FACT SHEET XXL Round 11/12

SCHAEFFLER

FORMULA E MONTREAL

July 29/30, 2017

The grand finale

On the last race weekend of Formula E in 2016/2017, ABT Schaeffler Audi Sport has the chance of winning two titles

FIA Formula·e Championship

Innovative

Many details improved: the ABT Schaeffler FE02

p. 8

Historic

Electric mobility in automotive design

p. 20

Editorial

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Formula E is staging the last two races of the season in Montreal. With a 10-point deficit Lucas di Grassi has good chances of winning the drivers' title. In the teams' classification, ABT Schaeffler Audi Sport can still win the championship as well – but this will take a strong performance by the whole squad. Two winners have already been determined: the fans that have been seeing fascinating motorsport and the series itself with its innovative electric approach. I look forward to the finale.

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Contents

Videos

Racing for a reason

Down to the wire

Electrifying Team ABT Schaeffler Audi Sport

Welcome to the *fu ture!*

Electric, in the heart of cities, all over the globe – this is Formula E. Forget everything that you knew about motorsport, and experience the world of the first ever fully-electric international race series

Formula E offers a number of distinct motor racing specialties. The most obvious feature is that, unlike conventional internal combustion engines (as in the DTM) or hybrid drives (as in the WEC), Formula E race cars are one hundred percent electrically-powered. The development of the electric motor as well as the transmission and subsequent software is unrestricted. Schaeffler and the team joined forces to design the entire powertrain, and this successful combination laid the foundation for clinching the vice-championship in the second season. The energy for all teams comes from identical batteries weighing approx. 320 kilograms and positioned in the rear of the car.

A second special feature is that Formula E races are not contested on conventional, permanent race tracks, but rather on temporary courses set up right in the heart of major cities. So, rather than the fans having to travel to events, racing is brought straight to the fans. Competing in these unusual locations is possible thanks to the low noise level of the Formula E racing cars and their zero emissions. Even the electricity that is used to charge the batteries is generated at the track using a glycerine-powered Aquafuel generator.

Electrifying around the world

In the motor racing scene, the venues are unique and exotic: Hong Kong, Marrakesh, Buenos Aires, Paris, Berlin and New York are just some of the metropolises where the ePrix are held, with backdrops such as Les Invalides, the skyline of Kowloon or the Statue of Liberty.

The grid line-up is studded with interesting names, including Nelson Piquet Jr, Nico Prost, Nick Heidfeld and, of course, the defending champion Sébastien Buemi.

As the sole German team, ABT Schaeffler Audi Sport again tackles the series with its regular drivers Daniel Abt and reigning vice-champion Lucas di Grassi. The other nine squads include outright factory teams such as Renault, Jaguar and DS Virgin as well as other top international teams from China, the USA and India.

The Formula E format is clear and concise: The practice, qualifying and race are all run on a single day. The race itself takes about 50 minutes – with pilots coming into the pits at around halftime to switch cars. ■

Around the *globe*

On its ten-month world tour covering four continents, the Formula E race calendar features one highlight after the other. Four new metropolises – Hong Kong, Marrakesh, Montreal and New York – are playing host to a round of the fully electric racing series for the first time

1 Kicking off with a podium

Hong Kong China

October 9, 2016
Lucas di Grassi made an almost perfect start to the new season with a second place finish – and this from second last on the grid. A tactical masterstroke.

First time in Africa

Marrakesh Morocco

November 12, 2016
Positions five and six at the African premiere of Formula E after a strong fight-back from Lucas di Grassi and a spotless race from Daniel Abt.

Pole premiere

Buenos Aires Argentina

February 18, 2017
First pole position for Lucas di Grassi in Formula E – on seeing the checkered flag, he celebrates a third place. Daniel Abt, in seventh, again scores points.

Sensational win

Mexico City Mexico

April 1, 2017
Grid position 15, last after one lap – and finishing as the winner thanks to a brilliant strategy. Lucas di Grassi makes motorsport history. Following a great battle, Daniel Abt still comes in seventh.

The string of success continues

Monaco

May 13, 2017
Third consecutive podium finish – in Monaco, Lucas di Grassi celebrates second place in front of sold-out grandstands. His teammate, Daniel Abt, in position seven, completes the good result for ABT Schaeffler Audi Sport in the principality.

Lean diet

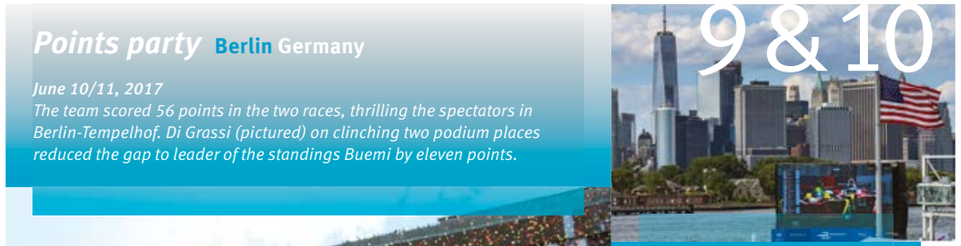
Paris France

May 20, 2017
For the first time this season, both Lucas di Grassi and Daniel Abt scored no points. The drivers' and teams' classifications continue to reflect position two.

Points party

Berlin Germany

June 10/11, 2017
The team scored 56 points in the two races, thrilling the spectators in Berlin-Tempelhof. Di Grassi (pictured) on clinching two podium places reduced the gap to leader of the standings Buemi by eleven points.



Comeback drive

New York USA

July 15/16, 2017
On clinching a fourth and a fifth place, Lucas di Grassi makes up ground to the top of the table. Daniel Abt misses out on scoring points at Formula E's premiere in New York.

Grand Finale

Montreal Canada

July 29/30, 2017
Just like in New York, Montreal hosts a double-header at the final weekend of the 2016/2017 season. The multicultural metropolis on the St. Lawrence River, where French is the official language, is crazy about motor racing.

Driver Ranking

P	Driver	Team	Pts
1	Sébastien Buemi (CH)	Renault e.dams	157
2	**Lucas di Grassi (BR)**	**ABT Schaeffler Audi Sport**	**147**
3	Felix Rosenqvist (S)	Mahindra Racing	104
4	Sam Bird (GB)	DS Virgin Racing	100
5	Nicolas Prost (F)	Renault e.dams	84
6	Nick Heidfeld (D)	Mahindra Racing	78
7	Jean-Éric Vergne (F)	Techeetah	74
8	José María López (RA)	DS Virgin Racing	50
9	**Daniel Abt (D)**	**ABT Schaeffler Audi Sport**	**47**
10	Nelson Piquet Jr. (BR)	NextEV NIO	33
11	Oliver Turvey (GB)	NextEV NIO	26
12	Robin Frijns (NL)	MS Amlin Andretti	20
13	Loïc Duval (F)	Faraday Future Dragon Racing	19
14	Pierre Gasly (F)	Renault e.dams	18
15	Stéphane Sarrazin (F)	Techeetah	17
16	Mitch Evans (NZ)	Panasonic Jaguar Racing	16
17	Maro Engel (D)	Venturi	16
18	Jérôme D'Ambrosio (B)	Faraday Future Dragon Racing	11
19	António Félix da Costa (P)	MS Amlin Andretti	10
20	Tom Dillmann (F)	Venturi	10
21	Esteban Gutiérrez (MEX)	Techeetah	5
22	Adam Carroll (GB)	Panasonic Jaguar Racing	5
23	Alex Lynn (GB)	DS Virgin Racing	3
24	Mike Conway (GB)	Faraday Future Dragon Racing	0
25	Ma Qing Hua (CHN)	Techeetah	0

Team Ranking

P	Team	Pts
1	Renault e.dams	259
2	**ABT Schaeffler Audi Sport**	**194**
3	Mahindra Racing	182
4	DS Virgin Racing	153
5	Techeetah	94
6	NextEV NIO	59
7	MS Amlin Andretti	30
8	Faraday Future Dragon Racing	30
9	Venturi	28
10	Panasonic Jaguar Racing	21

CES: Schaeffler and Formula E in Vegas

Las Vegas USA

January 7, 2017
A successful premiere of a virtual Formula E race in Las Vegas that received worldwide attention: In the simulator race supported by Schaeffler, the Formula E campaigners were pitted against the ten best fans. Daniel Abt finished in ninth place.

Scenic setting A view of Montreal's skyline across the Saint Lawrence River. Formula E stages its races in the heart of the city, not on the Formula 1 circuit on its outskirts

Ready for the *future*

In terms of urban mobility, Montreal, in addition to exemplary public transportation, has a plan to promote electric vehicles and a well-developed network of bicycle paths

2nd place

In the current "Future of Urban Mobility" index published by Arthur D. Little, Montreal ranks behind New York as North America's second-most advanced city in terms of mobility

1

***Schaeffler has** plant in Canada, in Stratford, while Montreal is home to a distribution partner, Schaeffler Canada Inc.*

With an area of nearly ten million square kilometers, Canada is the second-largest country in the world, after Russia. However, being home to only 36.5 million people and having merely two cities with more than one million inhabitants, the North American country is one of the least densely populated nations. For comparison: the United States is a few thousand square kilometers smaller but has ten times as many inhabitants and nine cities with a population of more than one million.

Montreal is regarded as one of Canada's most interesting cities. The French-speaking metropolis is located in the south-west of the province of Quebec on the Île de Montréal. Due to its location on an island, Montreal can only be reached by land via 24 bridges and three tunnels. In urban transit, the subway, Metro Montreal, operated by Société de transport de Montréal (STM), stands out in particular. Seven lines covering a total distance of 69 kilometers provide daily service to 1.1 million passengers, making Metro Montreal the most heavily frequented subway in Canada. An equally well developed bus network complements local public transportation. Daily, 1.4 million commuters use the 197 daytime and 23 nighttime lines of the city. Places in the metropolitan area can be reached on five lines of the suburban "trains de banlieue" system.

In terms of passenger car traffic, Quebec has assumed a pioneering role. The Climate Change Action Plan launched in 2013 provides for a 20-percent reduction of greenhouse gas emissions by 2020 versus 1990. Subsidies to encourage the use of electric vehicles, among other things, are to help achieve this aim. The government has appropriated 420 million dollars for this purpose, targeting the number of fully electric and plug-in-hybrid vehicles to have reached 100,000 within the space of three years and as many as 300,000 by 2026.

A paradise for bikes

Passenger car or local public transportation – in most big cities, people have only this limited choice to get from A to B. In Montreal, though, there's another viable option: the bicycle. In the "Copenhagenize Bicycle-friendly Cities" index, Montreal has been ranking in the top 20 for many years without fail. Since 2009, its bicycle path network has been extended from 400 to 750 kilometers. The city is also home to "BIXI Montréal," a continually growing bike rental service. One in two Montreal residents uses a bicycle at least once a week, according to the "Vélo Quebec" non-profit organization. ■

High-tech for the *race track*

The ABT Schaeffler FE02 is a purebred racer packed with high-tech. While most of the components, including the battery and the entire aerokit, are identical for all contenders, Schaeffler and ABT have developed the entire powertrain

Steering wheel

Standardized steering wheel with paddles for shifting and recuperation, controls for various engine settings and a display for all key information

Battery

Developed by Williams Advanced Engineering, charging time: approx. 45 minutes

Aerodynamics

Adjustable front and rear wing

Tires

18-inch wheels with Michelin control tires (same tread as for production cars)

Brakes

Hydraulic dual-circuit braking system, adjustable brake force distribution

Suspension

Optimized suspension with increased stiffness and improved kinematics

Powertrain

Electric motor ABT Schaeffler MGU 01+, three-speed transmission

Dimensions

***Length** 5,000 mm*
***Width** 1,800 mm*
***Height** 1,250 mm*
***Weight** min. 880 kg including driver*

Power output

***Practice and Qualifying** 200 kW (270 hp)*
***Races** 170 kW (231 hp) plus FanBoost*

Chassis

Specification carbon fiber-aluminum chassis from Dallara

Video
The powertrain of the ABT Schaeffler FE02

Top team performance
ABT Schaeffler Audi Sport is in contention for victory in every race

Well *equipped*

The basic concept for the powertrain of the ABT Schaeffler FE02 remains identical to last year. For the 2016/2017 season, the engineers focused on improving many details

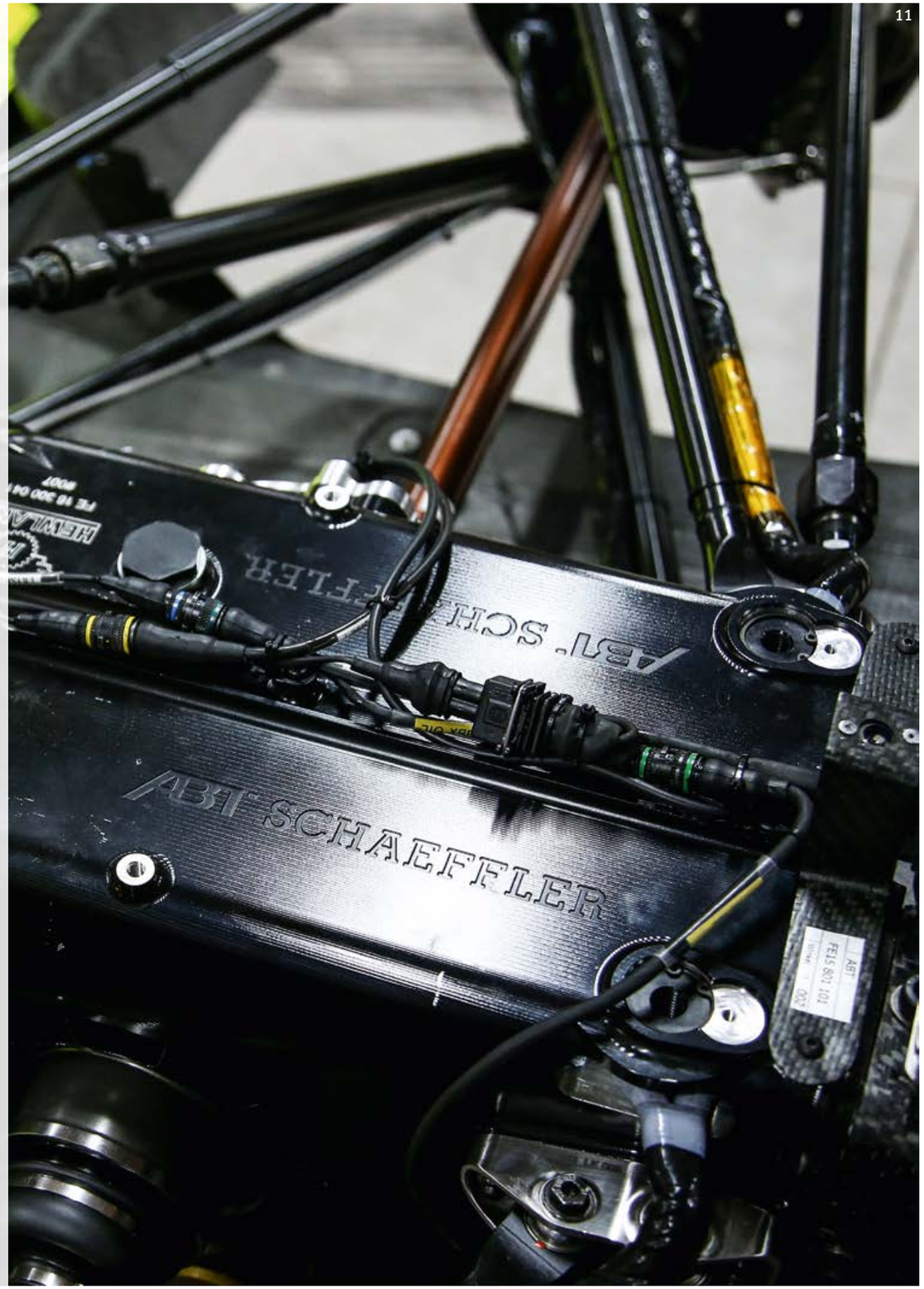
ABT Schaeffler Audi Sport heads off on the Formula E tour around the world with a powertrain that has been improved in many aspects. ABT Schaeffler MGU01+ – even the name makes it clear that the powertrain is based on the combination of the electric motor and transmission from the successful season two model; in ten races the two pilots Daniel Abt and Lucas di Grassi scored ten podium positions, three of which were victories.

Improved details

The engineers of the exclusive technology partner, Schaeffler, have focused on further improving the torque and drive efficiency. Moreover, the weight has been further reduced. The transmission features three gears and has also been further optimized in its efficiency and gearshift times.

"We feel well equipped for the challenges of the third season," says Prof. Peter Gutzmer, The Chief Technical Officer and Formula E project leader at Schaeffler. "In its first season, our powertrain played an important role in our many successes. So, it quickly became clear that we should not only continue to focus on our proven concept, but also to further develop all aspects of our components. I would like to thank all the engineers who have worked with complete commitment in parallel to our fight for the title, so that we stay competitive and are preferably winning in the future as well." ■

1,830
kilometers have been covered by the team in the previous ten races of the season so far



Heavily energized

Lucas di Grassi is fully focused on electric motors, both on and off the race track. A portrait of the 32-year-old title candidate in a nutshell

Home

To me, means being with my family and friends – no matter where.

Why only yellow cars of the Audi brand?

At the moment, they're all yellow. The R8 was originally black, but I had it wrapped. The next RS 6 will be green. The idea behind it: my Brazilian helmet colors.

Toys with electric motors

I've got four or five electric bicycles, plus electric skateboards and hoverboards, and two e-scooters. I'm also developing an e-bike together with partners in Brazil. I'm highly interested in micromobility, just like in artificial intelligence in self-driving cars. I'd like to stay up to speed in these technologies and understand how quality can be improved. I'm involved in Formula E's Roborace project as well.

Is electric mobility underrated?

Not underrated. People are now quickly starting to understand what it's all about. It's a little like in the early days of television. Everyone knew it would become a big thing, but it takes time for a large number of people to change their ways. Fear plays a part in this. You ask yourself: "Is this really better?" But electric mobility will catch on much faster than predicted. Take Formula E for example: I've been involved in it for five years. At first, nobody, for even a second, believed in races with electric cars.

Best Formula E moment

There've been quite a few. Mexico was great: in last place twice in the race and then winning it in the end. My pole in Berlin with a broken leg and an advantage of a thousandth was special, too – even though I didn't know at the time that it was a fracture.

If not a racer, what would you be?

I don't race and then go to the beach. I race, earn money with it and then invest it. So, I'd either be an entrepreneur or an engineer or an inventor. I'm a guy who always seeks competition. I can't lose. That makes me better as a racer and would probably be my character in any other line of work, too. Ultimately, what matters in any of these areas is being the best, being surrounded by the best people and extracting the most out of yourself and your projects. That also distinguishes them from the world of art where everything is subjective. So, I'd never have become an artist.

Talking about "mobility for tomorrow," what should Schaeffler invent for it?

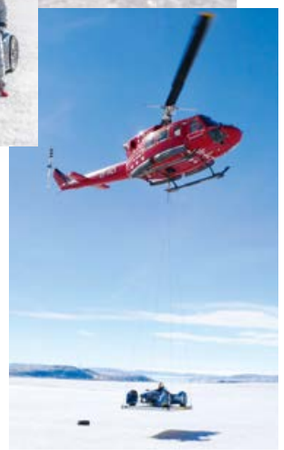
Well in that case, I'd like to have a very efficient hybrid airplane that could fly autonomously or semi-autonomously. ■

Spectacular
statement against climate change

Eternal ice? Formula E made a strong and spectacular statement in Greenland against global warming

In an unparalleled event, Formula E, Schaeffler and Lucas di Grassi have made a strong statement against global warming. In his Formula E car, the Brazilian turned laps on a glacier in Greenland

Lucas di Grassi Formula E vice-champion in the ABT Schaeffler Audi Sport team (right) together with Formula E CEO Alejandro Agag



Unknown territory The Formula E car is lowered onto the glacier

"Global warming is an issue that affects us all. The electric mobility can and will continue to play an important role against climate change in the future," says Schaeffler's CTO, Prof. Peter Gutzmer. "We regard Formula E with its innovations and new ideas as a driving force for mobility of the future and hence we were pleased to support this spectacular event."

In conjunction with the Greenland government and environmental activists as well as teaming up with other partners such the Monegasque Prince Albert Foundation and the University of Southampton, the event required careful planning so that it could be implemented with the least possible input. Stunning images have attracted huge interest worldwide with around three million visitors on YouTube alone. The images also provided footage for a 48-minute documentary which was premiered on the occasion of the international climate change conference held in Marrakesh at the same time as the ePrix.

Global warming challenge

"The Greenland region is such a peaceful place. I was shocked to see how the landscape changes through global warming," says Lucas di Grassi. "This experience gives me a completely new understanding of the challenge we face and what Formula E can contribute." ■

#ProjectIce

A tradition of innovation

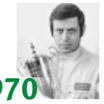
Hall of Fame Success not only in single-seater racing

ABT Sportsline – the world's leading tuner of vehicles from the Volkswagen Group and successful motorsport team in the DTM. Together with Schaeffler, the Allgäu-based squad enthusiastically tackles a new motorsport challenge in Formula E

ABT Sportsline is one of the most successful motorsport teams in Germany and Europe. Its history in racing dates back more than 60 years and began with initial victories scored by Johann Abt in the 1950s. The first recorded success took place in a dirt track race, followed by victories and titles in touring car, sports car and formula racing. 2009 has gone down in the company's history as the most successful year to date: Timo Scheider won the DTM, Christian Abt the ADAC GT Masters in the Audi R8 and youngster Daniel Abt was victorious in the ADAC Formula Masters. Previously, in 2007, Schaeffler and ABT had jointly celebrated success as well: with the logos of LuK, INA and FAG on his A4, Mattias Ekström won his DTM title number two.

Founded as a smithy in 1896, the ABT company has been continually developing ever since. Just one thing has never changed: the family still runs the company with about 170 employees and partners in 50 countries around the world. CEO Hans-Jürgen Abt now represents the fourth generation at the helm. For ABT Sportsline, the commitment in Formula E also marks a return to the roots, as the team celebrated success in formula racing as far back as in the early 90s – among others, with Ralf Schumacher in the cockpit back then. ■

Moments



1970

Johann Abt *(† 2003), father of Hans-Jürgen and Christian Abt, becomes European Touring Car Champion*

2007

Sporting the logos of the ***Schaeffler Group, Mattias Ekström*** *becomes DTM champion*

2009

Christian Abt, Timo Scheider and Daniel Abt *clinch three titles in a single year*

2014

ABT and Schaeffler *win the first ever Formula E race*

A strong team in the *cockpit*

In Lucas di Grassi (32) and Daniel Abt (24) the squad of Hans-Jürgen Abt has its dream team filling the cockpits of the two Formula E race cars. The experienced Brazilian and youngster Daniel Abt are not only fast and technically adept but perfectly harmonize with each other off the race track as well

Lucas di Grassi # 11

Highlights

2005	1st in Macau GP
2006	Formula 1 Test
2007	2nd GP2 series, Formula 1 test driver
2008	3rd GP2 series, Formula 1 reserve driver
2009	3rd GP2 series, Formula 1 reserve driver
2010	Formula 1
2013	3rd in Le Mans 24 Hours
2014	2nd in Le Mans 24 Hours, 4th WEC
2015	4th in Le Mans 24 Hours, 3rd FIA Formula E
2016	3rd in Le Mans 24 Hours, 2nd FIA Formula E

Vita

Date of birth	August 11, 1984
Place of birth	São Paulo (BR)
Domicile	Monaco (MC)
Height	1.79 m
Weight	75 kg

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Daniel Abt # 66

Highlights

2007	2nd ADAC Kart Championship
2008	8th ADAC Formula Masters
2009	1st ADAC Formula Masters
2010	2nd ATS Formula 3 Cup
2011	4th FIA Formula 3 International Trophy, 7th Formula 3 Euro Series
2012	2nd GP3 series
2013	GP2 Series
2014	GP2 Series, FIA Formula E
2015	1st in Le Mans 24 Hours (class), 11th FIA Formula E
2016	19th ADAC GT Masters, 7th FIA Formula E

Vita

Date of birth	December 3, 1992
Place of birth	Kempten (D)
Domicile	Kempten (D)
Height	1.79 m
Weight	70 kg

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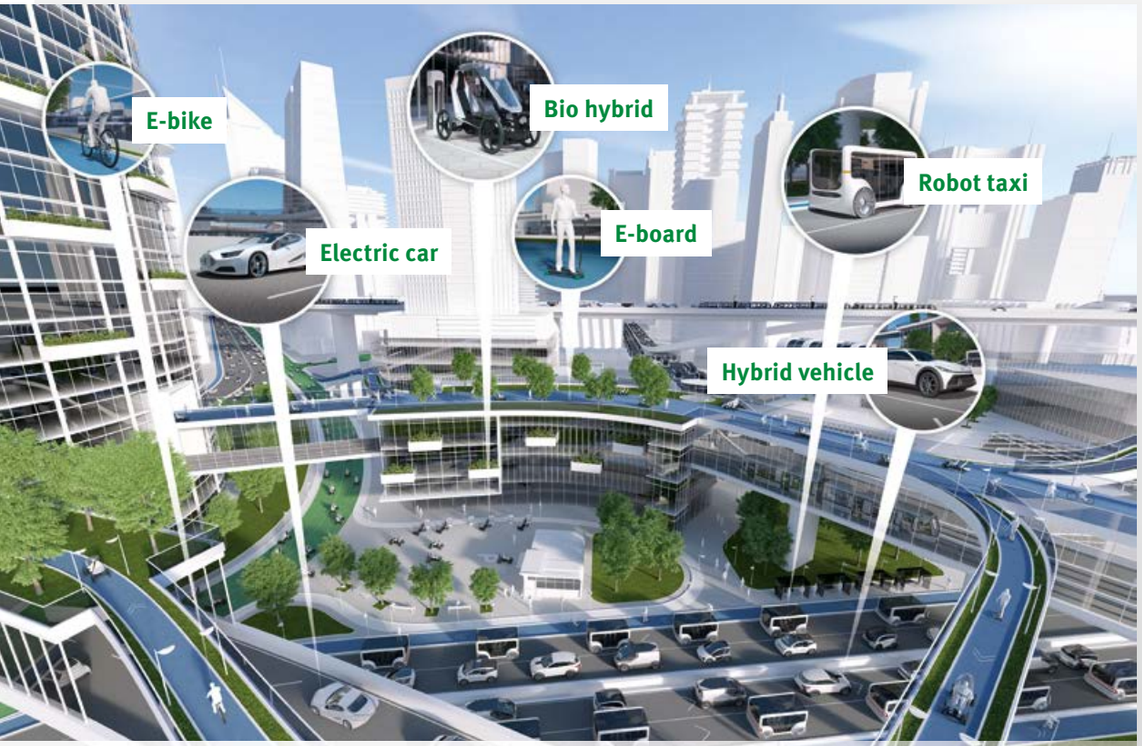


Race track ››› Road

An electric circuit

Motorsport has always been a driver of developments that subsequently make their way into production vehicles. This now applies to electrified powertrains as well. In the FIA World Endurance Championship (WEC) with Le Mans as its highlight, high-tech hybrid race cars are pitted against each other and in Formula E, all-electric single-seaters are. For Schaeffler, both racing series have become pioneering test beds for future technologies

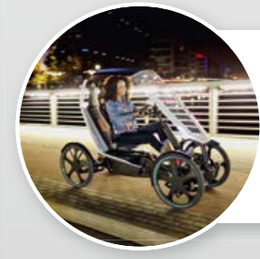
"The commitments in the WEC and in Formula E have been helping us gain a better understanding of the environment and systems of electric mobility," explains Prof. Peter Gutzmer, Schaeffler's Chief Technology Officer. Be it in terms of systems knowledge, the development of new materials, recuperation (recovery of braking energy) or thermal management – these are important findings which also advance the Schaeffler technology group aside from racing with respect to ideas, visions and technologies for networked mobility for tomorrow. Schaeffler has significantly increased the size of its development team for electric vehicle components and new mobility concepts within a short period of time and is working at full stretch on sustainable mobility solutions. Six examples ... ■

E-bike

On bicycle expressways, powerful pedelecs – with Schaeffler hardware and software on board – provide a particularly fast and eco-friendly means of transportation for shorter distances. Branded as SCHAEFFLER VELOSOLUTIONS, the company offers an extensive and innovative product range.
See also: ***www.schaeffler-velosolutions.com***

Electric car

Schaeffler's electric axles (pictured) help make traffic noise in inner cities a thing of the past, moving forward with a wide product range from Herzogenaurach. In this context, Schaeffler has developed an innovative modular system for electric axles in various configurations and build levels.



Bio hybrid

The innovative and compact mobility solution for urban areas not only provides weather protection but, featuring four wheels including an electric pedelec drive, high driving stability and ample stowage space. In spring of 2016, Schaeffler unveiled this design and development concept that met with positive response around the globe.

E-board

In addition to its handy dimensions, this ideal means of transportation for short distances in urban areas boasts hydraulic brakes and a range of 25 kilometers. At CES in Las Vegas in January 2017, Schaeffler showcased this prototype. Integrated in the board is a battery that drives the rear axle via an electric motor. The e-board is controlled using a stick with an ergonomically shaped handle.

Robot taxi

Self-driving buses with integrated wheel hub motors (pictured) from Schaeffler could provide a means of demand-based zero-emissions short-range public transportation in the future. All the drive components except for the battery are completely installed in the wheel. They include the electric motor, power electronics, the brake and the cooling system. eWheelDrive makes all-new drive concepts possible.

Hybrid vehicle

Hybrid components will continue to make conventional IC engine based powertrains more efficient. Schaeffler offers solutions across the entire range of electrification potential – from the 48-volt hybrid to the plug-in hybrid for various mounting positions to all-electric axles that assist the IC engine or serve as the sole short-term source of propulsion.

1899 Electrifying beginnings

The car picks up speed. ***The first car to exceed 100 kph:*** *the electric race car "La Jamais Contente" made by Camille Jenatzy. That was 1899, the same year that the Baker Motor Vehicle Company began to build electric cars. Fully electric or hybrid drive from Ferdinand Porsche for the Lohner electric vehicle. The same idea with the Mercedes Eléctrique and Mercedes Mixte. Up to 1939, Detroit Electric models with more than a 100-kilometer driving range. Around the turn of the century there were* ***more electric cars on the road than combustion ones.*** *Only with the improvement of performance, range and gas station networks do petrol-powered vehicles take over.*

1972 The limits to growth

Electric mobility means drive from a fixed electricity supply – trams, trains, trolley buses. But gasoline-power comes under pressure. The 1972 Club of Rome "limits to growth": Finiteness of resources. ***1974 oil crisis.*** *The industry responds with* ***rudimentary electric drives:*** *A BMW 1602 for the 1972 Olympics only has 32 kW (43.5 HP). In fleet tests, the electric transporters from Mercedes and VW, equipped with the batteries that were still very heavy in those days and with a capacity of approx. 22 kilowatt hours, merely had a range of 60 to 80 kilometers. And the electric models of Opel, Mercedes and VW in a large-scale project on the German island of Rügen are based on existing cars. This is the wrong path.*

Fast *currents*

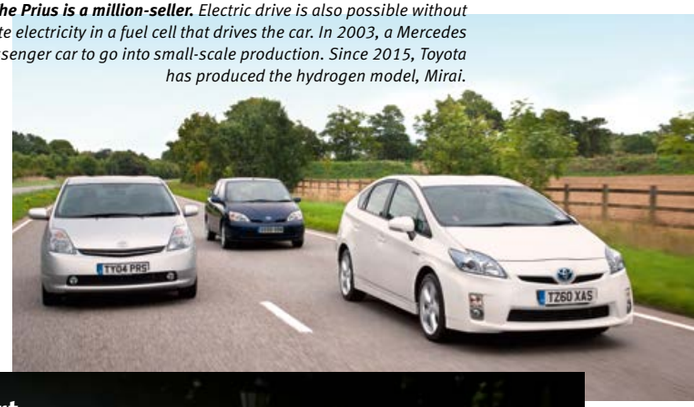
From the early alternative via public transport and back into the automobile: Electric cars have enjoyed a rapid history spanning more than 100 years and are only now coming of age

1996 Tailored for the future

Two things are needed: 1) A paradigm shift. In 1996, General Motors is the first major manufacturer to offer a car specifically designed for electric drive. Around 1,100 units of the EV1 are produced. Its cw value: 0.19. It reaches 130 kph with a range of around 250 km using 26.4 kWh from a nickel-metal hydride battery. 2) A technological leap, based on ***lithium-ion batteries from Sony.*** *With these batteries,* ***Tesla joins*** *the car industry in 2008 with a roadster; 200 kph top speed, 350-kilometer range. In Japan, the Mitsubishi i-MiEV has been rolling off the assembly line since 2009. Today, there are many electric cars, and Schaeffler is a sought-after partner.*

1997 Attractive alternatives?

The bridging solution comes from the ***hybrid drive*** *using the combustion engine and electricity. Toyota makes the breakthrough in 1997:* ***The Prius is a million-seller.*** *Electric drive is also possible without a battery: hydrogen and oxygen generate electricity in a fuel cell that drives the car. In 2003, a Mercedes A-class F-Cell is the world's first fuel cell passenger car to go into small-scale production. Since 2015, Toyota has produced the hydrogen model, Mirai.*



2009 Motorsport

The milestones of electric mobility in racing: In July 2009, the first victory for a McLaren-Mercedes with hybrid drive in Formula 1. In June 2012, the first Audi win with diesel-electric drive at Le Mans. ***In September 2014, FIA Formula E is launched as the first race series with electric drive. Schaeffler is one of the pioneers with the ABT Schaeffler Audi Sport team.*** *June 2015 heralds the first overall victory of Rhys Millen's electric race car against petrol-powered vehicles at Pikes Peak. September 2016: World record for electric drive by Venturi with 549 kph in Bonneville.*

Mobility *for tomorrow*

For Schaeffler, innovation has been part of its corporate DNA since the foundation of the company. It is based on lateral and interdisciplinary thinking

Schaeffler is known as an innovative leader delivering a wealth of technologies that make automobiles more fuel-efficient, environmentally friendly, and safer, as well as products for trains, aircraft, wind turbines, and many other industrial sectors. Schaeffler can be found wherever things are in motion – and motion also means mobility. The challenges facing mobility of the future are immense. That's why Schaeffler is committed to its holistic "mobility for tomorrow" concept, geared to finding sustainable solutions for the world of tomorrow. ■

Mobility for tomorrow Under this concept, Schaeffler concentrates on four focus areas: environmentally friendly drive systems, urban mobility, interurban mobility and energy chain

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ABT Schaeffler FE02

- **Aerodynamics** Front and rear wing adjustable
- **Electric motor** ABT Schaeffler MGU01+
- **Battery** Williams Advanced Engineering
- **Transmission** ABT Schaeffler, 3 speeds
- **Brakes** Hydraulic dual-circuit braking system, adjustable brake force distribution
- **Suspension** Optimized suspension with higher stiffness and improved kinematics
- **Weight** 880 kg, minimum (including the driver)
- **Dimensions** Length 5,000 mm, width 1,800 mm, height 1,250 mm

The ABT Schaeffler FE02 accelerates from 0 to 100 km/h in

2.9 *seconds*

200 kW *Power output in qualifying*

170 kW *Power output in the race*

3 *The 3 drivers with the most #FanBoost votes get 100 kJ more energy*

1 *FanBoost for second car*

fanboost.fiaformulae.com

56 kWh *of energy may be used by a driver per race*

=

Two-person household (6 days)

Refrigerator, 150 liters (210 days)

Light bulb, 60 W (39 days nonstop)

Television (15 days nonstop)

Dish washing machine (70 wash cycles)

=

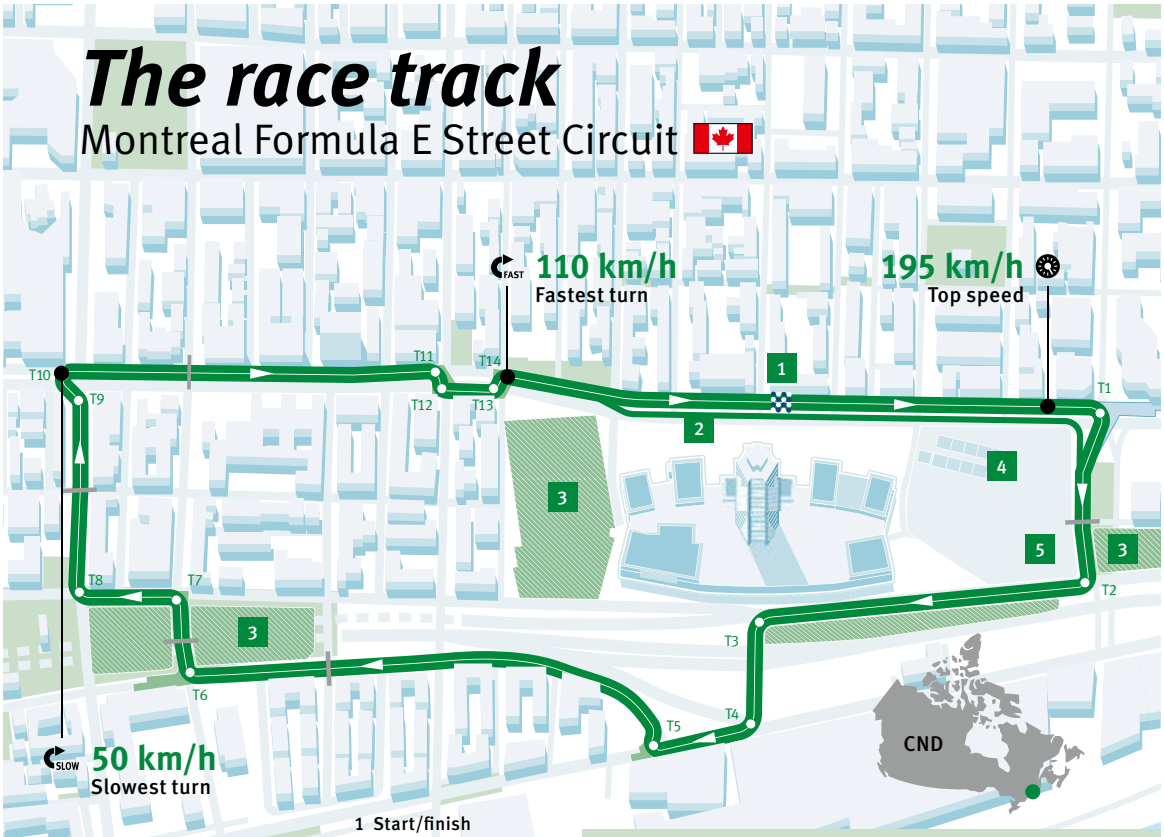
20,000 *conventional AA batteries provide the same amount of energy*

Schaeffler facts

≈ 87,000	employees worldwide
13.3	billion Euro turnover in 2016
› 2,300	registered patents in 2016
25,000	active and pending patents
170	locations in 50 countries
75	factories worldwide
60	Schaeffler components in automobiles worldwide (average)
17	R&D centers worldwide

The race track

Montreal Formula E Street Circuit



1 Start/finish
2 Pit lane
3 eVillage
4 Emotion Club
5 Media Center

2,745 m
Track length

Schedule

Saturday, July 29

08:00 – 08:45	Free practice 1
10:30 – 11:00	Free practice 2
12:00 – 12:36	Qualifying (4 groups)
12:45 – 13:00	Super Pole
14:00 – 14:30	Autograph session (eVillage)
15:00	Driver parade
15:23	Pit lane open
16:04	Race (35 laps)
17:05	Podium ceremony
17:25 – 17:40	Press conference (Media Center)

Sunday, July 30

08:00 – 08:45	Free practice 1
10:30 – 11:00	Free practice 2
12:00 – 12:36	Qualifying (4 groups)
12:45 – 13:00	Super Pole
14:00 – 14:30	Autograph session (eVillage)
15:00	Driver parade
15:23	Pit lane open
16:04	Race (37 laps)
17:05	Podium ceremony
17:25 – 17:40	Press conference (Media Center)

Schaeffler

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Learn more about mobility for tomorrow

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