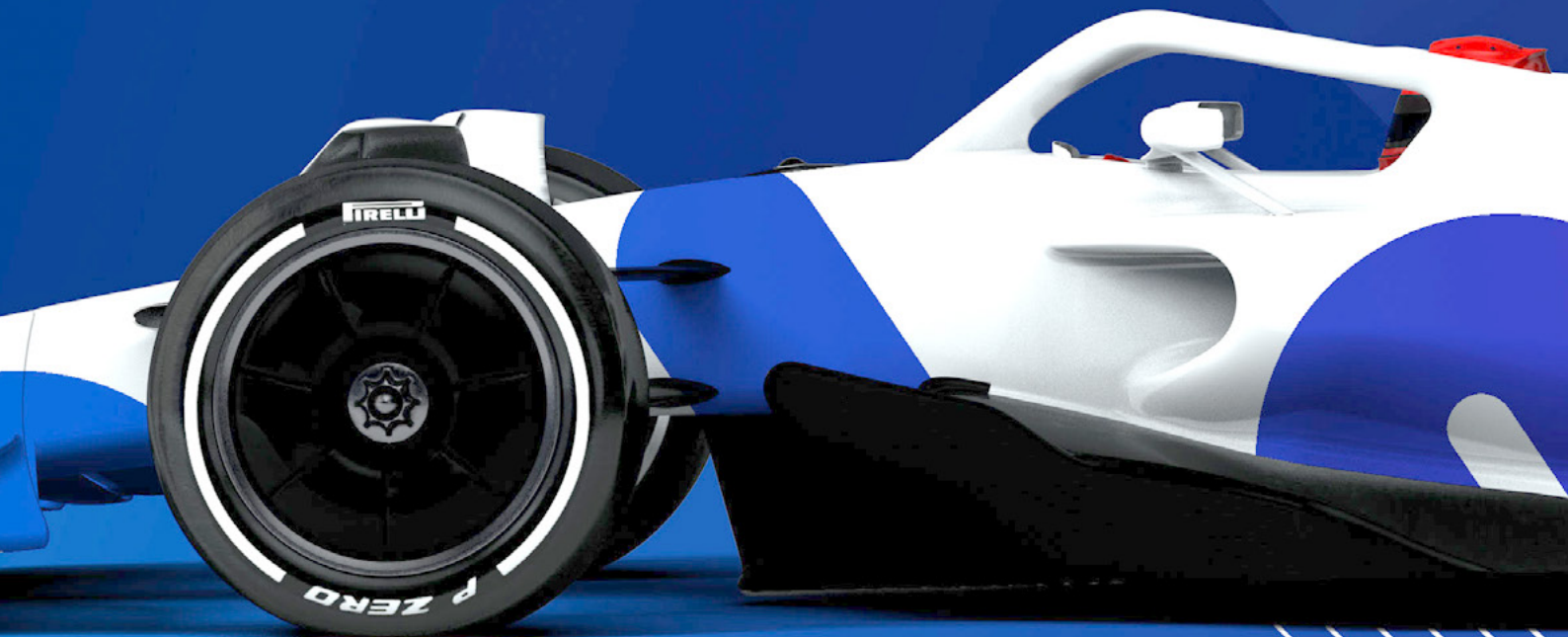




# 2023 FORMULA 1® IMPACT REPORT

EXECUTIVE SUMMARY



# 2023 HIGHLIGHTS

## 13%

Across the 2022 season, we reduced our carbon footprint by 13% against our 2018 baseline. Throughout 2023, we continued to take further action to accelerate meaningful change.

## 75%

From trial activations to the entire event, over 75% of our promoters powered aspects of their events using renewable energy sources – compared to 50% in 2022.

## 55%

Formula 2™ and Formula 3™ Championships use 55% sustainable fuel to power the cars.

## 90%

Low-carbon energy generation trial in Austria reduces emissions in the Pit, Paddock and Broadcast Compound by >90% vs 2022 Grands Prix™.



The newly reopened Formula 1® Media and Technology centre welcomes local students for career insight days.



F1®, F1 Teams and FIA host STEM days in schools across the UK for more than 350 children that directly meet Engineering UK's equality, diversity and inclusion criteria.



Formula 1® launches an all-female driver category, the F1 ACADEMY™, to develop and prepare young female drivers to progress to higher levels of competition.

## 83%

European leg of the season delivered by DHL biofuel-powered trucks across nine races, reducing logistics carbon emissions by 83%.



Formula 1® retains its FIA Three-Star Environmental Accreditation and becomes the first Championship with all member teams to achieve the same feat.



The first cohort of students from the Formula 1® Engineering Scholarships embark on their first work placement with the F1 Teams.

# ADDRESSING OUR CARBON FOOTPRINT

In 2018, Formula 1® set the target of being Net Zero Carbon by 2030. In establishing this goal, we set a baseline of our carbon emissions and defined the scope of what was included.

The commitment was set in accordance with the science from the Intergovernmental Panel on Climate Change (IPCC) aligning with its definition of Net Zero emissions and the need to keep global average temperature rise below 1.5°C. Our emissions inventory is set against a 2018 baseline and follows the guidance set by the Greenhouse Gas Protocol – the most widely used international accounting tool for government and business leaders to understand, quantify and manage greenhouse gas (GHG) emissions.

To meet our minimum 50% emissions reduction commitment, we are engaging with key stakeholders across the sport to materially change our operations and reduce emissions that sit within our sport's direct control. Any remaining unavoidable emissions will be offset using credible programmes that are certified by international standards, tracked on leading registries and in line with latest best practice guidance.

In 2018, the carbon footprint of the sport within this scope was 256,551 tCO<sub>2</sub>e.

The scope of our Net Zero by 2030 commitment goes far beyond our own business, and engages our wider sport in carbon reduction and includes:

- The Formula 1 Group.
- The F1® Teams.
- Our Race Promoters.
- Logistics service providers.
- Key suppliers, such as our tyre manufacturer.
- Paddock operations.

In the years since, the sport, and the individual companies and groups that are part of F1, have worked together and made progress in addressing this footprint, delivering an overall reduction in the sport's emissions against a backdrop of a calendar that has now reached 24 events.

Formula 1 Group has made significant changes to its operations internally, which have reduced our own emissions between 2018 and 2022:

- Moved all our F1 offices to renewable electricity.
- Implemented travel policies to reduce the number of staff travelling to events. 150 staff who used to work at events now work remotely from our Media and Technology Centre in the UK on race weekends.
- Reduced the amount of freight sent around the world through increased use of remote operations. 32% reduction in airfreight emissions directly related to Formula 1 Group since 2019.

Changes such as these have been replicated by our partners across the paddock and around the world, and as a result the carbon footprint for the sport in 2022 was 223,031 tCO<sub>2</sub>e, a 13% reduction compared to the 2018 baseline year leaving 37% reductions to be made by 2030 to meet our Net Zero goal.

Examples of the continuing work being done to address our footprint are below and included in the full report.



# WHAT'S NEXT?

The largest contributor to the sport's carbon footprint is travel and logistics, so it is here that our strategy is focussed to deliver our target, and in the coming years will enter a new phase of delivery that will focus on three key areas:

## 1.

**Investment in an alternative fuels strategy** across all parts of the operation, including the delivery of Sustainable Aviation Fuel (SAF) in airfreight, biofuels for road and sea freight, and 100% sustainable fuel for cars in 2026.

## 2.

**Paddock wide solutions to reduce energy consumption** and further transition operations to renewable options across all stakeholders.

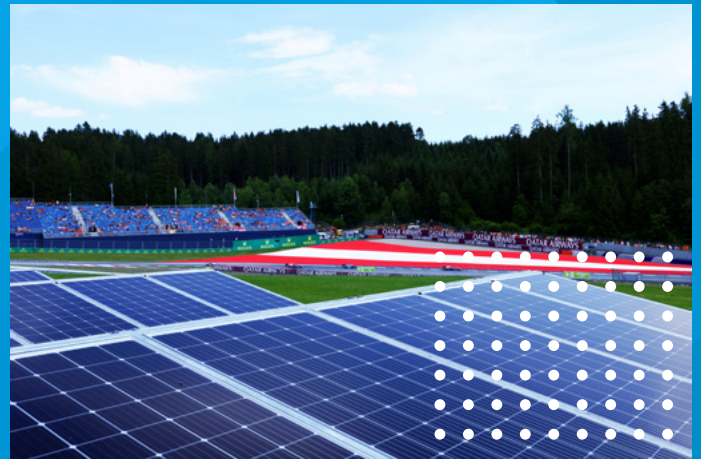
## 3.

**Next generation operations** that will see investment in new technologies that reduce the reliance on physical infrastructure, change the mode of freight transport to less carbon intensive options, such as sea freight, and reduce the amount of equipment that is required.



# ENVIRONMENT

- A new fleet of DHL biofuel-powered trucks reduced logistics-related carbon emissions by an average of 83% during the European season.
- A next-generation low-carbon energy solution pilot at the FORMULA 1 AUSTRALIAN GRAND PRIX 2023 reduced relevant emissions by >90% in the Pit Lane, Paddock, and broadcast compound.
- All F2™ and F3™ cars trialed 55% sustainable fuel in partnership with Aramco, as F1® took another step towards the use of 100% sustainable fuel in F1 cars in 2026, alongside the introduction of the new power unit regulations.
- Ranging from trial activations to the entire event, more than 75% of promoters powered aspects of their events using renewable energy sources – compared to 50% in 2022.
  - FORMULA 1 BRITISH GRAND PRIX 2023 at Silverstone was fully powered by green energy alternatives. This included 2,746 solar panels and the use of HVO fuel in all temporary generators.
  - FORMULA 1 DUTCH GRAND PRIX 2023 reduced fuel consumption by approximately 80,000 litres, replacing it with HVO100. The multiple projects in place across the event reduced its power supply carbon footprint by 94.5%.
    - The solar farm at the Bahrain International Circuit produced 5.28 MW of clean energy between the 2022 and 2023 Grands Prix™ - enough renewable energy to cover all the circuit usage for F1 with significant capacity to spare.
  - FORMULA 1 SINGAPORE GRAND PRIX 2023 installed 1,396 solar panels to the roof of the pit building and pledged to reduce emissions produced by energy sources by 50% by 2028.
- FORMULA 1 LAS VEGAS GRAND PRIX launched a first-of-its-kind water conservation programme, as part of efforts to implement technologies that can reduce, and eventually offset, outdoor water consumption at large-scale sporting events.



# SOCIAL I

Alongside our work on environmental sustainability, Formula 1® is committed to creating a more diverse and inclusive sport. This includes addressing the gender pay gap in the Formula 1 Group, supporting engineering students through university, launching on-track initiatives from grassroots to elite levels to increase female participation, and working with promoters around the world to deliver inclusive activities to inspire local communities around races.

Work also continues across the Paddock with the Teams and the FIA to create opportunities for those from underrepresented backgrounds to access the world of Formula 1. This is delivered through a formal D&I working group and working with partners, such as Sir Lewis Hamilton's Mission 44, to create inspiring opportunities at Grands Prix™ around the world.

This work is crucial to the long-term diversity of the sport and central to its mission of leaving a positive legacy wherever it races. Further updates on various projects will be delivered throughout the season.

Highlights of the work delivered in 2023 can be found below, and the full details are in the Impact Report.

- F1 ACADEMY™ was launched to increase female participation in motorsport, both on and off the track. Marta Garcia was crowned as inaugural champion and secured a fully funded seat in FRECA for 2024. Runner up Lena Buhler will also race in FRECA.
- F1 ACADEMY DISCOVER YOUR DRIVE™ was launched to encourage female participation in motorsport. Its first initiative was launched with Motorsport UK to identify and nurture UK karting talent from the age of 8. Discover Your Drive engagement programmes will be run alongside all seven F1 ACADEMY events this season.
- Following the launch of F1 ACADEMY DISCOVER YOUR DRIVE karting with Motorsport UK, there has been a 265% increase in female participants aged 11-16 qualifying for the British Indoor Karting Championships. F1 ACADEMY partnered with international karting competition Champions of the Future to form Champions of the Future Academy. The series will support nine drivers from ages

8-15 in 2024, with the top three female finishers in the senior category offered a F1 ACADEMY test.

- The partnership with Champions of the Future has seen female participation increase from 5% in 2023 to 25% for the early part of the 2024 season.
- The gender pay gap in Formula One Management continues to be addressed, with its mean pay gap falling by more than 30% since 2017 to 20.7%.
- Five leading universities in the UK and Italy offered the Formula 1 Engineering Scholarship to a new cohort of engineering students as part of the ongoing Formula 1 scholarship programme. Each scholarship covers the full cost of the student's tuition alongside living expenses for the full duration of their degree. The scholars also undertake work experience at one of the ten F1 Teams® during the second year of study and have access to career workshops and mentoring. By 2025, F1 will have supported 50 students through this programme.
- More than 350 secondary school students in the UK took part in STEM Challenge Days organised by F1, F1 Teams, and the FIA. The participating schools were selected based on the Engineering UK EDI Criteria, which identifies schools that are likely to reach more young people from groups that are underrepresented in the engineering profession, such as women, ethnic minorities, people with disabilities and those from lower socioeconomic backgrounds.



# GOVERNANCE

In 2023, Formula 1® participated in the following voluntary and regulatory frameworks to deliver a continuous improvement pathway.

- ISO20121: 2012 Event Sustainability Management System: Certified in 2023. This certifies that a Sustainability Management System is in operation for events with respect to planning of events for the FIA Formula One World Championship™, Formula 2 Championship™ and Formula 3 Championship™.
- FIA 3 Star Environmental Accreditation: Maintained the highest level of environmental sustainability recognition from the sport's governing body.
- The UN Sports for Climate Action: Signatory since 2020 to this UN-led initiative that aims to provide a clear direction for the global sports community to reduce GHG emissions in line with the Paris Agreement, and to use sports as a unifying tool to encourage citizens' engagement in climate action.
- BAFTA albert certification: Since 2021, Formula 1 has certified its FORMULA 1 BRITISH GRAND PRIX broadcast through BAFTA's albert Sustainable Production Certification. F1 also use the training from BAFTA to embed best practices across its operations year-round.
- As a material subsidiary of Liberty Media Corporation, a US public company, Formula 1 is required to comply with the Sarbanes–Oxley Act.
- Formula 1 Code of conduct: Underlying policies and compliance procedures ensure that business is carried out ethically and in compliance with applicable laws.



# VOICES FROM F1®



## Stefano Domenicali

President & CEO, Formula 1®

“Sustainability is one of the most important factors to us, not only as a sport, but as a business. It is no longer enough for us to simply deliver great action and wheel-to-wheel racing on the track, we need to ensure that we are doing so in a sustainable way so our sport can thrive long into the future. F1 has been innovating and influencing wider society for over 70 years, and we’ve seen how the great minds and technology of the sport have had a positive impact in many different spaces, and now we have turned that expertise and insight to sustainability.

“We are a global sport with over 700 million fans around the world, which gives us a great platform to create change and influence those watching and engaging with F1 to act and leave their own positive legacy. Over the past four years, we have made significant progress, and we remain very focused on our goals and I’m excited to see the impact we can have.”



## Ellen Jones

Head of ESG, Formula 1®

“Sport can ignite passion and shine a light on the world around us. At Formula 1, we take this privilege seriously and are committed to continually improving our operations whilst also showcasing technologies of the future.

“To achieve this, we are integrating sustainability across all departments within Formula 1 as well as with key stakeholders across our sport. Our aim is to empower the wider Formula 1 community to do what it does best in finding solutions at pace.

“Teamwork is a key element of success within F1 and the response we’ve seen from our people reflects that there is desire from every corner of the business to be a part of the change.”







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