Policy Brief

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Increasing Tax Incentives For Electric Vehicles (EV)

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Where it Begins:

The Energy Improvement and Extension Act of 2008

- Signed into law by President Bush
- Outlines tax incentives for Electric Vehicles (EV's)
- Consumers are eligible for a maximum $7500 tax credit when purchasing an EV
  - Base is $2500
- Manufacturers have a 200,000 production cap
- If cap is reached, tax incentives are cut in half for every succeeding 6 months

The Problem:

In 2008, when the government implemented a limit on tax incentives for electric vehicles, a question arose: "How can we increase the amount of electric cars driven?". The reasoning behind a desired increased in electric vehicle usage stems from the positive environmental and consumer externalities that EV's exert. However, problems arose for consumers and manufacturers as a result of the limit on EV's tax incentives. With the limitations, consumers began to stop purchasing electric vehicles due to a high expense factor, decreasing the amount of electric vehicles on the road (Barry).

Also, manufacturers believed once the cap limit was hit, it put them at a market disadvantage because consumers steered away from buying their product (Carey). Once again decreasing the amount of electric vehicles on the road.

One of the largest manufactures of electric vehicles, Tesla, was the first to reach the 200,000 vehicle cap in 2018. Tesla first acknowledged the market disadvantage with an analysis of their tax incentives. It concluded their tax incentive would only be $1875 by the end of 2019 (Carey). Tesla then predicted that consumers would look to other suppliers. In order to combat the market disadvantage, they joined with General Motors and Nissan Co. in a lobbying effort to extend the $7500 tax incentive to more than 200,000 vehicles (Natter).

> "a **federal tax credit** to help make electric cars **more affordable** for all consumers is **integral** to reaching a **zero emission future**"
>
> -Dan Turton *(Vice President of General Motors)*

With a decrease in utilization of electric vehicles, the proposition stands to extend the tax incentive. The extension of the tax incentive will get rid of the 200,000 vehicle cap, in hoping to increase the positive environmental and consumer externalities of EV's.

Benefits of EV's

Environmental

CO_2 Emissions

- Study in Beijing, China found EV's could reduce it emissions by 10,686 tons daily (Li)

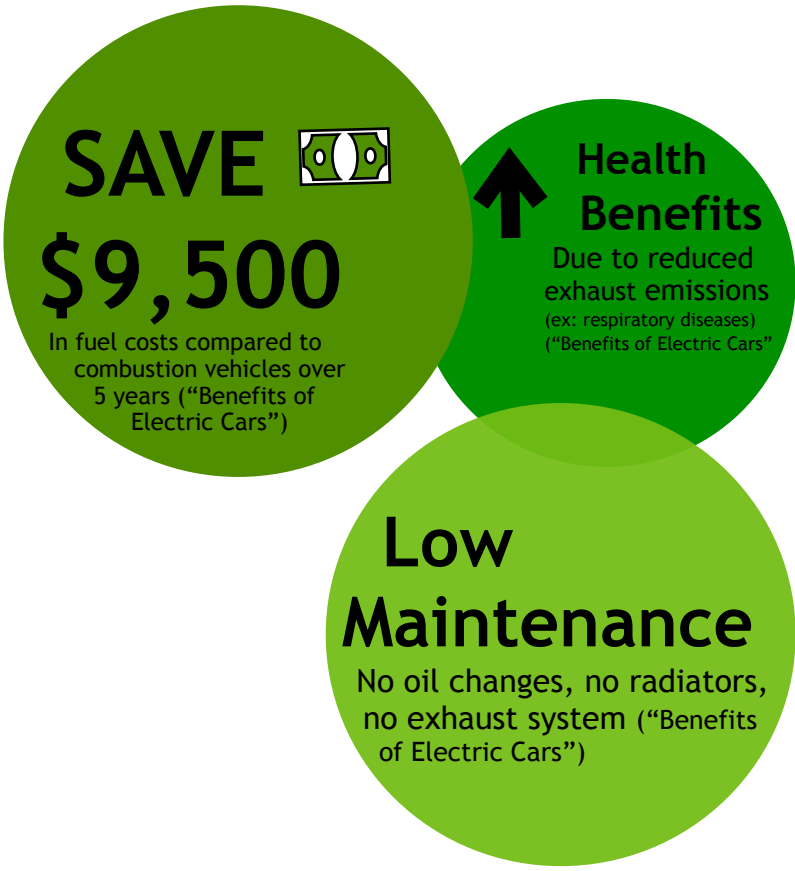
Daily Kilowatt Usage

- Study in Beijing, China found amount of electricity was reduced by 14.44 million kilowatt-hours (Li)

Urban Heat Island Intensity

- HII: the difference in temperature between rural and urban areas of a location
- EV's have potential to decrease it by .94 degrees Celsius (Li)

Consumer



The Solution:

Eliminate 200,000 EV Cap at a Federal Level, Extending Tax Incentives

Due to the 200,000 tax incentive cap on EV's, States have provided EV tax incentives at a local level. **20 out of 50 states** in the U.S. provide additional EV incentives (Felton). California is a pioneer in providing local incentives to drive EV's. California's efforts begin with their desire to increase their state tax subsidy to $4,500 (Felton). They continue with California's Clean Vehicle Rebate Project offering a $2500 tax credit for the purchase of a purely electric vehicle ("States incentives"). Continuing under the California Clean Vehicle Rebate Project, the California Air Resource Board plans to extend the tax credit to up to $4500 (Hansen). This increase is a result of the desire to give EV manufacturers a reliable market for the industry to grow. With these state incentives, California has **increased** their electric vehicle fleet **by 53%** bringing it to a total of 337,482 vehicles (Sisson). California serves an example to the federal government of how an increase in tax incentives increases the amount of EV's on the road. **Thus, if the federal government eliminated the 200,000 vehicle cap, expanding tax incentives, the amount of EV's on the road would increase exerting positive externalities.**

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