Solutions To Decrease Global Warming: Macro Environment Of Electrical Cars

Over the past years experts have discovered that global warming is a result of the increase of our carbon footprint. Recently years has been an increase of global warming to due the actions and demands of the people of this world. Especially in these times our carbon footprint is one of the most crucial things that we should be monitoring. If we were to look at our cities, countries and our world, it is almost unthinkable to be able to run it without oil. Oil is probably one of the main fossil fuels used as we use it for cooking, generating electricity and more importantly, fuel for most types of transport. Cars alone represent 25% of the world's carbon dioxide in the atmosphere. 10 years ago Shai Agassi stated that at the rate we were going then the demand for oil will be 30% greater, and those statistics were not false. The best option to reduce the world's carbon footprint would be to switching to electric cars. The only problem with this would be that the electric cars are too expensive or inconvenient. What would make the electric cars unattractive would be that electric cars are proven to have a lower top speed compared to gasoline cars. Customers may complain that they spend their money on a vehicle that will make them arrive late to work.

People really often want to take time to solve the problem instead of solving it immediately. Although the world will profit by reducing the amount of CO2 in the air, this will come with it's expenses. Shai Agassi stated that capital of approximately 200 million dollars will be needed in order for this transformation to occur along with a car company willing to produce electric cars.

Implications of the problem

Electrical cars would play a major role in our world's economy but not so much in ours. Personally, I think that the overtaking of electrical vehicles over vehicles of gasoline is something that South Africa is not equipped for as yet. In our country's stats it is shown that already most of the population is unemployed. With the arrival of electric cars, this will result in the closing of gas stations meaning the loss of peoples jobs. In south Africa it's a law that workers in gas stations can't lose jobs due to automation/self-service.

Today we all face a global threat, and it's that the world is running out of oil. Although other countries can afford to convert their cars to 0 emission, South Africa cannot. In terms of electricity this country is not coping at the moment at all, and this is excluding the fact that our cars are gasoline. Baring in mind that electric cars have to charge in order to function, If every citizen decided to convert the cars to electric cars the country wont have enough funds to pay for all of the cars in South Africa which are 0 emission. This would probably result in high rates of load shedding and our government owing even more capital. Gasoline cars are proven to have a higher top speed than electric cars. This would mean that if the country was to operate with electric cars the rates of car accidents would decrease. But this would also result with the increase of traffic since the move slower.

Awareness of the central point to the talk

The speaker Shai Agassi was bringing an awareness of global warming and how the world is beginning to care less and less about the environment based on its actions and conservancy of fossil fuels. We all are aware that we are responsible of global warming, but not everyone is making an effort or searching for the best solution. Global warming summarised is the increasing of the earths temperature. In areas of cold such as Montana, there is Glacier National Park which when it was created used to consist of 150 glaciers. By the time it was the year 1910 only 30 glaciers were left which is an example of what global warming is capable of. The damage can be considered to be just as bad in dry areas. The heat coming from the sun could scorch the vegetation and crops growing in that area. This could lead to less food source availability to some people or less crops to sell for farms. Lack of access to food could lead to starvation.

Another example could be Cape town. Due to the increase of global warming Cape Town is currently in a drought and doesn't receive enough precipitation. It is essential that our country reduces the use of products that release toxins in our atmosphere. Which is why Shai introduced the topic about electric cars as these cars can be powered by the use of wind mills which will create wind energy and could also develop products which are powered by solar energy. In this way fewer toxins are released into the atmosphere. This will result in the reduction of damage occurring in our environment and the reduction of global warming itself.

Macro Environment

Political

In South Africa, investing electrical cars in a county like this wouldn't be the wises decision considering that our country is a developing country and is currently ranked in the junk status. This is implying that our country has enough problems such as unemployment. Majority of South Africa is unemployed meaning that the target market for electric cars is very small. If you have a small target market you're bound to make small amounts of sales. This means investing your cars in south Africa would not be maximizing your profits, its better to invest in other countries specifically first world. Corona virus is said by experts that its impact in, not only south Africa, but the world will influence prices, ad potentially create better deals in the future, meaning that in this moment its not a great idea investing your cars in countries because you may lose out on some profit.

Physical

When discussing about cars, no car on earth is 100% safe. For the past few years, since 2013, the number of fatalities due to car accidents has been increasing, a third of the deaths recorded were pedestrians. This research shows that some of the reason of these accidents are due to reckless driving. With the arrival of 0 emission cars, these numbers have a possibility o decreasing due to the fact that electric cars have a lower top speed than electric cars suggesting that you citizens may have better control resulting in less fatalities. The question that remains is, are electric cars safer than cars which use gasoline. But no car is 100% safe. Majority of Electric cars consist of li-ion batteries. These batteries are famous for their catching fire and explosive behaviour. Obviously Gasoline cars suffer from the same thing as the fuel is flammable.

Economic

Given South Africa's status at this moment, With the arrival of electric cars in the south Africa this may arrive with its own pros and cons. The prices of oil for south Africa majority of the time is increasing. For the people in South Africa's economy that have insufficient funds for purchasing of oil, electric cars may be a good asset for that particular group as these cars only run on electricity. However this is a contradiction to the fact that South Africa's electricity is not good. The electricity company ESKOM is in a high debt of billions of dollars. So South Africa's government wouldn't be able to support all the electricity absorbed by the cars of all of south Africa.

If electric cars were to come in our country, our government would experience even worse debt and the cars wouldn't be reliable as our countries experience load shedding regularly. if our country's government could focus on paying out the debt that we owe, electric cars would be a great alternative in order to improve our environment. The government could also enforce tax rates like other countries. Cars that use gasoline get taxed 180% where as cars that use electricity don't get taxed at all. This should encourage the target market to purchase cars 0 emission cars rather than gasoline. If the inflation rate is high it might cause the target market to not purchase the electric cars as they may appear expensive.

Ethical

It would be unethical for most of south Africa's citizens to purchase electric cars as this could put employees at garage stations out of jobs. Although electric cars support the environment, they don't need an employee assisting when it needs to charge . in South Africa it is illegal to replace an employee at a garage station with machinery(automation). Not only would the car company be robbing the worker from his job, but they will also be responsible for the increase of the unemployment rate in south Africa.

Social

When discussing the macro environment socially, it is important to sell a product that has the potential to trend amongst the target market. It's already bad enough that the target market finds the electric cars unattractive due to their lack of speed, so the business should add more features to the car to make the target market want it even more. A good start would be appearance. Most electrical cars I have personally seen have the best designs, designs that can catch your eye. This will encourage more customers to purchase the car which will create a trend.

South Africa Is also a hot country so these electric cars could also contain features such as heat resistant windows and good Airconditioning system, the customer would be travelling in a luxury car. A big factor of the electric car would be the pricing range. The owner must set the cars for a better price than gasoline cars, as this will increase sales as well as popularity.

Technological

Involves high automation. When discussing about the technological point of view of electric cars, it is important that to recognise that with the incoming of these vehicles will require new

types of workers. These workers will require specific type of training in order to be able to have knowledge on how to work with electric cars. Workers are expected to know how the electric cars work inside and out like experts. Training in this sector is very vital as workers will be dealing with vehicles which are worth a lot of capital and if inexperienced workers damage the assets, it will result in less profit.

It happens quite frequently that businesses worth a lot of capital end up shutting down due to insufficient funds. It is crucial that the owner/investor of the electric cars has enough money to continue to run the business. Petrol garages would replace fuel stations with charging ports for 0 emission cars.

Legal

These external factors talk about how the law affects the business operation and the customers behaviour. This may include factors like consumer protection act and employment law. These types of legal factors will ensure that the prices for the electrical cars will be fair and not fraud and will also ensure the employees working for the car company are treated in a correct manner.

Environmental

The business' main objective is to make a profit, but this shouldn't be accomplished with the expense on the environment. As discussed in the TED talk, Shai Agassi states that there is approximately 10 million cars per region. These cars alone contribute a lot of carbon dioxide into the atmosphere as a result contribute to climate change. With climate change occurring, this causes the weathers for south Africa to be more extreme. The weather in our country will begin being colder, hotter, and much more windy. This means that the sea levels would rise higher than usual, and years later cities along coastal regions could be eroded.

But electric cars being a green company has the potential to reduce all these tragedies. Because of the CO_2 in the air, the rain produced is referred to as acid rain. This type of rain is bad for our country and its environment as It destroys vegetation, and for South Africa, destroys the crops we grow. With the functioning of electric cars, petrol stations will not be necessary. This would imply that the purchasing and burning of fuel would reduce and so would global warming.

Conclusion

Every day we release toxins into the atmosphere that increase the rate of global warming. The TED talk held by Shai Agassi was raising an awareness and introducing possible solutions. These solutions include countries that are ruled by dictators, they could simply say cars with gasoline can no longer be purchased, that would immediately decrease global warming. He brought the awareness up to show us that global warming is a major problem that will not solve itself, and that we the only people that can solve it. He set an example by presenting the speech based on global warming, and so if one person can make that much of a difference, picture millions more.