Should the United States Transfer from Gas to Electric Cars?

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With the prices of gas going up many are looking into buying an electric car, but what most people do not realize is that by doing so will increase the risk of others. Most of the United States population do not know how electric cars are made of and what they are doing to not only America, but around the world. Many Americans often say that electric cars are better for the environment and has less maintenance requirements, rather than a gas vehicle. People may also think since gas prices are high, that electric cars are cheaper with recharging. Electricity is what almost everyone uses on a daily basest, which could be little as charging your phone to, your furnace keeping the house warm. With the buildup of electric cars America must produce more energy than it has ever done before, which could lead to a disaster for many that relies on such power. In an article from Fred Lambert (2022), he talks about the increase of EV revolution and how electric cars have doubled more in 2021. Lambert says, "The global market share of electric cars more than doubled in 2021, marking a clear acceleration of electric vehicle adoption around the world". I have also seen an increase in electric cars and think that there are many pros and cons in an electric car. Even though maintenance may seem cheaper and more reasonable there are many batterie errors that has affected the people of America. Including many young children around the world that work long hard hours every day.

Many people think that electric cars are more efficient in energy and are better for the environment. I can see where many Americans may see that, but I still think there is a catch to electric cars and how they are affecting the environment, with how these cars are built. Benjamin Plackett (2021), who is a science journalist quotes, "Of course electric cars must be better for the environment, because they don't have exhausts… However, electric vehicles (EVs) aren't perfect, and they come with their own set of polluting problems… their batteries contain components, such as lithium, that require a significant amount of energy to source and extract."

Even though electric cars may seem perfect for the environment rather than gasoline cars, there is a problem these EVs still hold. In the article "Lithium-ion battery toxic gas-introduction, smoke and hydrogen" from *LARGE,* LARGE (2021) quotes, "It can give rise to many crucial conditions which cannot be managed or assessed on the spot. The toxic gas has left many workers with most of the medical conditions that could not be treated later. This can show that the smoke from the lithium-ion battery is very dangerous. It has a direct effect on the environment and health of every individual." This mineral is not only a gas but can produce many emissions that could lead to health issues for many. I believe these electric cars are affecting more on the environment rather than gas cars. Even though gas cars produce some toxins that release into the air, seems way healthier than electric cars leaving many workers and others with untreated medical conditions. In the article "Electric cars: Child slave labor, market manipulation, ad environmental pollution." From *The New American*, Mitchell Shaw (2017) quotes, "The manufacturing process for making the components (especially the battery packs) and building the electric cars is considerably more polluting than the process for building traditional internal combustion cars." Electric cars are causing more pollution, which leaves gas cars to be seen as more friendly to the environment.

In addition, many people may think that electric cars are less expensive when it comes to maintaining an electric vehicle. Even though it may seem that way, people do not realize that these electric cars have parts that are difficult to find in stores. I think that many do not understand the differences between maintaining an electric and gas car. Most writers say that gas cars have easier maintenance than electric cars, which is what Dave & Rays (2022) argues, "Older, gas-powered cars are easier to maintain and much easier to source replacement parts for in the event of an emergency. Because the whole world has not yet embraced electric cars, there

are a lot of places in the world you could get stuck without access to EV parts. On the other hand, a traditional scrapyard could have sorted out the parts of an older car in minutes to a day or two." I agree with what the author argues, purchasing parts for gas vehicles are less of a hassle rather than finding parts in store for an electric car. If an electric car were to break down there would most likely be no stores with the parts for the car, but with a gasoline vehicle stores are more likely to have the part for the car. Electric cars have not been around that many years, which means stores have not been introduced to such parts for these cars. This is a good reason why gasoline cars are more efficient than electric cars. Although many may still say that it takes time to adapt to new technology, which I think is true, but there are still reasons why gas cars should not be transferred to electric cars.

In contrast, most Americans say that the technology, such as batteries for an electric car is more long lasting or better quality than a gas car. I think that electric cars have many possibilities where the batteries can go wrong. Andy Nguyen (2021) quotes, "Fully electric vehicles require a large lithium-ion battery to store energy and power the motor that propels the car… Because they require a mix of metals that need to be extracted and refined, lithium-ion batteries take more energy to produce than the common lead-acid batteries used in gasoline cars to help start the engine." Lithium-ion is a rechargeable battery, which stores energy in a reversible reduction for lithium ions and within each electric car is one of these batteries. With hurricane Ian that left much damage to the state of Florida, these electric cars can't stand a chance with salt water. In the article "Hurricane Ian is not a friend of electric vehicles" from *IER Institute for energy research*, IER argues about the aftermath of hurricane Ian and electric cars. IER (2022) quotes, "The washed-up saltwater induces rapid corrosion, which can cause the lithium-ion battery in a flooded electric vehicle to malfunction and ultimately catch on fire." The

electric car batteries are causing more difficulties for the fire departments and many others. There are much more electric cars in the south, which are close to salt water. Hurricanes cannot be the only problem for electric cars and who knows what else can cause the difficulties for electric cars.

In addition, many people do not notice were the minerals to build electric cars are coming from. They may not even care or think how the minerals such as cobalt is being dug up for the electric vehicles. In Democratic Republic of Congo, many children younger than four work under the earth surface to mine for cobalt. These children are much smaller than grown adults, which means they are more capable of fitting into tight spaces in the ground. In the article "Electric cars: Child slave labor, market manipulation, ad environmental pollution." From The New American, Mitchell Shaw (2017) quotes:

> Adult miners dig up to 600 ft below the surface using basic tools, without protective clothing or modern machinery. Sometimes the children are sent down into the narrow makeshift chambers where there is constant danger of collapse. And that danger, though immediate, is not the worst of it. The material itself, cobalt, is 'such a health hazard that it has a respiratory disease named after it cobalt lung, a form of pneumonia which causes coughing and leads to permanent incapacity and even death.

Instead, these children should be educated in school rather than mining for toxic minerals. These children are forced to work in such harsh conditions. This is child slave labor, which is what many do not hear about or know of.

In contrast, many Americans are not realizing that the increase of electric cars is also rising the amount of electricity that is needed. I think that the Americans need to be open to what the United States could look like, with such a large amount of electricity that is being used every

day. In the article "Electricity grid not ready for EV revolution" from *Energy central news*, Arizona Capitol Times (2021) quotes, "…Electrification of transport will mean the U.S. needs to double its electricity generating capacity by 2050." This is a huge change for the United States and electricity grid. With such a short amount of time and much needing to be changed, America will be going over its grid limits. In the article "Millions of EVs are coming – But can the U.S Electric grid handle them?" from *The Detroit Bureau,* Paul Eisenstein (2021) quotes, "Each time the grid goes down it not only leaves businesses and homeowners in the dark but it also threatens EV owners who could find themselves stuck at home or on the highway. And that comes at a time when the energy infrastructure faces growing demand from the battery-electric vehicles expected to roll out on U.S roads by the millions during the course of the coming decade." With what Eisenstein quoted could be the future America holds. If electric cars continue to increase, it could leave many stranded or even without power, since the electricity grid will not be able to catch up.

I can see where many people may think that electric cars can be better for the environment and more maintainable, but we need to realize the side effects that these cars are leading too. Electric cars are not only affecting the United States, but children who work non resting hours that are thrown into the toxic mines. The danger electric cars are causing and to who knows what that holds in the future for the people of America. I have found this topic interesting and have built more knowledge through doing research. Learning about new thoughts, which I never would have known about, if I were to not have chosen this topic. Especially learning about where cobalt came from and how such a toxic mineral is dug up by young children. Electric cars are becoming a problem in the United States, which could impact not only my future, but yours.

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