Benton High Tiger Tech Team Competes in Super Mileage Competition

Seven Benton High School Tiger Tech students competed in the Shell Eco-Marathon this past weekend in Houston, Texas. The Shell Eco-marathon (SEM) competition challenges high school and college student teams from around the world to design, build and test energy efficient vehicles. With annual events in the Americas, Europe and Asia, the winner is the team that goes the furthest distance using the least amount of energy. Teams in the SEM compete in two classes - Prototype and Urban Concept - with two broad categories of power systems - Internal Combustion and Electric Mobility. The Shell Eco-marathon vehicle is an educational platform that encourages innovation, reinforces conservation, and fosters the development of leading technology for greater energy efficiency. The project requires integration of vehicle design, finance, and construction into the curriculum, as well as demonstrating the value of multi-disciplinary teams working together with industry towards a common goal.

The Benton High Team achieved 123 miles per kilowatt-hour and finished 10th out of 30 entrants in the Battery Electric group, beating out a number of college and high school teams from North and South America. The team passed a challenging technical inspection process on Friday and then completed a total of five, 6 mile runs on the streets of Houston over the course of two days of official competition.

The team competed for the first time this year in the Electric Mobility category. Benton High School STEM students have competed in the SEM-Americas competition for the last three years in the prototype internal combustion division. This past year the team, working with Northwest Louisiana Technical College (NWLTC), achieved 672 miles per gallon. The event offers students and faculty a chance to exchange ideas and compete with some of the top technical universities in the world. Students and faculty at Louisiana Tech University began competing in the SEM several years ago and have inspired area high schools to compete as well. Last year Tech opened their doors to high schools from around the region to come and learn about the SEM and learn how to put together a team.

Tiger Tech SEMA Team members included Kirsten Basco, Harley Campbell, Chris Conway, Brad Ewing, Katie Frost, Dallis Harrell, Denver Houghton, Tosh Morgan, and Jasmine Sikand.

The Cyber Innovations Center, teamed with Chesapeake Energy, along with the Blue & Gold Warrior Foundation and Benton Signs & Graphics, sponsored the BHS team this year. Others in the community, including several area businesses, and **Electric Bikes Solutions in CA** also provided expertise and support to help these students prepare for this competition.

For more information on the SEM see http://www.shell.com/home/content/ecomarathon/.



Students Brad Ewing, Harley Campbell, Chris Conway, and Denver Houghton after a day of working on the chassis. The entire car has been fabricated and assembled in the classroom after school and weekends.



The Eco-Tiger prototype uses an electric hub motor, motor controller, and Lithium Ion battery for propulsion, which came from **Electric Bike Solutions, LLC in California.**



BHS Tiger Tech team members in Houston (left to right): Denver Hougton, Harley Campbell, Chris Conway, Katie Frost, Kirsten Basco, Tosh Morgan, Brad Ewing.



Team members working on brakes between competition runs.



Passing brake test after a completed run is required for the team to receive a score. Success!