

The Environmental Impact of Fossil Fuel Motorsport and the benefits of going all electric.

By Charlie Horn



Photo: Formula E

Throughout history, Motorsport has been dominated by cars powered by fossil fuels. As we now know, these fuels are harmful to the environment. Ever since cars have been around, there have been people who have wanted to race them. The first car race was held in 1867, and since then it has continually gained popularity and prestige. The legends of Fangio, Clark, Lauda, Senna, Schumacher and others have only added to the sports mystique. The sports impact on the development of commercial cars cannot be overlooked. Latest estimates show that around 490 million people worldwide watched the 2018 F1 season. 88.2 thousand people responded to a survey for WEC fans in 2017. These figures demonstrate the worlds continued love for car racing. Sponsorship rakes in millions for teams and track owners and helps the world's top brands stand out from the crowd. Whichever way you look, autosport, and the worlds love for it isn't going anywhere. But it all comes at a cost.

So, what kind of problems *does* the pollution from these cars create? An article published in the Montreal Gazette claims that every year, the Canadian Grand Prix, held at Montreal's Circuit de Gilles Villeneuve creates a 'bad air day', a phenomenon experienced in Montreal where bad pollution is trapped between hot and cold air. According to Daniel Green of the Société pour vaincre la pollution (SVP), a Montreal based environmental organization, these bad air days can cause various health problems from asthma to heart attacks. Besides from the obvious pollution caused by the cars themselves, the sports main source of pollution lies with its logistics. The 10 formula 1 teams use an aircraft to fly their equipment and cars from one venue to the other, only a small amount of their freight travels by sea. Team members take commercial flights from one country to the other, while the drivers and top staff are transported by private jet. Pirelli supply thousands of tyres each weekend, if the race is dry,

then the 2000 wet weather tyres are thrown away. Pirelli say they burn the tyres to create power, obviously burning rubber isn't the most environmentally friendly solution.

If we are to address the problem of pollutant race cars, we must first find a solution. Thankfully, a solution comes in the form of the fastest growing racing series on the planet. In 2014, Spanish businessman, politician, car enthusiast and environmentalist Alejandro Agag officially launched season one of the world's first all-electric racing series, Formula E. Formula E (FE) is based on a mission to promote sustainable and carbon neutral development in several sectors, mainly of course the transport sector. This ties in to Sustainable Development Goals (SDG) 9 and 11. Although it may sound like a series for "treehuggers" and the farthest thing from proper racing, the championship is anything but. The series has attracted some of the most prestigious manufacturers in the world, and is the first time in history that all four great German manufacturers, Audi, Mercedes, BMW and Porsche have raced together in the same competition. They join other established manufacturers like Jaguar and Nissan. As for drivers, the field is arguably the most talented outside of Formula 1. Le Mans winners and ex F1 drivers Sebastien Buemi and Brendon Hartley, joined by other ex F1 Drivers Felipe Massa, Stoffel Vandoorne and other series winning drivers. On the environmental side of things, formula E ships all of its freight by sea, reducing pollution from air transport. Each car is only allowed 2 sets of all-weather tyres for the whole event, as opposed to formula 1's 13 dry sets and 7 wets.

Several other e-racing series have been suggested and developed. The official support series for FE, Jaguar i-Pace e-trophy, uses Jaguars all electric i-pace SUV. Through the lessons learned as part of the series, the regular road car has had 12 miles added to its range, a real example of how electric racing helps manufacturers to develop the carbon neutral cars of the future. In 2021, Extreme E, the first electric rally raid series will launch. Extreme E will race to raise awareness of damage to the natural environment, through their race locations: Ocean, Desert, Glacier, Arctic and Rainforest, and the routes will be planned with preservation of the environment at the forefront. The desert round will take place in the legendary rally city of Dakar. MotoE is the first electric motorcycle series.

So is there a value to electrifying motorsport? By now, many manufacturers have pledged to go all electric, either immediately or in the near future. Throughout history, top level motorsport has been a test bed for manufacturers the world over. If we are to see a boom in electric car production-and therefore encourage people to drive them-then a platform is required to test and display advances in electric technology. The environmental impact of the thousands of different petrol and diesel powered race cars can be a thing of the past, thanks to breakthroughs in battery technology. So yes, electric motorsport is certainly the way forward. But will die hard petrolheads accept this change? That remains to be seen. But for now, I know I will certainly stick with Formula E.

<http://www.montrealgazette.com/sports/debate+continues+over+much+race+cars+pollute+environment/9919288/story.html>

<https://www.formula1.com/en/latest/article.how-does-an-f1-team-get-two-cars-and-42-tonnes-of-freight-to-australia.7980SpcLE9VSvmBA7qGEA5.html>