

ABB FIA FORMULA E CHAMPIONSHIP



SEASON FOUR SUSTAINABILITY REPORT 2019





INTRODUCTION





At the ABB FIA Formula E Championship, we have integrated a strong mind-set focussed on sustainability as we aspire to accelerate change towards an electric future - one race and one city at a time.

Through the electric street racing series, we aim to raise awareness and inspire change in sustainable practices, contributing to reducing global emissions and our impact on the environment.

To help achieve our vision of sustainable mobility, we challenge conventional thinking and focus by breaking down the barriers to the electric vehicle market through:

- Promoting the adoption of electric vehicles (EVs)
- Driving technological innovation
- Stimulating sustainable infrastructure

In season four, we reached over 500 million people with the electric mobility message through our race communications, raising awareness on the appeal of electric vehicles. Over 200,000 people in season four had the opportunity to experience the thrill of electric vehicles, with many getting the chance to test drive them in the Allianz E-Village.

Through our Smart Cities initiative, we hosted seven international conferences on smart mobility and innovation involving global experts, NGOs and business leaders. Working with partners such as Michelin, we have been able to showcase the latest technologies such as hybrid tyres that last the whole race and can be recycled afterwards.

With each race we are reinventing motorsport, combining purpose with passion in the world's first fully-electric international single-seater racing series. Join us in the race to improve air quality in city centres and fight climate change!

**“ AT THE HEART OF THE
FORMULA E PHILOSOPHY IS TO
ACT AS A LABORATORY TO DEVELOP
CLEAN TECHNOLOGY FOR ALL ”**

Alejandro Agag
Founder & Chief Executive Officer,
Formula E Operations Ltd



WHAT DOES THE "E" STAND FOR?



The questions people used to ask me most - other than 'why' and 'are you bonkers?' - was naturally 'what is it - what is Formula E?' and 'what does the 'E' stand for?'

With the exponential growth we've seen over the past 12-months, I'm hoping a few more people know the answer... but that doesn't stop me getting asked though.

You can make up your own mind about the 'E'. To most it's electric - to others it's entertainment, energy, education or even environment. Formula E stands for all those things.

We've still got a job to do in order to create mass awareness and make Formula E mainstream. However, now we are into our fifth season and a milestone moment for the series - we have a product that is a true representation of our brand and gives Formula E its unique identity. The Gen2 car.

Alejandro Agag

Founder & Chief Executive Officer,
Formula E Operations Ltd

We needed a look and feel that visually showed our ambition and purpose - taking Formula E to the next level. The Gen 2 car demonstrates a clear step-up in performance with almost double the energy storage capacity and higher performance and speeds.

After another season of successes - which culminated in Formula E being awarded prestigious third-party ISO 20121 certification - we are being recognised for leading the way in sustainable event management. But there is always more that can be done.

The ABB FIA Formula E Championship is quickly earning its place alongside the most recognisable sporting properties. Together with the FIA, ABB - our title partner - and the current roster of teams and partners, we're ready to usher in a new era of electric racing.

INTEGRATING SUSTAINABILITY ACROSS OUR OPERATIONS



ENERGY

Our cars are fully powered by Formula E glycerine fuel generators

A revolutionary 100% renewable glycerine fuel



TYRES

Our bespoke tyres are hybrids

Designed by Michelin to be suitable for all weather conditions, they last the entire race and are all recycled at the end of the day



TRACKS

We are the city street racing series

We race on temporary tracks in the hearts of some of the world's leading cities



SPECTATORS

We bring the race to our fans in city centres

We encourage fans to use public transport and support electric vehicle sharing



RACE CALENDAR

Our calendar has been designed with a cluster approach

Our calendar is designed in a region by region approach to help us use sea and road freight instead of air freight, thanks to our Official Logistics Partner DHL



Improving the air quality of the cities in which we race remains a priority. We are driven to do more each season to promote and support the research, development and promotion of electric vehicles, both on and off the race track.

In season four, we strengthened our partnership with the United Nations Environment Programme (UNEP) to advance our shared interest in improving air quality to protect both the environment and human health.

With cities disproportionately contributing to air pollution levels, making up 75% of global emissions, we were able to help UNEP by racing and showcasing sustainable mobility in the heart of some of the world's most iconic cities across five different continents.

UNEP joined us in the Allianz E-Village for two races in season four, promoting their #BreatheLife campaign at both the Paris and New York City E-Prix. We were also thrilled when they awarded champion-level honors to Brazilian Formula E driver Lucas di Grassi, officially naming di Grassi as their Global Ambassador for Clean Air at the Paris E-Prix in April last year.

Together, we are raising awareness for a cleaner future and look forward to growing our partnership during season five.

"We face big challenges ahead of us - climate change, inner-city pollution and producing energy in a sustainable way all around the world. That's why we've teamed up with UN Environment to accelerate the education process. Formula E and the FIA aim to make the switch to electric cars make sense for consumers - more efficient and more affordable."

*Alejandro Agag,
Founder & CEO of Formula E*

"What is so great about having Lucas on board is that he's a champion in more ways than one. He's a champion in Formula E but also a champion in terms of his promotion of the environment and air quality. We're working with Formula E because we want to promote sustainable mobility to improve the lives of people all around the world."

Tim Kasten, Deputy Director, Economy Division, UN Environment

[Watch the video of Lucas Di Grassi](#)





Season four: 12 races, 10 countries, 5 continents

In season four, we solidified our place as the champion of sustainability in motorsports, pushing what is possible for electric vehicles on the track and on the roads that connect us around the globe. By putting the right foundations in place, we are laying down the tracks toward a cleaner future. In season four, we spent the needed time to put in place a clear sustainability governance structure and strategy, ensuring regular audits to better track our progress and set more appropriate future sustainability targets.

Our big sustainability achievements from season four:



We achieved ISO20121 certification. This showcases our commitment to sustainability, placing us in the company of other world class sporting events.



We renewed our FIA Three-Star Accreditation with the FIA Environmental Certification Framework. We continue to use the excellent tools and support offered by FIA's sustainability body to pave the way.



We aligned with the Sustainable Development Goals, clarifying our contribution to society.

Our work clearly contributes to 7 of the SDGs, thanks to our promotion of electric vehicles, partnerships to fight climate change and support of technological advancements.

And we can't forget the stars of the show – our teams and drivers! Season four drivers' champion was TECHEETAH's Jean-Eric Vergne and the teams title went to Audi Sport ABT Schaeffler.

[See all the award winners here](#)

SEASON FOUR RACEMAP



SEASON FOUR TEAMS AND DRIVERS

Furthering their commitment to responsible racing, DS Virgin announced this season that the team intends to have its core operations certified as carbon neutral, in partnership with the Carbon Trust. DS Virgin Racing hosted an Innovation Summit at the inaugural New York City E-Prix, which saw panellists such as Sir Richard Branson addressing the issue of climate change.

**Sam Bird,
Alex Lynn**



Racing Director Leo Thomas was chosen as the winner of the inaugural Modis Engineer of the Year award, which recognizes an imperative team member who supports the electric revolution more than anyone else in the paddock. Driver Jean-Eric Vergne helped raise awareness about endangered species when he raced against a cheetah.

**Jean-Eric Vergne,
Andre Lotterer**



Team member Lucas di Grassi proved to be a champion on and off the track, named UNEP's Global Ambassador for Clean Air and continuing his work with with Roborace, putting his and teammate Daniel Abt's track record of success to work developing the world's first driverless racing car.

**Lucas Di Grassi,
Daniel Abt**



Venturi team have displayed the logo of Prince Albert II of Monaco Foundation on their car livery to show their support for the official charity of their native city

**Maro Engel,
Tom Dillmann**



Drivers Seb and Nico visited terminally ill children in Paris to support the work of our local charity partner: Association Du Sport et Plus.

**Ma Qing Hua, Lucas Filippi,
Oliver Turvey**

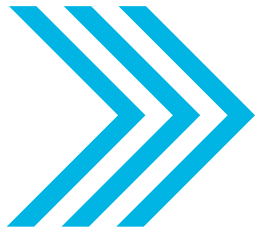


MS & AD Andretti driver Antonio Felix Da Costa is a keen surfer in his personal life and cares very much about plastic pollution.

**Stephane Sarrazin,
Antonio Felix Da Costa**



SEASON FOUR TEAMS AND DRIVERS



Alongside two victories on the track during season four, drivers Felix Rosenqvist and Nick Heidfeld helped champion Mahindra's goals as an electric car manufacturer to further develop its electric road car technology.

**Felix Rosenqvist,
Nick Heidfeld**

Mahindra
RACING
F O R M U L A - E T E A M

Driver Oliver Turvey supported a London air quality activity for teenage school children.

**Ma Qing Hua, Lucas Filippi,
Oliver Turvey**

NIO
Formula E Team

Drivers Nelson Piquet Jr. and Mitch Evans from Panasonic Jaguar Racing made a sustainable splash this season, winning extra FanBoost votes for season four's Uruguay series by taking part in a surfing contest that used unique surfboards made from recycled Jaguar model car materials.

**Drivers Nelson Piquet Jr.
Mitch Evans**

Panasonic
JAGUAR
RACING

Driver Jerome D'Ambrosio visited injured soldiers in Paris to show his support.

**Jerome D'Ambrosio,
Jose Maria Lopez**

DRAGON





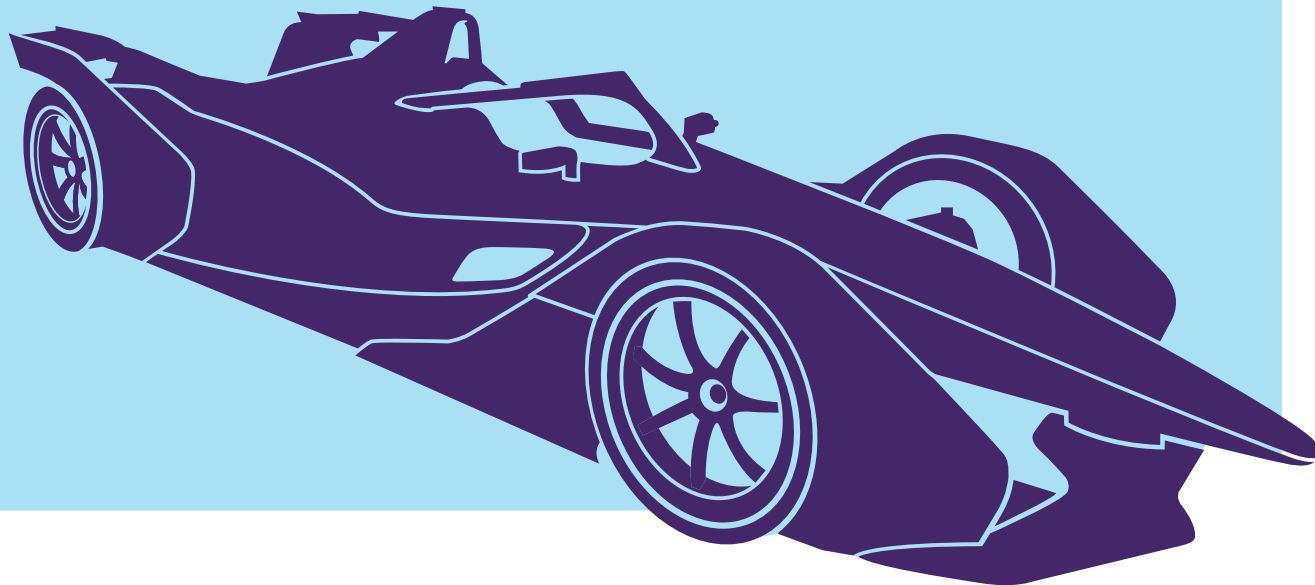
SUSTAINABILITY APPROACH

MEASURING AND MONITORING OUR IMPACT

COLLABORATING WITH OUR SUPPLY CHAIN PARTNERS

ENGAGING WITH OUR LOCAL COMMUNITIES

CARING FOR OUR PEOPLE



At Formula E, we have a holistic approach to sustainability that is fully embedded in the business. Aligned with the ISO20121 standards, our framework focusses on the following three areas:

1 Measuring and monitoring our impact

2 Collaborating with our supply chain partners

3 Engaging with our local communities

4 Caring for our people

In this report we have also added a section to show how we are caring for people, emphasising how important it is to value, challenge and reward our people whilst maintaining a diverse and inclusive working environment where each individual is recognised.



Good governance is a pre-requisite for achieving sustainability objectives. It provides the structure that enables organisations to understand and address their sustainability challenges and opportunities, while ensuring the right teams are in place to make visible progress.

Ultimately, the senior management team are the primary decision-making body of Formula E. The HR Director leads sustainability, with a dedicated sustainability department driving the program throughout the organization.

The sustainability department is in charge of developing, coordinating and implementing ISO20121 and the sustainability strategy, and is supported by four working groups comprised of representatives from several departments.

This department is supported by four core implementation teams, comprised of representatives from several departments.

These implementation teams are divided into three groups under the umbrella of ISO20121:

- Community engagement
- Waste reduction
- Supply chain

The sustainability department also partners with specialist external consultants to obtain needed information, advice and feedback on the implementation of the sustainability strategy.

"Overseeing both HR and Sustainability has allowed me to ensure that sustainable values are embedded into both the company culture and employee experience here at Formula E. With sustainability at the DNA of our organisation, I am so proud to lead a team of high-performing sustainability professionals to deliver our strategy and create real value for the business."

Helene Speight, HR Director



ISO20121 is the international standard of sustainability for events. Formula E is the first ever motorsport championship to receive this prestigious certification, placing us alongside other world-class sporting events that have also received certification, including the Roland Garros French Open, the 2016 Olympics in Rio de Janeiro and the 2016 UEFA European Championship in France.

ISO20121 offers holistic guidance and best practise parameters to help us manage our social, economic and environmental impacts. The certification, granted through a third-party audit process, reinforces our commitment to leading the way in sustainable events and entertainment through electric-powered street racing.

With the ISO20121 certification, we will enhance our reputation and strengthen relationships with our partners and suppliers. It will also help us achieve cost savings with respect to material consumption, waste and energy, and reduce emissions across our event supply chain, strengthening our position in the field of motorsports.

To ensure our certification remains valid, we have committed to undergoing annual surveillance audits. In season four, one race was audited onsite and one on paper. We will use the same objectives looking ahead to season five but the audits will increase to one onsite and two on paper.

THREE OBJECTIVES: KEEP US ON TRACK FOR ISO20121



Annual monitoring keeps us competitive and committed to challenging “business as usual” in order to meet our ISO20121 targets.

Three specific objectives help keep us on track:

1 Measuring and monitoring our impacts:

Our environmental reporting for season four increased in scope to include factors like donations made per race and the number of charity partners with which we work. For season five, we hope to expand the scope even further to include economic reporting. We will also include cars and batteries in our annual life cycle assessment.

2 Collaborating with our supply chain partners:

We're committed to working together with our suppliers to strengthen relationships while sharing a common goal to be more sustainable. Through constant innovation and testing, we maintain our competitive edge without compromising production or race quality. We are looking to continually improve practices at each step in the supply chain and work with suppliers to identify new sustainable solutions. For example, we're exploring recyclable alternatives for the PVC material we use for track branding after testing new options at several season four races.

3 Engaging with our local communities:

We engage with our local communities and involve them in the race build-up to ensure they are fully supportive of our event. We create a positive legacy in race cities by actively engaging with local charity partners to make amazing race day experiences a reality for a diverse array of community members.

“ A SPECTACLE THAT
WANTS TO GIVE A GLIMPSE INTO
THE FUTURE OF RACING ”

GQ Germany





In season four, we renewed our [FIA three-star accreditation](#) aligned with the FIA Environmental Certification Framework. We are the first championship to be awarded this accreditation, originally awarded in season three. Building on our origins, we continue to use the excellent tools and support offered by FIA's sustainability body to pave the way.

We monitor and report on the following items:

- Carbon management
- Energy use
- Environmental performance
- Key environmental impacts (e.g. LCA)
- Communication and management commitments



The environmental accreditation auditor summary report stated:

"Formula E Holdings demonstrate through their application for FIA Environmental Accreditation (21.05.2018) that they have a long and solid experience within Environmental Management.

Formula E have recently achieved ISO certification according to the ISO 20121:2012 management standard, and the certificate is valid until 05.07.2021. Furthermore, the Formula E management team impressed the FIA auditor through the implemented Life Cycle Assessment of the Series, and also the level of developed routines, procedures and monitoring that demonstrate their performance.

This shows a solid environmental commitment over time, and it is clear that Formula E lead the way for environmental commitment within the promoters of FIA Championships. The onsite audit evidenced that all areas are well documented and covered by the already implemented ISO requirements."



THE CLIMATE GROUP

Electric vehicles only reach their full full benefits when powered by 100% renewable energy. We are a proud ambassador of the EV100 programme and partner of the RE100 programme. Both roles signal our commitment to accelerating the transition to electric vehicles and 100% renewable energy in collaboration with The Climate Group. Even looking to our own operations, we currently power our headquarters and car batteries with renewable electricity and we have a long-term ambition to power our events with 100% renewable energy by 2020.

RE100 is a global initiative by The Climate Group, in partnership with CDP, to support influential companies working towards 100% renewable energy targets. According to The Climate Group,

“Businesses are already taking bold and ambitious action to help create the transformative change we need to drive the clean energy revolution. One of the ways they are doing this is by switching to renewable power.”

The EV100 is a global initiative that encourages businesses and governments to make bold commitments to scaling up electric vehicle use. The objective is to *“make electric transport the new norm by 2030.”*

This is also a key objective of Formula E and therefore a natural fit with the work of The Climate Group. These commitments align with our shared goal to accelerate climate action at a global level.

“Electrification is the future and it’s here to stay. We all need to work together to create a sustainable future and our contribution is to excel the electrification of the automotive and motorsport industry.”




Mark Preston, DS TECHEETAH
Team Principal

“It is time to talk about the endgame for the combustion engine and speed up the move from vehicles whose emissions pose health risks and a growing contribution to climate change. We want automotive companies to do more to help us get there.”

Helen Clarkson, CEO, The Climate Group, said at an event in New York against the backdrop of a Generation 2 electric Formula-E racing car.

ALIGNING WITH THE UN SUSTAINABLE DEVELOPMENT GOALS

Efforts to address the United Nations' Sustainable Development Goals (SDGs) cut across every area of our business practise. Each season, our global championship works in alignment with the global goals. We have identified 7 specific goals where our work makes a clear contribution and aligns with the targets outlined by the United Nations (UN).

UN SDG	FE CONTRIBUTION	TARGET ALIGNMENT
 <p>3 GOOD HEALTH AND WELL-BEING</p>	By promoting electric vehicles and shared mobility, we help drive improved air quality in urban areas.	3.9 Substantially reduce the number of deaths and illnesses from air pollution and contamination.
 <p>7 AFFORDABLE AND CLEAN ENERGY</p>	We are working to shift to and promote renewable energy and improve energy efficiency in electric vehicles.	7.2 Increase the share of renewable energy in the global energy mix. 7.3 Double the global rate of improvement in energy efficiency.
 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	As a test-bed for electric vehicles, we are driving innovation and influencing the development of infrastructure to support electric vehicles.	9.4 Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency. 9.5 Upgrade technological capabilities of industrial sectors, encouraging innovation.

ALIGNING WITH THE UN SUSTAINABLE DEVELOPMENT GOALS

11 SUSTAINABLE CITIES AND COMMUNITIES



Our work promotes shared, connected, clean and electric mobility, key elements of sustainable cities.

11.2 Provide access to safe, affordable, accessible and sustainable transport systems for all.

11.6 Reduce the adverse per capita environmental impact of cities, paying special attention to air quality.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



We are committed to responsible procurement, promoting waste reduction by recycling and reuse of materials, and raising awareness about sustainable choices.

12.5 Substantially reduce waste generation through prevention, reduction, recycling and reuse.

12.8 Ensure people have relevant information and awareness for sustainable development and lifestyles.

13 CLIMATE ACTION



We are dedicated to promoting the transition to clean, electric mobility which will greatly reduce the climate impact of the transportation sector.

13.3 Improve education, awareness-raising and human and institutional. Capacity on climate change mitigation, adaptation, impact reduction.

17 PARTNERSHIPS FOR THE GOALS



We partner with many global and local institutions, NGOs, and communities on our shared goal to accelerate climate action and promote electric vehicles.

17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries.

17.16 Support achievement of the sdgs with multi-stakeholder partnerships. That share knowledge, expertise, technology and financial resources.

MEASURING AND MONITORING OUR IMPACT



HEADQUARTERS: STARTING FROM THE INSIDE-OUT



Sustainable office materials

The carpets come from EGE Carpets Ecotrust collection which has felt backings produced from recycled water bottles and yarns produced from used fishing nets. The material used for our booths comes from Camira Fabrics, who use natural bast fibre fabrics made from harvested nettles, hemp and recycled jute from coffee sacks.

Renewable energy

The series is serious about our commitment to renewable energy – both at home and while at the races. The London headquarters are currently powered by 99% renewable energy. This compares to the average for the UK of 24%. The carbon emissions for the headquarters are 4.4 g/kWh (compared to UK average of 249.3 g/kWh carbon emissions).

Uniforms

At the end of season four we recycled all our uniforms, working with Shredall Group. They will be repurposed for use in other materials such as vehicle chair fillings. This enables us to give a second-life to the uniforms, ensuring they don't end up in a landfill.

Change donations

Collection of our leftover foreign currency after travels to races and donate it to a local charity in Hammersmith, The Daisy Trust, which provides grants to local causes working to improve the neighborhood. In season four alone we collected and donated over £280.

Fruit baskets

We receive weekly fruit baskets from an organization called Fruitful. For every basket delivered, a fruit tree is planted in Malawi, Africa. In season four, we contributed to the planting of over 300 trees in Malawi. We use approximately 33 baskets per month.

MEASURING OUR IMPACT: LIFE CYCLE ASSESSMENT

As part of our commitment to measuring and monitoring our impact, Formula E conducts a complete Life Cycle Assessment of the environmental impacts of each season. Life cycle thinking takes a holistic view of the production of an E-Prix and assesses its environmental

impacts across different areas, including the headquarters, travels and transport to and from events, and at the event itself. The assessment measures our carbon footprint as well as other impact areas including water footprint, impact on natural resources, ecosystems and human health.

We have carried these out since our inaugural season and thanks to lifecycle assessment, we can better understand where our biggest impacts lie and design smarter strategies to reduce our impacts over time.

CATEGORIES

FREIGHT



INFRASTRUCTURE
& OVERLAY



STAFF
TRAVELS



SPECTATOR
TRAVELS



ENERGY



FOOD AND
BEVERAGES



CARS &
BATTERIES



SCOPE



IMPACT AREAS

CARBON
FOOTPRINT



WATER
FOOTPRINT



ECOSYSTEMS
QUALITY



NATURAL
RESOURCES



HUMAN
HEALTH



MEASURING OUR IMPACT: LIFE CYCLE ASSESSMENT

SEASON 4

CARBON FOOTPRINT

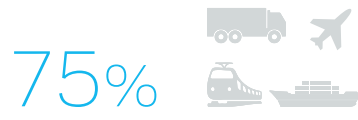
BY CATEGORY

At Formula E, we are committed to driving society forward towards a low carbon economy. To do our part, we monitor our own carbon footprint for each season.

Our season four carbon footprint was 32,000 t CO₂eq. The ABB FIA Formula E Championship has one of the lowest carbon footprints among international sporting events with a carbon footprint by spectator of just 124kg of CO₂eq, which is equivalent to driving 400 to 500km with a non-electric car.

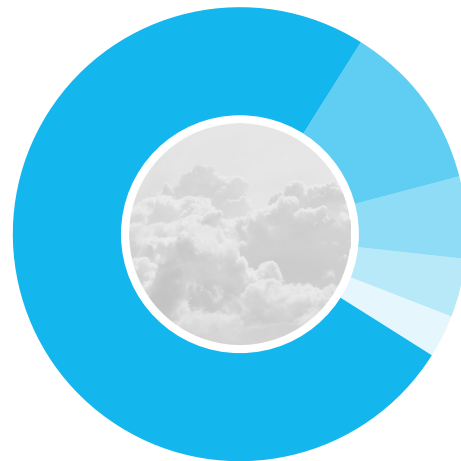
This is due to the absence of permanent infrastructure - a positive bi-product of racing in the heart of city centres - as well as the majority of spectators coming from local communities and taking public transportation.

Compared to other major sporting events, such as the World Cup, where the event infrastructure and spectator transportation can easily make up over half of the footprint, in Formula E these two categories are less than 10% of our carbon footprint.



FREIGHT

Shipping by air contributes the most to our carbon footprint. Optimising our race calendar is a continual improvement approach we are taking with DHL to help reduce this impact.



12%



BUSINESS TRAVELS

Air travel is a significant contributor to our footprint. We encourage train travel within Europe and only needed staff at races.

6%



SPECTATOR TRAVELS

Since we bring the race to the heart of cities, we maintain a low footprint from spectator travels.

4%



FOOD & BEVERAGES

While it is a small portion of our footprint, we can easily reduce the impact by serving lower carbon meals.

3%



EVENT

Including infrastructure and overlay and energy, this is the lowest impact area.

**“ IT'S COOL, IT'S SEXY, IT'S FAST!
CAR MAKERS ARE USING FORMULA E
TO CHANGE THE PERCEPTION
OF ZERO-EMISSION VEHICLES ”**

Daily Mail US



TRANSPORT AND TRAVELS: GETTING FROM RACE TO RACE



Freight Transport

We work closely with DHL, our long-term logistics partner, to optimize the freight map and reduce shipping distances wherever possible, helping us to save up to 15,000 t CO2eq each season. We also try to use sea freight over air transport whenever possible.

"As a Founding Partner and the global Logistics Partner, we are delighted to be able to help Formula E optimise the delivery of their events, transporting the Championship freight as efficiently as possible through our multi-modal logistics network. We share much more than just a successful business relationship - our common objective is to demonstrate the advantages of electric mobility in order to significantly improve air quality and thus quality of life in urban areas. At Deutsche Post DHL Group we set ourselves the goal of zero emissions related to our logistics operations by the year 2050. Innovative technologies such as those developed by Formula E and its partners will be important to achieve our mission."

Sabrina Kreienborg, Global Sponsorship Manager DHL Group

Business travels

Sustainable transport for staff is an important consideration for our Travel team:

- They will book staff onto trains instead of planes where possible

- Only key staff with responsibilities on-site travel to races

- Arranging group bookings to stay in the same hotel with shuttles organised to reduce journeys

- Race shuttles will also be electric or hybrid where possible

Spectator travels

Formula E is advertised as a no-parking event, and public transport is always advertised to the public for use. On average, 50% of fans take public/shared transport to arrive at our races. In Santiago, over 80% of spectators took public or shared transportation to the race.

EVENTS: MONITORING OUR IMPACTS BEYOND CARBON



Beyond our carbon footprint and climate impact, we regularly measure and monitor our impacts on other key environmental indicators, including waste, energy and water.

Waste

We have continued to carry out waste separation on site which is always aligned with the infrastructure and local laws of each of our race locations. For season four, we also trialled a number of pilot projects for waste reduction/awareness including:

- Donating leftover unprepared food in Paris through Linkee;
- Donating furniture from an entire Race Suite to a local production company in New York City.

Energy

As part of the RE100 programme, we are well on our way to becoming a 100% renewable event by 2020. The fuel we use to power our cars is 100% renewable and we use biodiesel or low-sulphur fuels where possible to minimise our emissions. Our HQ is also 99% renewable.

Water

In line with our waste reduction/awareness efforts, we are introducing Hydration Stations at our events and giving out reusable water pouches in our Allianz E-Villages.



As we are committed to reducing our environmental impact, it is very important for Formula E to reuse as much material as possible. One of the materials that we use around the races which cannot all be reused are the race branding materials, including wraps, banners and signage. We are working closely with our supplier, CSM Live, to find a solution and a more sustainable material that can be used, re-used when possible, and recycled at the end of life.

Here are some of the materials we use and the challenges we face when looking to shift to more sustainable options:

Concrete block vinyl: On average, 3,500 m² of self-adhesive vinyl are used at each race. The material chosen must be hi-tac, strong enough to stick to damp, damaged or dusty blocks, and as well easy and fast to remove without leaving a residue behind. The material currently used is PVC, which has a paper liner with a silicon treatment – neither the PVC or the liner may be recycled today. CSM Life is currently working with their primary manufacturer to find an alternative that is recyclable. Options may include Polyurethane or Polyolefin. To-date we have not found a suitable alternative but we continue working on this.

Bridge and gantries: This branding material is produced locally at each venue due to the complexity of the structure build and tight timelines before races. In season four, this material was changed from PVC to 100% polyester fabric. CSM Live is working on developing a re-usable tension bar to help us to reuse the material from one season to another in the same city.

As an interim solution to finding recyclable alternatives, and in line with our waste reduction/awareness efforts, we work with partners on projects to repurpose materials. In New York City, over 8,000m² of our branding was donated to Rewilder who will be repurposing it into grandstand shades for use in season five.

SUPPLY CHAIN COLLABORATION





Title Partner

As title partner of the ABB FIA Formula E Championship, ABB is pushing the boundaries of e-mobility to ensure a more sustainable future.

The strong focus on sustainable and ecological development was a decisive factor for ABB in entering the partnership. The Championship demonstrates the potential of e-mobility and perfectly supports ABB's commitment to running the world without consuming the earth.



Global Partner

Considering the impact of our actions today and lessening the effect on future generation is central to both organisations.

Julius Baer's next generation philosophy revolves around an exploration of the global megatrends set to affect our lives in years to come, one of which is the future of mobility. By partnering with Formula E, both organisations hope to encourage the move towards electric mobility as viable and sustainable alternatives to existing technologies in the field. Julius Baer is a signatory of the UN-supported Principles for Responsible Investment (PRI) and member of the Swiss Sustainable Finance Association.

Julius Bär

Technical Partner

Michelin: Rolling out Success, Race after Race. Michelin was the first company to commit as a partner to this exciting new discipline.

Since then, Michelin has been our trusted technical partner. This partnership has led to numerous technological breakthroughs, the most notable being the introduction of the MICHELIN Pilot Sport EV, the very first 18-inch single-seater tyre to feature in a world class FIA-endorsed series. These special tyres that can race in many conditions and last the entire race, greatly reducing our environmental impacts. By using just one type of hybrid (any weather, any pavement) tyre per season and only one set of tyres per race, we produce up to 6 times less tires than for other motorsport events, saving material, logistics needs and waste tyres.





modis

enel x



ALLIANZ: Future of Mobility Conference

In Berlin, Allianz and the Prince Albert II of Monaco Foundation held a conference that brought together a panel of industry leaders to discuss clean and independent mobility, air and eco-friendly mobility, as well as mobility for the general public.

www.allianz.com

MODIS: Formula E Innovation Manager Challenge

To promote careers in low-carbon technologies, specifically e-mobility and give young talent an opportunity to shine, Modis launched the Formula E Innovation Manager Challenge. This offered one young, talented innovator the opportunity of a lifetime: a 6-month assignment working alongside the Head of Technology of Formula E to design and test their online operations architecture. At the same time, it served to identify the next generation of new talent – self-starters, drivers of change, problem solvers, and great communicators, supporting them with access to career development opportunities. The challenge received nearly 2,000 talented and diverse applicants from 62 countries.

www.modis.com

ENEL: First zero-emission E-Prix

Alongside Enel, the emissions from the inaugural race in New York were offset making it the first ever zero-emission event in the championships history. The E-Prix was offset with green certificates from Enel's portfolio of renewable energy plants, including the Enel Green Power Stipa Nayaa 74 MW wind farm in Mexico. The wind turbines at Stipa Nayaa prevent the emission of over 133,000 tonnes of CO₂ per year, which is the equivalent of taking 26,000 cars off the road.

www.enel.com

DHL: Sustainable Shuttles

DHL, one of our founding partners and our official logistics partner, announced it aims to reduce all logistics-related emissions to net-zero by the year 2050. In New York City this season, DHL also offered free electric car rides to showcase their fleet of sustainable vehicles.

www.logistics.dhl

TAG HEUER

As the Official Time Keeper and Founding Partner of the championship, TAG Heuer has also developed sustainability programmes, that promote clean energy and the preservation of the environment in Switzerland, where the brand produces its watches.

www.tagheuer.com

OUR OFFICIAL PARTNERS



BMW i

As well as providing the fleet of hybrid and all-electric safety and official course cars, BMW i has also played a proactive role in the development of Formula E, fielding a full manufacturer works team in the form of BMW i Andretti Motorsport.

www.bmw-motorsport.com

HUGO BOSS

With a strong commitment to innovation and sustainability, the HUGO BOSS Group is one of the leading companies in the upper premium segment of the apparel market that focuses on the development and marketing of premium fashion and accessories for men and women.

group.hugoboss.com

QUALCOMM

Qualcomm Technologies, Inc. (QTI) is an Official Technology and Founding Partner. As a leader in wireless technology, QTI is supporting Formula E in their quest to incorporate exciting new and innovative technologies into the race series. Qualcomm Halo™ wireless electric vehicle charging systems are integrated into the Official Qualcomm Safety Cars. Enabling these key support vehicles to be charged wirelessly ensures they remain fully charged at all times, ready to be rapidly deployed in case of an emergency.

www.qualcomm.com

VISA

Our Official Payment Partner is committed to maximising its positive impact on society. By striving to reduce energy and water usage and increase waste diversion to landfills, Visa is lowering its environmental impact while increasing efficiencies. The company also has achieved environmental certification status of many of its offices and data centres, including ISO14001 certification for the company's environmental management system in Europe.

www.visaeurope.com

GH MUMM

Maison Mumm, our Official Champagne Partner, has been pushing the limits in the pursuit of victory through innovation in sport and adventure since 1904, when they supported Baptiste Charcot in his explorations of Antarctica. They have redesigned their Formula E champagne bottles to be lighter, easier to transport, and as a result are more fuel efficient with less environmental impact.

www.mumm.com





To meet our sustainability goals, we must effectively engage our supply chain at the local level.

To reduce our staff travel footprint, we rely on local partners and staff to ensure the races run smoothly.

Some of the key actions and recommendations we have given to suppliers include:

- Sustainable packaging and waste/plastics reduction: We are working to reduce the amount of single-use plastic at events by encouraging suppliers to use reusable or recyclable cutlery, no straws, and biodegradable/compostable packaging where possible. We always provide recycling bins at the races and ask suppliers to recycle as much as possible.

- Water fountains and reusable bottles/pouches: We strongly advise against using single-use plastic bottles and have started using hydration stations where people can fill up their reusable bottles reusable pouches. Starting in season five, we will be donating refillable water pouches at each of our events.

- Sustainable food: In an effort to reduce our carbon footprint and impact on the environment from food served at the races, we ask that food is sourced locally and in-season. If possible, it should be certified (organic, fair trade, etc.) and nutritious, with plenty of vegetarian options. We also seek to reduce food waste and support efforts to donate or give away any edible leftovers after the event. In order to help us better assess and measure our impacts, a food and beverage questionnaire must be filled in and returned a maximum of two weeks after the race.

Our sustainable development policy is linked into every contract, meaning each supplier is bound into adhering to this. They also have to complete a pre-qualification questionnaire which includes questions on their sustainability credentials.

For season five, we will continue our efforts to work in collaboration with our supply chain on our common sustainability goals.



ENGAGING WITH OUR LOCAL COMMUNITIES

WORKING WITH LOCAL COMMUNITIES AT EVENTS



Community engagement is key to spreading the Formula E message. We believe the best way to spread the word is by inspiring the next generation to join the electric revolution.

We work with local community groups, charities and schools to visit the event to learn first-hand about the excitement of electric vehicles, their role in a sustainable future of mobility and the impact of inner-city air pollution. We provide free access to the races in general so local communities can experience the thrill of the race through games and educational activities on electric vehicles. By creating unforgettable experiences, we are better able to connect with communities and more effectively spread our global sustainability message. We provide free access to the races in general to local communities.



In season four, we brought the thrills of race day to four cities, including:

Mexico City with Con Ganas de Vivir

For the 2018 Mexico City E-Prix, we collaborated with Con Ganas de Vivir, an organization that supports people living with cancer in Mexico. We invited 50 paediatric patients to join us for a unique race day experience with their families and friends, including special reserved suites to take in all the action.

Through our work at the event, we donated over £6,000 to the charity.

Paris with L'Association du Sport et Plus

At the 2018 Paris E-Prix, we invited a group of 12 adults and children to experience the electric buzz of Formula E. The NGO aims to enrich the daily lives of young children suffering from life-threatening illnesses in hospitals.

At the event, we raised over €26,000 to donate to charities.



New York City engaging with local communities

At the New York City E-Prix we explored a deeper level of community engagement, building on our season three partnerships to collaborate with multiple NGOs and schools. 125 guests were treated to a pit walk, garage experience, VIP interactions with drivers at our race simulators and a chance to watch the Shakedown from the grandstand. *Through our work at the event, in cumulative assets we donated over \$53,400 to charities.*

Berlin with Dare 2 Be Different

We invited a group of 100 girls from local schools, along with refugees that live at Tempelhof, for an activity day in partnership with Dare 2 Be Different. The girls enjoyed a variety of activities designed to introduce them to the world of sustainable motorsports and encourage more girls and young women to get behind the wheel.

Berlin with Berliner Krebsgesellschaft

We invited a group of 10 individuals from our local community partner, The Berlin Cancer Society, for a special race day experience during the BMW i Berlin E-Prix 2018. This was our second year supporting the NGO, which offers advice, information and extensive support to the 17,000 people diagnosed with cancer in Berlin every year and their relatives.

In Berlin, we spent a total of over €15,500 to donate to charities.



LEAVING A POSITIVE LEGACY IN OUR LOCAL COMMUNITIES



As part of our legacy, we ensure that we leave sites exactly as they are found, if not improved. Due to the nature of our race locations, on everyday urban streets, there is often the need to re-surface or fill in holes to ensure a safe track for the drivers. Each legacy project is unique to the city depending on their needs.

In Mexico City, we donated our box office revenue, a total of 1.2 million pesos collected from the 2018 Mexico City E-Prix, to be utilised to reconstruct their Olympic rowing track in Xochimilco. This area, which has a high environmental and cultural value, was one of the most affected areas following the tragic earthquake in September 2017.

Alvaro Buenaventura, Commercial Director of Formula E in Latin America: "With the Legacy Programme, we don't only want to leave the cities as we found them before the race, but it's our desire and responsibility to improve their conditions wherever that's needed."

LEAVING A POSITIVE LEGACY IN OUR LOCAL COMMUNITIES



Improving urban air quality: Paris case study

Formula E is committed to helping improve air quality in cities; as part of this objective, Formula E works with Pollutrack to measure urban air quality and monitor the effect of changes in vehicle usage.

Pollutrack is driving innovation in air quality measurement. Today, most urban air sensors measure only as small as PM10 (10 microns of particulate matter). However, we know smaller particulate matter is more dangerous to human health. Pollutrack is able to measure PM2.5 and smaller (1 to 2.5 microns of particulate matter) using small mobile sensors distributed on municipal vehicles that circulate throughout the city.

Pollutrack conducted an air quality assessment at the race venue in the 7th District of Paris around the Hôtel National des Invalides before, during and after the event. The findings were clear. Air pollution was reduced by two-thirds (as measured with PM2.5) on the site of the event from 10 days before to the event itself. This impressive reduction in air pollution is most likely due to the reduction in petrol/diesel-powered vehicle traffic on the site and the absence of parking for fans or hospitality guests and the fact FE EV are powered by renewables.

At Formula E, we believe changing to sustainable forms of transportation, such as shared public transport, bicycles and electric vehicles, would enable us to improve inner city air quality on a long-term basis.

"The citizens of Paris and cities around the world demand clean air to breathe," said Anne Hidalgo, Mayor of Paris & Chair of C40. "As mayors of the world's great cities, we are transforming the way that our citizens move around the city - prioritising walking, cycling, and clean public transport through initiatives like C40's Green & Healthy Streets Declaration. I urge car manufacturers to seize this opportunity and help us shape a sustainable future, by accelerating the shift to electric vehicles."





RAISING AWARENESS AND DRIVING A MORE SUSTAINABLE FUTURE



Formula E is proud to host the FIA Smart Cities Initiative to advance the development of more sustainable, safer and more connected cities, working towards a low-carbon economy with sustainable mobility.

The Smart Cities Forums bring together experts from different fields of sustainable mobility and seek to demonstrate how cities can grow in a more sustainable and inclusive way, making the best use of innovative technology. These forums call for effective policy-making as needed to achieve the vision for sustainable cities.

Formula E races provide a unique arena for the FIA Smart Cities Initiative, aligning with FIA's expertise in Mobility and Sport. **In season four, FIA Smart Cities included: Hong Kong, Santiago, Rome and Zurich.**

During the Smart Cities Initiative, we also hold an international entrepreneurship contest to identify, support and invest in the world's most high-impact technology companies. Technology themes addressed include autonomous driving, big data and artificial intelligence.



FOUNDATION PARTNERS HELP US DRIVE GREATER SOCIETAL CHANGE



THE CLIMATE GROUP

The Climate Group: Putting electro-mobility at the forefront of ambitious climate action.

In September 2017, we announced our partnership with The Climate Group whose work is at the forefront of ambitious climate action. The Climate Group's vision is a world of prosperous 'net-zero' emission economies and thriving, sustainable societies.

We are a proud global ambassador of the EV100 Initiative and partner of the RE100 Initiative. Both roles signal our commitment to coming together and accelerating the transition to electric vehicles and 100% renewable energy.

In season four, we had activations together with the Climate Group in New York which included an end of season gala and an EV summit.

At the Formula E season finale in New York City, a new Zero Emission Vehicle (ZEV) Challenge, led by The Climate Group and C40 Cities, was launched.

FOUNDATION PARTNERS HELP US DRIVE GREATER SOCIETAL CHANGE



Prince Albert II of Monaco Foundation: Fighting climate change by supporting the future of sustainable mobility.

With us from the start, the Prince Albert II of Monaco Foundation continues to fuel our sustainability efforts as a true foundation partner.

In June 2006, HSH Prince Albert II of Monaco decided to establish his Foundation to address our planet's alarming environmental situation. The Prince Albert II of Monaco Foundation is dedicated to the protection of the environment and the promotion of sustainable development on a global scale. The Foundation supports initiatives of public and private organizations, in the fields of research and studies, technological innovation and socially-aware practices.

Formula E gives the Foundation a platform to promote and accelerate sustainable transportation together with renewable energy use and promotion and work towards our shared goals.

This year's 2018 CBMM Niobium Rome E-Prix Presented By Mercedes EQ Gala Dinner raised €123,500 — enough to support an entire project for a year.

Also during season four, Prince Albert II spoke during the Smart Cities high level panel in Rome.



ABB
FIA FORM

BERLIN
2018



CARING FOR OUR PEOPLE



HEALTH AND SAFETY ARE A KEY PRIORITY AT FORMULA E



Formula E has worked tirelessly to develop a company specific health and safety (HSE) management system.

The premise of the HSE management system was never to emulate proprietary systems but to develop a unique, fit-for-purpose management system exclusive to Formula E. The system incorporates more than 600 event and task specific documents held in 27 on-line accessible files. We completed our legal register in season four just in time for our ISO20121 audit, which was also a success.

Formula E passed a training milestone in season four and in so doing became the only company to place every member of staff on the IOSH Managing Safely Course. IOSH confirms that no other company has shown such a commitment to ensure all staff undertake the four-day course. Aside from the obvious benefits of improved staff safety awareness – IOSH published a detailed report on the improvements FE has observed through accident and incident reduction at our events. This article was published in the August IOSH Magazine.

www.ioshmagazine

Post season safety developments included the closer alignment of the HSE and sustainability departments. The immediate benefits including a review and update of environmental policies and safety procedures and the inclusion of sustainability within the HSE management system – a huge step forward for HSE delivery within the business. A new software-based accident and incident reporting system was introduced in November, 2018. This system removes the requirement for paper-based reporting, makes report templates accessible to staff 24/7 via their mobile phones and introduces automatic statistical analysis by day, race, month, and season. Without a doubt, this is a quantum leap forward from the previous system.

Season four was a good season for health and safety at Formula E, and we now are looking forward to reaping the benefits of this work in season five and beyond.



Personal Development

Our year round focus on development is underpinned by our performance review process whereby KPIs on professional and personal goals are set. To ensure continuous improvement, we invest in the learning and development of our employees. In season four, we sent 100 employees on an IOSH Managing Safely course, ensuring they have a working understanding of actions needed for the health and safety of our events. We also have compulsory training on soft skills, such as leadership and unconscious bias to support our staff in becoming the best inclusive leader/ team player they can be. High potential employees have seen company investment in degree education and professional qualifications. With race cities such as Mexico and Santiago, we decided to have an onsite Spanish teacher who comes every week to work with those wanting to develop their language skills.

www.ioshmagazine

Diversity

By the end of season four, Formula E had a total of 124 employees and 20 different nationalities. Of these 124 people, 40% were female. Gender balance is key to high performing teams and hiring internationally has made this possible. Many of our team have made the move to London to achieve their personal goals. We hired 30 new

employees in season four and 14 of them were female. And the number of women in Senior Manager and Head of Department roles doubled by the end of season four.

In order to highlight gender equality in the sport, Formula E started a strand of written content called 'Paddock Pass' on the Formula E website.

The series looks into the unsung heroes of the sport, including women working in the paddock and their journey/drive to get there. Formula E launched the series on International Women's Day with this piece on Delphine Biscaye.

[Discover more about Delphine Biscaye](#)

AWARDS AND ACHIEVEMENTS



AWARDS AND ACHIEVEMENTS

Awards received for our efforts in sustainability are testimony to the Formula E spirit and dedication to a future of sustainable mobility.



2016 Business Green Leaders Awards

Sustainability Team of the Year
& Company of the Year



2016 Tve Global Sustainability Film Awards

Finalist - Net Positive Leadership



2016 BusinessGreen Technology Awards

Finalist - Transport Technology of the Year



2016 British Renewable Energy Awards

Low Carbon Transport Award



Depicting Formula E's visionary role for the automotive industry.

[Learn More](#)



We received third party ISO20121 certification for our entire championship.



We renewed our FIA Three-Star Accreditation aligned with the FIA Environmental Certification Framework.



WHAT COMES NEXT FOR SUSTAINABILITY AT FORMULA E?



Season five marks the start of a new era for Formula E. From faster cars to fresh faces on the track, we're accelerating changes to our championship to grow our impact and continue to push the boundaries of sustainability in motorsports.

Going the distance to connect with communities — Our legacy is poised to grow through improved community engagements and the establishment of legacy programmes at every race. We will also be expanding our partnership with UNEP to raise awareness of our shared sustainability goals.

No plastic, less waste — We are working towards becoming a no single-use plastic event with the introduction of water pouches for spectators and Hydration Stations at every race, and reusable bottles for staff, teams and hospitality guests. We will also be working more closely with our waste suppliers to ensure we have a consistent and effective waste strategy onsite, and we have revamped our Waste

Watchers to become Recycling Rangers so look out for them on site!

A change in charge — Cars in all season five races will be powered by new Gen2 batteries with almost double the energy storage capacity. This means we're also changing up the format of races themselves, since the extended battery range no longer requires teams to make a mid-race car swap. We are also actively exploring the best ways to recycle and re-use Gen1 batteries during season five.

Covering more throughout the series lifecycle — We will be expanding the scope of what we measure as part of our Lifecycle Assessment to include the production of our cars and the batteries that power them.

THANK YOU!

ABB FORMULA-E
FIA FORMULA-E CHAMPIONSHIP

