

# RACECARD

2019 NEW YORK CITY E-PRIX



**SATURDAY/SUNDAY  
JULY 13-14  
2019**

**ROUNDS 12 AND 13**  
2018/2019 ABB  
FIA FORMULA E  
CHAMPIONSHIP

**ROUNDS 9 AND 10**  
JAGUAR I-PACE ETROPHY

**3<sup>RD</sup> RUNNING**

**NEW YORK CITY  
USA**



2018 NEW YORK CITY  
**E-PRIX**

**WINNER RACE 1**

Lucas di Grassi (Audi Sport Abt  
Schaeffler/Michelin), 43 laps

**WINNER RACE 2**

Jean-Eric Vergne (Techeetah/Michelin),  
43 laps

**POLE POSITION RACE 1**

Sébastien Buemi (Renault e.dams/  
Michelin), 1m13.911s

**POLE POSITION RACE 2**

Sébastien Buemi (Renault e.dams/  
Michelin), 1m17.963s

**FASTEST RACE LAP RACE 1**

Felix Rosenqvist (Mahindra Racing/  
Michelin), 1m14.663s

**FASTEST RACE LAP RACE 2**

Daniel Abt (Audi Sport Abt Schaeffler/  
Michelin), 1m15.552s



Jean-Eric Vergne and Audi Sport  
wrapped up the 2017/2018 Formula E  
Championship titles

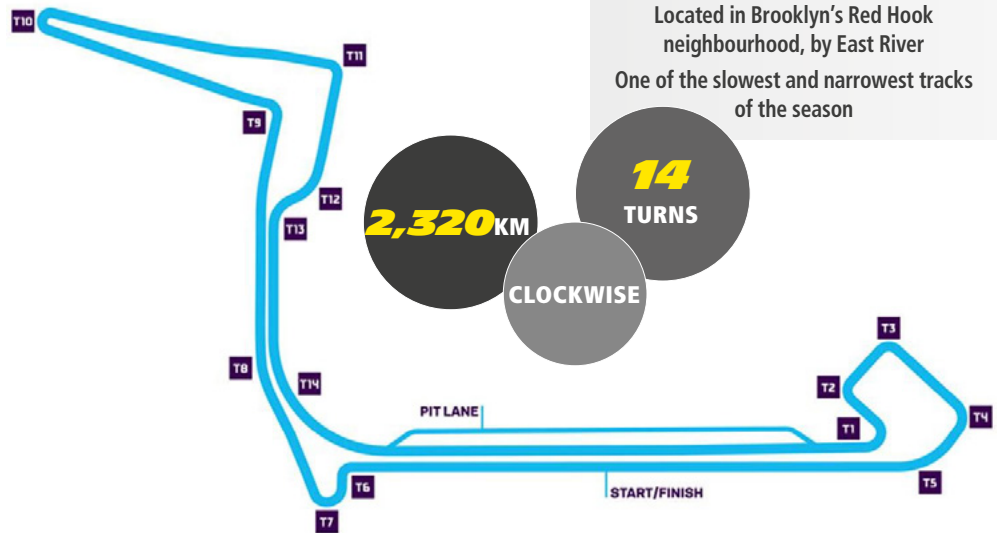
Fifth place in Race 1 sufficed for Vergne  
to make sure of the Drivers' title

Second and third places for di Grassi  
and Abt in Race 2 were enough for Audi  
Sport to clinch the Teams' title, two  
points clear of Techeetah

Both races took place in searing heat  
(track temperature > 45°C)

## THE CIRCUIT

BROOKLYN CIRCUIT



2019 NEW YORK CITY  
**E-PRIX**

The third American Formula E  
meeting of the season

Two Formula E races, plus two  
Jaguar I-Pace eTrophy races

Final meeting of Formula E's Season 5

NEW YORK CITY E-PRIX  
**PREVIOUS  
WINNERS**

2016/2017

**Race 1 Sam Bird**  
(DS Virgin Racing/Michelin)

**Race 2 Sam Bird**  
(DS Virgin Racing/Michelin)

2017/2018

**Race 1 Lucas di Grassi**  
(Audi Sport Abt Schaeffler/Michelin)

**Race 2 Jean-Eric Vergne**  
(Techeetah/Michelin)

### TIMETABLE

**SATURDAY, JULY 13**

7:30am	45 minutes	Free Practice 1 (Formula E)
8:30am	30 minutes	Qualifying (Jaguar I-Pace eTrophy)
10:00am	30 minutes	Free Practice 2 (Formula E)
11:15am	36 minutes	Qualifying (Formula E)
12:30pm	20 minutes	Super Pole (Formula E)
2:00pm	25 minutes + 1 lap	Race 1 (Jaguar I-Pace eTrophy)
4:03pm	45 minutes + 1 lap	Race 1 (Formula E)

**SUNDAY, JULY 14**

8:30am	30 minutes	Qualifying (Jaguar I-Pace eTrophy)
10:00am	30 minutes	Free Practice 3 (Formula E)
11:45am	36 minutes	Qualifying (Formula E)
12:30pm	20 minutes	Super Pole (Formula E)
2:00pm	(25 minutes+1 lap)	Race 2 (Jaguar I-Pace eTrophy)
4:03pm	(45 minutes+1 lap)	Race 2 (Formula E)

LOCAL TIME



## THE NEW YORK CITY E-PRIX AND MOTORSPORT



» The 35,400km New York to Paris race in 1908 started in Time Square. It was won by George Schuster driving a Thomas Flyer Model 36

» A New York Grand Prix (IndyCar) was held at the New York State Fairgrounds Raceway from 1905 until 1962

» The plan to hold an F1 grand prix in Jersey, by the Hudson River, failed to materialise

» Watkins Glen (New York State) hosted an F1 grand prix from 1961 until 1980, as well as numerous top endurance races

» Lime Rock Park (a two-hour drive from New York City) hosts a round of the IMSA WeatherTech Championship



## THE NEW YORK CITY E-PRIX AND RENEWABLE ENERGY



» The first New York taxi company Electric Carriage introduced a fleet of 12 electric vehicles in 1897

» New York recently announced a 250 million-dollar scheme (Evolve NY) to expand its electric-vehicle infrastructure

» The Mount Morris Solar Energy Center in New York State provides electricity for 39,000 homes

» New York's Mayor Bill de Blasio wants to see all the city's infrastructure powered by zero-emissions hydropower generated in Quebec

» Electric vehicle sales leapt by 63 percent in New York in 2018

## NEW YORK CITY & BROOKLYN

» New York City is the USA's most populated city (8.6 million in 2017)

» In 1664, the city was named New York in honour of James, the then Duke of York and brother of King Charles II

» New York attracted 65.2 million visitors in 2018 (a new record)

» Brooklyn is one of New York City's five boroughs, along with Manhattan, Queens, Bronx and Staten Island

» Brooklyn is NYC's most populated borough (2.6 million)

» The circuit is in Red Hook, one of Brooklyn's oldest neighbourhoods where the Dutch settled in the 17th Century

» Notorious gangster Al Capone was a frequent visitor to Red Hook



## MICHELIN GREEN GUIDE

Michelin has published several guides for visitors to the Big Apple, including the Green Guide New York, the Weekend Green Guide New York and the Michelin Red Guide New York City, the 2019 edition of which lists 570 restaurants



## SERGE GRISIN

Formula E Programme Manager, Michelin Motorsport

**"LAST YEAR, THE TRACK TEMPERATURE CLIMBED TO ALMOST 50°C"**

The New York City E-Prix uses the same circuit as last year. It is one of the slowest of the championship, but changes to Turns 1 and 10 have shortened it slightly from 2.373km to 2.320km. The surface provides little grip and doesn't produce much tyre wear, so will we see some

drivers run just one set of tyres per race-day. Last year, the track temperature climbed to almost 50°C on Saturday but it rained during free practice on the second day, so we were able to see the Michelin Pilot Sport's performance potential in different types of conditions.

## MICHELIN AND THE 2019 NEW YORK CITY E-PRIX

### TECHNICAL DATA

#### MICHELIN PILOT SPORT

FRONT: 245/40R18

REAR: 305/40R18

Developed specifically for the FIA Formula E Championship

The first 18-inch single-seater racing tyre

The first single-seater racing tyre capable of competing in dry and wet conditions

The first tyre capable of lasting the full race distance



<b>Size (front/rear)</b>	24/64-18 / 27/68-18
<b>Width (front/rear)</b>	245mm / 305mm
<b>Tread width (front/rear)</b>	240mm / 270mm
<b>Side wall height (front/rear)</b>	98mm / 122mm (i.e. 40 percent of tread width)
<b>Rim diameter</b>	18 inches
<b>Weight (front/rear)</b>	8kg / 9.9kg
<b>Type of tread pattern</b>	Asymmetric, non-directional
<b>Usage</b>	Circuits, street circuits, asphalt, concrete, wet or dry weather
<b>Number of tyres taken to each race</b>	176 (22 cars x 8 tyres)
<b>Weight saving (compared with the MICHELIN Pilot Sport EV)</b>	Front: 2kg Rear: 2.5kg





# MICHELIN PILOT SPORT

THE REVOLUTIONARY NEW  
MICHELIN PILOT SPORT:  
LIGHTER AND MORE ENERGY-  
EFFICIENT THAN EVER

## A REVOLUTIONARY RACING TYRE, IN MORE WAYS THAN ONE!

Developed specifically for the world's first all-electric single-seater motor racing championship, the new MICHELIN Pilot Sport is an exceptionally versatile tyre that was designed by Michelin Motorsport's engineers to cover the entire race day (free practice, qualifying, race), whatever the weather, as required by the technical regulations that govern the series.

Another exceptional characteristic of the tyre is its size. The MICHELIN Pilot Sport was effectively the first ever single-seater tyre to feature an interior diameter of 18 inches, a disruptive concept put forward by Michelin Motorsport and approved by the FIA (Fédération Internationale Automobile). The fact that 18-inch wheels have become a common

feature of road cars enables Michelin Motorsport's engineers and chemists to carry over the lessons they learn on the racetrack to everyday tyres, in keeping with the firm's 'track to street' policy.

The MICHELIN Pilot Sport (front: 245/40 R 18 / rear: 305/40 R 18) is tall and narrow in the interests of energy efficiency, which equates to longer range. Its low sidewalls also flex less, resulting in the generation of less heat, which in turn means reduced energy consumption, a valuable benefit for Formula E's latest-generation 'Gen2' Spark SRT 05Es.

The MICHELIN Pilot Sport is a connected tyre, too, thanks to an embedded RFID chip which facilitates tracking, from production through to recycling.



## MICHELIN PILOT SPORT: THE WINNING TYRE RANGE



### FRONT

#### Size

24/64-18 equivalent to 245/40R18

#### Side wall height

40% - 98mm



### Usage

Wet or dry weather

### Type of tread pattern

Asymmetric, non-directional

### Rim diameter

18 inches



### REAR

#### Size

27/68-18 equivalent to 305/40R18

#### Side wall height

40% - 122mm



# ENTRY LIST

## 2019 NEW YORK CITY E-PRIX

### ENVISION VIRGIN RACING AUDI E-TRON FE05



#### N°2 SAM BIRD (GBR)

Victory: 8      Fastest race laps: 5  
Pole position: 5      Podium: 17



#### N°4 ROBIN FRIJNS (NLD)

Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 3

### PANASONIC JAGUAR RACING JAGUAR I – TYPE III



#### N°3 ALEX LYNN (GBR)

Victory: 0      Fastest race laps: 0  
Pole position: 1      Podium: 0



#### N°20 MITCH EVANS (NZL)

Victory: 1      Fastest race laps: 1  
Pole position: 1      Podium: 3

### HWA RACELAB VENTURI VFE05

ROOKIE



#### N°5 STOFFEL VANDORNE (BEL)

Victory: 0      Fastest race laps: 0  
Pole position: 1      Podium: 1

ROOKIE



#### N°17 GARY PAFFETT (GBR)

Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 0

### GEOX DRAGON PENSKE EV-3



#### N°6 MAX GÜNTHER (DEU)

Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 0



#### N°7 JOSE-MARIA LÓPEZ (ARG)

Victory: 0      Fastest race laps: 1  
Pole position: 0      Podium: 2

### NIO FORMULA E TEAM NIO SPORT 004



#### N°8 TOM DILLMANN (FRA)

Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 0



#### N°16 OLIVER TURVEY (GBR)

Victoires : 0      Fastest race laps: 0  
Pole position: 1      Podium: 1

### VENTURI FORMULA E TEAM VENTURI FVE05

ROOKIE



#### N°19 FELIPE MASSA (BRA)

Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 1



#### N°48 EDOARDO MORTARA (CHE)

Victory: 1      Fastest race laps: 0  
Pole position: 0      Podium: 3

### NISSAN E.DAMS NISSAN IM01



#### N°22 OLIVER ROWLAND (GBR)

Victory: 0      Fastest race laps: 0  
Pole position: 3      Podium: 2



#### N°23 SÉBASTIEN BUEMI (CHE)

Victory: 12      Fastest race laps: 9  
Pole position: 13      Podium: 23

### DS TECHEETAH DS E-TENSE FE19



#### N°25 JEAN-ERIC VERGNE (FRA)

Victory: 8      Fastest race laps: 3  
Pole position: 9      Podium: 20



#### N°36 ANDRÉ LOTTERER (DEU)

Victory: 0      Fastest race laps: 3  
Pole position: 1      Podium: 3

### BMW I ANDRETTI MOTORSPORT BMW IFE.18

ROOKIE



#### N°27 ALEXANDER SIMS (GBR)

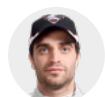
Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 0



#### N°28 ANTONIO FELIX DA COSTA (PRT)

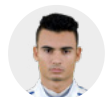
Victory: 2      Fastest race laps: 1  
Pole position: 1      Podium: 4

### MAHINDRA RACING MAHINDRA M5ELECTRO



#### N°64 JÉRÔME D'AMBROSIO (BEL)

Victory: 3      Fastest race laps: 1  
Pole position: 2      Podium: 9

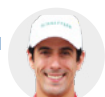


ROOKIE

#### N°94 PASCAL WEHRLEIN (DEU)

Victory: 0      Fastest race laps: 2  
Pole position: 0      Podium: 1

### AUDI SPORT ABT SCHAEFFLER FORMULA E TEAM AUDI E-TRON FE05



#### N°11 LUCAS DI GRASSI (BRA)

Victory: 10      Fastest race laps: 5  
Pole position: 3      Podium: 30



#### N°66 DANIEL ABT (DEU)

Victoire : 2      Fastest race laps: 6  
Pole position: 2      Podium: 9







# FIA FORMULA E

## DRIVERS STANDINGS

															TOTAL
		SAU 15/12	MAR 12/01	CHL 26/01	MEX 16/02	HKG 10/03	CHN 23/03	ITA 13/04	FRA 27/04	MCO 11/05	DEU 25/05	CHE 22/06	USA 13/07	USA 14/07	
1	● <b>25 J.E. VERGNE (FRA)</b> DS TECHEETAH FORMULA E TEAM	18	10	0	0	0	26	0	8	25	15	28	-	-	130
2	● <b>11 L. DI GRASSI (BRA)</b> AUDI SPORT ABT SCHAEFFLER	2	7	0	25	18	0	6	12	0	26	2	-	-	98
3	▲ <b>20 M. EVANS (GBR)</b> PANASONIC JAGUAR RACING	12	2	8	6	6	2	25	0	8	0	18	-	-	87
4	▼ <b>36 A. LOTTERER (DEU)</b> DS TECHEETAH FORMULA E TEAM	11	8	0	10	0	12	21	18	6	0	0	-	-	86
5	▼ <b>28 A. DA COSTA (PRT)</b> BMW I ANDRETTI MOTORSPORT	28	0	0	18	1	15	2	6	0	12	0	-	-	82
6	▼ <b>4 R. FRIJNS (NLD)</b> ENVISION VIRGIN RACING	0	18	10	0	15	0	12	26	0	0	0	-	-	81
7	▲ <b>23 S. BUEMI (CHE)</b> NISSAN E.DAMS	8	4	3	0	0	4	11	0	10	21	15	-	-	76
8	▼ <b>66 D. ABT (DEU)</b> AUDI SPORT ABT SCHAEFFLER	4	1	16	1	12	10	0	15	0	8	8	-	-	75
9	▲ <b>2 S. BIRD (GBR)</b> ENVISION VIRGIN RACING	0	18	25	2	9	0	0	0	0	2	13	-	-	69
10	▼ <b>64 J. D'AMBROSIO (BEL)</b> MAHINDRA RACING	15	25	1	12	0	8	4	0	0	0	0	-	-	65
11	▼ <b>22 O. ROWLAND (GBR)</b> NISSAN E.DAMS	6	0	0	0	0	21	8	3	21	4	0	-	-	63
12	● <b>48 E. MORTARA (CHE)</b> VENTURI FORMULA E TEAM	0	0	12	15	25	0	0	0	0	0	0	-	-	52
13	● <b>94 P. WEHRLEIN (DEU)</b> MAHINDRA RACING	-	0	18	12	0	6	1	1	13	1	0	-	-	52
14	● <b>19 F. MASSA (BRA)</b> VENTURI FORMULA E TEAM	0	0	0	4	10	1	0	2	15	0	4	-	-	36
15	● <b>5 S. VANDOORNE (BEL)</b> HWA RACELAB	0	0	0	0	3	0	15	0	2	10	1	-	-	31
16	● <b>27 A. SIMS (GBR)</b> BMW I ANDRETTI MOTORSPORT	0	12	6	0	0	0	0	0	0	6	0	-	-	24
17	● <b>6 M. GÜNTHER (DEU)</b> GEOX DRAGON	0	0	0	-	-	-	0	10	0	0	10	-	-	20
18	▲ <b>3 A. LYNN (GBR)</b> PANASONIC JAGUAR RACING	-	-	-	-	-	-	0	0	4	0	6	-	-	10
19	▼ <b>17 G. PAFFETT (GBR)</b> HWA RACELAB	0	0	0	0	4	0	0	4	0	0	-	-	-	8
20	▼ <b>16 O. TURVEY (GBR)</b> NIO FORMULA E TEAM	0	0	4	0	2	0	0	0	0	0	-	-	-	6
21	● <b>7 J.M. LÓPEZ (ARG)</b> GEOX DRAGON	0	0	2	0	0	0	0	0	1	0	0	-	-	3
22	● <b>3 N. PIQUET JR. (BRA)</b> PANASONIC JAGUAR RACING	1	0	0	0	0	0	-	-	-	0	0	-	-	1
23	● <b>8 T. DILLMANN (FRA)</b> NIO FORMULA E TEAM	0	0	0	0	0	0	0	0	0	0	0	-	-	0
24	● <b>6 F. NASR (BRA)</b> GEOX DRAGON	-	-	-	0	0	0	-	-	-	-	-	-	-	0
25	● <b>94 F. ROSENQVIST (SWE)</b> MAHINDRA RACING	0	-	-	-	-	-	-	-	-	-	-	-	-	0

# FIA FORMULA E

## TEAMS STANDINGS

		 SAU 15/12	 MAR 12/01	 CHL 26/01	 MEX 16/02	 HKG 10/03	 CHN 23/03	 ITA 13/04	 FRA 27/04	 MCO 11/05	 DEU 25/05	 CHE 22/06	 USA 13/07	 USA 14/07	TOTAL
1	● DS TECHEETAH FORMULA E TEAM (CHN)	29	18	0	10	0	38	21	26	31	15	28	-	-	216
2	● AUDI SPORT ABT SCHAEFFLER (DEU)	6	8	16	26	30	10	6	27	0	34	10	-	-	173
3	● ENVISION VIRGIN RACING (GBR)	0	36	35	2	24	0	12	26	0	2	13	-	-	150
4	● NISSAN E.DAMS (JPN)	14	4	3	0	0	25	19	3	31	25	15	-	-	139
5	● MAHINDRA RACING (IND)	15	25	19	24	0	14	5	1	13	1	0	-	-	117
6	● BMW I ANDRETTI MOTORSPORT (USA)	28	12	6	18	1	15	2	6	0	18	0	-	-	106
7	▲ PANASONIC JAGUAR RACING (GBR)	13	2	8	6	6	2	25	0	12	0	24	-	-	98
8	▼ VENTURI FORMULA E TEAM (MCO)	0	0	12	19	35	1	0	2	15	0	4	-	-	88
9	● HWA RACELAB (DEU)	0	0	0	0	7	0	15	4	2	10	1	-	-	39
10	● GEOX DRAGON (USA)	0	0	2	0	0	0	0	10	1	0	10	-	-	23
11	● NIO FORMULA E TEAM (GBR)	0	0	4	0	2	0	0	0	0	0	0	-	-	6

# REGULATIONS

## 2018/2019 ABB FIA FORMULA E CHAMPIONSHIP

### CARS (SINGLE-SEATERS)

- » **Spark STR-05e / chassis:** Dallara / battery: McLaren Applied Technologies
- » **Maximum length:** 5,200mm,
- » **Maximum width:** 1,800mm,
- » **Maximum height:** 1,250mm
- » **Minimum weight:** 900kg, including driver and battery/capacitor (385kg)
- » **Maximum power, electric powertrain:** 250kW (335hp) for free practice and qualifying, 200kW (270hp) during races.
- » 2 MGUs can be used
- » **Allocation per race number:** 2 electric motors, 2 gearboxes, 2 inverters and 1 battery pack for the season

### TYRES

- » A single type of tyre (pattern and construction)
- » No mid-race tyre changes
- » 4 new front tyres and 4 new rear tyres per driver per event
- » Can be inflated using air only
- » Minimum tyre pressure: 1.3 & 1.6 bar (measured at the end of races)
- » Tyre warmers not authorised

### EVENT FORMATS

- » A **Shakedown** session of a maximum duration of 30 minutes may be organised the day before the race. Power is restricted to 110kW. A maximum of six laps per car
- » **Practice:** Two practice sessions (45 and 30 minutes) in the course of the morning of Race Day. Maximum power: 250kW
- » **Qualifying:** The drivers are divided into four

groups as a function of their championship positions (or of the previous championship order in the case of the season's first race). Each driver has six minutes and up to two flying laps to post a qualifying time. The six fastest drivers go on to take part in the Super Pole shootout. Maximum power: 250kW

- » **Super Pole:** Start order is based on the times posted in qualifying, with the 'slowest driver' to lap first, etc. One flying lap only
- » **Grid:** The six places at the front of the grid are reserved for the drivers who take part in the Super Pole session
- » **Race:** Standing start. Maximum duration: 45 minutes + 1 lap. Use of two power outputs mandatory: Normal Mode (200kW / regeneration: 250kW) and Attack Mode (225 kW / regeneration: 250kW) which must be activated twice per race, for a period of four minutes. The car's halo head protection device lights up (Blue) when the Attack Mode is activated
- » **Attack Mode:** For the 2018/2019 season, drivers have two power options during the race: Normal Mode (200kW) and Attack Mode (225kW). Attack Mode must be activated twice per race. To trigger it, the driver must run off the ideal racing line through the corner specified for this purpose by the race organiser, a little like in Mario Kart. Attack Mode is activated for four minutes. The car's halo head protection device lights up when it is activated
- » **FanBoost:** A temporary 100kJ power boost (240kW-250kW) for five drivers chosen by a fan vote. To be activated once when in Attack Mode. The car's halo head protection device lights up (Magenta)



### POINTS-SCORING SYSTEM RACE

1<sup>st</sup>: 25 points / 2<sup>nd</sup>: 18 points / 3<sup>rd</sup>: 15 points  
 4<sup>th</sup>: 12 points / 5<sup>th</sup>: 10 points / 6<sup>th</sup>: 8 points  
 7<sup>th</sup>: 6 points / 8<sup>th</sup>: 4 points / 9<sup>th</sup>: 2 points  
 10<sup>th</sup>: 1 point  
**POLE POSITION** 3 points  
**FASTEST RACE LAP** 1 point  
 (if a top-10 finisher)

