Government Subsidies To Electronic Cars

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A subsidy is a kind of payment any government makes to firms producing goods and services just to encourage them to produce more of their products. In many cases, they always intervene in cases where the goods produced by that particular company have an influence on the economy of the country. Different governments across the world provide subsidies to firms, most of which are those that produce either basic commodities for citizens or products that are environmentally friendly. They also provide subsidies to cut the production cost for the producers, hence lowering the price of the goods, which, in the end, encourages the public to buy such a commodity. Environmental pollution has become a challenge to the entire world, especially from the cars we own. Government subsidies are very important for emerging companies like electronic car companies to pick up in the market. Subsidies promote these companies in their production, and at the same time, it may end up making the company less competitive in the market.

At no particular time will one reject the fact that smoke billowing from our car's exhausts is a significant contributor to air pollution (Lelieveld et al. 367). Air pollution is the presence of foreign materials in the atmosphere or excess impurities, which, at that particular moment, are not harmful to human beings. The emission of gasoline from our cars when fuels burn is a serious air pollutant. Gasoline is also emitted from the cars at the fueling stations when they are being fueled. There are different types of air pollution caused by burnt fuels. A combination of hydrocarbons and Nitrogen oxide in the presence of sunlight results in an ozone layer, and the ozone layer in the atmosphere is very important since it protects us from the ultraviolet rays coming from the sun. Ultraviolet rays pose a great risk to our health when they find their way to the earth's surface.

The only way this kind of rays can reach the surface of the earth is when there are holes in the ozone layer. These holes also make the ozone layer come closer to earth, and when the ozone layer comes down, it brings problems like smog that can lead to respiratory completions to many people (Lelieveld et al. 367). The gases released by cars are also believed to be a major cause of cancer across the globe, besides other problems like heart diseases, asthma, eye irritation and even birth defects.

Another problem associated with the emission of gases from cars is the increase in the levels of carbon dioxide in the atmosphere, plus other greenhouse gases. Normally, greenhouse gases absorb some of the heat from the sun and help in warming the earth's surface. Research by scientists shows that increasing the levels of these greenhouse gases creates an imbalance in the atmosphere, causing the levels of greenhouse gases to spike and, hence, global warming. Sophisticated scientific instruments are used to measure the levels of impurities in the atmosphere, but it is not clear what percentage comes from cars. Despite this fact, it is believed cars are the major contributor, and this calamity can only be solved by the introduction of electric cars. Electric cars are environmentally friendly; they do not produce any kind of impurities in either the atmosphere or even the land.

Environmental Protection Agency of the United States declared mobile cars as the great culprits in environmental pollution even though other fuel-using machines like bulldozers, snow blowers and others also contribute to pollution (Helveston et al. 97). In the United States, only the Environmental Protection Agency approximates that, cars results to about seventy-five of the total carbon monoxide in the air. Moving cars contributes a third of the pollution that causes smog every year.

Fortunately, technology and unfueled cars have brought a sigh of relief to the long-time threatened atmosphere. Tough emission standards have been put in place by the federal government to help curb the pollution from cars, and drivers demand better efficiency. The introduction of Hybrid cars by Tesla and other Companies has become a major advancement in the technology of controlling air pollution. Electric cars are indeed a big step, but the sheer number of individuals owning these cars offsets the expected improvements.

The electric car is a plug-in type of automobile propelled by motors or one motor from energy stored in batteries which can be recharged. The Renaissance in the manufacturing of electric cars began in 2008. This advancement has brought concerns about the government increasing the cost of oil and, on the other way, providing subsidies to firms manufacturing electric cars. This idea intends to minimize the greenhouse gases emitted into the air. (Helveston et al. 109). The national and local governments promote the manufacture of electric cars by establishing subsidies and tax credits alongside incentives. This mission is also intended to improve the adoption rate of these new electric cars in the market depending on their battery sizes and their electric range.

The former federal New Clean Vehicle Credit offered up to $7,500 for qualifying purchases, but the IRS states that the new, previously owned, and commercial clean-vehicle credits are not available for vehicles acquired after September 30, 2025. In comparison with internal combustion cars, electric cars neither pollute the air nor make sound since they are much quieter compared to internal combustion engines (Holtsmark et al. 162). Proper analysis of the general efficiency and benefit of electric cars to the government includes the type of energy used in charging the battery, the energy needed to come up with the battery and the energy expended when it is disposed of in an environment-friendly way. The charging time is statistically one hour, with some prototypes doing only 30 minutes, but technological research is still on the idea of how to reduce this time. The key limiting factor up to late 2017 was the problem of fewer recharging stations along the major highways in most countries, even though many owning these cars prefer home-based charging rather than commercial filling stations. The government has been trying all it can to change this, and for the small time frame, they are subsidising the batteries, and the companies are also trying to manufacture long-range batteries. Most drivers using these vehicles have reported high levels of anxiety about what can happen when their power gets depleted on the way. By 2018, these companies had shown their interest in making these cars more efficient by introducing a long range of up to 480-kilometre batteries produced by Tesla, which is comparatively the range of gasoline-fueled cars.

With the ever-increasing government subsidies, a series of improvements in the rate of market adoption for these cars have been increasing (Holtsmark et al. 165). Going by the statistics, in late

2015, there were around 30 models of all-electric passenger vehicles on the highways. Cumulatively, the global sales of highway-capable and light-duty electric cars shot up to over one million in total by September 2016. Nissan Leaf was rated the world's best-selling of all time in the history of highway-capable electric cars, with a sale of over 300,000 units globally in January 2018. Tesla Model S ranked second with about 213,000 sales worldwide. With the objective of the government intervening in a market with the purpose of correcting a potential failure in the market, the government is mainly subsidising the electric cars due to the good service offered in an environmentally efficient way. The positive externality of the production of these electric cars is environmental conservation. Government subsidies are meant to benefit both the consumers of these electric cars, which are the users and the producing companies.

Clean energy and electric cars are essential for sustainable production of goods and services. This idea is very important given that it is not optimal when the society's welfare diminishes over time, but it is optimal when the welfare of the society increases with time (Bakker et al. 54). Economists will argue that subsidizing key industries may be of benefit in the research alongside development of energy that is clean, but firms may fail and fall due to their interest in profits and not quality.

Government subsidies for electronic cars are of great benefit to society since they allow companies to expand, and by doing so, many people get employed. A typical example is the Nissan Company, which has a massive production plant in Sunderland. Many people are employed in this electric car manufacturer company. Without the government's support, such an expansion creating jobs for millions of people would not happen, and so the environment is conserved, and the economy developed at the same time. However, before providing the subsidy, a careful review and calculation has to be done to determine the potential benefit the employment created brings to the economy of a country.

Electronic car firms are solemnly responsible for the negative externalities in the production of their goods and services. For instance, a manufacturer of fueled engine cars always incurs third-party charges, which include hazardous wastes from the company and air pollution. In every subsidy intended by the government, like the electric car subsidies, they should always consider socially the net benefit of their intervention in such a market. In a situation where the production externalities cause severe costs to the welfare of a society, which potentially overshadows the benefits, the government should never intervene in such a market (Bakker et al. 61). The production of electric cars though, is quite a challenge and a hard puzzle indeed. Electric cars is certainly a massive benefit to the consumers with its zero emissions of impurities, their production on the other hand is certainly a zero venture. From the economic view of the whole idea, it is significant that the government come up with an accurate calculation of the real costs to society right before it makes a decision on subsiding electric car production. Failure to calculate this, predictably, an economist will see a wide chance of failure with the policy not having an impact on the welfare of the nation. This point proposes that it is better if the government specifically targets organizations and firms that do not produce any negative externalities if they pose no little risk to the government itself.

The second negative impact of the government providing subsidies is related to the moral hazard problem facing firms that are receiving subsidies from the government. Government subsidies may discourage firms from ever trying to be competitive and later reduce their production costs. In such a case, you will find out that without the subsidy, the firm may have found more efficient ways of reducing their production cost in a manner that gives them an opportunity to maximize their outputs from the little resources they have, that is, minimizing inputs and maximizing outputs. Firms receiving subsidies from the government sometimes find it disincentive to do so. It becomes economically considerable that the government determines the size of incentives they would provide to this electric car company and the length for which the subsidy would run (Carrillo-Hermosilla et al. 1075). Prolonged and bigger subsidies are disastrous to companies since they become lazy and start failing to produce more competitive and efficient products, which, at the end of it all, would discourage people from buying these environmentally perfect and friendly cars. Firms not subsidized by the government are the most successful current companies on US soil. They work harder to boost their productivity with increased inventions and innovations due to competition, making them stay in the market and make big sales on their improved products.

Thirdly, government subsidies for electric car companies are the opportunity cost of these kinds of subsidies they may require. There is a higher risk of government failure in organizations where the subsidies they provide are much bigger, especially in a situation where the government is already running on debts yet to be paid. The subsidy money, from an economist's perspective at that particular point, would help develop other sectors of the economy, helping the government pay the debts and relieving society of the same. This implies that the government would be better off subsidising another sector of the economy rather than the car industry, which would, at last, not live up to the expectation.

In general, subsidies have both positive and negative impacts on society. Many factors are considered before its provision to a firm. The size of the subsidy matters a lot, and it should be well calculated in relation to the social production optimum level. The period of the subsidy must also be considered. It must not be too long since when it is longer, the firm may resort to being lazy and less competitive, making it fall at some point just because of the subsidy (Carrillo-Hermosilla et al. 1110). It is therefore important that these electric car companies, when subsidized, should be able to pass the subsidy by making these cars cheaper, encouraging people to buy them. By this, the government's intention of making environmentally friendly cars dominate the market would be achieved. The company must also be in a position to make these cars even more efficient to encourage buyers. The competitive marketplace must be encouraged since this will keep the firm on its toes, providing good cars not only to the environment but also to the users of these cars.

In summary, the government must be keen on subsidising the electric car industry. An accurate analysis of cost-benefit due to the subsidy must be given consideration besides the environmental benefit of these cars. Some would argue that these firms are already making profits enough to help them invest more and expand to other parts of the world with this kind of technology. Concurrently, electric cars are a good project for the environmental sector and for our health. Engine cars are

polluting the air we breathe, and an intervention such as these electric cars should be given the utmost support. Despite environmental benefits, economic benefits must also be given consideration since favouring the environment by deteriorating the economy is not justice at all.

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