

# Key Findings:

Economic Impacts to U.S. Biofuels, Agriculture,  
and the Economy from Subsidized Electric Vehicle Penetration  
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A new study examines three scenarios for electric vehicle (“EV”) market penetration through 2050 and their potential impacts on U.S. biofuels consumption, the agricultural sector, and the greater economy.

The three scenarios include:

1. Base Case: EV market penetration increases to 13 percent of light-duty vehicle sales by 2050, following the Annual Energy Outlook Reference Case projections.
2. ICE Ban by 2050: EV market share reaches 100 percent of light-duty and freight vehicle sales by 2050 due to a ban on internal combustion engines (“ICE”);[1]
3. ICE Ban by 2035: EV market share reaches 100 percent of light-duty vehicle sales by 2035 and 100 percent of freight vehicle sales by 2040 due to a ban on internal combustion engines. [2]

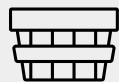
These scenarios were selected to present a full range of possible impacts across the biofuels value chain and supporting supply chains. The biofuels value chain includes farm seed, fertilizer, and other inputs required for crop production, maintenance, and harvesting, intermediate transportation, and biofuels manufacturing.

[Click here](#) to view the full study text.

The ICE Ban by 2050 and ICE Ban by 2035 scenarios were designed to represent scenarios where non-market, policy factors, including a potential ban on the sale of vehicles with an internal combustion engine, could require EV adoption. Relative to the Base Case, this study finds that in 2050:



U.S. light-duty and freight vehicle consumption of ethanol and biodiesel could decline up to 90 percent to 1.1 billion gallons and up to 61 percent to 0.8 billion gallons, respectively.



Corn and soybean consumption decrease by up to 2.0 billion bushels and up to 470 million bushels, respectively.



Corn prices fall up to 50 percent to \$1.74 per bushel.



Soybean prices fall up to 44 percent to \$4.92 per bushel.



U.S. Net Farm Income decreases by up to \$27 billion.



U.S. GDP declines by up to \$26.4 billion, resulting in cumulative GDP losses of up to \$321 billion.



U.S. job losses could reach up to 255,300 in the year 2050.

[1] The “ICE Ban by 2050” scenario was constructed to represent a softened version of the “ICE Ban by 2035” scenario.

[2] The ICE Ban by 2035 scenario is based on the recent Majority Staff Report entitled “Solving the Climate Crisis: The Congressional Action Plan for a Clean Energy Economy and a Healthy, Resilient, and Just America.” Accessed at: <https://climatecrisis.house.gov/report>