## Tesla's Innovation in the Electric Vehicle Industry

## **EXECUTIVE SUMMARY**

The landscape of the automotive industry is in the midst of a dramatic change. With gas prices on a constant incline and growing environmental concerns over carbon emissions, the automotive industry is looking towards more sustainable means of transportation. Numerous automakers have taken on the challenge of designing electric and hybrid vehicles with Tesla, Nissan and Chevrolet leading the industry. Upon close inspection of electric and internal combustion vehicles it's easy to spot the gaps in development, with electric lagging. Unlike electric vehicles (EV's), internal combustion vehicles have been able to enjoy nearly a century of sustained interest and trillions of dollars in investment. Competing against this established monarch would undoubtedly be difficult but necessary.

Innovation within the EV sector has been largely limited due to repeat phases of disinterest. Given the current state of global affairs with regards to transport, interest has been renewed and EV's have a great opportunity to finally penetrate the market permanently. Of all the automakers, Tesla is best poised to take the lead. They have been able to challenge EV limitations with flare and established themselves as a globally recognizable brand. Their success so far can largely be attributed to their mission. Unlike their competitors, they are solely dedicated to bringing compelling mass-market electric cars to market, and focus exclusively on the manufacture of EV's<sup>1</sup>. Mass production will be the key to widespread adoption, and Tesla is the only automaker even close to achieving this crucial milestone.

With the need for sustainable transport more urgent than ever, both public and private sectors must push for more widespread adoption through investment in R&D, infrastructure and marketing. Electric vehicles are the future of the automotive industry, but the world can't wait for a century to pass for EV's to achieve the same results as internal combustion engines. With Tesla at the forefront they may expedite this process bringing sustainable transportation to light, however the push for mass-market electric cars needs to be joint effort between the public, governments and automakers to ensure that once they hit market they remain a fixture, unlike in the past