



## THE LONG VIEW ON SUSTAINABILITY

### THE CASE OF TESLA

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What will your organization look like in 25 years? This question quickly stumps many executives. However, it is perhaps the most important question that organizations need to grapple with, particularly those that pursue the sustainability journey.

First, ask yourself: What is the capacity of your organization? Now, imagine every machine your company owns suddenly stops. Imagine that every product your company makes disappears. Imagine your supply chain instantly dissolves. Imagine everything that occupies your buildings vanishes, except for your co-workers. They are all standing idly by, anxious. This is the capacity of your organization. It is independent from all the machines, goods, services, materials, and even bottlenecks that often distract us during our daily business processes. Organizations often forego or delay their long-term vision because they do not correctly assess their capacity for change and innovation. As a result, organizations often shy away from challenges and consider them distractions as opposed to opportunities.

To tackle the sustainability challenges of the coming age and to remain relevant in the future, leaders must be able to accurately assess the capacity of their organizations and develop a long-term vision around them.

### **Electric cars**

Perhaps the most effective case that demonstrates the importance of long-term vision is the electric vehicle. Although electric vehicles were invented in the mid-19<sup>th</sup> century, they suffered from three problems: high cost (primarily attributed to batteries), low top-speed, and short range. GM became the first automobile manufacturer to mass-produce an electric vehicle—the EV1 during the 1990s. It was primed to become the leader in the electric vehicle market, having without a doubt the latest and most advanced technology at the time. However, GM cited that the actual cost for producing electric vehicles was too high to market. It, therefore, decided to terminate the EV1, in one of the most controversial moves in history. In addition, GM and other automakers were notoriously blamed for spending millions of dollars to lobby against regulation that would require the auto industry to produce a certain percentage of electric vehicles in each fleet.

Whereas other companies were unwilling to make the upfront investment for developing electric vehicles, a handful of visionaries were willing. Tesla raised \$187 million through five rounds of financing, largely led by Elon Musk who became the chairman of the board. Tesla's vision was for a high-performance fleet of electric vehicles—vehicles that could outperform their gasoline and hybrid peers in every category. Their primary innovation was investing in lithium-battery technology—the same batteries that power many modern consumer electronics such as laptops and cell phones. Despite being the most optimal battery technology for electric cars, lithium-ion batteries were not previously used due to their high cost. Tesla worked tirelessly to innovate on lithium-ion cells, re-designing them to make them lighter and cheaper to manufacture.

### **Turning point**

On August 2, 2006, Elon Musk wrote a memo entitled, “The Secret Tesla Motors Master Plan (just between you and me).” In it, Musk described how the first goal of Tesla was to build a high-end sports car, the Tesla Roadster, which could go head to head with a Porsche or Ferrari and still have twice the energy efficiency of a Prius. With a price-point of approximately \$110,000, Musk admits that there will only be a small supply of Roadsters, but they will serve as a proof of concept and be able to draw enough revenue and backing to begin building a more affordable car. With retail sales beginning in 2012, the Model S falls into this category, starting at just under \$70,000. After selling enough of these units, Musk states that Tesla's plan will be to launch an even more affordable car. It is estimated that this car, codenamed BlueStar and now referred to as the Model 3, will sell for between \$35,000 with an expected launch date in 2017. Tesla's ability to follow Elon Musk's roadmap and 11-year vision is impressive to say the least.

The Model S scored a perfect 5.0 National Highway Traffic Safety Administration (NHTSA) safety rating, with *Consumer Reports* giving it a score of 99/100—the highest rating the publication has ever awarded to a car. It is hard to disagree with this rating because on a single charge, a Model S can travel 300 miles, with the ability to go from 0 to 60 mph in 5.9 seconds with a 302 horsepower (hp) motor and 4.2 seconds with a 416 hp motor. A drag coefficient of 0.24 makes the Model S one of the most aerodynamic cars on the market, with a fuel economy of 89 miles per gallon (mpg) of gasoline equivalent. For customers traveling far distances, the Model S can be recharged for no cost at a supercharger station in approximately 30 minutes. Otherwise, the batteries can be charged overnight in a regular socket.

## Ahead of the competition

Tesla's success can be attributed to the long-term vision of Elon Musk, just as its market penetration can be attributed to the short time frames in which long-standing auto manufacturers are entrenched. In a 2009 interview, the vice-chairman of GM, [Bob Lutz, remarked](#): "All the geniuses here at General Motors kept saying lithium-ion technology is 10 years away, and Toyota agreed with us—and boom, along comes Tesla. So I said, 'How come some tiny little California startup, run by guys who know nothing about the car business, can do this, and we can't?'" Even if the technology was 10 years away, why not use GM or Toyota's capacity to achieve it?

As Tesla begins paving the way for economically-priced, self-driving vehicles, Elon Musk's vision for a fully electric car fleet seems to become closer to a reality than a dream. The question posed to leaders is this: If a game-changing technology is another 10 years away from being realized, why are you not already working on it? Alternatively, if you imagine your company being very different 25 years from now, why wait to start transform it?

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