Direct Sales of Electric Vehicles in Connecticut

Assessment of Employment Impacts at Existing Car Dealerships

May 17, 2017

Acadia Center

Advancing the Clean Energy Future

Overview

Electric vehicles provide significant benefits: to drivers by reducing fuel costs, to the regional economy from fewer dollars spent on imported oil and more spent in local economies, to communities burdened with air pollution, to national security through increased energy independence, and to the future of our planet with lower greenhouse gas emissions. Over the past several years, Connecticut has debated whether to allow the direct sales of electric vehicles (EVs) by manufacturers, as it is only one of a small number of states that prohibit this practice.

While the benefits of EV direct sales are well understood, including increased consumer access to zero-emission EVs and a positive impact on the state budget through increased sales tax revenue, alleged negative impacts have been speculated about, but not analyzed. One concern that is raised is whether allowing direct sales will have negative employment impacts at existing Connecticut car dealerships. Acadia Center sought to test this assertion by reviewing auto dealer employment data in Connecticut and nearby states with EV direct sales. The results show that there has been no negative impact on auto dealer job levels or trends in states that allow EV direct sales. This is consistent with the general experience in other states that there have been no significant economic downsides to allowing EV direct sales. In light of these findings, Connecticut needs to eliminate this arbitrary barrier, as proposed in H.B. 7097, *An Act Concerning the Licensing of New and Used Car Dealers*.[1]

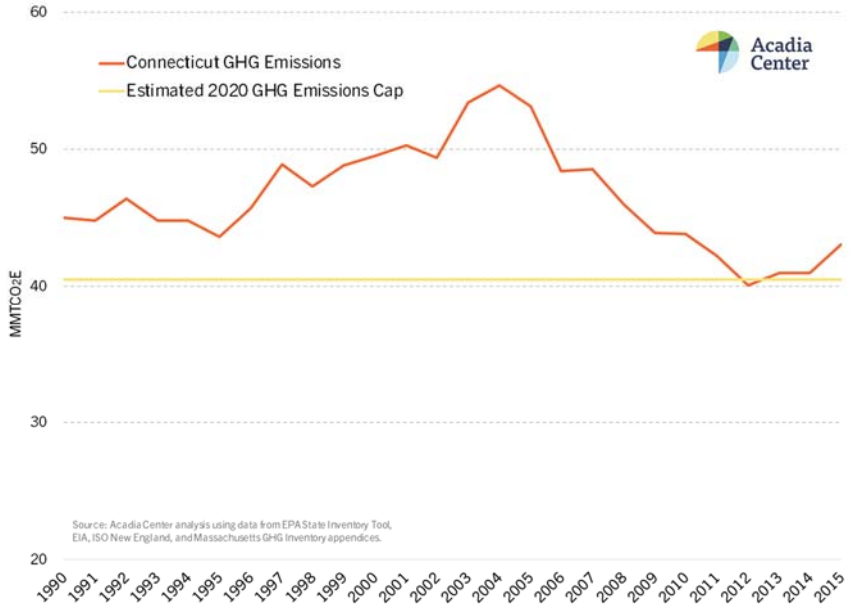
Connecticut Needs to Accelerate EV Adoption

Connecticut is required by its Global Warming Solutions Act (GWSA) to reduce greenhouse gas (GHG) emissions in the state to 10% below 1990 levels by 2020 and 80% below 2001 levels by 2050. Yet, GHG emissions in the state have been on the rise. Acadia Center's most recent GHG emissions analysis for Connecticut[2] shows that GHG emissions have increased by about 7.5% from a low in 2012 (Chart 1 below). One of the major causes of this upward trend is an increase in the driving of conventional vehicles, likely due to recent low gas prices.

[1] *See: An Act Concerning the Licensing of New and Used Car Dealers*, H.B. 7097, Connecticut General Assembly, 2017 Legislative Session. Available here: https://www.cga.ct.gov/2017/cbs/H/pdf/HB-7097.pdf .

[2] *See:* http://acadiacenter.org/document/updated-greenhouse-gas-emissions-inventory-for-connecticut/.

Chart 1. Connecticut GHG Emissions 1990-2015 Compared to Estimated 2020 GWSA Cap

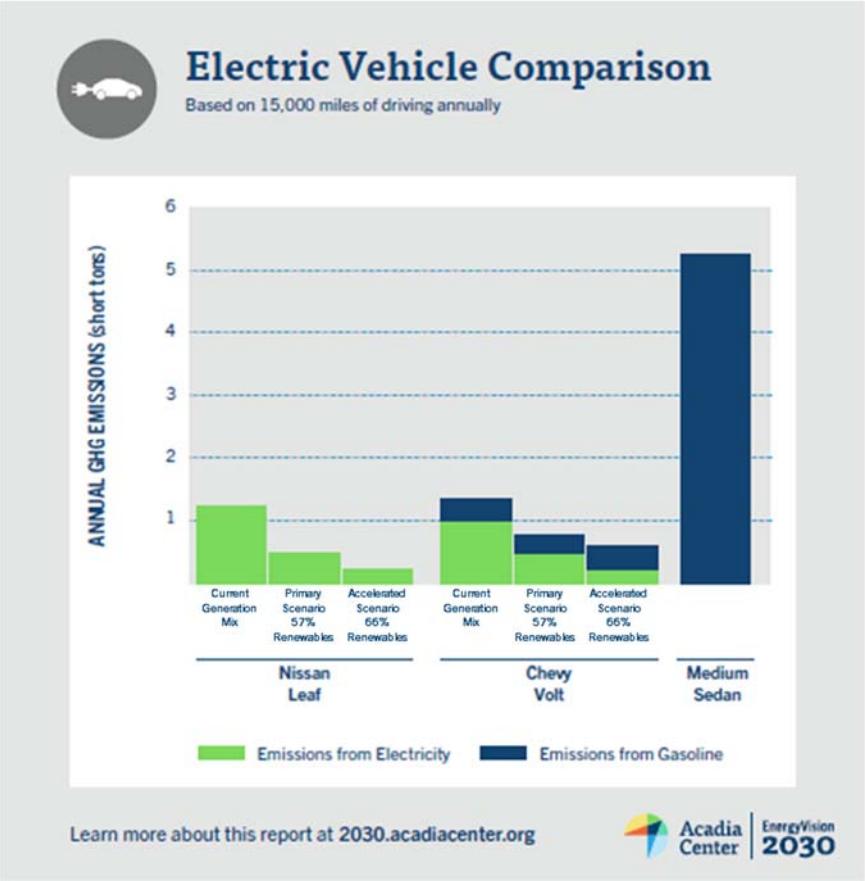


As transportation is the largest source of GHG emissions in Connecticut, responsible for about 40% of the total,[3] the state needs to use all available tools to reduce emissions from vehicles to achieve its GWSA mandates. Zero-emission EVs are an essential tool for addressing this challenge. With today's energy mix, EVs emit about 75% less GHGs than a conventional vehicle in the Northeast (Chart 2 below).[4] As the carbon intensity of the regional energy portfolio decreases, the environmental and climate benefits of EVs increase.

[3] *See:* CT Department of Energy and Environmental Protection, 2013 Greenhouse Gas Inventory http://www.ct.gov/deep/cwp/view.asp?a=4423&q=568752&deepNav_GID=2121 .

[4] *See:* http://2030.acadiacenter.org .

Chart 2: Greenhouse Gas Emissions from Electric and Conventional Vehicles in the Northeast



EVs also provide major benefits to public health, energy independence, consumers, and the regional economy. Recognizing these many benefits, Connecticut committed with other states in the Northeast to put 1.4 million zero-emission vehicles, primarily EVs, on the road by 2025;[5] this will require about 155,000 EVs to be registered in Connecticut by that year.[6] Given that only about 5,100 zero-emission vehicles have been registered in the state since 2011,[7] a significant increase in sales is needed to reach this goal. Increasing consumer access to additional EV models through direct sales will help to bolster EV registrations in the state. Recent modeling analysis by Acadia Center has shown that EV adoption levels will need to be even higher to meet GHG emissions mandates. We have accordingly projected that Connecticut will ultimately need to put about 509,000 zero-emission vehicles on the road by 2030 (Chart 3 below).[8]

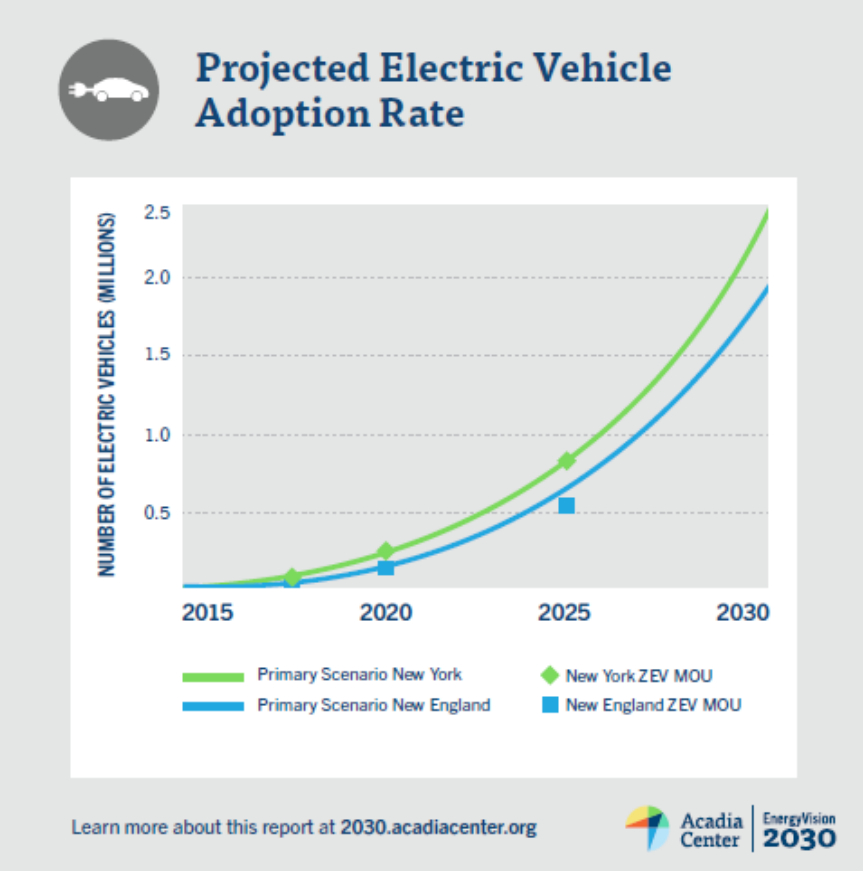
[5] The memorandum of understanding is between Connecticut, Massachusetts, Rhode Island, Vermont, and New York in the Northeast, as well as Maryland, California, and Oregon. The total commitment from all states is 3.3 million vehicles.

[6] Sierra Club, Conservation Law Foundation, and Acadia Center, "Charging Up," 2015. Available here: http://acadiacenter.org/document/charging-up/ .

[7] *See:* http://drivingzev.com/zev-state/connecticut (accessed May 15, 2015).

[8] Acadia Center, EnergyVision 2030, 2017. Available here: http://2030.acadiacenter.org.

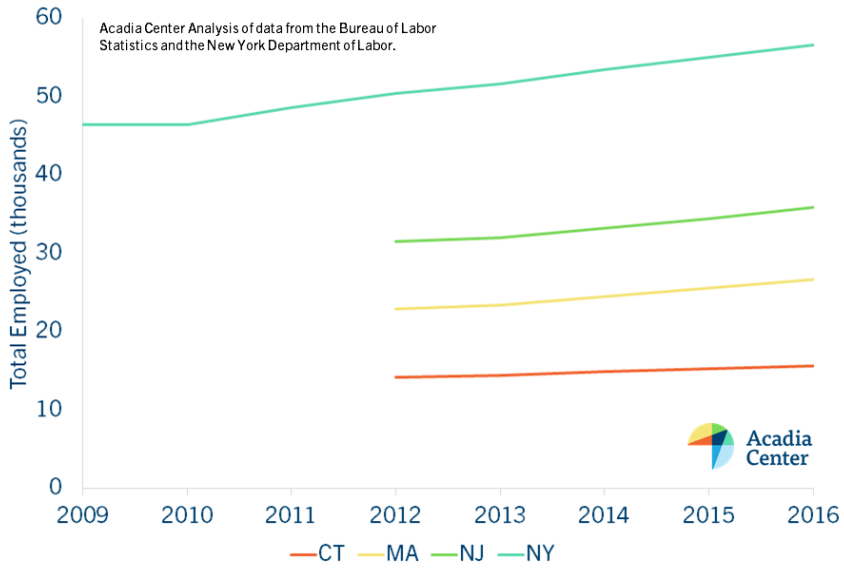
Chart 3: Electric Vehicle Adoption Needed to Reach 45% GHG Emissions Reductions by 2030



Auto Dealer Employment and EV Direct Sales

One of the concerns expressed by opponents to EV direct sales is that this approach to expanding consumer access negatively impacts employment at in-state car dealerships. To investigate the possible impact of direct EV sales on dealership jobs, Acadia Center reviewed and assessed car dealership occupational data in nearby states that currently have direct sales of EVs by at least one manufacturer: Massachusetts, New York, and New Jersey. The data demonstrate that, since direct sales started in these states (2009 in New York, 2012 in Massachusetts, and 2012 in New Jersey, which then revoked and reinstated direct sales between 2014 and 2015), there has been no evident decline in dealership jobs (Chart 4 below).

Chart 4: Total Auto Dealer Employment in Connecticut and Nearby States with EV Direct Sales



As Connecticut has important emissions mandates and clean car commitments to meet, it is imperative that it pursues all available consumer-friendly options to increase the number of zero-emission EVs on the road. Given that other states have not seen negative job impacts from allowing EV direct sales to consumers, adopting this sales approach in Connecticut is a reasonable way to facilitate greater EV market penetration at a time of high need for more rapid EV deployment.

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Appendix

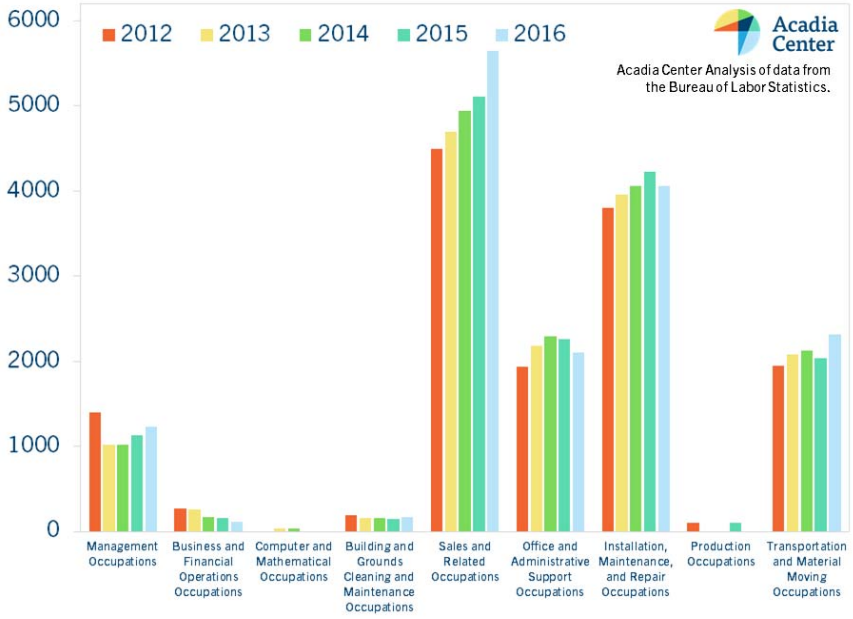
The following chart shows the total employment and composition by major occupations of auto dealerships. The two largest divisions are sales and related occupations and installation, maintenance, and repair occupations.

Table 1A: Auto Dealership Total Employment and Percentage of Major Occupations, 2016[9]

	CT	NY	NJ	MA
TOTAL EMPLOYMENT	15620	55790	35950	26640
Management Occupations	8%	5%	4%	8%
Business and Financial Operations Occupations	1%	2%	4%	3%
Transportation and Material Moving Occupations	15%	13%	10%	9%
Sales and Related Occupations	36%	36%	41%	35%
Office and Administrative Support Occupations	13%	17%	14%	16%
Installation, Maintenance, and Repair Occupations	26%	25%	23%	29%
Other (incl. Computer, Legal, Media & Production Occupations)	1%	2%	3%	1%

The following charts show trends in the composition of the auto dealer employment sector in Connecticut, New York, Massachusetts, and New Jersey between 2012 and 2016.

Chart 1A: Main Auto Dealer Occupations in Connecticut, 2012-2016



[9] Acadia Center analysis of Bureau of Labor Statistics. Data available here: https://www.bls.gov/oes/2016/may/oes_research_estimates.htm

Chart 2A: Main Auto Dealer Occupations in New York, 2012-2016

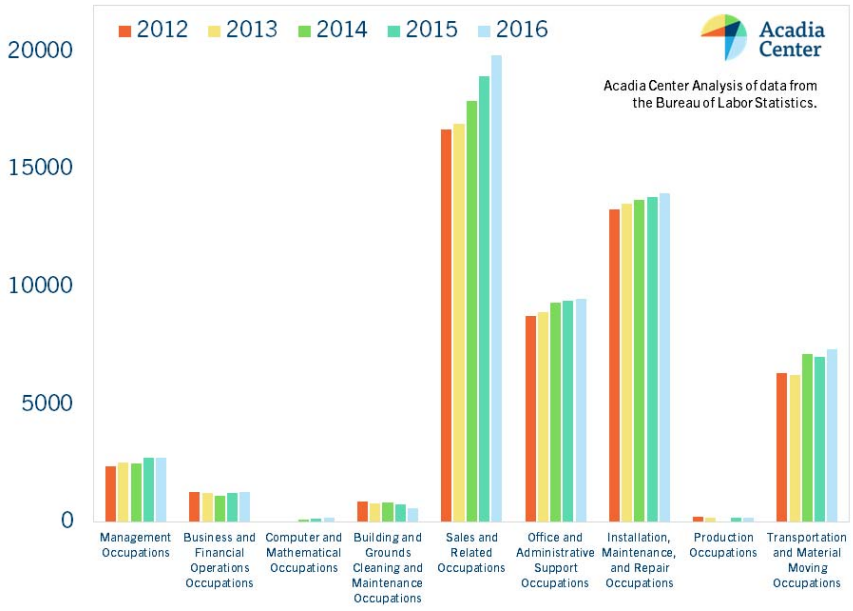


Chart 3A: Main Auto Dealer Occupations in Massachusetts, 2012-2016

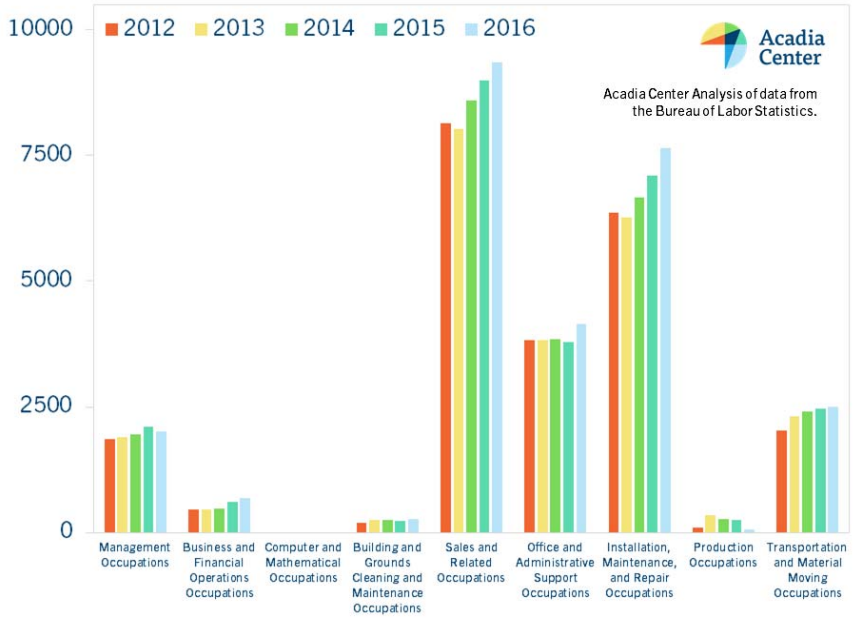


Chart 4A: Main Auto Dealer Occupations in New Jersey, 2012-2016