

A green flag for clean power: NASCAR unveils its first electric racecar

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CJ Tobin, senior engineer of vehicle systems, cleans a prototype of the first electric racecar at the NASCAR R&D Center in Concord, N.C., Monday, July 1, 2024. The top motorsports series in North America partnered with Chevrolet, Ford, Toyota and electrification company ABB to demonstrate a high-performance electric vehicle and gauge fan interest in electric racing. Credit: AP Photo/Nell Redmond

Part of the experience of a NASCAR race is hearing the engine roar, the rumble of each car's approach and the zip when it whizzes past at more than 150 mph.

NASCAR unveiled its first electric racecar Saturday in downtown Chicago, but it doesn't thunder when the grand marshal says "drivers, start your engines."

It hums.

The top motorsports series in North America partnered with Chevrolet, Ford, Toyota and electrification company ABB to demonstrate a high-performance electric vehicle and gauge fan interest in electric racing.

They want to represent [electric vehicles](#), and more broadly electrification, in racing as cool, fun and accessible, said Riley Nelson, NASCAR's head of sustainability.

The Associated Press got a first look at the \$1.5 million prototype. The only person who has driven it so far is semi-retired NASCAR driver David Ragan. The plan is to put the car on the Chicago street course for some fast laps on Sunday morning.

Ragan said the sound and smell were unlike anything he has experienced since first hitting the racetrack at age 11. He could hear squealing tires. He could smell the brakes. In gasoline-powered cars, the engine's sound and smell and heat from the exhaust overpower everything else. But after hundreds of laps, this time Ragan's ears weren't ringing. It was really wild, he said.



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Unlike typical sports coupes, the new car is actually a crossover utility vehicle. A huge wing on the back makes it aerodynamic enough to be a racecar.

It accelerates almost twice as fast as top gas-powered racecars and can stop almost immediately. But its lap time at Martinsville Speedway in Virginia was two-tenths of a second slower because it takes the corners slower due to being heavier. Ragan said it may go even faster; he wasn't

pushing the one-of-a-kind vehicle to its limits. Risk-taking is for racing, not testing, he said.

Eric Warren, who heads global motorsports competition for General Motors, said [market research](#) showed more than half of avid NASCAR fans surveyed would be more interested in purchasing an electric vehicle if they were exposed to it through racing. A main message is taking care with energy and optimizing it, he said.

"We're committed to electric vehicles," Warren said. "Racing gives a great platform to discuss a lot of those concepts and educate fans. It's a laboratory for us to try some new technologies and learn as we educate."

Burning gas pollutes the air and produces [carbon dioxide](#), which warms the atmosphere and leads to more extreme weather. Burning one gallon produces about 19 pounds of carbon dioxide, according to the U.S. Energy Information Administration. Racing events consume thousands of gallons in a weekend.

The event would certainly be quieter with more [electric cars](#), though many fans love the roar of engines when the green flag drops.



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A group of kids, including the children of ABB employees, pulled the cover off the car as part of the unveiling before Saturday's NASCAR Xfinity Series stop. Dean Radejewski, 16, of Chicago, stopped to check out the car as he made his way through the area near Buckingham Fountain.

"I think it's pretty cool that they're stepping into the newer age, where all the stuff's going electric," Radejewski said. "I feel like it's going to be maybe a bit more reliable, maybe a bit safer, too, since less fuel to light on fire."

Radejewski also was intrigued by the possibility of a NASCAR EV

series.

"It would be more racing to watch," he said. "So even better."

If NASCAR pursues electric racing, John Probst, NASCAR [senior vice president](#) and chief racing development officer said he thinks they could reinvent the fan experience. One option could be a DJ.

"It's our goal to entertain our fans," he said. "If our fans tell us this is what they want to see, we know how to create a racing series around pretty much anything."



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NASCAR is not the first motorsports organization to get into electric car racing. Formula E is an all-electric racing series that started a decade ago. But its fan base is far smaller than NASCAR's.

The new car is part of a broader sustainability plan by NASCAR. ABB is now NASCAR's official electrification partner. It will help NASCAR bring in more electricity from renewable sources.

NASCAR also owns 15 tracks around the U.S., many along major thoroughfares. ABB plans to install its electric-vehicle charging stations at those tracks and connect them to the grid. They will be compatible with regular electric cars and available for anyone to use, not just racegoers.

By 2028, NASCAR says it will introduce sustainable racing fuel, recycle at all events and use 100% renewable electricity at facilities and tracks it owns. By 2035, it aims to cut operating emissions to "net zero."

That's why the number 35 appears on the black, white and red car, along with ABB. The auto body is made from plant-based materials, a flax-based composite by the Swiss company Bcomp, rather than the typical carbon fiber composite.

NASCAR is also exploring racing with cars that run on hydrogen. IMSA, the sports car series owned by NASCAR, switched to hybrid engines in 2023. A competing race series, IndyCar, will debut its hybrid engines this weekend in Ohio. Formula 1 plans to use sustainable fuel in all cars

starting in 2026 as part of new engine regulations.



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Ford Performance, on its own, built eight cutting-edge electric demonstration vehicles in four years.

"Fans want to have some connection or relationship to the racecar," said Mark Rushbrook, global director of Ford Performance Motorsports. "As

more and more customers are buying all-electric vehicles, there will be, we believe, a growing number of people that want to watch full electric racing."

U.S. electric vehicle sales overall rose 7% during the first half of the year, [according to preliminary tallies Tuesday](#) by Motorintelligence.com. EVs accounted for 7.6% of the U.S. new vehicle market, about the same as it was for all of last year.

ABB Executive Vice President Michael Plaster hopes kids who see the new car at NASCAR events will ask questions about moving toward a future that runs on clean electricity, and may one day want to work on electrical products and solutions. ABB is investing billions to grow its U.S. business.

"As far as getting interest and attention, and having the forum to talk about this whole energy transition, I can't think of a better way to do it," Plaster said.

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