



PRICING OF INSURANCE FOR ELECTRIC VEHICLES

Introduction

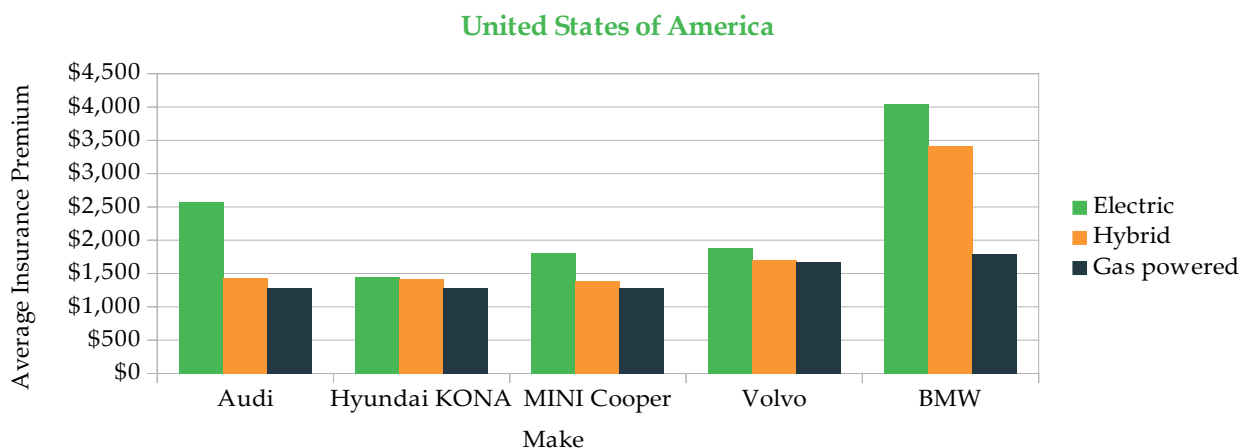
Electric vehicles are increasingly dominating the global market, with this seeking to reduce carbon emissions. Electric vehicles accounted for 14% of the total number of cars as at the end of 2022, with the number gradually increasing, making it necessary for insurance companies to assess the risks associated with these vehicles and provide insurance coverage to protect the general public and compensate for losses caused during accidents. This article looks into various factors that insurance companies can put into consideration for them to offer insurance cover for electric vehicles.

Specific Risks Associated with Electric Vehicles

- Battery fire as a result of overheating.
- Increased risk of collision due to the silent nature of electric vehicles.
- Risks of autonomous driving in which sometimes self-driving technology doesn't correctly identify roadway obstacles.
- Electric vehicles might not run efficiently when the weather is cold and the sensors may not work well.
- The risk of electrocution.

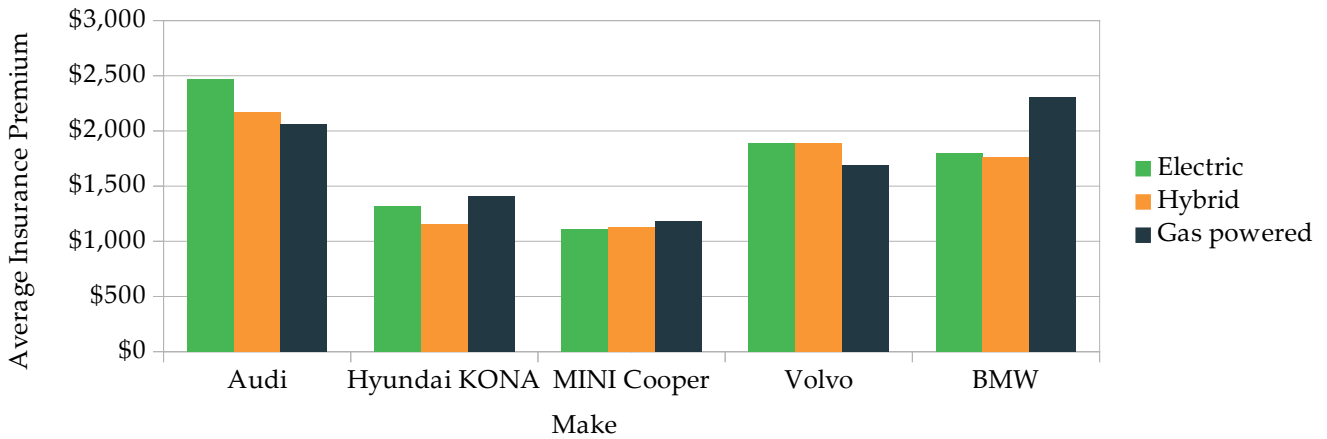
Country Comparatives

EV Insurance Rates



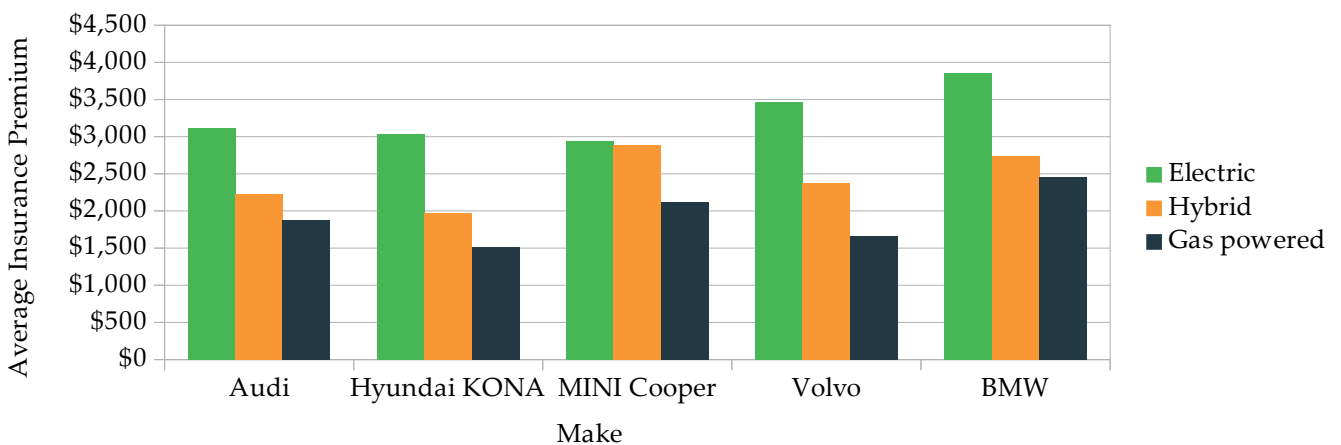
Electric vehicle premium is about 15% more than non-electric vehicle premium in USA.

United Kingdom



In UK, the electric vehicles premium rates are way cheaper compared to gas powered. This is because the UK government provides plug-in grant and no vehicle excise duty making electric vehicles more affordable thereby lowering premiums. Insurance companies in UK also have an initiative of offering lower insurance premiums to electric car owners.

South Africa



Electric vehicle premium is about 20% more as compared to non-electric counterparts South Africa.

The average annual premium for electric vehicles is higher compared to that of non-electric vehicles. This is because of the fact that they typically require more expensive repairs, especially when equipped with expensive technology features. The higher cost of purchasing electric vehicles also results to their premiums being higher.

Kenyan Electric Vehicle Industry

In Kenya, electric vehicles currently account for a mere 0.02% of the total registered vehicles. However, it is projected that the electric car industry in Kenya will experience gradual growth in the coming years. Presently, the country has seven charging stations but KenGen has plans to install over 30 additional electric vehicle charging stations in prominent urban areas.

Kenya has implemented substantial measures to encourage the adoption of EVs nationwide. The government's recent proposed finance bill 2023 zero rates the purchase of electric vehicles in a move to increase the uptake of these vehicles. Increased awareness of environmental regulations and growing concerns about pollution are also driving the expansion of the country's EV market.

The insurance sector needs to develop a distinct insurance policy to address the specific risks posed by electric vehicles in the country. This policy will differ from existing motor insurance products due to the unique characteristics and elevated risks associated with these vehicles. The rates for electric vehicles in Kenya are projected to be high due to insufficient infrastructure such as charging stations, spare parts, and specialized repair services. While insurance pricing for electric vehicles is similar to non-electric counterparts, additional risks associated with electric vehicles needs to be considered.

Advantages of Electric Vehicles over Non-electric Vehicles

- 1. Energy independence** - Gas stations are a thing of the past when it comes to electric vehicles, but you still need a charging station to refuel your car's battery. With a home charging station, you can plug in your car when you get home from work and it will be ready to go the next morning.
- 2. Minimal impact on the environment** - There are no emissions from electric vehicles' tailpipes. Hybrid electric vehicle models are a popular choice for those who aren't quite ready to fully commit to an all-electric automobile because they can run on either gasoline or battery power.
- 3. Lower maintenance costs** - You don't have to bother about routine oil changes or routinely replacing incidental parts like fan belts, gaskets, and radiator hoses with an electric vehicle. Original brake pads can be used for numerous miles of driving.
- 4. Reduced fuel costs** - Typically, the cost of running an automobile on gasoline or diesel is greater than the cost of operating an electric vehicle.
- 5. Reduced inhaled emissions** - There are different degrees to which tailpipe emissions damage both the environment and the interior of your car. Many harmful carcinogens, such as volatile carbon oxides, organic compounds, and particulate matter, are present in car emissions. With an electric vehicle, one can avoid such harmful emissions.

What is Hindering Adoption of Electric Vehicles?

Based on a recent survey on LinkedIn by Actuarial Services E.A Limited, **39%** of respondents identified **high purchase and repair costs** as the main obstacle preventing the adoption of electric vehicles. According to **29%** of respondents, there are **scarce charging stations**, **18%** observed the **limited public knowledge**, and **14%** believed that **the government offers few incentives** to encourage the use of electric vehicles.

Based on this information, high cost of EVs is a major barrier to adoption, as they are typically more expensive than gasoline-powered vehicles. This is due to the high cost of the batteries and also the repair cost being higher than gasoline-powered vehicles.

Conclusion

- Pricing of electric vehicles in Kenya is a key aspect bearing in mind that the market share of these vehicles is expected to rise in the near future due to technological advancement and the global target of reduced emissions.
- As much as electric vehicles are environmentally friendly, they pose some risks to the general public that needs to be taken into consideration by insurance companies in order to provide coverage for electric vehicles.
- High acquisition and repair cost and unavailability of enough charging stations remains a key challenge in Kenya.

Recommendations

- There is need to invest towards increasing electric vehicle charging stations in Kenya.
- There is also demand for trained personnel to handle electric vehicles in the country.
- Creating awareness to the general public on the environmental impact of electric vehicles and mobilizing them to shift to these vehicles will play a role towards achieving zero emissions in the coming years.
- There is need for friendly policies, laws and regulations pertaining electric vehicles to encourage purchase in large quantities.
- Based on this report, it is therefore recommended that the insurance premiums for fully electric vehicles and hybrid versions will be higher than the gasoline-powered counterparts in Kenya.

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