

Brian Vickers

NASCAR DRIVER



“Gentlemen . . . start your engines,” booms a voice into NASCAR driver Brian Vickers’ earphones. He flips a switch on the dash, presses a button and fires up his over 800-horsepower motor. He rolls slowly around the track alongside 42 other cars, weaving his Toyota from side to side to shake the gravel from its soft racing tires and to warm the tires so they stick to the track. He’s jammed in the seat so tightly he can barely move. The engine heats the air around him to over 110°F. The smell of burning oil and rubber fills his nostrils.

Then the pace car peels off the track and, within seconds, Brian reaches race speed, surging to nearly 200mph within inches of the other cars. As his heart pounds and packed grandstands blur by, he constantly thinks ahead to his next move. To the marker he’s staked out

that tells him exactly where to brake into the next turn. Where to make the next pass. When he has to pull into the pits. For Brian, racing is a mental sport as much as it is physical.

“When I am in the car, it is a zone,” he says. “It’s like tunnel vision. You’re focused on the cars in front of you. You’re focused on hitting your marks and making each corner count. If you slip up, you lose time. Losing time loses races.”

In 2003, Brian won NASCAR’s Busch Series at the age of 20, becoming the youngest national champion in NASCAR history. The next year he graduated to NASCAR’s top series and now routinely finishes in the top five driving for Red Bull Racing.

While his race car averages around 5 mpg, his personal car is a fairly fuel-efficient hybrid. He also offsets his racing and day-to-day carbon footprint. “I’m passionate about making the world a better place,” he says, “and we have to address climate change to do that.”

“Car racing is a traveling caravan of thousands of vehicles each weekend,” he explains. “Each sport that involves a lot

of people traveling and large amounts of spectators is cause for environmental concern. But there are hundreds of things that can be done. Tracks have started recycling programs for everything from used oil to the bottles and cans left by spectators.” Goodyear cuts up used racing tires and recycles them into playground surfaces. Safety-Kleen recycles oil and brake fluid, and Sprint collects and recycles old cell phones.

“Some tracks have started operating on re-usable energy,” he adds. “Manufacturers of the cars we run are also looking into hybrid technology. It’s all part of the way we’re trying to combat harm to the environment.”

LE MANS GREEN RACING CHALLENGE

IN 2008, THE AMERICAN LE MANS SERIES LAUNCHED THE GREEN RACING CHALLENGE, WHICH OFFERS A TROPHY AND PRIZE TO THE TEAM DEMONSTRATING THE BEST OVERALL PERFORMANCE, FUEL EFFICIENCY AND SMALLEST ENVIRONMENTAL IMPACT DURING A RACE. CORVETTE RACING WON THE WORLD DEBUT AT THE PETIT LE MANS, A THOUSAND-MILE RACE. THE CAR WAS ONE OF FOUR TO USE CELLULOSIC E85 ETHANOL, WHICH CONTAINS 15% GASOLINE AND 85% ETHANOL PRODUCED FROM MATERIALS LIKE WOOD WASTE. THE RACE DREW A RECORD CROWD OF MORE THAN 113,000 PEOPLE.

DEVELOPED WITH HELP FROM THE U.S. ENVIRONMENTAL PROTECTION AGENCY AND DEPARTMENT OF ENERGY, THE CHALLENGE INCLUDES A WELL-TO-WHEELS ANALYSIS—AN ACCOUNTING OF THE FUEL’S ENVIRONMENTAL IMPACTS FROM ITS ORIGIN IN THE OIL WELL, FARM OR FOREST, ALL THE WAY TO ITS CONSUMPTION IN THE VEHICLE. TO ENCOURAGE INNOVATIONS THAT ARE RELEVANT TO STREET VEHICLES, THE FUELS USED IN THE RACES MUST BE STREET LEGAL TO QUALIFY. THE 2009 GRID INCLUDES A HYBRID GASOLINE-ELECTRIC VEHICLE.

In 2007, the Indy Racing League’s IndyCar series began racing on 100% ethanol. That same year, the American LeMans Green Racing Challenge also fired up, awarding trophies to cars that run fast and efficiently on alternative fuels, like ethanol from woodchips.

Brian’s not crazy about biofuels, because it’s hard to produce them without affecting food supplies when they’re made from crops like corn. But he’s totally sold on advancing car technology to eliminate conventional fuel. “I would love it if, 50 years from now, there are no gas engines on the road,” he says. “That would be fantastic. Maybe the one place you’ll still hear one is at a NASCAR race.”



MANY DEVELOPED countries depend on imported oil. The U.S. is in the lead, followed by Japan and Germany. More than half of U.S. oil comes from abroad, and 70% of it is used for transportation. Cars and trucks running on the stuff can choke city air with smog – so much so that, during the 2008

Beijing Olympics, China banned half the vehicles in the city to help clean up its air. Around the world, transportation produces almost 15% of human-induced greenhouse gases.

It’s not surprising, then, that a great deal of research worldwide is going into developing alternate energy sources. That includes

hydrogen fuel cells, electricity and biofuels like ethanol and biodiesel from non-food sources like wood waste and algae. It’s also important to retire inefficient cars to dumps like this particularly artful one in Japan, and recycle them into vehicles that get better gas mileage. Some cars in Europe already get over 70 miles per gallon.