

FORMULA E



THE E REVOLUTION

Motor racing dates back to the late 1800s, but this September the Formula E championship will attempt to reinvent the wheel. **Christian Sylt** speaks to the driving force behind the series, Alejandro Agag, to find out how - and at what cost - the global electric racing series will run.

IN CHINA ON September 13 a new era will dawn for motor sport with the first ever grand prix in Formula E, the world's first fully-electric racing championship.

There's no doubt Formula E is a unique beast. Not only will the cars make no noise and need to be changed in the middle of the race, but fans will be able to vote by text message to give their favourite driver a boost. Even the business model is loaded with new ideas as team budgets are capped at \$4 million and race venues will not pay a hosting fee.

So who is the man behind it all? Formula E is the centrepiece of a green agenda promoted by FIA (International Automobile Federation) Jean Todt, and is a product of the same eco-friendly values that drove this year's controversial change in Formula One from 2.4-litre, V8 engines to 1.6-litre, V6s. However, whilst the FIA ultimately owns the commercial rights to Formula E, it isn't responsible for its innovative

ideas - they are the brainchild of Spanish businessman Alejandro Agag.

Agag is the chief executive of Formula E Holdings (FEH), which has a 10-year contract to run the series. FEH is majority-owned by Agag and Mutual Rise, the investment vehicle of Spanish real estate developer Enrique Banuelos. In 2012, the FIA awarded the Formula E licence to FEH after it agreed to invest up to 70 million in the series over a four-year period.

That figure would not even fund a Formula One team for a year, but Agag claims it is more than enough in Formula E. "The annual running costs for the championship are 50-60 million at most. We are a completely different dimension to Formula One," he says.

In contrast to Formula One, which has palatial offices in London's fashionable Knightsbridge, Formula E is located in the less glamorous district of Hammersmith. It is based in an anonymous-looking building



with no Formula E sign outside let alone any luxury trimmings.

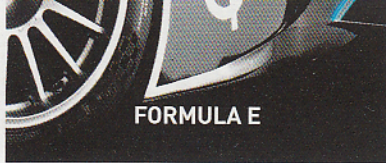
Formula E's offices fill Agag with great pride: "The one we had before was more crap than this, and was great to make people realise we are not Formula One or anything like that, so we pay less."

The High Life

Agag is one of the last people you would expect to be a champion of cut-price electric cars. The smartly-suited 43-year-old is more used to a five-star lifestyle, having owned the championship-winning Addax team in Formula One's junior GP2 series.

He is also a former board member of English football team Queens Park Rangers, and became somewhat of a celebrity in Spain when in 2002 he married the daughter of the country's former prime minister José María Aznar in a ceremony attended by personalities such as Tony Blair and Rupert Murdoch.





INNOVATION OR GIMMICKRY?

As the Formula E cars are powered by electric motors, they lack the high-pitched scream that single-seater motor racing is famous for. Agag is hoping to put loudspeakers around the track so that spectators will be able to hear the drivers talking on the in-car radio during the race.

Formula E cars aren't just quieter than those in Formula One, they also can't travel as far. Due to strict safety regulations, the battery has to be completely enclosed inside a double-layered chassis so they cannot be recharged or replaced, which isn't ideal given that they will only be able to power the cars for 25 minutes.

"The big limitation is the 25-minute battery. We are already using the best batteries in the world. That is our problem. The ultimate plan is one car for the whole race," says Formula E chief executive Alejandro Agag, whose solution in the meantime involves each driver having two cars.

"When they take a pit stop they will park in the area in front of the pit lane building and run 160 metres to the second car. All the drivers will have the same distance between their first car and the second one. You can actually have overtaking on foot."

It remains to be seen whether the idea will add to the action or will be too outlandish. It isn't the only one in this category - each Formula E car will have access to three power boosts per race as well as a fourth that will be awarded to the driver who gets the highest number of telephone votes from fans by the half-way point. Known as 'Fanboost', it is meant to engage fans, but has already led some to dub it as being artificial.

Agag is also working on a Formula E video game that will allow players to compete in the race online when it is taking place. The success of this, however, will probably depend on the calibre of the 10 teams and their drivers.



Agag honed his networking skills at an early age. When he was at CUNEF (the Colegio Universitario de Estudios Financieros) business school in Madrid, he reportedly set up a students' association so he could meet powerful people who were invited to give lectures. Speakers included former presidents of Spanish banks, and after their talks, Agag took them to dinner. These suave skills came in handy later in life when Agag worked as Aznar's assistant from 1996 and together they visited global powerbrokers including Blair, George Bush and Bill Clinton.

Even Agag's entry into motor sport came through his wining and dining. One of his favourite holiday haunts is the Sardinian resort of Porto Cervo and it was there that he met Flavio Briatore, former boss of Renault's Formula One team.

Through his contacts in the Spanish industry, Agag helped broker telecoms company Telefonica's estimated \$25-million sponsorship of Renault and he also had a hand in bringing insurance giant Mutua Madrileña to the team.

Agag got the idea of running Formula E when he came across French company Formulec, which made the world's only single-seat fully-electric racing car. "Formulec was owned by the French guys who developed it and we bought them out. We needed this because if we didn't have a car we would not be credible," he says.

He then engaged Frédéric Vasseur, an automotive engineer who founded ART Grand Prix, GP2's most successful team. Vasseur used the Formulec prototype to create the final Formula E car and his company Spark Racing Technology (SRT) committed to supplying 42

of them to the series. It was one of the most significant developments in Formula E's history.

"Vasseur has been the key because producing a car was the real challenge," Agag says. "We had a tight schedule with developing the car, so any setbacks would have delayed the whole thing."

"We had a month cushion, but we still would have had to delay the testing as we booked the tracks six months prior to that. Luckily the car has been just perfect. The shakedown with 25 per cent battery was perfect. Then we overhauled the chassis, got the big battery, and testing with that was perfect. The car has done two-and-a-half full seasons already."

Drawing on Agag's contacts, Vasseur put together a team of motor sport's best-known names to contribute to the car. Championship-winning Formula One team McLaren is making the electric motors, Renault is Formula E's technical partner, former Formula One supplier Michelin is providing the tyres and another Formula One team, Williams, is supplying the batteries.

The result is a car that doesn't look much different to those in Formula One and with a top speed of around 150-miles-per-hour, it is 70 per cent as fast as its bigger brother (see page 47). Under the hood is a 300-horsepower electric motor, which is powered by a lithium-ion battery and has just two gears compared to the eight in Formula One cars.

Unique Positioning

Agag has come up with an ingenious way of sidestepping Formula One's biggest criticism - high ticket prices - which are a result of an annual race-hosting fee averaging at \$27 million.

VIABLE TV CONCEPT

Formula E's one-year deal with UK commercial broadcaster ITV this March followed its deals last year with Japanese commercial and pay-TV broadcaster TV Asahi and with Fox International Channels in over 80 territories around the world.

Fox has a three-year deal plus a three-year option on the series. The distribution of its channels means the series will be in 50 million homes in Latin America from day one. Fox will broadcast a two-hour programme across the region for every race, and will have 10 people travelling with the series for pre- and post-race analysis.

The level of backing that Fox is giving the series has surprised some seasoned motor sports observers. Neil Duncanson, chief executive of production house North One Sport, a former producer of Formula One and other motor sport series, said that it was "a huge risk" for Fox because there was no way of knowing if the series was going to be successful.

"I'm guessing Fox is looking at the deal as a way to get in on the ground floor," he told *SportBusiness International* sister publication *TV Sports Markets*. "If it works, it would be one of the cleverest moves ever. If it doesn't, it will be a colossal white elephant. But you need to take chances because there are not many great sports properties out there to be had on a global basis."

Meanwhile, ITV will show every race live on ITV4, provide live online streaming of every race, and highlights on its flagship channel ITV1. The broadcaster also has the option to put live races on ITV1.

For ITV4, the series boosts a motor sport portfolio that also includes MotoGP highlights, live British Touring Car Championship rounds, highlights of British Superbikes, and BRDC Formula 4 highlights, as well as some one-off events.

UK pay-TV operators BSkyB and BT Sport are also thought to have looked at the series before ITV picked up the rights for its ITV4 channel, which industry experts believe paid either a very low rights-fee or none at all.

Agag says the deal with ITV was only for one year because Formula E didn't want to commit too long in such a competitive market: "We have other interested parties on the pay side, but we wanted it to be free to air, so we want to give priority to that but then be able to re-evaluate it."

The big limitation is the 25-minute battery. We're already using the best batteries in the world

Agag acknowledges that it would be hard for an unproven series to ask cities to pay anything close to Formula One's sky-high fees, so instead he has taken Formula E in the other direction.

Crucially, since Formula E cars are powered by an electric motor, they produce zero emissions. This means that they don't raise environmental concerns, and why its ten races can take place in city centres where the cars will seem more relevant to prospective buyers of electric vehicles. Street races also show off a city better than a faceless track on the outskirts of the city.

Whereas Formula One races are organised by independent promoters who pay an annual fee, Formula E is arranging many of the races itself and does not charge cities for doing so. Agag does not ask for a hosting fee, but in return requires cities to provide prime positions for the race as well as assistance with the preparations and introductions to local sponsors.

"What we want from the cities is their best premium space," he says. "That's what we ask from the city, but we don't ask for money. We also ask for introductions to local sponsors and help with infrastructure, police, health and safety, cleaning and sometimes with building the track. So there is definitely a contribution from the city, but there is not a sanction fee as such."

It is a tantalising offer that has attracted 10 cities to line up for a place on the inaugural Formula E calendar. It has also snatched the jewel in Formula One's crown by having a race in Monaco, as well as other exotic destinations including Buenos Aires, Los Angeles, Miami, Rio de Janeiro and London, where the series will wrap-up in June 2015.

Agag says the London track is "pretty much" finalised, however there remains a significant amount of logistical work to do. Four venues for the track are understood to be under consideration: Battersea, Wembley, Westminster and around the Olympic Park in Stratford. Although Agag will not say which one has been chosen, he denies that the track will be around London's famous Hyde Park as suggested in a recent report in the *Sunday Times* newspaper.

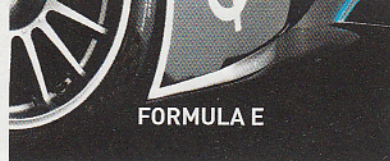
"The *Sunday Times* just guessed," he says. "It is not that one. We have very strong support from the mayor...[but] London is a place where you need to be very careful with everything. You have the residents, the buses, the trains and more."

The inaugural series will begin with a race around the Olympic Park in Beijing, which is not ideal for European TV audiences. But Agag says that the reason for hosting the first race in Beijing is that it had to be slotted in around other locations that could not be changed.

"We had a few dates that were set in stone, like Monaco where we have to do it before the Formula One grand prix because of the infrastructure," Agag adds. "London has to be the last race because we would not have the location ready in September. This meant Europe had to be at the end of the season and we had to organise the races in blocks for logistic reasons."

"We take the trucks to Asia, then to America and then to Europe. So we had to start in Asia and the best weather in Beijing over the entire year is in September."

"We could have done America first, but then we wouldn't have a place for Beijing. If we started in America then we could have gone to Asia in winter when Beijing is around -20



SPONSORSHIP PORTFOLIO

Sponsor	Category
DHL	Logistic Partner
Michelin	Tyre Supplier
Qualcomm	Technology Partner
Renault	Technical Partner
Tag Heuer	Official Timekeeper

degrees Celsius. So many factors come in to play when you start putting a calendar together."

It will get even more difficult in future as the number of races is due to increase. The summary of terms that was presented to the FIA before it gave the green light to Formula E reveals that the number of races will come to "10 in 2014, growing to 20 in 2019".

Agag says that in the second season, beginning in 2015, Formula E can go up to 12 races, with Hong Kong added as a stop. He also says that adding two races won't necessarily increase FEH's costs.

"Construction of the 2.5-kilometre city centre race track is one of the main issues, but we are finding more and more people ready to take that on," he says. "I have got three races that cost me zero because local partners take them on. Companies do it for free, because we give them certain local rights like TV or the title sponsorship of the race with a certain number of trackside advertising spots. I get hospitality rights and all the rest of the advertising, so I put my global sponsors there.

"Also, I am racing in places that already have street circuits, like Buenos Aires and Monaco, and can run Formula E grands prix the week before [existing races] or the week after, or something like that. There are other tracks that are in open spaces, not in streets, and that is much cheaper. I only have two or three races that are starting from scratch and those are the most expensive. The high ones cost me around \$8 million."

Formula One street races cost nearly seven times more to stage than Formula E races as the tracks are around double the length and, crucially, need a lot more grandstands. Formula One races attract around 80,000 spectators on average whereas Agag says he is hoping to get 30,000.

Formula E teams will only need to spend a total of around \$4 million per year, which is around two per cent of the average Formula One team budget.

There are three key spending restrictions. Firstly, the bulk of expenditure in most racing is concentrated in the staff and cars, but spending on both of these areas is restricted in Formula E. Whilst leading Formula One teams employ around 600 people and bring around 40 to every grand prix, Formula E will only allow eight people per team to the races excluding the drivers.

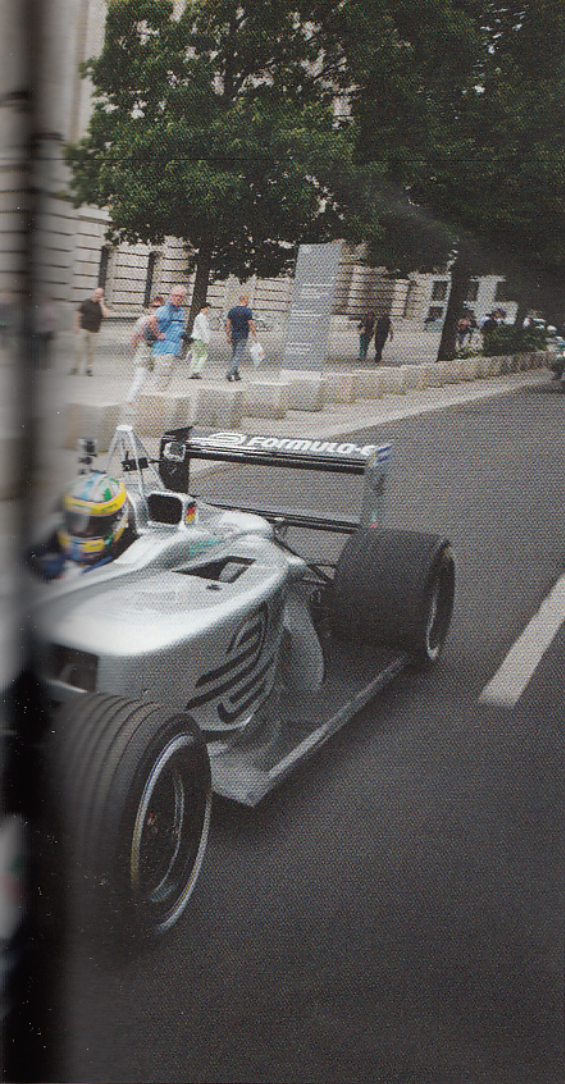
"The teams will only have two race engineers, one data manager, four mechanics and one team principal," says Agag. "We control the team numbers by not giving more paddock passes."

Limiting spending on the cars is equally straightforward, he adds: "In year one, we will buy all the cars from a manufacturer and will lease them to the teams at zero cost in exchange for a share of their sponsorship revenue."

The final restriction is on research and development as the chassis and the aerodynamics are fairly standard.

Star-Studded

Though none of the teams have announced a driver yet they can draw from a pool of 40



FORMULA E

Three races cost zero because local partners take them on

which is known as the Formula E Drivers' Club. It includes former Formula One drivers Bruno Senna, Nick Heidfeld, Takuma Sato, Jarno Trulli and former IndyCar champion Sebastien Bourdais. Drivers have a good incentive, as the prize fund will be \$500,000 per race giving a total of \$5 million per year.

The series has attracted a glittering array of team owners including car manufacturer Audi, IndyCar outfit Andretti Autosport, Sir Richard Branson, former Formula One champion Alain Prost and Hollywood A-lister Leonardo DiCaprio, who is of course an acquaintance of Agag.

"I had met Leo before through common friends clubbing. He loves partying," says Agag. "In late 2012 I had dinner with him in New York because he heard about Formula E and he said he really liked the concept and wanted to know how he could be involved. I told him he can have a team or be involved with a team, and he liked the idea. He is very much into electric cars and knows the business. He knew about batteries, and he knew about energy levels. I was very impressed.

"Formula E has basically passed all the challenges. We had to sign the teams, races and a number of sponsors quickly (see page 46).

"Now we feel the benefit because the teams are signing their own sponsors and doing their own promotion so they are spreading the word about Formula E around the world. It is like having 10 different agencies working independently and the same with the races." ■

FORMULA E VERSUS FORMULA ONE

The Cars

	Formula E	Formula One
Top speed	150mph	210mph
Engine	Electric motor	1.6-litre turbo-charged V6
Horsepower	300	760
Fuel type	Lithium-ion battery	Custom-blended petrol
Fuel consumption	N/A	8.5
Number of gears	Two	Eight
Engine manufacturers	McLaren	Ferrari, Mercedes, Renault
Weight of cars	780kg	691kg

The Races

	Formula E	Formula One
Number of races	10	19
Race attendance	30,000 (Expected)	80,000 (Average)
Average race hosting fee	\$0	\$27 million
Average length of race	50 minutes	95 minutes

The Teams

	Formula E	Formula One
Number of teams	10	11
Average annual budget per team	\$4m	\$182.5m
Race staff per leading team	8	40

Source: Formula Money