

MIT Electric Vehicle Team—Executive Summary

The MIT Electric Vehicle Team is a student-led team on MIT campus that focuses on the design and development of Hydrogen-powered vehicles. We have over 15 years of experience in electric vehicle design and development, and are now re-focusing our efforts to Hydrogen-powered vehicles to develop the solutions required for the energy transition.

The Field of Hydrogen Energy.

- Hydrogen has the potential to cumulatively reduce global emissions by 6% in the Net-Zero Emissions by 2050 plan.¹
- Hydrogen will be critical in the energy transition in the areas of transportation, and other hard-to-abate sectors.¹
- Educational opportunities in Hydrogen at the undergraduate level are rare due to the cost, and safety concerns associated with the technology.²
- Many demand-side applications of Hydrogen are still in the prototype phase, moving past prototype to production and application will require cooperation between many institutions.¹
- Academic research into hydrogen vehicles is difficult to verify on hardware due to costs, and time required for hardware development causing many researchers to resort to simulation.²

Our Team Goals.

- We will develop a **fully open-source** Hydrogen-powered vehicle to facilitate hardware-verification of academic research, and hands-on educational opportunities for students (within MIT and beyond).
- We will demonstrate Hydrogen's potential as an alternative energy source to help facilitate investment into infrastructure.
- We seek to fill gaps in research in the hydrogen vehicle research field, and publish these results in academic conferences and journals.

Events + Promotion.

Our team attends large-platform events such as the World Hydrogen Summit, and CES to spread our work.



¹ International Energy Agency

² Based on an Internal Literature Review