
ABB Formula E Championship Is Charged and Ready for Chile

Race 3 Jan 18, 2020, Santiago, Chile

As the Northern Hemisphere digs in for winter and most forms of motorsport go into hibernation between seasons, action in the ABB FIA Formula E Championship is just coming to a boil. After November's season-opening double race in Diriyah, Saudi Arabia, the series shifts far south to Santiago, Chile, for Round 3 on January 18.

The location is apt for the fully electric competition of Formula E. Santiago has avidly embraced the role of e-mobility in its blueprint for a sustainable future. With nearly 400 electric buses in its transit system, the Chilean capital operates the world's largest e-Bus fleet outside of China. ABB is a leading global provider of charging stations for such applications, including automated systems for overnight charging in bus depots and "opportunity" battery replenishment along daytime routes.

With the peaks of the Andes providing a majestic backdrop, the Antofagasta Minerals Santiago E-Prix goes green on a racecourse situated in Parque O'Higgins, a 75 hectare (185 acre) recreation space central to the city. Use of this location is made possible by the environmental friendliness – muted motor sounds and zero exhaust emissions – of the all-electric Formula E cars.

A revised circuit layout for the 2020 race results in a 2.3-kilometer (1.4-mile) course of 11 turns. From the start, the field of 24 drivers will confront a challenging series of corners, blasting past the Movistar Arena on the way to the sweeping backstretch, where maximum speeds will approach the cars' 280 km/h (174 mph) limit. Next, it's maximum braking force applied to scrub off speed on the approach to a pair of tight hairpin turns, then back to the starting line to begin another lap.

Adding to the demands on the dozen teams competing is the expectation of summertime temperatures around 30 degrees C (about 85 F) that test the ability to keep electronics and brakes in the proper operating range. Last year, peak temperatures touched 40 degrees C on race day – the highest in the championship's history.

The expanding global reach of ABB Formula E showcases the innovation that is key to the success of this sustainable form of motorsport. For its sixth season, the ABB FIA Formula E Championship presents a first-class field of 24 drivers piloting second-generation race cars, traveling to new locations in Seoul, South Korea, and Jakarta, Indonesia, representing nine global automakers.

Chile also holds a pivotal role in the global e-mobility revolution as the world's second largest producer of lithium, a vital component of lithium-ion electric vehicle batteries such those that power the Formula E cars. Drawn from the salt flats of the Atacama Desert, some 1,600 km (1,000 miles) north of Santiago, lithium is in high demand as EV production multiplies. ABB holds an important role in supporting Chile's industries, linking hydropower installations through its Ability™ digital solution, automating mining operations and delivering technology for solar power projects.

The Santiago race can be expected to preview which teams and drivers are likely to prevail over the course of season 6. The BMW iAndretti team dominated qualifying in Saudi Arabia, with Alexander Sims taking pole position for both rounds and winning the second race to lead the points standings. A strong

showing by Stoffel Vandoorne of the Mercedes-Benz EQ team placed the new entry in a solid second place in the points.

Sam Bird of Envision Virgin Racing won the Santiago round in 2019 and is sure to continue as a strong contender this year, after winning race one of Season 6 in Diriyah. There's no guarantee, however, as Bird and the rest of the field continue to adapt to Season 6 rules revisions. The available power level during Attack Mode operation steps up to 235 kilowatts (320 horsepower), and championship points will be earned by the fastest driver in each of the qualifying group stages, adding an incentive to perform at peak even before the cars line up on the starting grid. A battle to the final moments of each 45-minute race is assured by a new policy of subtracting available energy reserves from the batteries when an on-track incident causes the cars to run at lower speeds.

Santiago, CL

Population - 6,724,000

Elevation - 556 Meters

Good to Know: Santiago has the largest city fleet of fully electric buses in the world outside of China.