

# Research Paper

Student's Name

Institution Affiliation



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# Memo of Transmittal

This report starts with an introduction of the problem facing South Africa in its attempt to adopt electric cars. The country requires adequate charging systems in order to encourage the use of the new technology in the country. Some benefits associated with this project is the introduction of cheap cheaper and clean energy as well as a solution to the growing problem of global warming.

# Introducing Charging Systems for Electric Cars to South Africa

## 1.0 Introduction

The need to conserve the environment has been a major consideration in today's industrialized world. Emission from fuel is a major contributor to carbon dioxide, which is the major pollutant contributing to global warming, smog, and various health problems. The problem is even worse in the emerging economies such as the Africa's most developed country, South Africa.

The introduction of electric cars is aimed to solve the pollution problem and conserve non-renewable energy, but the main challenge is the adequacy of charging services for such cars. South Africa is facing the challenge whereby charging services that can generate a larger market for these electric system cars are hardly available (Cokanye, 2012). This paper describes the electric car charging services system and the way it can be promoted in South Africa.

## 2.0 Electric Cars Charging System

Tesla Motors has been on the lead to promote zero-emission car technology by manufacturing and selling vehicles that are purely electrically operated. The company manufactures not only simple electric cars but also premium electric cars, which include the Tesla Roadster and high-performance electric sport cars. The company also provides affordable charging services to its customers around the US by building the required charging infrastructure for its vehicles around the country (Liu, Hildebrandt, & D., 2012). The



company however is facing a major challenge regarding its next generation car technology. First, other electric car manufacturers are increasing their global market share of the new technology while its products are most based on the US market. Again, the charging systems are only customized for particular vehicles. This means that to venture the world market, it should build adequate charging stations for its customers.

To solve this problem and gain a competitive advantage from the problems, which are facing the other rival companies as well, the Tesla Motors can come up with compatible charging systems not only for its electric car products but also for all other electric cars from other companies (Tesla Motors, Inc., 2014 ). A potential market for this service is South Africa because it is the most developed country in Africa, and is the first to think of adopting the electric car technology in the region.

### 3.0 South Africa

South Africa is located at the south most tip of Africa. Its coastlines stretch along the Indian and South Atlantic Oceans. Its neighboring countries are Namibia, Zimbabwe, and Lesotho to the north, Mozambique and Swaziland to the east, and Lesotho, a small country surrounded by South Africa. The country has good attribute that can create a promising market for the Tesla Motors service upon its launch. The country is ranked 25th and 24th globally in terms of largest and most populous countries respectively. It is also characterized by people of different racial origins and has a large percentage of economically stable population. It is considered to be within the upper-middle level in terms of economy according to the World Bank. All these aspects make it a potential market for the new service (Liu, Hildebrandt, & D., 2012).

## 4.0 Introduction of the Service

The car charging services would aim at creating a new and affordable ways of charging electric cars from various manufacturers. The service would be introduced after receiving authority from the countries government and mostly the Ministry of Trade in collaboration with the ministry of transport (Cokanye, 2012). These bodies will be convinced about the importance of introducing the service to the country. Typically, the service would generate an era in South Africa's use of electric cars.

## 5.0 Target Consumers

Electric cars are more expensive than the fuel driven cars, but the long-run cost is much more less than that of fuel engine cars. The cost of purchasing the car would most create affordability among the economically stable population, which comprises of some middle-income earners and the rich.

## 6.0 Recommended Locations

The first locations targeted are the major cities such as Johannesburg and Cape Town. However, the service would be extended to smaller cities to attract even more customers. Eventually, it would reach the rural areas to allow people to drive back and forth the rural areas without the fear of running out of power (Cokanye, 2012).

## 7.0 Summery

The need to introduce electrically operated cars is reduce global warming contributed by car emissions and utilize cheaper sources

of energy. The need to introduce universal charging systems in South Africa is based on this effort alongside profiting from the new market opportunity in the country. The success of this innovative service is based on the government attitude towards the service and its efforts to conserve the environment as well as the response from the target population (Liu, Hildebrandt, & D., 2012).

## 8.0 Conclusion

Technology is taking the world to another stage especially regarding an effective response to global warming. Green technology seems to be the best option. The effort and innovative measures taken by Tesla Motors Company are mainly driven towards the realization of this dream. The success of the innovative service to the South African market would depend on the country's policies regarding efforts to reduce global warming and the response of the population towards the new technology (Cokanye, 2012). The service would even become most profitable if the demand of electric cars increase in South Africa. Nevertheless, the universal charging services would cartelize the demand and affordability of electric cars in the country.

## 9.0 References

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