

**REGULATORY FLEXIBILITY ANALYSIS**  
**(FORMERLY SMALL BUSINESS IMPACT STATEMENT)**

**SECTION A**

**Date:** May 11, 2023

**Agency Submitting Proposed Regulation:** Energy and Environmental Protection (DEEP)

**Proposed Regulation Title:** Proposed Adoption of the Low Emission Vehicle IV and Advanced Clean Cars II Regulations for Vehicle Model Years 2027 through 2035.

Prior to or concomitant with the posting of a notice pursuant to C.G.S. § 4-168a, as amended by Public Act 16-32, each agency shall prepare a regulatory flexibility analysis. Agencies must complete this document and upload it into the eRegulations System prior to posting the Notice of Intent described in C.G.S. § 4-168(a)(1). This document will automatically publish to eregulations.ct.gov at the time the filing agency posts the Notice of Intent.

Reminder: Pursuant to C.G.S. § 4-168a(c), prior to the adoption of any proposed regulation that may have an adverse impact on small businesses, each agency shall notify the Department of Economic and Community Development and the joint standing committee of the General Assembly having cognizance of matters relating to commerce of its intent to adopt the proposed regulation.

**Scope and Objectives of the Proposed Regulation (mandatory for all filers):**

The proposed Low Emission Vehicle (LEV) IV and Advanced Clean Cars (ACC) II regulations for vehicle Model Years 2027 through 2035 will help to achieve Connecticut's criteria pollutant and GHG reduction goals by accelerating sales of cleaner zero emission vehicle (ZEVs) in the light-duty vehicle (LDV) fleet, reaching a compliance requirement of 100% of new vehicle sales by 2035. For the remaining new LDV sales prior to that date, the proposed regulation will impose more stringent tailpipe pollutant emissions standards to reduce real world emissions from internal combustion engine vehicles (ICEVs). Additionally, the proposed ZEV assurance measures will ensure consumers can replace all ICEVs within Connecticut households with vehicles that meet their needs for transportation without harmful emissions.

Please check the appropriate box:

- The regulatory action will not have an effect on small businesses. *If you check this box, do not complete SECTION B.*
- The regulatory action will have an effect on small businesses, but will not have an adverse effect on such small businesses. *If you check this box, complete SECTION B.*
- The regulatory action may have an adverse effect on small businesses, but no alternatives considered would be both as effective in achieving the purpose of the action and less burdensome to potentially effected small business. *Note: alternatives considered may include those listed in C.G.S. § 4-168a(b)(6). If you check this box, complete SECTION B.*
- The regulatory action will have an adverse effect on small businesses that cannot be minimized in a manner that is consistent with public health, safety and welfare. *If you check this box, complete SECTION B.*

**SECTION B**

For regulatory actions which affect or may affect small businesses, please provide responses to the following:

**Types of Businesses Potentially Affected by the Proposed Regulation:**

**DIRECT EFFECTS:** The proposed regulations apply to vehicle original equipment manufacturers (vehicle manufacturers, (“OEM”) and as such do not apply directly to small businesses in Connecticut. As such there are no direct compliance costs on businesses in Connecticut.

**INDIRECT EFFECTS:** The regulations will benefit Connecticut residents primarily through reductions in harmful pollutants and decreased health impacts by increasing the number of ZEVs and reducing the emissions of non-ZEVs sold in Connecticut. The regulation will decrease emissions of nitrogen oxides, a precursor to ground level ozone (smog). DEEP worked with the Northeast States for Coordinated Air Use Management (NESCAUM) to use the Environmental Protection Agency’s (EPA) MOVES3 and COBRA modeling systems to develop a cost-benefit analysis (Table 1). The COBRA model uses emissions reductions to evaluate health outcomes and estimate health care avoidance costs. These health benefits would additionally be passed on to small businesses in the form of decreased sick time of employees and healthcare costs.

**Table 1: Cumulative ACC II Emissions Benefits Compared to the Business-as-Usual Scenario, 2025-2040 (Model Year 2027 implementation)**

	NO <sub>x</sub>	PM <sub>2.5</sub>	WTW CO <sub>2</sub> e
By 2030	460 US tons	31 US tons	3.6 million metric tons
By 2035	1,873 US tons	143 US tons	16.7 million metric tons
By 2040	4,341 US tons	324 US tons	39.5 million metric tons

The COBRA was then used to model estimated health benefits. The emissions reductions are used in the COBRA model to evaluate health outcomes and estimate health care avoidance costs. These health benefits would additionally be passed on to the state in the form of decreased sick time of employees and healthcare costs.

**Table 2: Annual COBRA-estimated economic values of Connecticut adopting ACC II, in millions of US dollars**

Analysis Year	Total NO <sub>x</sub> Reduction (TPY)*	Total PM <sub>2.5</sub> Reduction (TPY)*	In-State Benefit**	Out-Of-State Benefit**	In-State Burden***	Out-Of-State Burden***	Net Benefit****
2040	580	39	160.0	112.7	0	0	272.7

\* Emissions reduction in tons per year

\*\* The benefit of reduced on-road emissions

\*\*\* The burden of increased electric generation emissions

\*\*\*\* The sum of in-state and out-of-state benefits and burdens

It is assumed that the direct costs imposed on OEMs would be passed on through higher vehicle prices to end-users in Connecticut, which could increase prices for the purchases of vehicles in the state. However, cost evaluations for vehicles are generally determined using the “total cost of ownership” (TCO) which factors in other costs or savings such as maintenance and fuel. Costs include installing an electrical receptacle for electric vehicles supply equipment (EVSE) for purchasers of vehicles, fuel costs, difference in maintenance costs, registration costs, and insurance costs over a ten-year period. An analysis of the TCO for individual vehicle owners conducted by the California Air Resources Board concludes that operational savings will offset and incremental costs of the initial electric vehicle purchase. For example, a passenger car battery electric vehicle (BEV) with a 300-mile range will have initial annual savings in the first year for the 2026 model year technology. For the 2035 model year technology, the initial savings are nearly immediate and cumulative savings over ten years exceed \$7,500.<sup>1</sup>

As ZEVs become a greater portion of the fleet, the vehicle repair and maintenance service industry are estimated to see negative impacts, including dealerships that have service departments, due to the lower maintenance requirements for ZEVs compared with ICEVs. This trend would suggest that the number of businesses providing these services may decrease along with the reduced demand.

**Total Number of Small Businesses Potentially Subject to the Proposed Regulation:**

No small businesses in Connecticut are directly subjected to the proposed regulations. No vehicle manufacturing in Connecticut currently involves the final assembly of vehicles that would affect small business.

**Will small businesses, in order to comply with the proposed regulation, have additional requirements as listed in C.G.S. § 4-168a(b)(4)? If so, identify the requirements and provide an explanation for each.**

No, small businesses will not be subjected to additional requirements to comply with proposed regulations.

**Has the agency communicated with small businesses or small business organizations in developing the proposed regulation and the regulatory flexibility analysis, if applicable? If so, to what extent?**

No, the proposed regulations are not expected to have an adverse impact on small businesses in Connecticut.

**Does the proposed regulation provide alternative compliance methods for small businesses that will accomplish the objectives of applicable statutes while minimizing the adverse impact on small businesses? If so, to what extent?**

Small businesses are not directly subjected to the proposed regulations, so there are no alternatives that would lessen any adverse impact on small business. Businesses that are subjected to the proposed regulations have flexible options to achieve the purposes of the regulation and ensure full compliance while not negatively affecting business plans.

Based on NYDEC:

While the vehicle manufacturers are not Connecticut small businesses, the proposed regulation minimizes adverse impacts on vehicle manufacturers by offering various compliance flexibility mechanisms. Flexibilities include plug-in hybrid electric vehicle (PHEV) credits, credit banking and trading, proportional fuel cell electric

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<sup>1</sup> Advanced Clean Cars II Initial Statement of Reasons, at Pg 144  
Revised November 2017

vehicle (FCEV) values, historical credits, pooling, early compliance credits, environmental justice credits, and simplified ZEV credit accounting.

The regulation is also not expected to have adverse impacts on vehicle dealers. Dealerships will be required to ensure that the vehicles they sell are California certified, which they have been required to do since the 2008 model year for light-duty vehicles and medium-duty vehicles. Most OEMs have included provisions in their ordering mechanisms to ensure that only California certified vehicles are shipped to Connecticut dealers. The implementation of the regulation is not expected to be burdensome in terms of additional reporting requirements for dealers. There would be no change in the competitive relationship with out-of-state businesses.