
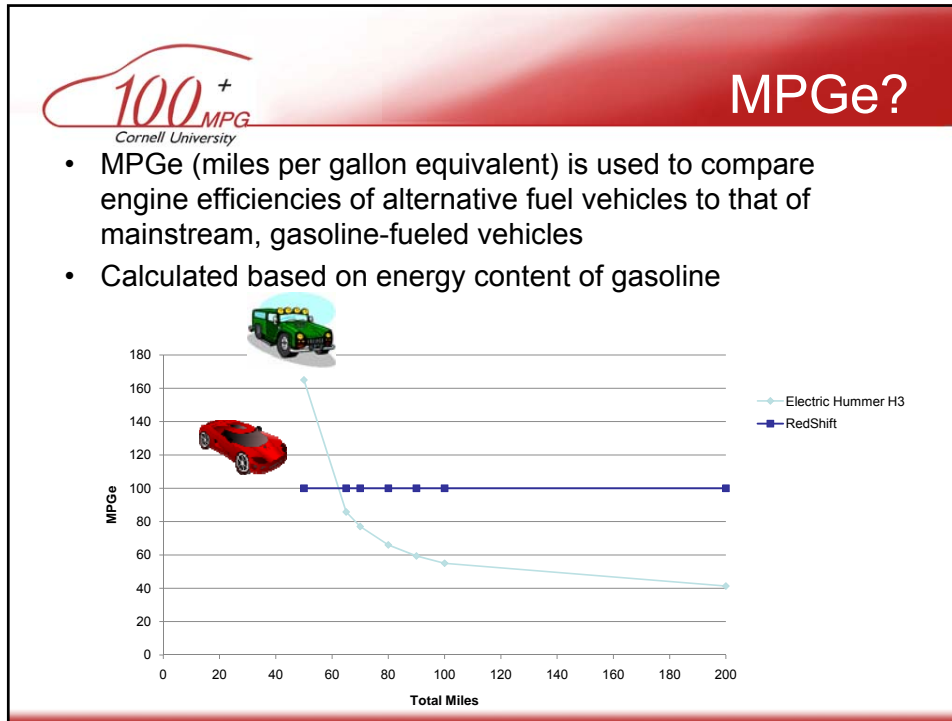


The Automotive X-Prize

- **Purse:** \$10 million
- **Two Categories:**
 - *Alternative:* two seats, minimum 3 wheels
 - *Mainstream:* four passengers and 10 ft³ of storage space
- **Vehicle Requirements:**
 - *Fuel Economy:* at least 100 MPGe
 - *Tailpipe Emissions:* Teir II, Bin 5
 - *Wells to Wheels GHG:* 200g CO₂/mile
 - *Safety:* meet safety regulations in the U.S. and other markets
 - *Business Plan:* market presence of units per year
 - *Range:* 200m between fillup/recharge

100⁺ MPG
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Cornell 100+ MPG

- Our Goal:
 - To compete and win the Progressive Automotive X-Prize competition
- Our Vision:
 - Help develop an **ultra-efficient** automobile for the mainstream market
 - Increase public **awareness** of fuel-efficient technology
 - Develop an **open source** technology resource to educate students - the next generation of workers - to be energy conscientious



Team History

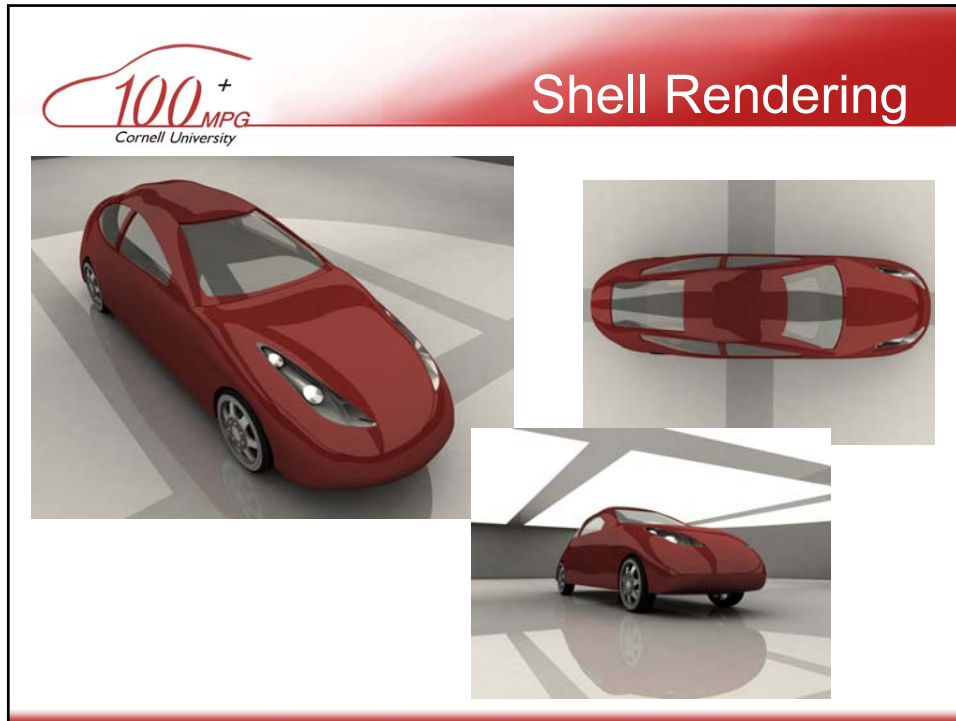
- Spring 2007
 - Team started by two Johnson School students
- Spring 2008
 - Completed mule car (hybrid geo metro)
- Spring 2009
 - Team of 90+ students strong
 - began construction of final car



The Final Car



- Based on the Subaru Sambar Chassis
- Chosen because of:
 - Frame Dimensions
 - Weight
 - AWD Capability



The slide features a red header with the text 'Recent Progress' in white. In the top left corner, there is a logo for '100+ MPG Cornell University'. Below the header, there is a bulleted list of progress updates.

- **Wheels-up E-drive testing:**
 - Well-functioning high voltage electrical and vehicle controls systems
 - Control of UQM motor by both the lab view software and the accelerator pedal in forward and reverse modes
 - Progress with breaking potentiometer



The Team

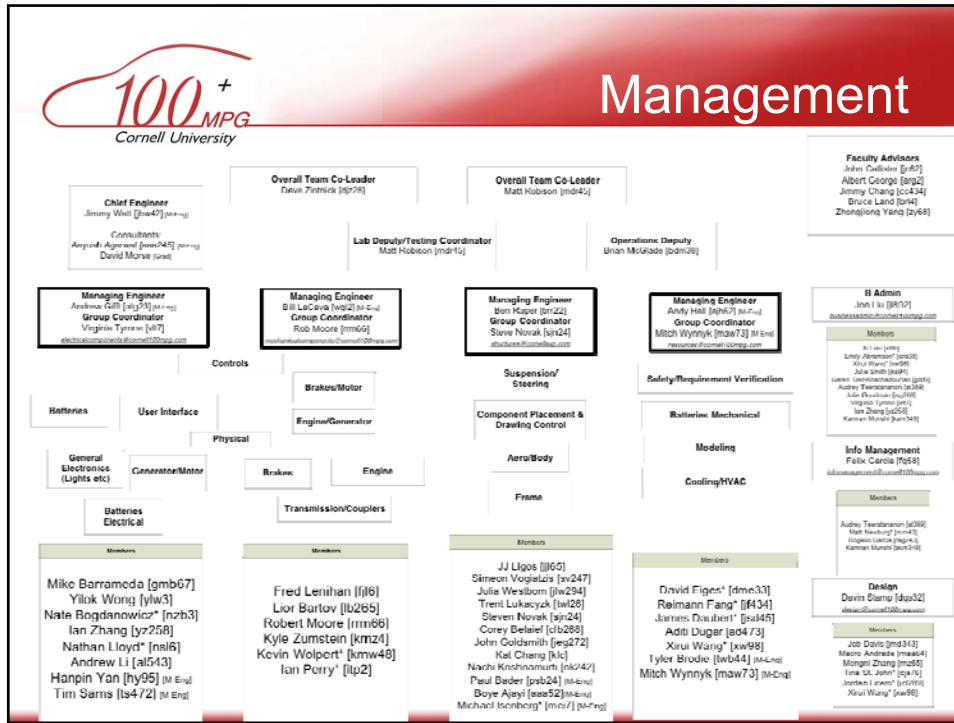
- **College of Engineering (54 Members)**

- Applied Engineering Physics (1)
- Mechanical Engineering (15, 6 MEng)
- Electrical and Computer Engineering (10, 3 MEng)
- Chemical Engineering (3)
- Computer Science (2)
- Materials Science (2)
- Operations Research and Information Engineering (7)
- Information Science (1)
- Environmental (1)



Other Colleges

- **College of Agriculture and Life Sciences (2)**
- **College of Architecture, Art, and Planning (5)**
- **College of Hotel Administration (1)**



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Why I Joined

- Leadership
 - Design Team Leader
 - Director of Operations
 - Overall Team Leader
- Work outside of my major
 - ORIE
- Get my hands dirty, very dirty



Future

- How this will help
 - Experience with leadership
 - Learn real world problems of group dynamics
 - Red tape
 - Coping with problems



Questions?

