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## **Electric Cars: Advantages and Disadvantages**

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The electric car is a relatively new concept in the world of the automotive industry. Today, some companies have based their entire model of cars around being proactive and using electricity.

Actually more than 3 percent of new vehicle sales, electric vehicles sales could to grow to nearly 7 percent – or 6.6 million per year – worldwide by 2020, according to a report by Navigant Research. The demand for electric cars continue to climb as prices drop and consumers look for ways to save money at the pump [1].

Recently in the world more and more attention is paid to environmental protection, as well as to our own comfort. These are two of the main factors of high demand for electric cars. But despite all the advantages, it is not a magical device and has its disadvantages. Let's analyze both sides of this issue.

### ***Advantages:***

1. No Gas Required: Electric cars are entirely charged by the electricity you provide, meaning you don't need to buy any gas ever again. Driving fuel based cars can burn a hole in your pocket as prices of fuel have gone all time high. With electric cars, this cost can be avoided as an average American spends \$2000-\$4000 on gas each year. Though electricity isn't free, an electric car is far cheaper to run.

2. No Emissions: Electric cars are 100 percent eco-friendly as they run on electrically powered engines. It does not

emit toxic gases or smoke in the environment as it runs on clean energy source. You'll be contributing to a healthy and green climate.

3. Safe to Drive: Electric cars undergo same fitness and testing procedures test as other fuel powered cars. In case an accident occurs, one can expect airbags to open up and electricity supply to cut from battery. This can prevent you and other passengers in the car from serious injuries.

4. Cost Effective: Earlier, owning an electric car would cost a bomb. But with more technological advancements, both cost and maintenance have gone down. The mass production of batteries and available tax incentives have further brought down the cost, thus, making it much more cost effective.

5. Low Maintenance: Electric cars runs on electrically powered engines and hence there is no need to lubricate the engines. Other expensive engine work is a thing of past. Therefore, the maintenance cost of these cars has come down. You don't need to send it to service station often as you do a normal gasoline powered car [2].

6. Reduced Noise Pollution: Electric motors are capable of providing smooth drive with higher acceleration over longer distances.

### ***Disadvantages:***

1. Recharge Points: Electric fueling stations are still in the development stages. Not a lot of places you go to on a daily basis will have electric fueling stations for your vehicle, meaning that if you're on a long trip and run out of a charge, you may be stuck where you are.

2. Electricity isn't Free: Electric cars can also be a hassle on your energy bill if you're not considering the options carefully. Sometimes electric cars require a huge charge in order to function properly – which may reflect poorly on your electricity bill each month.

3. Short Driving Range and Speed: Electric cars are limited by range and speed. Most of these cars have range about 50-100 miles and need to be recharged again. You just can't use them for long journeys as of now, although it is expected to improve in the future.

4. Longer Recharge Time: While it takes couple of minutes to fuel your gasoline powered car, an electric car takes about 4-6 hours to get fully charged. Therefore, you need dedicated power stations as the time taken to recharge them is quite long.

5. Normally 2 Seaters: Most of the electric cars available today are small and 2 seated only. They are not meant for entire family and a third person can make journey for other two passengers bit uncomfortable.

6. Battery Replacement: Depending on the type and usage of battery, batteries of almost all electric cars are required to be changed every 3-10 years [2].

7. Not Suitable for Cities Facing Shortage of Power: As electric cars need power to charge up, cities already facing acute power shortage are not suitable for electric cars. The consumption of more power would hamper their daily power needs.

8. Some base models of electric cars are still very expensive because of how new they are and the technology it took to develop them.

Thus, as in any reality, there are two sides. So far, this industry is only developing, especially in our country. There is still a shortage of opportunities for most people to have such a car. But technologies are developing rapidly, and we hope that in the very near future this technology will bring us much benefit.

References:

1. Electric car history [Electronic resource]. – Mode of access: <https://energy.gov/articles/history-electric-car>. – Date of access: 23.03.2019.
2. Advantages and disadvantages of electric cars [Electronic resource]. – Mode of access: <https://conserve-energy-future.com/advantages-and-disadvantages-of-electric-cars.php>. – Date of access: 06.04.2019.