

## EV Dream

Electric cars, or EVs if you like, are the future, right? They will be less expensive, cleaner for the environment, slow carbon dioxide emissions, and we will be more secure because we won't be so dependent on oil. These are the things we are being told by politicians and activists. But is any of this actually true?

I won't say I'm sorry to drain the juice from this electric dream, because I'm not. We've got way too many supposed leaders selling us stories that are much more complicated than their simple talking points. Let's begin with this idea that EVs are the next big thing.

There are currently 4 million of them on the road but there are 1 billion vehicles, so they aren't even one-half of one percent of the market. EVs are currently 2 percent of auto sales, but that's largely because WE ARE ALL paying for them through massive taxpayer subsidies. The U.S. federal subsidy alone is \$7,500 per vehicle. When China cut subsidies in half in June of 2019, EV sales plunged.

And who is buying all these EVs? The wealthy are. The Congressional Research Service reports that 80 percent of EV subsidies were claimed by those with household incomes of more than \$100,000. That means, the rich man's Tesla is partially paid for by all the rest of us.

Operating and maintaining an electric vehicle is cheaper. But you'll need to own it for many years before you make up the extra expense of the original purchase. But if those subsidies are taken away, you're paying significantly more than if you bought a vehicle that runs on fuel.

And who is going to pay to dispose of all the toxic batteries? Nobody knows. EV's won't meaningfully reduce our oil use either.

According to the Manhattan Institute's Mark Mills, an all-EV America would barely trim 8 percent off world oil demand. Part of the reason is it takes a lot of oil-based energy to make batteries and much of our cars and trucks are made from oil and natural gas.

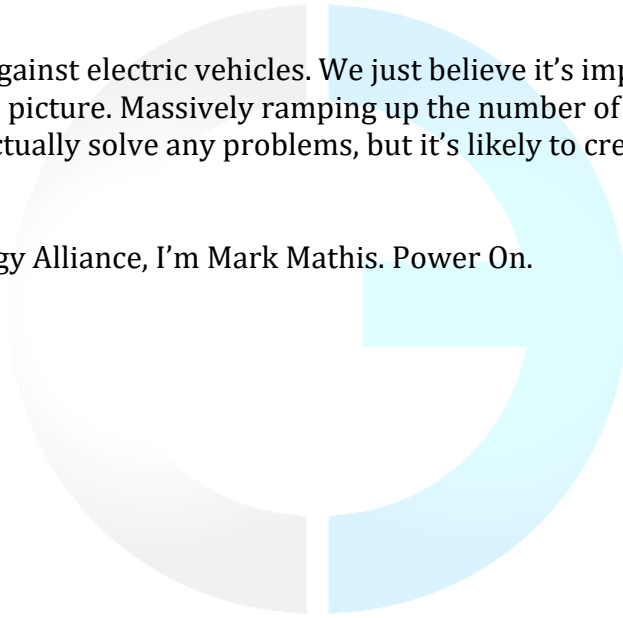
One thing many people are concerned about is carbon dioxide emissions. But EVs don't help on that score either. Making batteries requires enormous amounts of mining and the construction of giant chemical factories. The CO<sub>2</sub> produced making the batteries may actually be more than the CO<sub>2</sub> saved by getting off gasoline and diesel.

China makes 60 percent of lithium ion batteries and will make 70 percent by 2021. As Mills points out, "Importing batteries manufactured on Asia's coal-heavy grid means that consumers are just exporting carbon-dioxide emissions, along with jobs." And don't forget, the electricity used to power EV's doesn't just magically appear. In the U.S., fossil fuels generate almost 65 percent of electricity.

All of this comparing of EVs and traditional vehicles misses what is probably the most important factor in the electric vehicle discussion. China doesn't just make most EV batteries. It also has a near monopoly on the entire supply chain used to make those batteries. It produces many rare earth metals and critical elements, and processes even more. Who thinks it's a good idea to allow China to control world transportation?

We at CEA aren't against electric vehicles. We just believe it's important for people to consider the full picture. Massively ramping up the number of electric vehicles on the road doesn't actually solve any problems, but it's likely to create a few more that are much bigger.

For the Clear Energy Alliance, I'm Mark Mathis. Power On.



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