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ENVIRONMENTAL INFLUENCE OF TRANSPORT

Nowadays transport is used everywhere. This is what we use to move between home and work, from town to town or between countries.

Despite being useful, all cars, trucks, and ships use petroleum as fuel. What is more, petroleum is a non-renewable source of energy, meaning that the fuel will eventually run out.

In addition to that, there are lots of other impacts on the environment. Burning of the fuel releases lots of greenhouse gases which leads to global warming. Motors of transport are noisy, so noise pollution also takes place.

Petrol cars are widespread for several reasons: they are relatively cheap to buy, their engines are easier to tune, and have a longer lifespan. It requires regular maintenance. This can be quite expensive, though. Even the fuel can be quite expensive to refill.

To counter the problems of this type of cars there were invented electric cars. They became known as eco-friendly even though it is hard to agree with that. While using electric transport is safer since it helps to release smaller amounts of carbon dioxide as well as other harmful gases, its manufacturing causes an even more severe impact on the environment.

Consider a lithium-ion battery. While iron, copper, nickel, and cobalt are safe, it is hard to say the same about lithium which is used as an anode for the cells. Mining of the anode is resource-intensive in terms of human labor and exhausting natural resources.

On top of that, it is an uneasy task to recycle accumulators. For example, finger batteries in most – if not all – cases can only be recycled manually. Even though the batteries are almost the same, their dimensions may vary by a few millimeters which may not be acceptable for automation of recycling.

Many accumulators are not getting recycled. Instead, they are simply thrown away even though in this case the cell can poison cubic meters of the soil. This fact turns the act of discarding batteries into a time-bomb.

Lithium-ion batteries cannot withstand hits, severe scratches, or piercing. If any of the impacts occur, it can lead to battery swelling, leakage, or, in the most severe cases, an explosion.

However, some of these problems can be countered to make the accumulator safer. For example, a tough casing can help withstand physical damage, battery controller can prevent overheating from overcharging or charging too fast.

In general, lithium batteries are good. They can be stored for quite a long time because they have little to no self-discharge, compared to other types of batteries. They can withstand relatively high and low temperatures, and they are more compact.

As mentioned above, using the electric car is far more eco-friendly than its manufacturing, especially because of lithium-ion batteries. In addition, there are more advantages to electric cars as well as disadvantages.

Electric cars are said to feel easier to drive, they are fast enough and less noisy. You can charge the car in a home garage. Also, they have fewer mechanical parts than petrol cars and this makes their maintenance easier and cheaper. Moreover, the car itself does not emit carbon dioxide.

On the other hand, electric cars can cover shorter distances compared to petroleum transport because the battery capacity is not big enough for long distances. This leads to more frequent recharges which reduce the cell's lifespan over time.

On top of that, installing an advanced charger can be somewhat expensive. What is even more expensive is the replacement of the battery itself. And electric cars themselves are far more expensive to buy than petrol ones.

To sum up, electric cars have a chance to replace petrol transport, especially since oil is non-renewable. What needs to be improved is the manufacturing process and recycling of lithium-ion batteries. It may be possible to invent an alternative for the cells.