .*<sup>3</sup>

Thus, unlike other rulemakings, under 38 M.R.S. § 585-D, the Department is not creating new standards—instead, it is electing to incorporate by reference standards that have *already* undergone not only extensive rulemaking procedures but also approval by the United States Environmental Protection Agency. The Department has no flexibility to develop or even tinker with the provisions. In fact, the Department is *prohibited* by federal law from “adopt[ing] or attempt[ing] to enforce [Maine’s own] standard relating to the control of emissions from new motor vehicles or new motor vehicle engines. . .”<sup>4</sup> Maine has only two options: either adopt the more stringent “identical” standards adopted under the Clean Air Act by California and any states that follow its lead, or adhere to the federal standards.<sup>5</sup>

Maine has taken the more stringent route for decades to most effectively address the serious air quality concerns in our state. Back in 2005, the Maine Legislature recognized the Department’s history of availing Mainers of cleaner cars to safeguard their health, and determined that to most efficiently maintain this practice, legislative review was unnecessary.

This determination was and still is consistent with the two-pronged rulemaking approach set forth in Maine’s Administrative Procedure Act. “Routine technical” is a catchall category including any rules “that are not major substantive rules as defined.”<sup>6</sup> “Major substantive” rules are those that, first, “require the exercise of significant agency discretion or interpretation in

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<sup>2</sup> 38 M.R.S. § 585-D.

<sup>3</sup> 42 U.S.C. § 7507 (emphasis added).

<sup>4</sup> *Id.* § 7543(a).

<sup>5</sup> At noon today, the federal government released the latest iteration of federal pollution standards pertaining to passenger cars, light-duty trucks and medium-duty vehicles for model years 2027 through 2032 and beyond. *See U.S. Environmental Protection Agency, Biden-Harris Administration finalizes strongest-ever pollution standards for cars that position U.S. companies and workers to lead the clean vehicle future, protect public health, address the climate crisis, save drivers money* (Mar. 20, 2024) available at <https://www.epa.gov/newsreleases/biden-harris-administration-finalizes-strongest-ever-pollution-standards-cars-position>. These “strongest-ever [federal] pollution standards” are still markedly less stringent than the ACC II, projecting up to 67% electric vehicle sales by 2032 (compared with 82% under the ACC II). *See id.* As a national standard, they do not specifically ensure that clean vehicles will make their way to Maine drivers. They are also expected to be litigated, potentially delaying implementation.

<sup>6</sup> 5 M.R.S. § 8071(A).

drafting.”<sup>7</sup> As explained above, rules under 38 M.R.S. § 585-D are the opposite; the federal Clean Air Act *prohibits* exercise of agency discretion for these rules.

The second rationale for legislative review is rules that are “reasonably expected to result in a significant increase in the cost of doing business, a significant reduction in property values, the loss or significant reduction of government benefits or services, the imposition of state mandates on units of local . . . or other serious burdens on the public or units of local government.”<sup>8</sup> Here again, rules under § 585-D fail the test. In fact, multiple models have shown that adoption of the ACC II will save Mainers significantly in terms of health care costs, fueling and maintenance, and even electricity rates.<sup>9</sup> The rule does not impose any requirements on Maine people, businesses, or local governments, and does not impact delivery of government benefits or services. Because new motor vehicle emission standards do not meet either of the criterion triggering major substantive rules, they are properly classified as routine technical.

More recent legislation also indicates a legislative assessment that these rules do not warrant legislative review. In 2019, the Legislature enacted climate mandates and directed the Board to ensure their achievement.<sup>10</sup> The Legislature required the Board to “adopt rules” by routine technical rulemaking that “prioritize greenhouse gas emissions reductions by sectors that are the most significant sources of greenhouse gas emissions.”<sup>11</sup> At the time, transportation was far and away the “most significant source”—responsible for 53% of Maine’s fossil fuel emissions, and far higher than any other sector (the second highest was residential, at 18%).<sup>12</sup> Thus, there can be no question that the 2019 Legislature was contemplating Department regulations by routine technical rulemaking to cut greenhouse gas emissions from transportation. But as explained above, options for regulating vehicle emissions are limited. The federal Clean Air Act prohibits states from enacting their own emission standards for new motor vehicles.<sup>13</sup> Thus, Maine’s only choice for standards more stringent than the federal government’s are California’s.<sup>14</sup> By directing the Department to regulate *by routine technical rulemaking* to reduce vehicle emissions, while knowing that the only pathway for doing that was by adoption of California’s rules under 38 M.R.S. § 585-D, the Legislature again indicated its determination that these rules do not warrant legislative review.

\* \* \*

Thank you for the opportunity to testify in opposition to L.D. 2261. We urge the Committee to vote ought not to pass.

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<sup>7</sup> *Id.* § 8071(2)(B)(1).

<sup>8</sup> *Id.* § 8071(2)(B)(2).

<sup>9</sup> For a full projection of the benefits to Maine of adoption of the Advanced Clean Cars II Program, please see Attachment A: *ERM*, Comparison of Maine Adoption of ACC II Results: Through 2032 vs. 2035 (Aug. 17, 2023) and Attachment B: *ERM*, Comparison of Maine Adoption of ACC II Results: Through 2032 vs. 2035, Fact Sheet (Aug. 17, 2023).

<sup>10</sup> 38 M.R.S. § 576-A.

<sup>11</sup> *Id.* § 576-A(4)(B).

<sup>12</sup> *Maine Department of Environmental Protection*, Seventh Biennial Report on Progress toward Greenhouse Gas Reduction Goals (Jan. 2018), available at <https://www.maine.gov/tools/whatsnew/attach.php?id=778255&an=1>.

<sup>13</sup> See 42 U.S.C. § 7543(a).

<sup>14</sup> See *id.* § 7507.

Attachments:

- A. ERM, Comparison of Maine Adoption of ACC II Results: Through 2032 vs. 2035 (Aug. 17, 2023)
- B. ERM, Comparison of Maine Adoption of ACC II Results: Through 2032 vs. 2035, Fact Sheet (Aug. 17, 2023)



# Comparison of Maine Adoption of ACC II Results: Through 2032 vs. 2035

August 17, 2023

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*The business of sustainability*



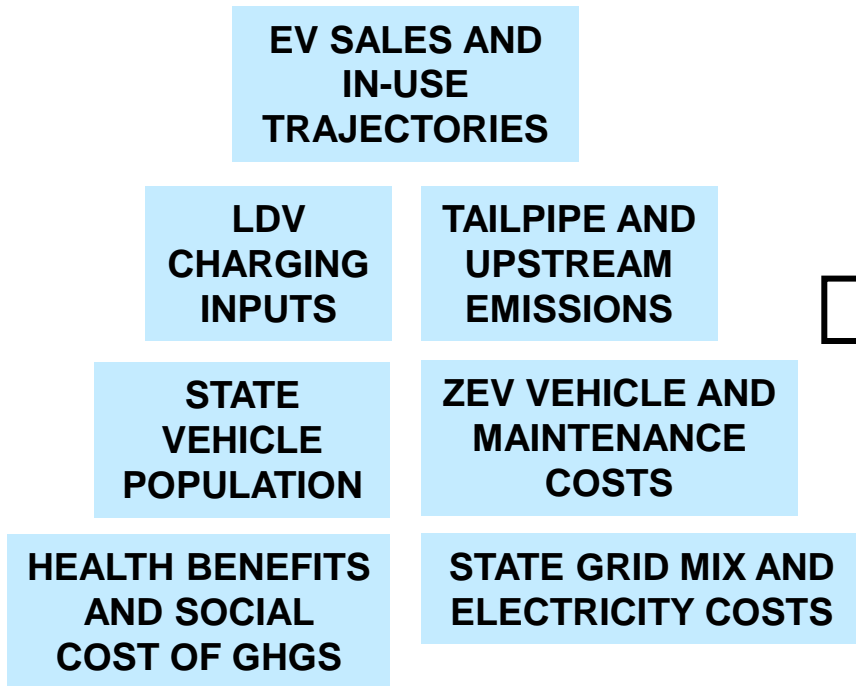
# Agenda

- Modeling Framework
- Scenarios
- ZEV Vehicle Population
- Climate Benefits
- Air Quality Benefits
- Cumulative Health Benefits
- Utility Impacts
- Charging Infrastructure
- ZEV Owner Benefits
- Jobs and GDP Impacts
- Cumulative Net Societal Benefits



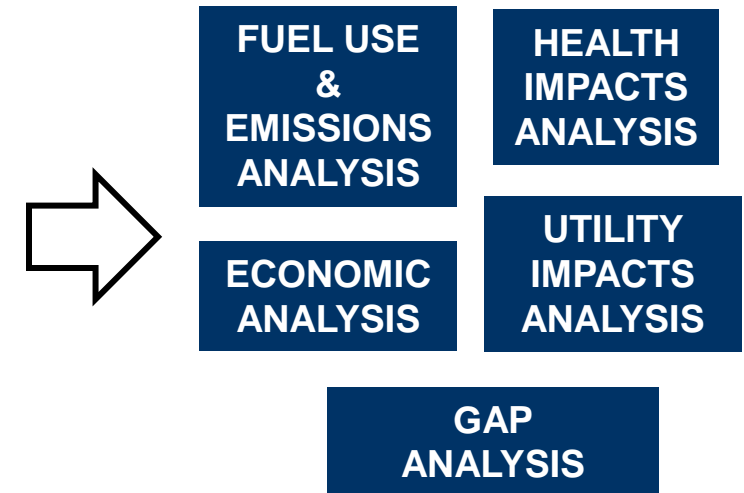
# Modeling Framework Schematic

## INPUTS



## EV COSTS & BENEFITS ANALYSIS

## OUTPUTS



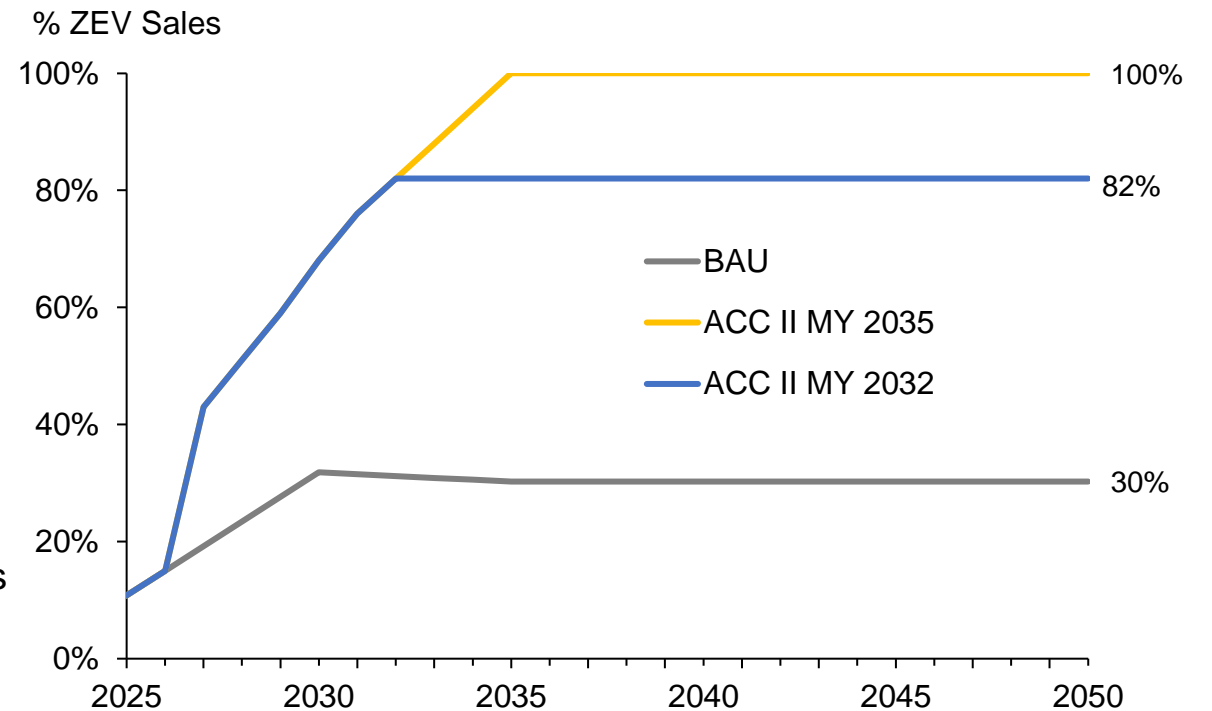
# Detailed Model Outputs

<b>FUEL USE &amp; EMISSIONS ANALYSIS</b>	<ul style="list-style-type: none"><li>▪ <math>\Delta</math> Fuel use (diesel, gasoline, electricity)</li><li>▪ <math>\Delta</math> GHG emissions (<math>\text{CO}_2</math>, <math>\text{CH}_4</math>, <math>\text{N}_2\text{O}</math>) and criteria pollutants (<math>\text{NO}_x</math>, <math>\text{PM}_{2.5}</math>), including both tailpipe and upstream emissions</li><li>▪ Monetized value of net emission reductions</li></ul>
<b>HEALTH IMPACTS ANALYSIS</b>	<ul style="list-style-type: none"><li>▪ <math>\Delta</math> Premature deaths due to lower <math>\text{NO}_x</math> and PM emissions</li><li>▪ <math>\Delta</math> Hospital visits &amp; asthma incidents due to lower <math>\text{NO}_x</math> and PM emissions</li><li>▪ Monetized value of net health benefits</li></ul>
<b>ECONOMIC ANALYSIS</b>	<ul style="list-style-type: none"><li>▪ <math>\Delta</math> Spending on vehicle purchase, fuel, and maintenance</li><li>▪ Charging infrastructure investments</li><li>▪ Jobs and GDP Impact</li></ul>
<b>UTILITY IMPACTS ANALYSIS</b>	<ul style="list-style-type: none"><li>▪ <math>\Delta</math> Electricity use and load</li><li>▪ Utility net revenue</li><li>▪ Impact on electricity rates</li></ul>
<b>GAP ANALYSIS</b>	<ul style="list-style-type: none"><li>▪ Estimate of state-level charging infrastructure needs</li></ul>

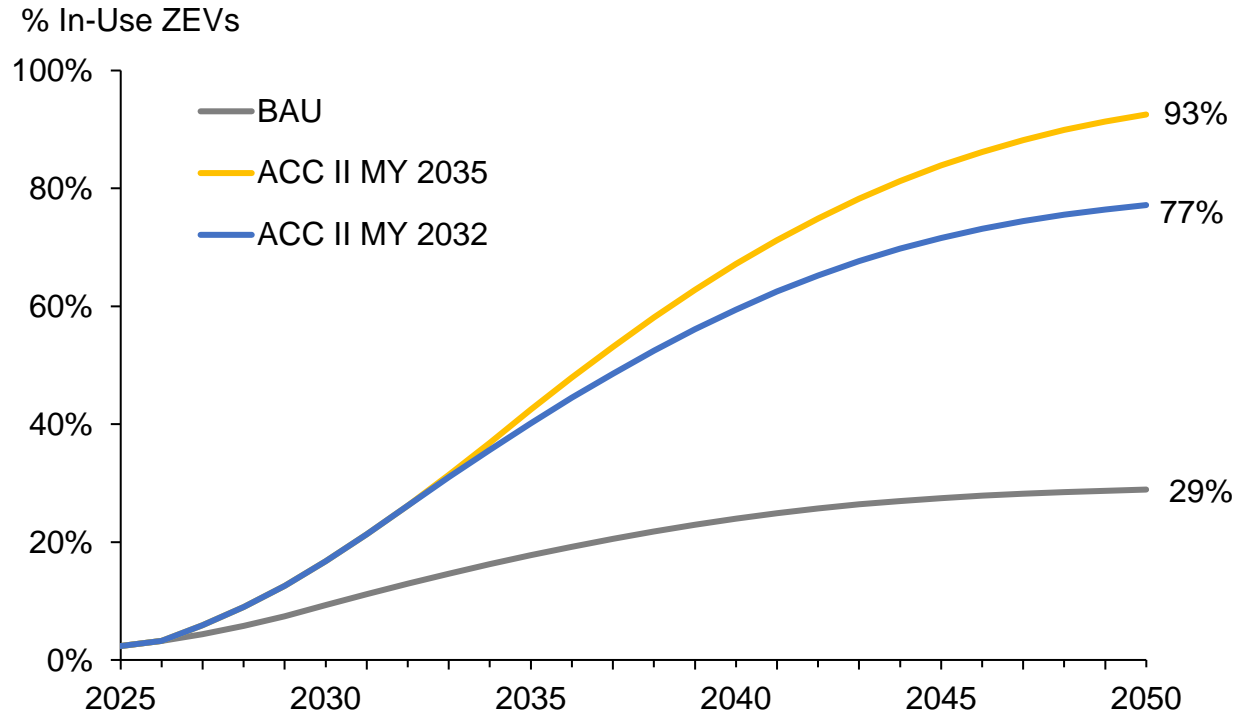


# Modeled Scenarios

- **Business-As-Usual (BAU)**
  - ZEV sales grow moderately particularly driven by the IRA and current Federal standards
- **ACC II MY 2035**
  - ME adopts the full ACC II regulation requiring the state to reach 100 percent ZEV sales by MY 2035. Sales hold steady in future years.
- **ACC II MY 2032**
  - ME adopts ACC II only through MY 2032 when ZEV sales reach 82%. ZEV sales are held at 82% for future years

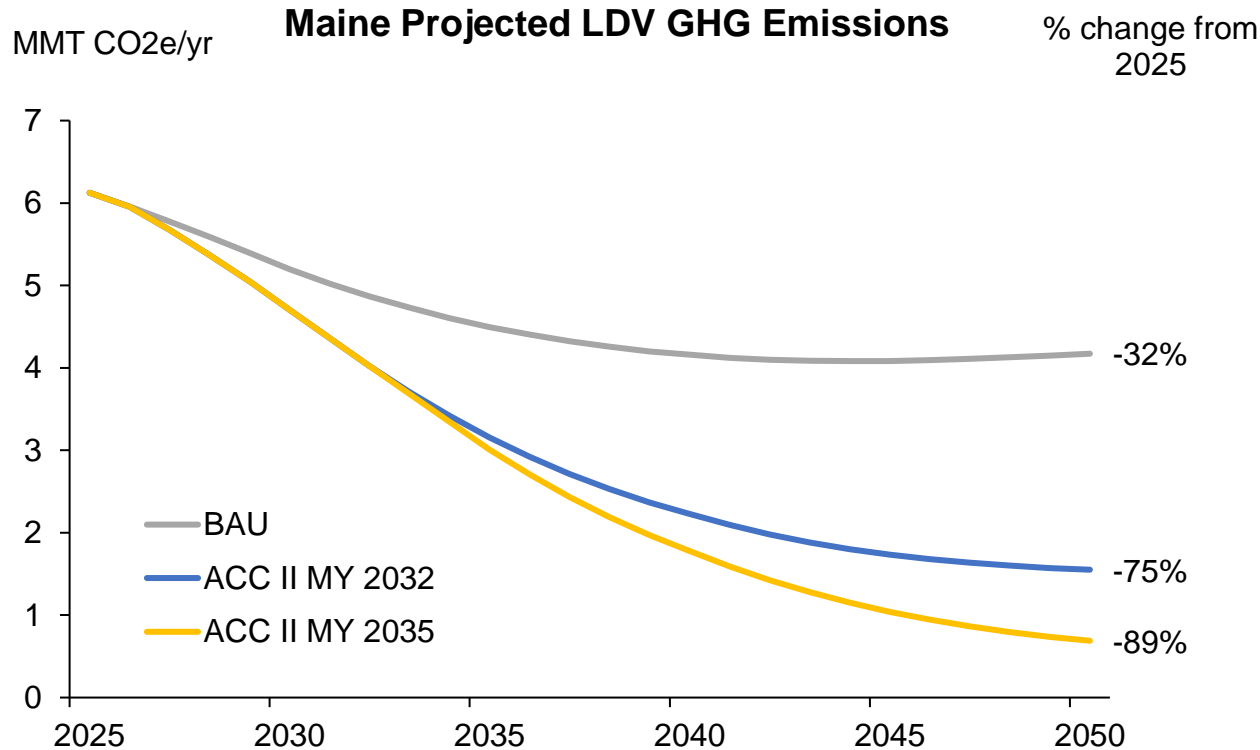


# ZEV Population



- The ZEV population is derived from a fleet turnover model that incorporates vehicle survival rates as well as projected growth
- The ACC II MY 2035 scenario results in a significantly higher population of ZEVs by 2050 compared with a scenario held at 82% sales
- This represents a gap of about **230,000 vehicles** (roughly **15%** of the projected 2050 vehicle fleet)

# Climate Benefits

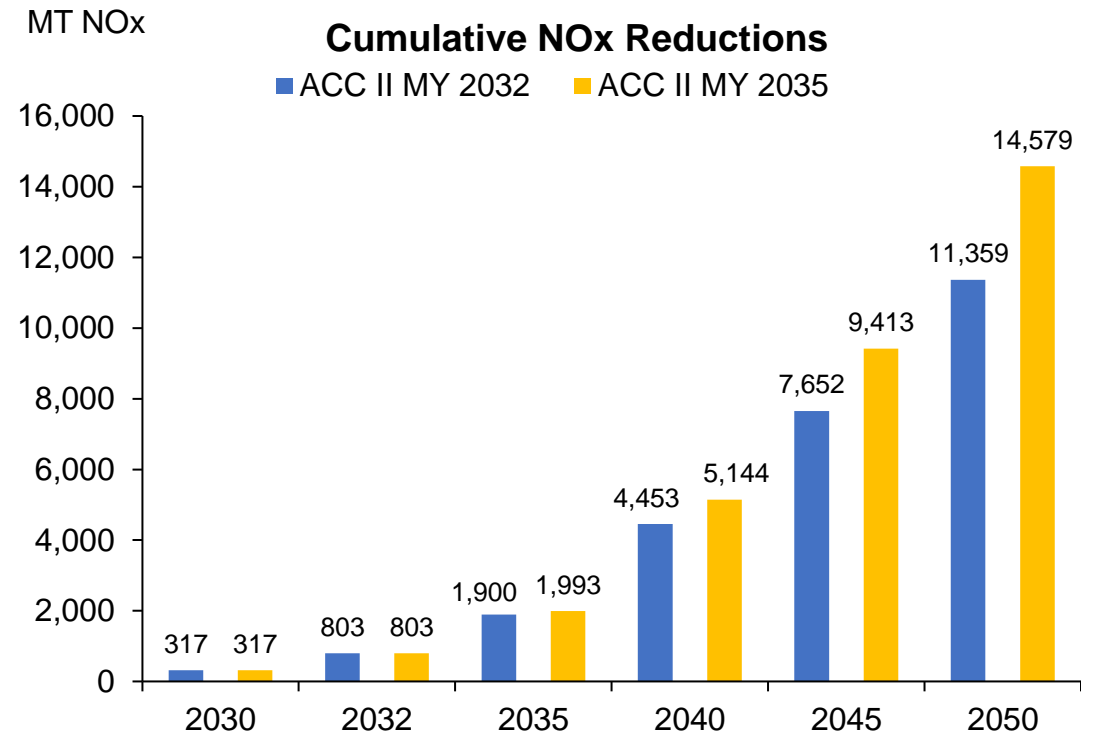
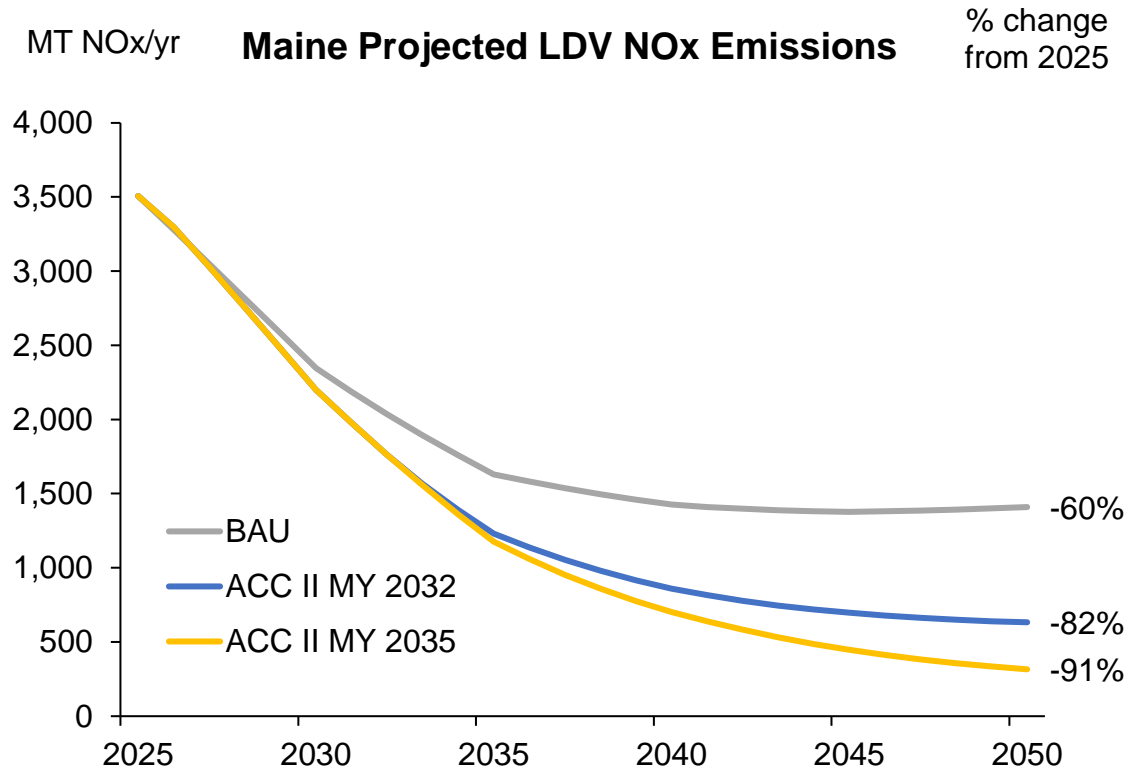


- As the ZEV population grows and part of the LDV fleet turns over to more efficient ICE vehicles, annual CO<sub>2</sub>e emissions are cut by ~ **89%** in 2050 compared to 2025 in the ACC II MY 2035 Scenario, versus by about ~**75%** in the ACC II MY 2032 Scenario.
- In the ACC II MY 2035 Scenario, cumulative reductions reach close to **50 million MT of CO<sub>2</sub>e** (2027 through 2050) providing a benefit of **\$3.9 billion** by 2050, as compared with **40 million MT of CO<sub>2</sub>e** and **\$3.2 billion** for the ACC II MY 2032 Scenario.
- Climate benefits were monetized using IPCC's Social Cost of GHGs

**Note:** Maine does not have estimates of total LDV GHG emissions in 1990 for percent change comparison to 2050 projections. ERM estimated these emissions to be 6.8 MMT CO<sub>2</sub>e, based on 1990 transportation sector CO<sub>2</sub> emissions from fuel combustion from Maine DEP GHG Report <https://www.maine.gov/dep/news/news.html?id=1988154>, assuming 62% of these emissions are from LDVs based on 1990 data from EPA U.S. GHG Inventory as proxy for Maine <https://www.epa.gov/system/files/documents/2023-04/US-GHG-Inventory-2023-Main-Text.pdf>. Resulting estimate of 1990 LDV CO<sub>2</sub> emissions from fuel combustion increased to total CO<sub>2</sub>e based on ERM analysis, informed by tailpipe and upstream emissions factors from GREET used in projection analysis. GHG emission reductions achieved by 2050 compared to 1990 amount to 39%, 77% and 90% for BAU, ACC II MY 2032 and ACC II MY 2035 scenarios respectively.

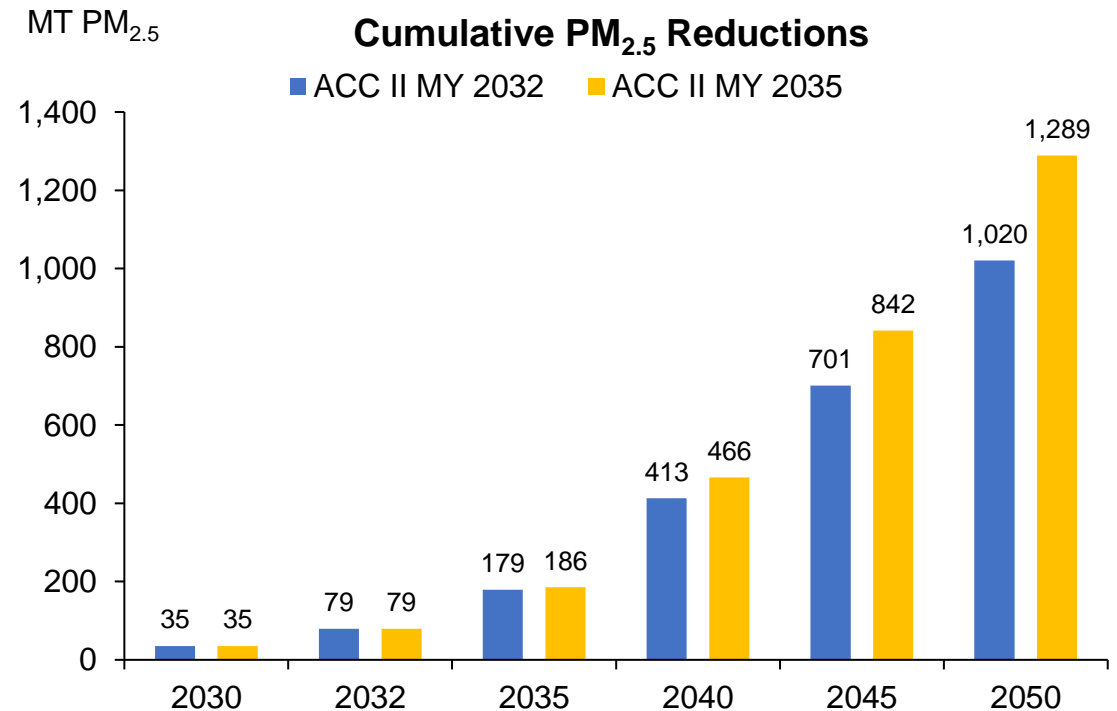
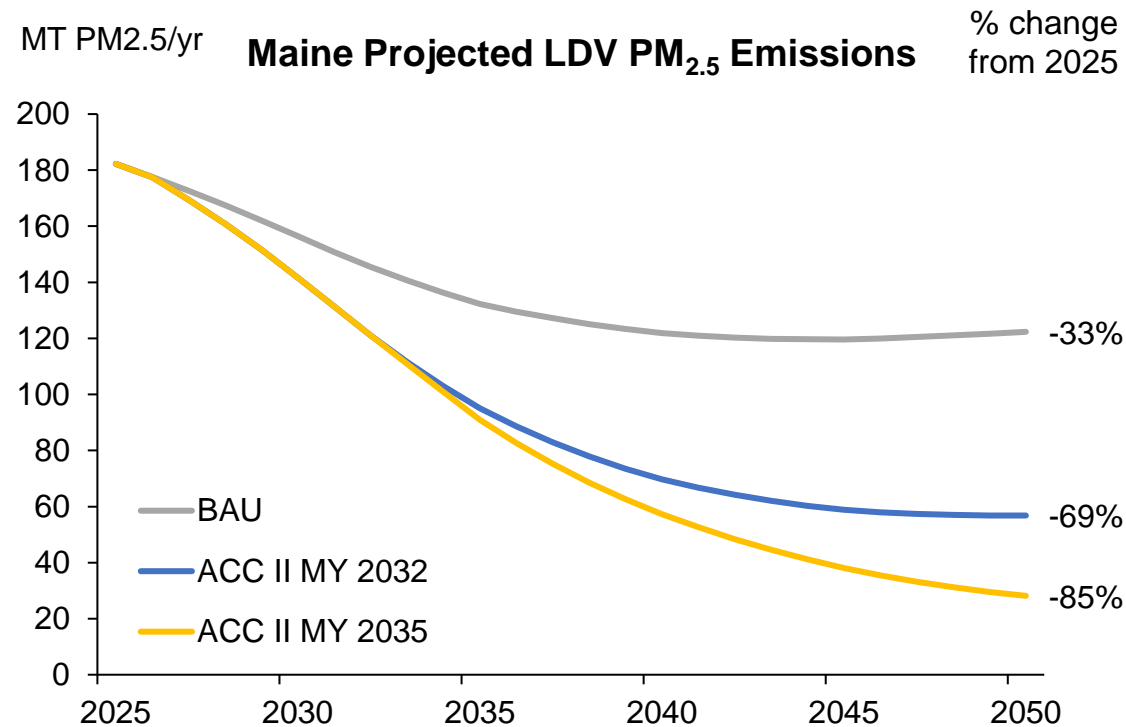
For simplicity and consistency with federal projections, ERM's "clean electricity generation" mix includes biomass, although ERM recognizes there are emissions associated with this category of fuel sources. Biomass is projected to comprise less than 1% of the fuel mix and the impacts of this inclusion are therefore nominal.

# Air Quality Benefits – NO<sub>x</sub> Emissions



The ACC II MY 2035 Scenario results in **91% reduction of NO<sub>x</sub> emissions** by 2050 with a cumulative reduction of almost **14,600 MT** between 2027 and 2050; whereas the ACC II MY 2032 Scenario results in an **82% reduction** by 2050 and nearly **11,400 MT** in cumulative reductions

# Air Quality Benefits – PM<sub>2.5</sub> Emissions



The ACC II MY 2035 Scenario results in **85% reduction of PM<sub>2.5</sub> emissions** by 2050 with a cumulative reduction of almost **1,300 MT** between 2027 and 2050; whereas the ACC II MY 2032 Scenario results in a **69% reduction** by 2050 and just over **1,000 MT** in cumulative reductions

# Cumulative Health Benefits

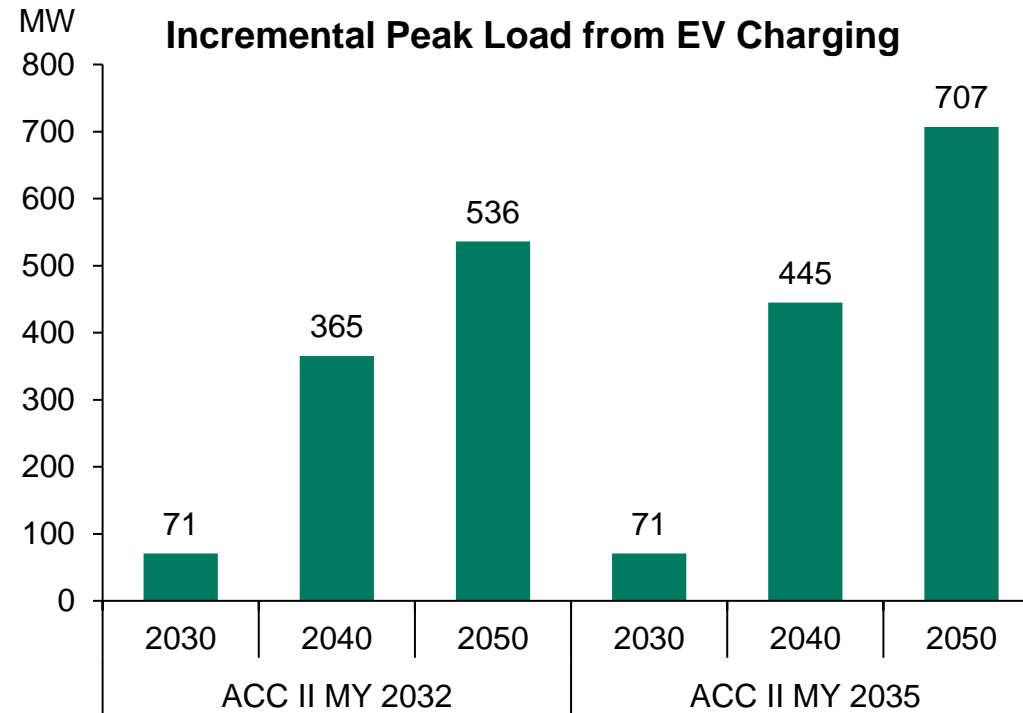
- Reducing criteria pollutant emissions improves air quality and leads to health outcome improvements.
- To convert emission reductions into health benefits, EPA's COBRA model was used.

	Cumulative Reduction by 2050 (MT)		Cumulative Reduced Incidents			Monetized Value (2021\$ mill)
	NOx	PM <sub>2.5</sub>	Mortality	Hospital	Minor*	
<b>ACC II MY 2032</b>	11,359	1,020	36	33	20,056	\$438
<b>ACC II MY 2035</b>	14,579	1,289	45	42	24,945	\$546

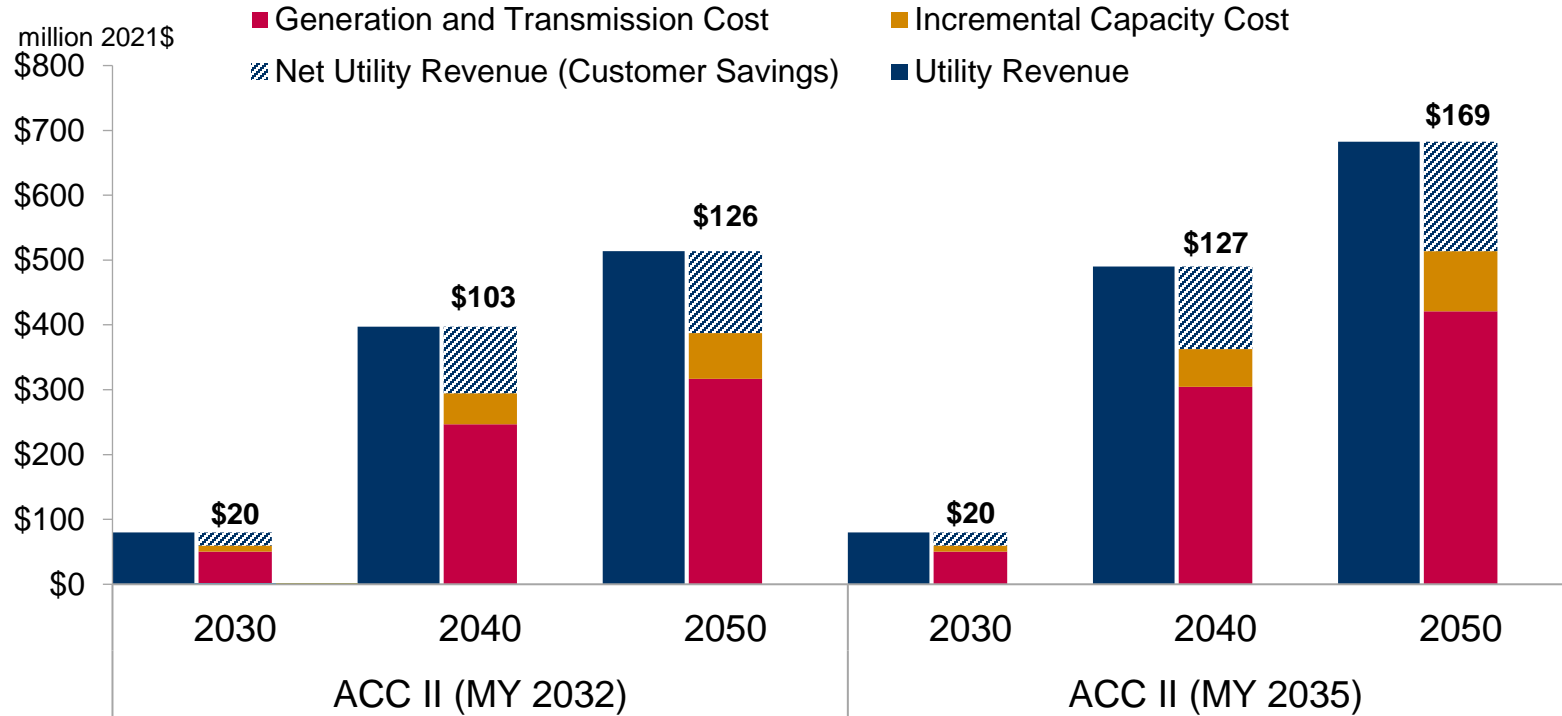
\* Minor health incidents include cases of acute bronchitis and other respiratory symptoms (not resulting in hospitalizations), restricted activity days and lost workdays

# Utility Impacts

- This analysis assumes widespread managed home charging, shifting 70% to off peak hours. This allows ME utilities to minimize grid infrastructure upgrades
- By increasing the efficiency of the grid, and increasing revenue in excess of utility costs, LDV electrification in ME has the potential to reduce electric customer rates.
- LDV electrification drives up utility revenue at the same time it drives up utility costs (e.g. for generation and transmission and incremental capacity). The increased utility revenue exceeds increased costs in both scenarios for every year, resulting in customer savings.



# Utility Impacts Continued



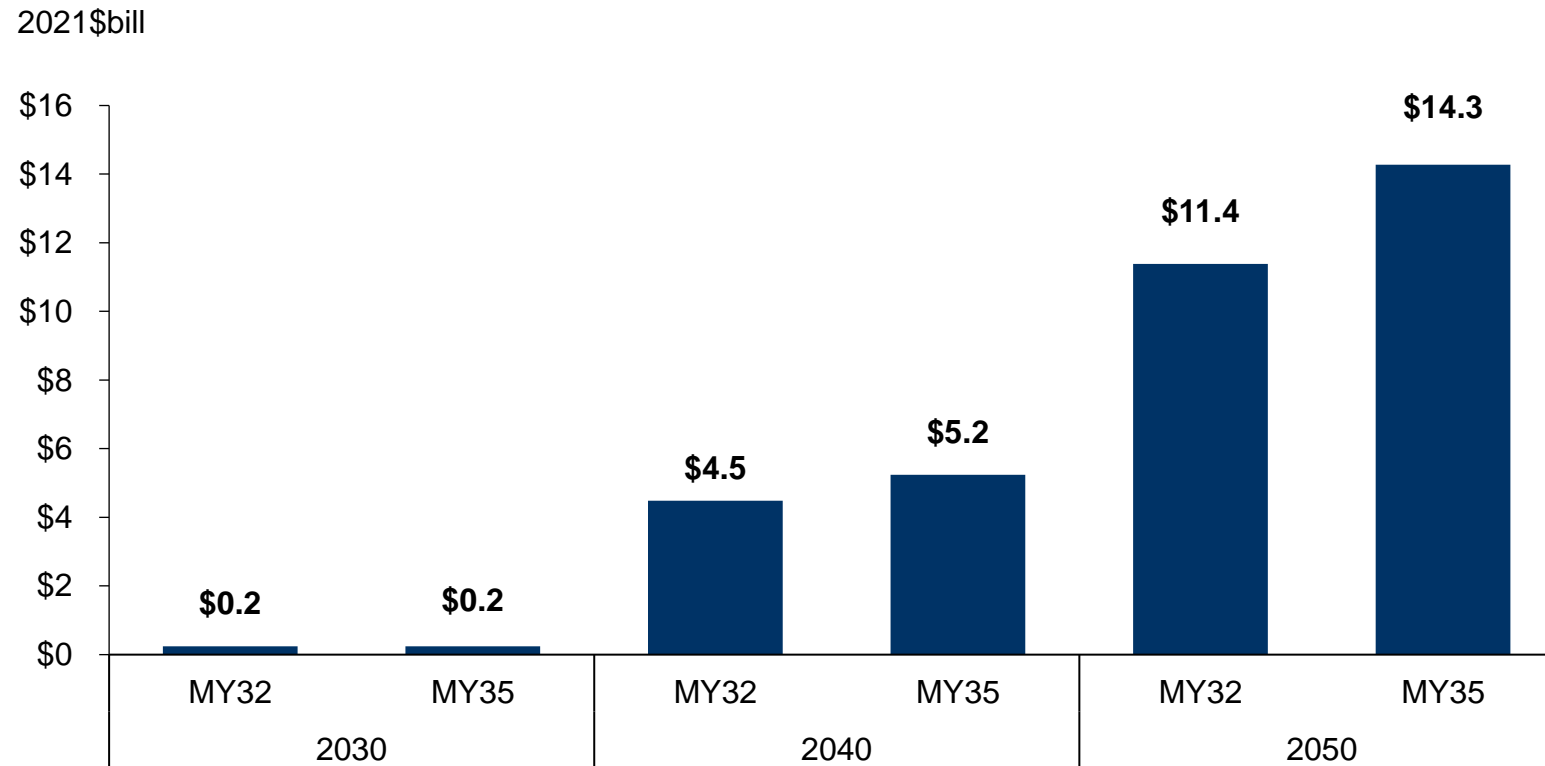
Under the ACC II MY 2032 scenario, annual customer savings are projected to be **\$20 million in 2030, rising to \$103 million in 2040 and reaching \$126 million in 2050.**

Under the ACC II MY 2035 scenario, annual customer savings are projected to be **\$20 million in 2030, rising to \$127 million in 2040 and reaching \$169 million in 2050.**

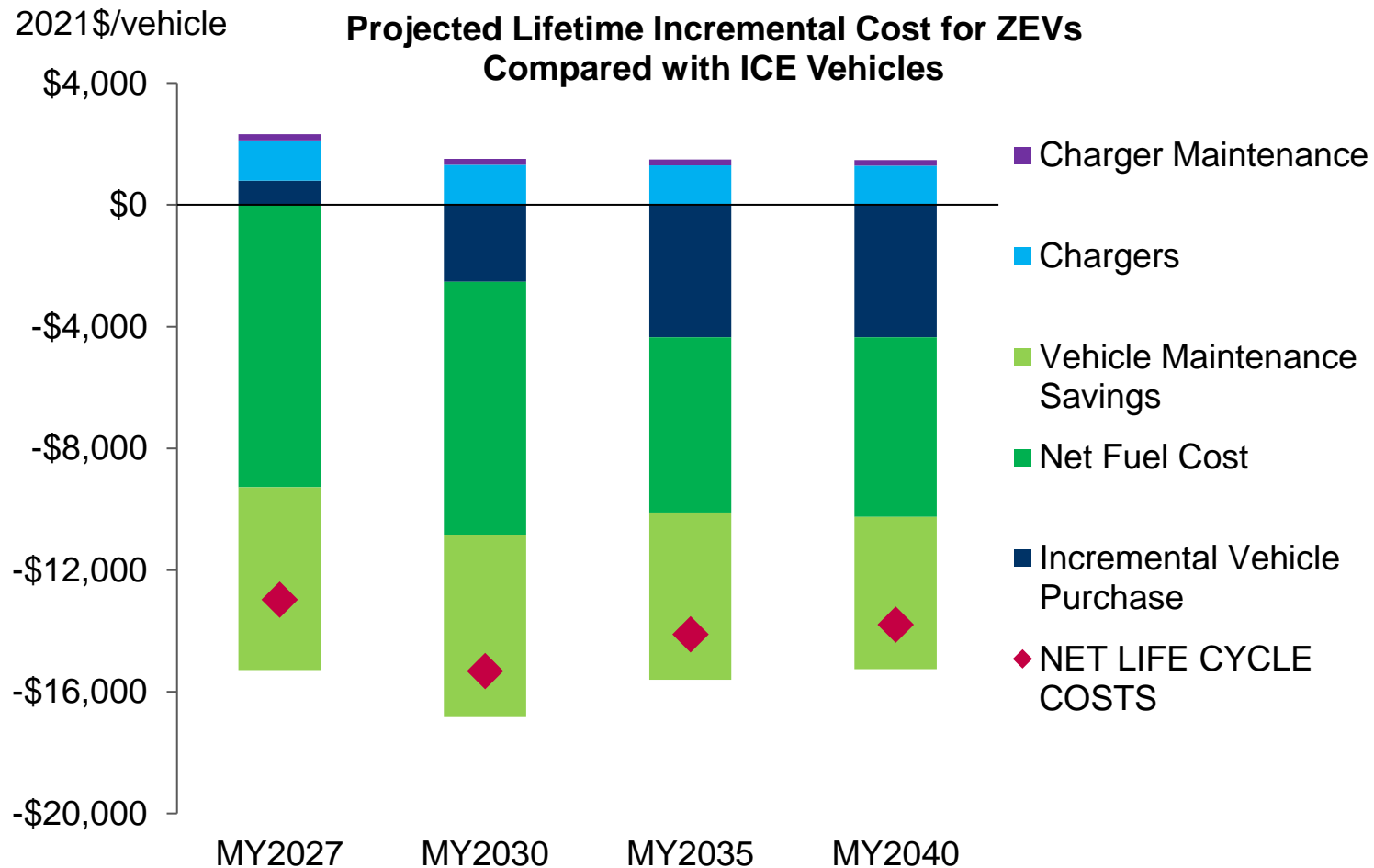


# ZEV Owner Benefits

- ZEV owner benefits are the net difference of positive costs (incremental cost of purchasing a ZEV, cost of purchasing chargers and their maintenance) and owner savings (fuel and maintenance savings of owning a ZEV)
- ACC II MY2035 scenario results in more than **25%** higher cumulative owner benefits by 2050 compared with an ACC II MY2032 scenario

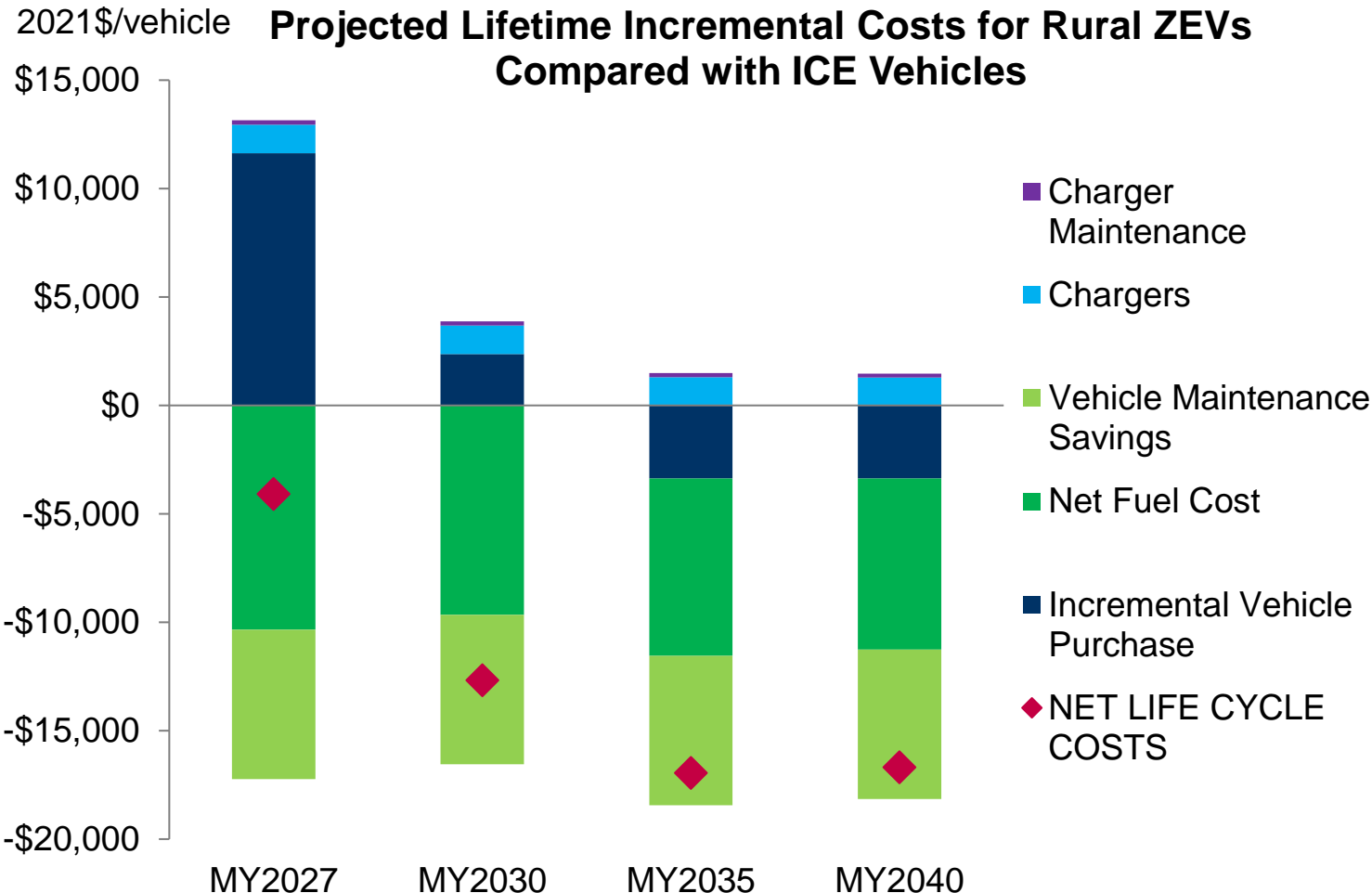


# Average ZEV Owner Net Lifecycle Costs



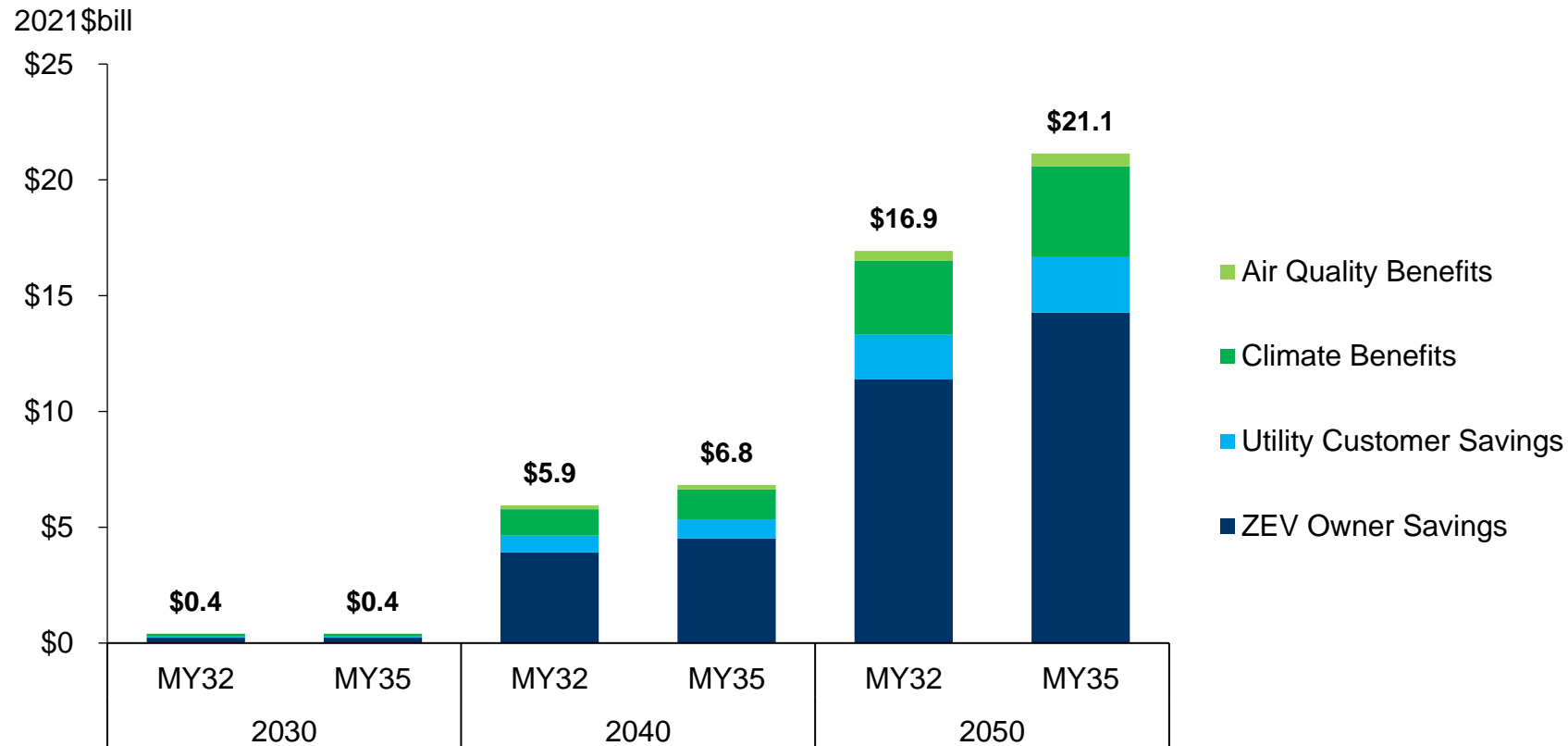
- By MY2030, ZEV owners save more than \$15,000 in lifetime costs as compared to a conventional vehicle.
- Even with MY2027 vehicles when ZEV purchase prices are higher, the decrease in fuel and maintenance costs mean lifetime savings for the vehicle owner.
- Assumed 16-year lifetime and 3% discount rate.
- Using a 7% discount rate still results in substantial savings.

# Average ZEV Owner Net Lifecycle Costs – Rural Owners



- After MY2030, savings to more than \$12,000 due to the incremental purchase cost of the ZEV becoming less expensive than a comparable ICE vehicle.
- Even with MY2027 vehicles when ZEV purchase prices are higher, the decrease in fuel and maintenance costs mean lifetime savings for the vehicle owner.
- Assumed 16-year lifetime and 3% discount rate.
- Using a 7% discount rate still results in substantial savings.

# Cumulative Net Societal Benefits



Between 2027 and 2050, cumulative net societal benefits reach **\$21.1 billion for the ACC II MY 2035 Scenario; \$4.2 billion more than the ACC II MY 2032 Scenario.**

# Jobs and GDP Impacts

METRIC	ACC II MY 2032			ACC II MY 2035			
	2030	2040	2050	2030	2040	2050	
Net Change in Jobs	3,104	978	922	3,104	1,404	974	
Net Change in GDP (2021\$ Millions)	\$520	\$310	\$340	\$520	\$410	\$430	
Average Annual Compensation	Added Jobs	\$103,326	\$95,135	\$93,690	\$103,326	\$95,298	\$94,367
	Replaced Jobs	\$66,172	\$61,482	\$60,873	\$66,172	\$61,796	\$60,755

# Benchmarking ERM analysis to other studies

ERM compared this work to several other studies, and the message is clear:

**Full adoption of zero emission vehicle regulations (ACC II) through 2035 provides significant benefits to the climate, local air quality and state economy**

**ERM** comparison to **Energy Innovation's** Energy Policy Simulator (EPS) and **ICCT's** Emission Summary fact sheet results for Maine finds parallels across all three studies:

- GHG emissions reductions range from **66% to 89%** from 2025 levels by 2050\*
- Health benefits, such as **42 to 49 less** hospital visits and/or asthma attacks
- Cumulative ZEV owner savings of **\$10.5 to \$14.3 billion**
- Greater than **500 million gallons** of petroleum fuel use reduced through 2050\*



*\* ICCT's fact sheet provides benefits through 2040*

**Note:** Modeling platforms, such as the ones analyzed as part of this benchmarking, are optimized to produce scenario results based on a set of assumptions. ERM did not perform a review of all these assumptions and focused the comparison on modeling outputs and findings associated with potential implementation of ACC II policy.



**Thank you**

**Dave Seamonds**  
Principal Consultant, Corporate  
Sustainability and Climate Change  
[Dave.Seamonds@erm.com](mailto:Dave.Seamonds@erm.com)

**Lauren Slawsky**  
Principal Consultant, Corporate  
Sustainability and Climate Change  
[Lauren.Slawsky@erm.com](mailto:Lauren.Slawsky@erm.com)

**Fahim Saleem**  
Consultant, Corporate Sustainability  
and Climate Change  
[Fahim.Saleem@erm.com](mailto:Fahim.Saleem@erm.com)

# The Benefits of the Advanced Clean Cars II Program in Maine: Fact Sheet



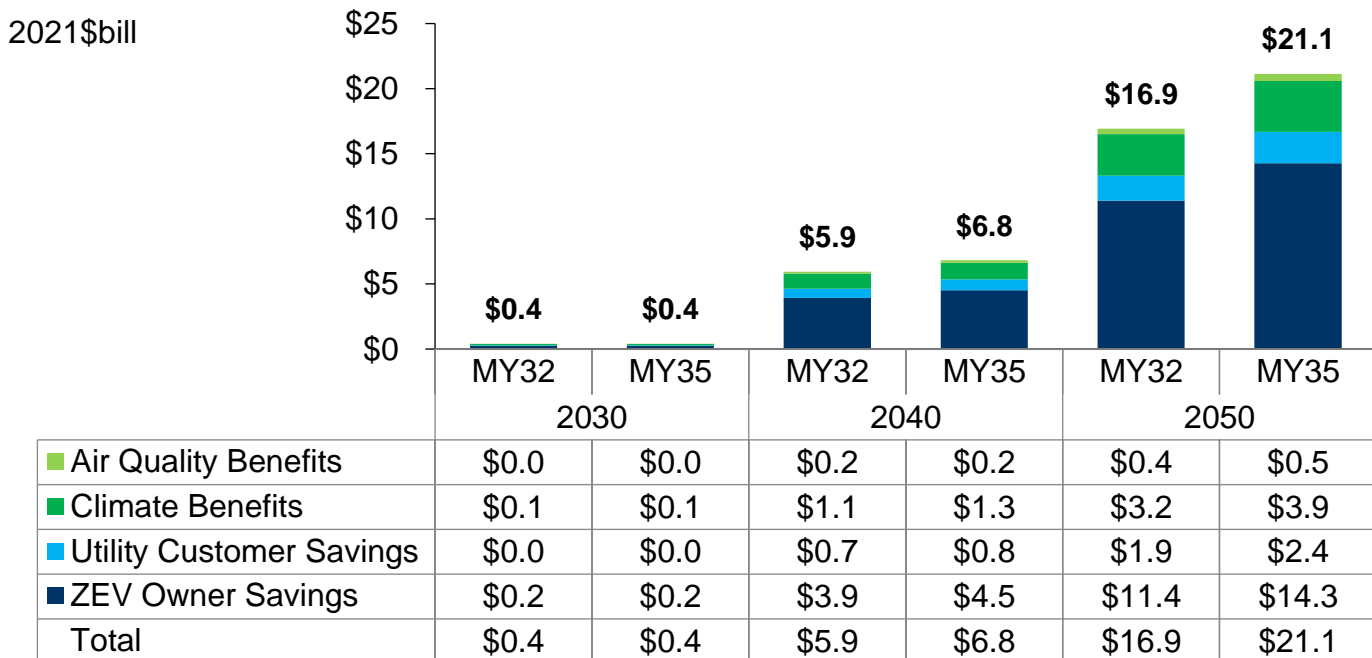
Adoption of the Advanced Clean Cars II (“ACC II”) Program in Maine would require vehicle manufacturers to increase sales of light-duty zero-emission vehicles (ZEVs) in the state. This fact sheet compares the environmental, public health, and economic benefits of two versions of the ACC II: 1) the program as proposed, which ends with model year (MY) 2032 and requires vehicle manufacturers to reach 82% ZEV share of new light-duty vehicle (LDV) sales<sup>1</sup>; and 2) the full program, which runs through model year 2035 and requires manufacturers to reach 100% ZEV share of new LDV sales.

To conduct this analysis, ERM modeled ACC II implementation assuming that manufacturers do not use any compliance flexibilities and assuming that Maine reaches 100 percent clean electricity generation by 2040. ERM then looked at compliance ending with MY 2032 (the “ACC II MY 2032 Scenario”) versus MY 2035 (the “ACC II MY 2035 Scenario”). Each scenario assumes that the final ZEV sales target required by the ACC II in that scenario holds steady in future years. These two scenarios were compared with a baseline “business-as-usual” (BAU) scenario in which all new LDVs sold in the state continue to meet existing EPA vehicle standards, and ZEV sales increase but never reach more than a third of new vehicle sales each year.

Our analysis projects that in the ACC II MY 2035 Scenario, 93% of the LDV fleet will be zero-emission in 2050, versus a 77% zero-emission LDV fleet in 2050 in the ACC II MY 2032 Scenario, a 16-percentage point decrease. This difference drives additional savings for Maine in the ACC II MY 2035 Scenario for every category modelled.

## Net Societal Benefits

ERM modelled net societal benefits including the monetized value of public health and climate benefits, net cost savings for ZEV owners, and net utility customer savings from increased electricity demand for EV charging. In the ACC II MY 2035 Scenario (“MY35” in chart below), Maine’s cumulative net societal benefits are more than \$21 billion. Whereas, projected net societal cumulative benefits in the ACC II MY 2032 Scenario (“MY32” in chart below) are roughly \$4.2 billion lower.



<sup>1</sup> The proposed rule contains a midterm review in which “incorporation of percentage requirements for subsequent years will be determined.” The ACC II MY 2032 Scenario models the standard as it is drafted—ending in MY 2032—not as it may be later amended.





### Climate Benefits

Adoption of the ACC II in Maine would produce significant reductions in greenhouse gas (GHG) emissions from the LDV fleet, even after accounting for the emissions from producing the electricity needed to power ZEVs. In the ACC II MY 2035 Scenario, GHG emissions are reduced by 89 percent by 2050, for a cumulative reduction of 49.1 million metric tons (MT) of CO<sub>2</sub>e (2027 through 2050 compared to the BAU Scenario). Whereas, in the ACC II MY 2032 Scenario, GHG emissions approach 75 percent reduction by 2050 (compared to 2025 levels), which corresponds with cumulative reductions of 40.1 million MT of CO<sub>2</sub>e between 2027 and 2050 compared to the BAU Scenario.

### Air Quality and Public Health Benefits

Adoption of the ACC II in Maine would also produce significant reductions in air pollution emissions from the LDV fleet, even after accounting for the emissions from producing the electricity needed to power ZEVs. In the ACC II MY 2035 Scenario, NO<sub>x</sub> and PM emissions are reduced by 91 percent and 85 percent by 2050, resulting in cumulative reductions of approximately 14,579 MT of NO<sub>x</sub> and 1,289 MT of PM<sub>2.5</sub> compared to the BAU Scenario. Whereas in the ACC II MY 2032 Scenario, NO<sub>x</sub> emissions exceed an 80 percent reduction, while PM emissions approach 70 percent reduction by 2050 compared to 2025 levels. These reductions correspond with cumulative reductions of 11,359 MT of NO<sub>x</sub> emissions and 1,020 MT of PM<sub>2.5</sub> compared to the BAU Scenario.

These reductions will improve air quality resulting in public health benefits from reduced mortality, hospital visits and lost workdays. The ACC II MY 2035 Scenario saves nine lives compared with the ACC II MY 2032 Scenario, and saves 45 lives compared to BAU:

#### Cumulative Public Health Benefits of Advanced Clean Cars II Adoption 2027 - 2050

Scenario	Cumulative Reduced Incidents (Counts)			Monetized Value (2021\$ mill)
	Mortality	Hospital	Minor*	
ACC II MY 2032	36	33	20,056	\$438
ACC II MY 2035	45	42	24,945	\$546

\* Minor health incidents include reduced cases of acute bronchitis and other respiratory symptoms and reduced restricted activity days and lost workdays

### Utility Customer Savings

In both scenarios, utility revenue from LDV electrification exceeds increased costs from LDV electrification. This results in net utility revenue, and that translates to savings for Maine consumers. In the ACC II MY 2035 Scenario, Mainers are projected to save \$20 million in 2030, rising to \$127 million in 2040 and reaching \$169 million in 2050. Mainers will save more than \$40 million more than in the ACC II MY 2032 Scenario.

### ZEV Owner Benefits

The analysis estimated annual incremental costs associated with purchase and use of light-duty ZEVs compared with baseline internal combustion engine (ICE) vehicles that operate on petroleum fuels. The average light-duty ZEV purchased in MY 2027 will result in over \$14,000 in lifetime savings thanks to fuel and maintenance savings that outweigh the projected incremental purchase cost (around \$800 more than an ICE vehicle) as well as the charger costs. Additionally, for MY 2030 and beyond, the average ZEV purchase price is projected to be lower than the average ICE vehicle, such that ZEV owners will realize savings of more than \$15,000 over the lifetime of the vehicle. The ACC II MY 2035 Scenario is estimated to yield \$14.3 billion in cumulative net ownership cost savings for Maine ZEV owners between 2027 and 2050, \$2.9 billion higher than in the MY 2032 Scenario.