

Abstract Submitted  
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**Electric Vehicle Emissions by State** LOGAN HENNES, presenter,  
ARGONNE NATIONAL LAB ES DIVISSION TEAM — Transportation is the economic sector with the highest greenhouse gas (GHG) emissions in the United States. Dramatic transition is needed in all vehicle markets to alternative fuels by 2035 to reach deep decarbonization in all sectors. Over 1.9 million plug-in electric vehicles (PEVs) have been sold in the United States through June 2021. PEVs include both all-electric battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs). Using the grid mix for each subregion provided by the EPA, we determined the emission rates from the electric grid in each state from 2010 to 2020. We also incorporated vehicle efficiency and vehicle sales by state to calculate the emissions generated per mile and the total historical emissions generated by state and nationally.

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presenter

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