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| **Course Code: CLE030**  **English for Academic Purposes**  **(Spring 2023)**  **Argumentative Research Paper**  **(Final paper)**  **Paper topic:**  Why the NEVs should not be the final solution for protecting environment.    **Name:智宣淇**  **SID:12112225**  **Class:EAP-10** |

Why the NEVs should not be the final solution for protecting environment.

The NEVs which is short name for new energy vehicles refer to those cars that apply electricity or gas-electric hybrid as their energy sources. And because of their great potential in dealing with emissions of pollution and greenhouse gases like carbon dioxide and alkane produced by tradition fuel cars, in recent years, the NEVs have received a boost attention from either the governments, automotive companies and lots of consumers. One recent report that also produced by the International Energy Agency (IEA) shows that the spending of consumers and government increase rapidly from 2015 to 2020 and we can see consumers contribute around 120 billion dollars in 2020 (IEA, 2021). Though it is a fact that there has been significant development in the NEV market and many different relevant fields like automotive-related technology including battery technology, to simply replace the traditional vehicles with NEVs that gives a wish to solve the pollution problems is beyond reality. The NEVs should not be the final solution for protecting environment. The new challenges arising in the development of NEVs will make it impossible to work out the pollution problems simply with NEVs themselves, like the coming burden on infrastructure and the potential problems that seems irrelevant with NEVs in many aspects.

The first thing that needs to mention is development of NEVs will destroy much infrastructure built in the last hundred years. According to company Tesla, recent developed electric vehicles can give around 670 kilometre drive every single charge which is actually slightly below traditional fuel cars. But considering the spent hours for charging, it makes NEVs can still barely compete with fuel vehicles, which leads to the great demand of charging station that makes sure the consumers can keep there vehicles in a perfect shape. But that’s easier said than done, the demand means too much to the modern cities that are puzzled by tight residential land and the rural area that are short of agricultural land. Beyond these, the movement between cities and long-distance travel may also be a problem. All these problems will seal the NEVs in only highly developed areas, but it never shows which is an easy deal in developed cities. [Farhad Manjoo](https://www.nytimes.com/by/farhad-manjoo) the columnist from the New York Times points out that, “Cars have [insatiable demand for roadway and urban space](https://www.nytimes.com/2020/07/09/opinion/sunday/ban-cars-manhattan-cities.html" \o "), capturing our cities for their near-exclusive use. They are expensive and inefficient — the ridiculous notion of paying thousands of dollars a year for a machine that’s mostly parked is no less ridiculous because the car is being charged while it’s parked. ” ([Farhad Manjoo](https://www.nytimes.com/by/farhad-manjoo), 2021) The plan of building charge stations will further intensify conflicts over land use and put enormous pressure on government for urban planning and cost seems infinite. Even if it is possible to build enough facilities, it also means destroying of much infrastructure that has already been built in recent a hundred years which changes a lot in cities. In a word, the development and widely application of NEVs will cause heavy burden on governments.

Other things that need to worry, except for the predictable challenge on infrastructure, are plenty of potential problems may appear in the coming future and many of them are unconcerned by the consumers and even also the governments. The vehicle chargers are one of the most much-trailed NEV-related technology as the major part of those cars. However, the first serious problem that is eagerly to be solved is caused by those batteries. New energy models with power batteries, once scrapped, it is still a problem to deal with. If not handled properly, it can also be very polluting to the environment. Many researches show that the average life span of batteries in NEV is ten or more years. But the fact is that, a large amount of car produced worldwide may hardly serve its whole life and many of them are destroyed in accidents which causes damage to themselves of varying degrees. This leads to the concern of lithium ion battery wildly applied in the new energy cars, [Heekyong Yang](https://www.reuters.com/authors/heekyong-yang/) from REUTERS points out that “The major weakness of lithium-ion batteries in electric cars is the use of organic liquid electrolytes, which are volatile and flammable when operating at high temperatures. An external force such as a crash can also lead to chemical leakage.” ([Heekyong Yang](https://www.reuters.com/authors/heekyong-yang/), 2021) The accidental crash of cars may rapidly cause fire and burst that is especially destructive in densely populated modern cities which are the main markets. Also because of the low noise in NEVs, it may cause no attention for the passersby and leads to an accident which will possibly increase children casualty rates. There are many problems like those mentioned that will bring trouble to citizens need to be overcame. However, many of the potential problems can not be easily solved with the current state of technology and urban plan.

The new energy vehicles, especially electric vehicles are considered equaling to environmentally friendly in popular view. It is true that the emission is considerably decreased comparing to traditional fuel cars. But the point is that they still pollute environment in many different ways and the most obvious examples are from the industrial chain. In the literature review produced by Chi-Wei Su et al. They found that “the positive influences from NEVs to PM2.5 ascertain that NEVs cannot be considered as an efficient measure to mitigate air pollution. Moreover, these results are not supported by the energy and environment interaction model, which essentially indicates that replacing traditional energy with renewable energy is an effective measure for controlling environmental pollution. ”(Chi-Wei Su et al., 2021) It is obviously impossible to remove the pollution in auto-related industries because every single step of producing vehicles cause pollution and greenhouse emission and the goal of carbon neutrality requires much more effort and can not be achieved in recent years. So it is necessary to not only focus on the electric vehicle itself, many links in the industrial chain are noteworthy.

In conclusion, the new energy vehicles can not work as the final solution for protecting the environment. There is still a long way to go before achieving carbon neutrality, where the NEVs act as intermediate, but not the product. There are still many problems not only in the electric cars but also in the industrial chain which possibly can not be easily solved in recent years due to the limitation of lands and economic reasons of different countries. The two sides of which should be clearly considered and judged to prevent ill-considered development. Simply cheer for the development of cars is unpractical and unrealistic. If this trend continues, the environmentally friendly future will be far away.

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