



718 Cayman GT4: Fuel consumption 10,9 l/100 km; CO2 emissions 249 – 232 g/km (as of 11/2020)

Porsche Podcast 9:11

Transcript episode 3: eSports vs. real motorsports

Guests:

André Lotterer, Porsche Formula E Driver

Smudo, Rapper (Die Fantastischen Vier) and amateur racedriver

Host:

Sebastian Rudolph, Vice President Communications, Sustainability and Politics at Porsche AG

Intro [00:00 – 00:13]

Sebastian Rudolph: Welcome to the new edition of 9:11, the Porsche podcast. My name is Sebastian Rudolph and I am responsible for the areas of communications, sustainability and politics at Porsche. With this audio magazine, we want to bring the world of Porsche closer to you, our listeners, and answer some interesting questions. For this reason, we have set up today's podcast studio high up in Porsche factory 2, in Stuttgart. This is where our 911 and 718 sports cars and the all-electric Taycan are produced. From here we have a beautiful view of the Porsche Museum and, opposite, the Porscheplatz where the central sculpture features three white 911 cars, which reach up to the sky.

Today, we're talking about all things motorsport – racing with petrol engines, electric cars and also with bits and bytes. What are the key differences? What are the special features of each, and where are we heading? I will discuss these questions and more with today's guests. They are both passionate gamers and also enthusiastic racing drivers. One started on the karting track at the age of eight, and the other has competed in virtual races on a console from a young age. While one-time karter André Lotterer has now become a professional racing driver for Porsche, you will know Smudo as the racing rapper and one of the "Die Fantastischen Vier"



[literally: The Fantastic Four] – one of the most famous German hip-hop bands. Before we start, I would like to introduce my two guests in a little more detail.

[01:48] **Clip: André Lotterer** discovered his passion for motorsport on the karting track when he was a young boy. Later in life, that young boy from Duisburg would go on to celebrate three overall victories at Le Mans. He became world champion in the WEC. After a short stint in Formula One, he joined Porsche as a works driver in 2017. Here, the 38-year-old is now on the track purely electrically: since last season, the professional racing driver has represented Porsche in Formula E. And he has already achieved the first successes. For André Lotterer, the word “home” is always in plural. He was born in Germany, grew up in Belgium and lived in Japan for a few years. Today, the keen photographer lives in Monaco and at his holiday home in Provence.

Smudo's real name is Michael Bernd Schmidt. Born in Swabia, Germany, he started his musical career in 1986 together with Andreas Rieke. Later, Michael Beck and Thomas Dürr joined them. “Die Fantastischen Vier” was born – now one of the best-known German hip-hop bands. Besides music, Smudo has another major passion: he loves motorsport, both virtually as well as on real tracks. The racing rapper has taken part in endurance races since 2003 for the Four Motors team. He is currently driving a Porsche 911 GT3 Cup. Renewable energies and sustainability are part of his motorsport commitment. The musician lives in Hamburg with his wife and three daughters. Today, he joins me digitally in the 9:11 podcast studio.

[03:24] **Sebastian Rudolph:** Hello André, hello Smudo, thank you for joining me today.

[03:27] **Smudo:** Greetings!

[03:28] **André Lotterer:** Hi, glad to be here!

[03:30] **Sebastian Rudolph:** Smudo, you have basically joined us straight from the racetrack and the 24-hour race at the Nürburgring. How was it?



[03:38] **Smudo:** Well, this time it was indeed like a spa treatment. A Nordschleife spa treatment. We had unbelievably bad weather. It was like the 2017 race when it was [...] also cold and wet at night – it rained so much that the drains, or the drains that actually aren't there, at the Nürburgring weren't able to deal with all the water. We got the red flag from, I think, ten o'clock in the evening until eight o'clock in the morning. So, I made a few trips to the sauna. Then I slept really well. Unfortunately, we weren't ideally equipped for the weather in terms of tyres and spun the car. We finished in the Top 50, but our car uses alternative fuels. We drove a Porsche GT3 Cup 2 which we filled up with E20 biofuel and, with organic fibre parts on the body, we came first in our class.

[04:28] **Sebastian Rudolph:** That's fantastic! Well done! We'll still get to sustainability and Porsche in a bit, Smudo, but one more question first: you only entered motorsport at the age of 31, and The Grand Prix Legends racing simulator played an important part for you there. How did you get from playing on the computer to racing on a real track?

[04:47] **Smudo:** Well, I'm a passionate fan of video games. I became interested in them as a teenager, as soon as they were released. I was nine or so when I saw a Pong machine at a motorway service station. [...] My father was basically a computer pioneer at the time, if you could call it that, and that's why I've always been fascinated by electronic gaming devices. Since then I have been passionate about this genre. [...] At some point, I also became involved in motorsport in this indirect way, so to speak. There was the Grand Prix Legends simulation, I think it's from 1997. It simulates the 1967 Formula One season. We remember those monochrome aluminium cars with rock-hard grooved tyres. They had hundreds of litres of petrol sloshing around in the chassis which could actually make the car rock. The cars were so realistic and so incredibly difficult to drive that it was like a puzzle. That was the game, so to speak, to find your way into it. I also started to become interested in the theories behind vehicle dynamics, driving physics and so on. All of a sudden I was always ahead, not only in the simulator, but also in a real kart on the kart track at the weekend. I used to always drive at the back with my mates. Then I went to the Nürburgring where I saw Zakspeed Racing School. Then I got into a Formula Renault there – as a 29-year-old – together with a bunch of older men who had been given this as a wedding anniversary present. That was kind of nice, but not really



exciting. But while I was there I met an instructor who drove for Zakspeed. I made friends with him and then we drove an M3, with him as the driver, on the Nordschleife. That's when I saw what you can actually do with a car like that. That's when I discovered how what I knew theoretically felt in real life – and from then on I was on fire. I then happened to win one of these celebrity karting tournaments in 2000, or 1999. That was quite interesting: it was in Cologne and for a good cause. Formula One stars such as Rubens Barrichello, Michael Schumacher and others raced in 38 PS karts in front of a 10,000-strong crowd in the Cologne Arena. During the breaks, there was a comic relief field consisting of celebrities – Stefan Raab, Haddaway, Mola Adebisi and I were there. And we drove there in these small, normal karts in front of this same crowd of Formula One fans. I won the race spectacularly, the tournament so to speak. And then a lot of Nordschleife fans approached me that day. Of course, there were a lot of teams who had come to watch it and connections were made. I quickly got to know my current motorsport manager, Tom von Löwis, and since 2000 I have been driving on the Nordschleife; since 2003 with my own racing team.

[07:13] **Sebastian Rudolph:** What a great story! Karting is a good cue that brings us to André Lotterer. At the age of eight he drove his first races in a kart. How did you develop an interest in motorsport so early on and what enabled you to get into karting?

[07:29] **André Lotterer:** Well, I was practically born on the race track. My father had a racing team, and that was also the reason I grew up in Belgium. Because my father was a team manager and also an automotive engineer, he was often allowed to take my mum and me to the race track, so I grew up in this environment. One day he announced that we were going karting. I was really excited, because before that I only had a pedal kart. The mechanics had pushed me into the garage in this kart from time to time and made the floor wet. They were amused that I could already control oversteer. Then things went really well on the karting track, but the rental karts were too slow. My father enquired whether go-karts for kids could be bought there and we went back a week later. I can still remember it to this day: I was standing in front of this go-kart, and my father said "ok, do you want to do this?" And I said "you bet!" But he said: "This is serious business. It costs money. You can't get bored after a year and then go and play football or tennis. If you want to do it, you go from here to Formula One." He had this vision already, even



though I was only seven-years-old. That's how it all started. I practiced on the karting track at weekends for six months and then, when I was eight, I entered my first race.

[08:56] **Sebastian Rudolph:** Many in motorsport started with karting, including Formula One drivers such as Michael Schumacher – and you are also one of these people. What difference does it make? Does karting give you a basic foundation, the tools to drive the larger, faster, even more powerful cars later on?

[09:14] **André Lotterer:** Yes, you just hone this ability to be naturally and subconsciously at one with your car. And yes, when you start so early you learn to drive without thinking. I don't have to concentrate now. It's like when someone is riding a bike or walking: if that's your environment from a very young age and it's natural, then these things happen automatically and you don't really have to make an effort for something like that. But karting is also a great school. I often didn't go to the right school because of the kart races all over Europe and the world – I was a works driver from the age of 13 and often had to skip regular school – but I learned a lot on the kart track with the teams. That was just a great foundation for switching to motorsport relatively early. In my case, that happened when I was 16.

[10:11] **Sebastian Rudolph:** To make things automatic, to train, to be on the track again and again, that takes time. Let's get back to Smudo now: you are a very successful musician. How do you find the time to be on the track again and again to practice this great hobby but also become better in view of the competitive situation with music?

[10:32] **Smudo:** Well, the artist's mistress is the night. I have my own appointment calendar. Ideas don't just come to you during working hours, and you have to be able to record them. Being a professional musician is also seasonal: I always say the campaign starts with the decision to make an album, and then we sit down and start thinking. That's a very free time, but also a very thoughtful time. Songs are written and then occasionally we record in the studio. That is, if you like, the hard work. There are fixed times when recordings are made. Then we mix a little bit again. Then it's time for rehearsals and planning the tour and then we go on tour. This



cycle is about three years long, so there is plenty of time for a few race weekends. I am what I call a professional amateur. I didn't get into motorsport all that early, which means I lack the foundation to be really fast. I am speedy, but not fast, and certainly not very fast. But I drive speedily and steadily. In other words, you can count on me when it comes to endurance. I leave the cars intact and you can set the clock by me – that is always good over such long distances.

I have also done a bit of sprint racing and I only drive, at best, in the middle in a gentleman's field; and in another sprint field I'm in the last third. I always find my opponents a bit like that. So, I don't drive right out at the front. If I wanted to do things so that I was really, really fast, then I would have to do a lot of sport, train a lot, sit in the simulator all the time, analyse and so on. Then that would be professional level and I'm simply too late now because of my age – I should have done it sooner. But you don't have to be a professional footballer to play football in a club, and that's how I see my motorsport ambitions.

[12:08] **Sebastian Rudolph:** Thinking about what André told us about being at one with the car or with the road – do you also notice that when you are on the road a lot? Or is it rather that you notice it with your music – to be at one with the rhymes that simply come out of your head and mouth and result in a good song?

[12:24] **Smudo:** Of course, you have to have an overall picture of what is going on. Even chess players train mental images and mental sequences all the time, in order to be fit. It's the same for me. I also think that you can feel whether you are doing well with the car or whether something is wrong. For example, at the weekend, in the very cold conditions, our rain tyres were simply not soft enough. There was no feedback from the tyres and the track for the drivers. It feels a bit like driving in the dark with sunglasses. There's something missing, you're not quite there and therefore you're not quite able to activate the full power of the system. System means car, person, track and environment – and to really fill it up to the limit. I think it's the same for everyone who does sport. Sooner or later you are at one with it.



[13:17] **Sebastian Rudolph:** Activating the performance – that is a good cue for the next question for André. You have done karting, you have also done Le Mans. Petrol is in your blood. At some point you were offered the chance to drive in Formula E – to be electrified in the literal sense. What was your first thought?

[13:36] **André Lotterer:** To be honest, I wasn't really keen on it at the beginning, because I was actually very happy in the series I was driving in – in WEC endurance racing with LMP1 hybrid prototypes with 1,000 PS. We also had an electric motor in them, which allowed us to use the all-wheel drive, and we really did an excellent job with the cars back then – almost as fast as Formula One, even. But there's a good saying in French: only fools never change their opinion. I looked at it more and more, and when this racing format, the Formula E, came into being, I found the concept really great. The races were in the cities and they were very spectacular, which was sometimes missing on the normal race tracks, where it's very emotional because of the combustion engine and the speeds. The speeds in Formula E are of course much lower, but because we drive on city circuits everything is much narrower and you don't really need the same speed. I gradually became interested in it and the automobile world quickly oriented itself in this direction and suddenly Formula E was the top platform for it.

It was also very interesting to see how motorsport became important for the manufacturers in such a short time. At Le Mans, the diesel came first for endurance racing. That was then a top platform to show that. The hybrid cars then followed very quickly and then, almost immediately afterwards, the electric cars. Now I've been in this series for three years and it's very interesting to see what's happening and how much development is behind it; how much work and preparation. Actually, it's much more than in 'normal' or traditional motorsport. Before, you could just get on the track, have fun, accelerate, just drive instinctively and get the most out of it. But in Formula E it doesn't work like that – you have to prepare so much in advance.

[15:46] **Smudo:** Yes, André, I find that fascinating. Almost like an artist, who never really works and then has to do something in between to get into it. I tested Formula E in Berlin-Tempelhof and what I noticed immediately was the respect, because you only drive past concrete walls. You really mustn't overdo it, not even once. You have to approach the limit from below all the



time, because sometimes you can give a little bit too much when there are run-off zones, when testing or during training, but there you have to approach it from below. That would drive me crazy. And you have relatively short training times. How do you go about finding the best time as quickly as possible?

[16:24] **André Lotterer:** Race day is incredibly stressful in Formula E. In the other series I was totally relaxed. But when the race day comes, you are already very tense because everything happens in one day. You only have two free practice sessions, which are very short, and the track is very dirty at the beginning. I can remember our debut race for Porsche in Riyadh ...

[16:46] **Smudo:** Yes, exactly, because they are also road circuits, there is of course less grip and so on.

[16:50] **André Lotterer:** The track was full of sand. It had less grip than there is in rainy conditions, although it was dry. I said we could never race there.

[16:59] **Smudo:** Then there are slick rain tyres, intermediates and sand tyres.

[17:05] **André Lotterer:** We have an all-weather tyre, which is also interesting, but in the series you can't really prepare yourself. Unless you do a lot in the simulator, in the factory. You simulate a lot of scenarios and you sit in the simulator for three or four days to prepare for all kinds of things. But still: when you get to the track, you have to – as you say – work your way up from underneath, because you brake a bit too late and immediately you've hit the wall. Or you go a little bit more to the limit with a little oversteer and then – whack – you hit the wall. Then you have to repair the car and there's no more time to drive. Then you can't prepare for the qualifying because the qualifying is with around 20 per cent more power. You only have one chance to drive a lap in every free practice session with this power and you often go into the qualifying without knowing where to brake and at what speed you arrive at certain points. You have zero rhythm, and that's the cool thing about this series, because the driver can really do a lot and it's a huge challenge for us. That's what makes this series so special.

[18:09] **Smudo:** I think the series is great. Especially when it comes to the overall picture of racing, it's so diverse. I wish they would race here in Hamburg, here in HafenCity. I can already



see the circuit before my eyes. That would be really spectacular. I am therefore officially suggesting it.

[18:26] **Sebastian Rudolph:** I've noted it as a request ... Now, we've already talked about the fascination of motorsport, from karting to the Nürburgring and Formula E. So now we're going to listen to a little bit about motorsport at Porsche.

[18:43] **Clip:** The 24 hours of Le Mans is the most famous motorsport race in the world. Porsche first competed there almost 70 years ago. In 1951, a 356 SL aluminium coupé secured the first class victory right away. The first overall victory followed in 1970. After 343 laps, Hans Herrmann and Richard Attwood steered the Porsche 917 safely across the finish line. In total, the Porsche Motorsport Team has achieved 19 overall victories: a record to date. More about the Le Mans legend in Episode 2 of the 9:11 podcast. Goosebump moments are guaranteed.

The Formula E teams are also chasing a place on the podium, but without any engine roar. All 24 racing cars are purely electric. The special thing here is that the cars are 80 per cent identical. The chassis and battery are specified for all teams. And something else is new: many routes run right through cities with millions of inhabitants such as Paris, New York or Santiago de Chile. Last season, the drivers competed in 11 races. The Tag Heuer Porsche Formula E Team finished eighth overall in its debut season. André Lotterer also finished in eighth place in the drivers' classification. At 71 points, he was the best German Formula E driver.

Virtual racing is getting a further boost due to the coronavirus pandemic. Porsche is taking part in five different eSports racing series. Even the 24 Hours of Le Mans took place on a virtual track for the first time. A newly formed eSports team competed for Porsche in four Porsche 911 RSR cars. Porsche works drivers, juniors and young professionals shared the cockpits with experienced sim racers and with remarkable success: after a total of 339 laps, Porsche works driver Nick Tandy and Porsche Junior Ayhan Güven won with sim racing professionals Joshua Rogers and Tommy Östgaard, exactly 50 years to the day after Porsche's first overall victory in Le Mans.



[20:52] **Sebastian Rudolph:** Let's take a closer look at the fascination of eSports. André, you were part of the virtual 24 Hours of Le Mans just mentioned. What was your experience?

[21:02] **André Lotterer:** I was really amazed. I had already done a few virtual "race at home" races with Formula E. Except for the fact that we were online with the other competitors, the real race atmosphere was not really there. But with Le Mans, it was really impressive. You could really feel the atmosphere of Le Mans even though you were at home. Everything was so well represented, and we were all together on the track. The speed differences between LMP and GT, the places where you overtake – it was all like it is in reality, and the team, our Porsche eSports team, prepared very professionally. We had a proper schedule with practice sessions and also driver changes. The real Le Mans atmosphere that I know was virtually created and also in the race. I was really nervous before my first stint because the whole team and the professional eSports drivers put so much energy into it. Mistakes can quickly happen to me in a game situation like that, because I lack a bit of input and I don't have as much talent in the game as the guys. But in any case, I didn't want to make a mistake and I was covered in sweat by the end. After all, it's a long time that you have to concentrate behind the computer screen, without simply driving instinctively. Because when you're sitting in a real car, everything is much more instinctive. That's where I admire the eSports gamers, because you have to concentrate in a completely different way. I realised that it's not easy. But, taking the race as a whole, it was really cool because of the atmosphere, day and night and with the engineers in the background. They were always recalculating different strategies, just like in real life.

[22:55] **Sebastian Rudolph:** Cool atmosphere, lots of adrenalin. Smudo, what's it like for you when you compare virtual race track and real race track?

[23:03] **Smudo:** Well, it must be said that virtual is sometimes ridiculed. Of course, you can find many differences between real sport and the simulation but it is still closer than, say, watching erotic films and experiencing eroticism yourself, just as an example between the virtual and the real world. It's like this: if you can't afford real motorsport, eSports is the best way to experience the thrill of competition. And I would say that it is 80 per cent of the real thing. Then you subtract the 20 per cent of real sweat, real effort, wet and cold and so on. But the emotional



aspect of the race is exactly the same. The really big difference is that in virtual racing there is simply much, much more training. That is not possible in a real car. It costs time, nerves, material. You always have to have a whole team with you. The real eSports pros drive day and night, all the time. They get to the competition at a really high level. As an amateur in eSports, you can't get anywhere near that. Plus, a professional racer has a different feedback system, he reacts to the G-forces and to sounds and other things like how the body actually moves, the forces acting on the muscles and so on. That is different from eSports. But there the driver also drives according to the visual inputs he gets, and in principle they are quite similar. They listen a little more closely because the tyre wear – in other words, the point at which they lose grip – can be heard in the tyre noise, and you listen out for that. But first you have to become aware of this. In the competition, however, you make exactly the same strategic decisions.

When I am behind an opponent, I sometimes watch him do three or four laps. Where is he strong and where am I strong? Then you prepare an attack. And when the moment comes, you go and get him, or if it comes unexpectedly, you muster all your courage and go for it. Or the annoyance of biting the steering wheel and all that because it didn't work out, or embarrassing yourself in front of the team because you were the fool who went off the track because of bad weather – I think that's exactly the same thing.

The nice thing about the virtual 24-hour race at the Nürburgring or in Le Mans is that you drive, you get out of your rig and get on the sofa, go to sleep there, set the alarm clock, get up and go to the driver change. You don't have to go through the whole paddock, put your clothes on and take them off, and you don't have to get back into the cold, fireproof suit. I can honestly recommend this to everyone. It's amazing how realistic it is. Real racers all say it's incredible when they're in the competition. And people who come from sim racing to real racing already come at a relatively high level in terms of driving skills.

[25:30] **André Lotterer:** I was surprised because if I had had this tool before I started at Le Mans for the first time in 2009, I would have been much better prepared. And to organise this race virtually would actually be excellent training before the real race.



[25:46] **Smudo:** Our racing team currently has high hopes of participating in this special garage in Le Mans with our sustainable car. And if that really does come true, then I will be sitting in the simulator every day to drive around the track. I have very, very great respect for it, especially at night. The smaller cars drive with a radar that transmits backwards so that you can estimate how fast the next cars are approaching. I have been told that the hybrid drive makes the top cars come out of the corner so incredibly fast that it is impossible to imagine it. I was never there myself. But at the 24-hour race at the Nürburgring, if I can be slightly disparaging for a moment, grandpa can get his old banger ready, and then he can drive as well. Le Mans is something different. You first have to audition. You have to present your project and so on. It is another league altogether. It would be a dream come true if we could succeed.

[26:33] **André Lotterer:** Le Mans also requires a few simulator days with the ACO, to simulate all these processes and only then can you drive at Le Mans. I'm sure there will be other things, but that is one part. Fernando Alonso also had to do that when he was a Le Mans rookie.

[26:53] **Sebastian Rudolph:** Smudo gave us a good cue: sustainability. Let's talk about that now. In the first podcast episode, I had Porsche CEO Oliver Blume as a guest to discuss how important this topic is for mobility as a whole. Now I would like to hear your opinions. André, how do you see the topic of sustainability in relation to conventional motorsport and electric racing?

[27:14] **André Lotterer:** I think we all have a responsibility to bring sustainability into our lives, but because we are in motorsport, with top engineers, it is also our responsibility to drive all this forward. Whether it is with the conventional combustion engine or in electric racing: you have to push it in both directions. The series itself has just reported that it is completely net zero, since the beginning, and that is also a huge sustainability message, which is of course even more relevant with Formula E. But in traditional motorsport also, the engineers keep pushing to have more efficient engines, especially in the endurance category, because this is of course also of great relevance, for example at Le Mans. It was always very interesting there, especially if you look back a little when hybrid technology came along. It came in 2012, but in 2014 there were



new regulations, and we even drove faster with 30 or 40 per cent less energy. These are real milestones that come from motorsport.

[28:20] **Sebastian Rudolph:** Smudo is also one of the leaders in terms of sustainability. Earlier in his career he drove a VW New Beetle powered by rapeseed oil and now, as he mentioned earlier, he is driving a 911 GT3 Cup as a "Four Motors Bioconcept Car" at the Nürburgring. What exactly should listeners understand from this?

[28:41] **Smudo:** Since 2003, we have been incorporating up-to-date, sustainable concepts into our racing cars. For example, we have biofibre instead of carbon fibre, which is a flax fibre that is baked under vacuum and injected with resin. Its hardness is then similar to carbon fibre. It even has a better rigidity, and better fracture behaviour because the splinters are not sharp. It is similar in terms of weight, and what is really hot: our partner BComp has just built a kit together with Manthey Racing, which can be fitted on the 718 GT4. We have now driven the 24-hour race with it, there was also an interesting press release from Porsche about it.

The third big pillar is our fuel. Previously, we used to drive many biodiesel variants. We now use E20 from Puraglobe, which in principle has a 20 per cent bioethanol content in the fuel. It could also be much, much more. And by the way, it's bioethanol made from waste materials, so you don't need extra land for cultivation, it's made from the waste left over from feed production or plants and so on, which is otherwise thrown away. This would allow almost the whole of Europe to be fuelled with E20. This is failing, and this must be made clear, also because of the German government which believes that e-mobility is the only solution and says that only that can solve the climate problem. Of course, this is not true, because we are already driving cars. They are not electric cars – those have to be bought first. Unfortunately, the CO2 footprint of the batteries is not yet ideal either. If you were to put E20 in a normal car now, you would theoretically have a better CO2 footprint than if you bought a new electric car and threw the old one away. This would therefore be a medium-term solution. In any case, we have to get past the Federal Government, whose minister unfortunately does not have the right vision for these issues.



By the way, E20 is even better in our engine because it burns more efficiently. It gives us a few PS more than if we had a normal fossil fuel in it. In theory, we could also just run on 100 per cent bioethanol. E20 can be introduced throughout Europe. In France there is an experiment with E80. So a lot can still be done there. This is a clear wake-up call to the Federal Government.

[30:58] **Sebastian Rudolph:** And also for funding that is open to technology. Another thing I'm still interested in: you mentioned Porsche – well, we are among the pioneers in this field, whether it's sustainability, at the Nürburgring or in Formula E. A question for Smudo: what characterises the sustainable pioneers on the race track, from a practical point of view? Do you still notice that we are now the exotic species on the track? Or is this a topic that is gaining tremendous traction across the board?

[31:24] **Smudo:** Yes, well it's both. On the one hand, it is – and this is not a good thing – the progression of climate change, of man-made climate change, that forces us all to pay more attention to it. It is also the case that 40 per cent of investors would like to invest more in green technology. COVID-19 has not reversed this but, on the contrary, has made the climate catastrophe more visible. The reason for this is that during the lockdown we found that – at a time when you would say the earth is recovering – even lockdown was not enough. So we're really on a knife edge and simply have to do something. And that's why consumers are focusing on it so much.

Unfortunately, there are still a lot of people who do not want change, who do not have this vision – as I can see in politics, for example, but also in the car industry and in motorsport. But there are also many forward-looking people who have always helped, for example in our team. You have to tinker with regulations and so on. Prejudices must be broken down. People thought biodiesel, my goodness, it would ruin everything if it ever leaked. Biogas cars could explode, a special filling station was built, a special pit area was created at the Nürburgring. All so that we can be explosion-free in case we blow ourselves up, so that we don't take everyone else with us. Biodiesel is not even hazardous to ground water. Also, it doesn't burn when you try to ignite it, it has to be in an engine.



The other thing is: you really have to do pioneering work, especially in motorsport, because it takes a lot of imagination to say that motorsport supports sustainability. Because that sounds like two terms that do not belong together. Like non-alcoholic beer. But of course non-alcoholic beer also has its place and its reason. You really have to make people understand that motorsport stresses all parts to the max. What is tested on the Nürburgring will last forever. And if our bio parts can do this 24 hours a day without any problems, then you can easily install them into your own Porsche. That is what happens. Is that siren here because of me?

[33:19] **Sebastian Rudolph:** The siren was us – but we heard you really well.

[33:22] **Smudo:** Ok, I'll keep talking. ... so, this is what happens when people wonder "oh my God, can this biofuel be used in my car?" Then I say: "sure, you can even win a car race with it. So forget this message from yesterday that biofuel is not OK. In fact, it is really rather healthy for your vehicle and for the environment." And that is what people have to see. André is absolutely right: you also have to think further than just the cars on the track. That's what you have to say – and the league has done that: we want a completely clean carbon footprint. Of course the cars that drive around a bit need a good footprint. But especially in Formula One, the cars are more efficient than any other commercial car. But how do people get to the 'Ring, and to the track? What are the hospitality facilities, and so on? How much waste is produced there? And the FIA has also just made a statement and said that it wants to be carbon-neutral by I don't know when. That would bring motorsport back to something that it has actually lost a bit, I think – namely to be this technology pioneer. Since we live in a mobile society and do not want to give up mobility, this must be the message of motorsport. That way you are mobile, and that way you are fast, and that way you are on the road with a fair carbon footprint.

[34:29] **Sebastian Rudolph:** Smudo talked about the high level of attention, which also applies to Formula E, and about the pioneering spirit that distinguishes many, I would say, including Porsche. You, André, are now driving a Formula E car for Porsche. Earlier we heard that you were on the podium in your first season for Porsche. What can we expect next season?

[34:49] **André Lotterer:** Hopefully victories – that is, of course, the goal. I think with the developments we have continued to make, we should be able to achieve these. I would be



disappointed if there were no victories. Winning the Championship is of course another goal, a bigger goal, but to be in the lead on a good day is my goal for now, and to be in the top three in the championship.

[35:11] **Sebastian Rudolph:** In any case, it is a tremendously exciting racing championship and will certainly remain so. And the word exciting takes us to a competition, which is what I have in store for you two ...

[35:20] **Smudo:** Wow – we can win something, André!

[35:22] **Sebastian Rudolph:** The question is, who is the fastest between the two of you? Just call out the answers in good sportsman's style, because they are all about racing sport. Let's talk about one of the most famous race tracks – Smudo has just been there, André knows it well ... it's the Nürburgring. We have prepared three questions about this fascinating circuit and if you know the answers, as I said, just call out. First question: what do you think is the lap record on the Nordschleife of the Nürburgring?

[35:54] **Smudo:** I think it's 6:15 minutes.

[35:55] **André Lotterer:** Five minutes ...

[35:58] **Smudo:** Ah ... was the hybrid faster than six minutes? I would have thought 6:15.

[36:03] **André Lotterer:** What was that time? 5:50 or 5:58 or 5:55?

[36:09] **Sebastian Rudolph:** So Smudo says 6:15, André five ... so under six and the answer is: 5:19.55 minutes.

[36:18] **Smudo:** Oh yes, 5:19 not 6:19 ... wow.

[36:21] **Sebastian Rudolph:** By the way, the time belonged to Timo Bernhard, who was a Porsche works driver at the time. He broke the 2018 record in the Porsche 919 Hybrid Evo. André mentioned the car earlier – a really fast car.

[36:35] **André:** Yes, I have also driven it.



[36:36] **Smudo**: If you watch the video and see how the car whizzes past, it looks like a time-lapse recording.

[36:45] **André Lotterer**: Unbelievable. I drove that car at Spa.

[36:47] **Smudo**: You drove that car?

[36:48] **André Lotterer**: Yes, Neel Jani also broke a record at Spa. It was faster than Formula One back then. And I drove the day before that. Then he set the record time, but I was also testing and it was incredible.

[37:00] **Smudo**: How does it feel? It must give you a kick, it must be incredible.

[37:03] **André Lotterer**: It is incredible. It accelerates in La Source, the hairpin bend at Spa, we drove at 70/80 km/h and went up to 300 in four seconds.

[37:16] **Smudo**: That must be like having your whole brain swept backwards. Does it make you dizzy?

[37:20] **André Lotterer**: Yes, then it becomes too fast for the brain. But you notice how quickly the brain gets used to speed.

[37:29] **Smudo**: That is probably true but what I find so weird is that there are really two forces. One is the power of the engine, and we know from electricity that the lower the rotational speed, the greater the power. It is virtually infinite when at standstill. But then there is the other: how do I bring this force through the rubber onto this concrete surface?

[37:56] **Sebastian Rudolph**: Let's go back to the power of the mind. Question two: how many corners does the Nordschleife have?

[38:03] **André Lotterer**: 180.

[38:04] **Smudo**: I would say 170 ... I say 179.

[38:07] **Sebastian Rudolph**: There are 73 corners through the countryside, so the 70 was there.



[38:14] **André Lotterer:** Far too many. You just feel that you're cornering all the time.

[38:19] **Smudo:** There is a software, GPSauge, which is used to see where the vehicles are and so on. And it says 179 corners.

[38:25] **Sebastian Rudolph:** Then you would have to put GPSauge on the oldest and most famous part again. We are probably both right in the end. There are 73 through this old and famous part, which winds its way through the countryside.

Third and last question: on the Nürburgring you can do more than just drive fast cars. Smudo, you probably know another perspective – normally the music festival, Rock am Ring, takes place there every year. This is currently not possible due to the pandemic but we hope that this will change again.

Here is the final question: how many spectators do you think were at Rock am Ring at the Nürburgring in 2019?

[39:05] **André Lotterer:** 2019?

[39:09] **Smudo:** So, I know that there are probably 15,000 to 20,000 people in front of the stage, but that is only one part.

[39:10] **André Lotterer:** I would have said 50,000.

[39:15] **Sebastian Rudolph:** 50,000 says André and Smudo has the chance to add something more.

[39:19] **Smudo:** Yes, I would say 120,000.

[39:22] **Sebastian Rudolph:** Yes, and the middle scores: 85,000. And perhaps Smudo can briefly answer the question: what is it like to perform in front of so many people – 85,000 or 20,000?

[39:33] **Smudo:** We played Rock am Ring five years ago or so, and it's a crazy atmosphere, because you see the paddock basically sticking out of this sea of people. There's a line from



which it doesn't matter, I'd say about 12,000 to 15,000. Then you practically see only those who are in front of you, if you like, and then somewhere on the horizon. It's an incredible atmosphere. It's incredible when you get the crowds going back so far – and that's always how we measure the quality of the evening: when we do songs where we say "put your hands up in the air", how far you can see them putting their hands up in the air. Rock am Ring was definitely an absolute highlight and yes, I notice myself, we haven't played for a long time. This year we would have done a "30 years of Fanta 4" tour in stadiums. The highlight of our live career has been postponed until further notice. That's a really strange feeling. I miss it very much, playing live. It's a weird kind of unemployment.

[40:28] **Sebastian Rudolph:** And André, what is it like for you to drive in front of so many spectators? We have heard that Formula E races go through city circuits. Tens of thousands of people come to the track.

[40:37] **André Lotterer:** The highlight for us is the race in Mexico City. There the track actually goes through a former baseball stadium and it is full. I think there are about 30,000 people there, at a guess. We can even hear the fans through our helmets. I mean our engines are not very loud, but we can hear them cheering and it's a fantastic atmosphere. So the race in Mexico City, that's really cool. And the other highlight is when you stand on the podium at Le Mans: right at the top after the race. All the fans and the teams mingle and you see an endless sea of people, all along the straight. And if you're lucky enough to win the race and stand up there with all those people, the flags, to see all that – that is one of the best feelings you can have as a racer. Pure satisfaction.

[41:38] **Smudo:** The podium ... If you stand on the podium at Le Mans, as you say. Who stands on it? There are considerably more people on a rock 'n roll stage every year than on the Le Mans podium.

[41:41] **André Lotter:** Yes, 12.

[41:42] **Smudo:** Congratulations, awesome!



[41:54] **Sebastian Rudolph:** I think both are special moments: both at Rock am Ring and of course at Le Mans. Before I start on the finishing straight with André and Smudo, it's your turn now, dear listeners. In this episode of our 9:11 podcast you can also win something again.

[42:13] **Clip:** Porsche AG is giving away the racing game Project CARS 3 for PC, Play Station or Xbox, so nothing stands in the way of virtual driving fun. The competition starts now and will run up to the next edition of the 9:11 podcast. Porsche will draw one winner from all correct entries. Everyone above the age of 18 can take part. The detailed competition rules – as well as the odd hint or two – can be found on the Porsche Newsroom site at newsroom.porsche.de/podcasts. Good luck!

[42:48] **Sebastian Rudolph:** Yes, and to win you must send us the correct answer to the following question by email. We will stay at the Nürburgring for this: why is one of the track sections on the Nordschleife called "Fuchsröhre"? André and Smudo won't help now, but of course they can theoretically take part, just like all of the Fanta 4, by the way. We wish everyone who sends in an entry good luck and success.

So, now we are on the finishing straight of the 9:11 Porsche podcast. The final question is – let's start with you, André, whether it is possible that eSports will replace real motorsport?

[43:32] **André Lotterer:** I hope not. Because in the end, despite their similarities, they are two completely different worlds. But I think that eSports will continue to develop and reflect reality more. Nevertheless, they are two different sports, in the sense that you are physically on the road and virtually on the road. In terms of relevance, it is of course also a completely different story, sitting in a real Porsche compared to in the virtual world. But I think to reach new target groups and get much more attention for such races, eSports is fantastic.

[44:15] **Sebastian Rudolph:** What's your take on this, Smudo?

[44:16] **Smudo:** I think eSports, virtual sim racing, only makes sense if the real thing exists, because it is a copy of it. The thrill and the fun, the entertainment, the attraction of sim racing is how closely it reflects the real thing. If the real thing is missing, so to speak, the main thrill of



sim racing will also be missing. You want to imitate what you know from the real thing or you want to be able to experience it.

In a duel in a simulator with a Formula car for example, even with a small Formula car, you can see the difference to a touring car. And you get to know the thrill and excitement. From then on, you will consume a car race differently when you watch it on the track or even on TV, when you've had this thrilling experience in a simulator. That's why I think they are inseparable. But motorsport is also so broadly diversified. We are talking about Formula E, which is something completely different. I saw some pictures the other day: there's a race in Australia where they drive cars with a 1.50-metre-high suspension so hard over jumps that it looks totally crazy. Or NASCAR racing, which has an endurance strategy element – a slipstream strategy – that's also fascinating to watch. It's very broad. Or private karting in a group at weekends. Motorsport is just racing. It's just a great sport that you can also do virtually. That's why I would say eSports will be a big world, and sim racing only works in combination with real racing. But I believe the same thing as a racer and as a fan of both worlds, and also as a Porsche fan, which I am.

By the way, since we started driving Porsche cars, we have always been very open when it came to sustainability issues. This was not the case at all with previous manufacturers. I think it's because this is a smaller world, and blood is thicker than water. I am also a Swabian, which is a good thing. But I also notice that the charisma of Porsche also works in the simulator and vice versa. I am firmly convinced that a manufacturer or a customer sport producer must be in both worlds because it makes their brand attractive. In the sim world and the other way round. It charges the brand with emotions in both worlds.

[46:23] **Sebastian Rudolph:** We could carry on talking for a long time. One thing has become very clear: on the race track or virtually, motorsport is simply fascinating. On that note, Smudo, André, thank you very much for the interview! Dear listeners – thank you for tuning in. If you have any feedback and suggestions, please send them to 911-podcast@porsche.de. Take care – and goodbye for now.