

## ASPER SCHOOL OF BUSINESS, UNIVERSITY OF MANITOBA

### Member Information

<u>Name</u>	<u>Expected Graduation</u>	<u>Field of Study</u>
Anmoldeep Malhotra	2025	Accounting & Finance
Maisy Do	2024	Supply Chain & Marketing
Nicole Blatta	2025	Marketing & Entrepreneurship
Tahbit Dewan	2023	Marketing & Leadership

**Advisors:** Howard Harmatz, Judith Jayasuriya, Lauren Slegers

**Topic:** Tesla, Inc: Why Being Green is Not so Black & White - Going to the Battery Source

**Division:** Undergraduate

**Audience:** Tesla's Board of Directors

Tesla's vision is to create the most compelling car company of the 21st century by driving the world's transition to electric vehicles. Its mission is to accelerate the advent of sustainable transport. The EV industry is growing at a compound annual growth rate of 6% with Tesla being the leader in the market of electric car companies. In 2022, Tesla delivered 1.3 million cars into the market. Tesla's vehicles are powered by Lithium-Ion Phosphate batteries that contain metals such as cobalt, nickel, magnesium, and lithium, which have the potential to contaminate water supplies, and ecosystems, and cause air contamination during their mining, refining, and disposal processes.

Tesla's vision "implicitly" emphasizes the advancement of humanity through technology and its advertising focuses on environmentally friendly cars. However, this interpretation of being environmentally friendly is narrow and ignores the supply chain activities and disposal of the batteries.

EVolve Consulting recommends that Tesla switch from lithium-ion phosphate batteries to sodium-ion batteries due to the latter's potential to be more environmentally friendly in its supply chain. Although the engineering of sodium-ion technology needs more investment, the social and environmental impacts of the transition are significant. The cost of being environmentally responsible is not reflected in Tesla's accounts. It is ethically important for the company to consider the potential damage to the environment. Additionally, the most advanced sodium batteries are currently being outsourced, so Tesla could benefit from less dependence on this constraint. Sodium-ion batteries are less resource-intensive to produce and use abundant, non-toxic materials, making them a more environmentally-friendly option. By adopting sodium batteries, Tesla could potentially improve its environmental impact and reposition itself as a leader in sustainable energy.

Our recommendation is in line with Tesla's vision to be the most compelling car company by driving the world's transition to EVs. Making the transition to sodium-ion batteries will allow Tesla to be more compelling by being less dependent on outsourcing, more environmentally friendly, and paving the way in the electric vehicle industry.