

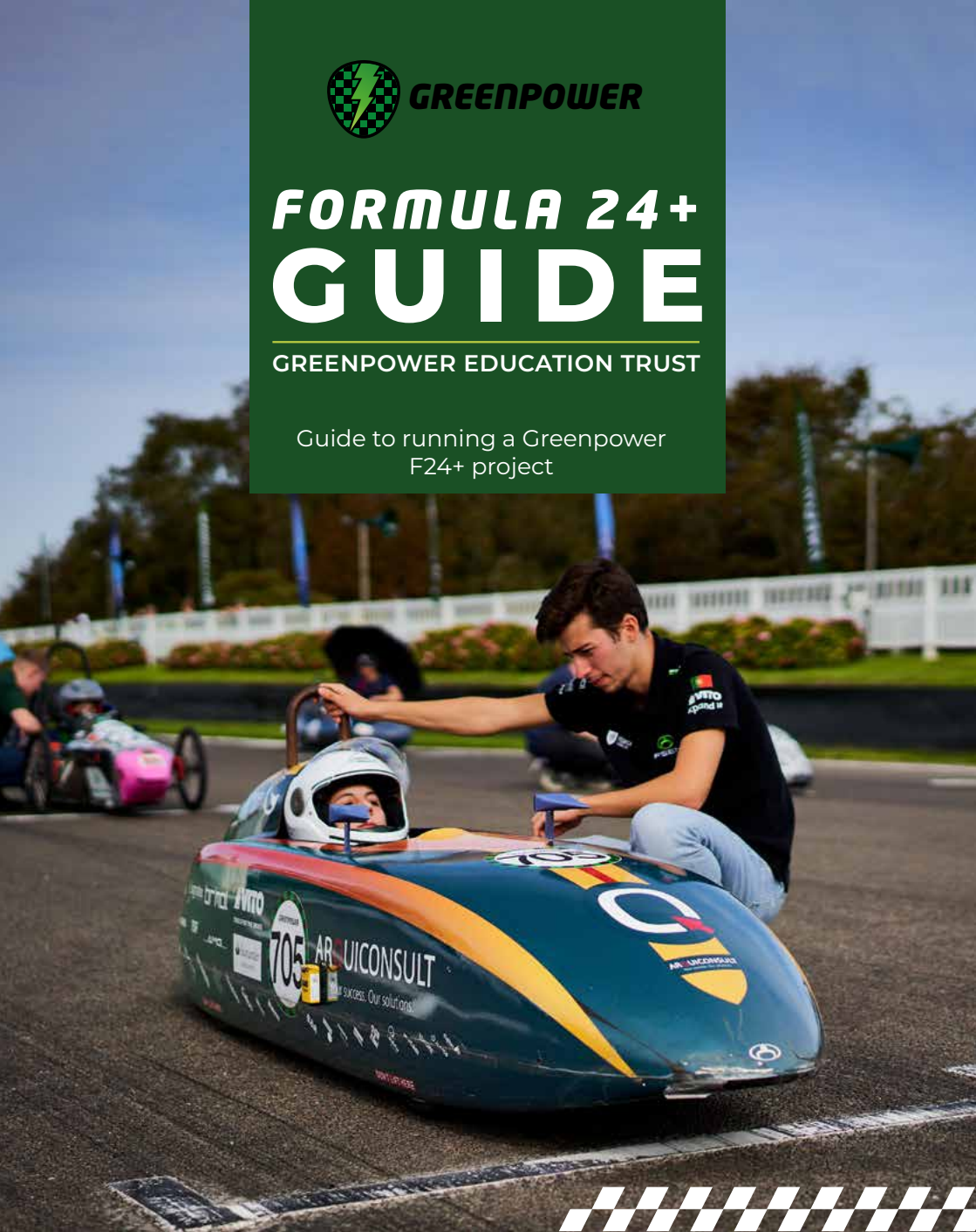


GREENPOWER

FORMULA 24+ GUIDE

GREENPOWER EDUCATION TRUST

Guide to running a Greenpower
F24+ project



National supporter



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FORMULA 24+

FOR 16-25 YEAR OLDS

Formula 24+ gives young adults the opportunity to design, build and race an electric, single seater car on some of the UK's top motor circuits.

Greenpower's Formula 24+ (F24+) category boosts interest and career opportunities in Science, Technology and Engineering through enabling 16-25 year olds to design, build and compete in electric, single seater racing cars.

Teams take part in the design and building of the car, race days and the F24+ Championship.

Drivers from each team compete in 60 minute endurance races. The team that goes the furthest distance within the time limit wins.

F24+ is geared towards sixth forms, colleges and universities and apprenticeship schemes but we also welcome private entries and teams from youth groups and engineering clubs.





THE CAR



KIT CAR OR BUILD FROM SCRATCH?

Once you have registered your team, it is up to you to decide whether to buy a Greenpower Kit Car or design and build a car from scratch.

KIT CAR BUILD

A Greenpower Kit Car is the perfect introduction to F24+. It will engage students, teach them the principles of building a car and can be built in around 15 hours this does not include the time to design and build the bodywork.

The F24+ Kit Car is self-assembly and the kit includes everything you need to get the car up and running, except bodywork. The bodywork is easy to design using a CAD programme.

The Kit Car can be dismantled and rebuilt each year with a new team or improvements can be made to the existing car. The kit comes with an easy to follow assembly manual. You will only need simple tools to build the car. These are listed in the manual.

If you would like to get a taste of Greenpower before progressing to building your own car, the Kit Car is for you.

SCRATCH BUILT CAR

If you want to build a car from scratch, you must think about how you would construct the car, what materials to use and whether it will be possible with the resources available to you.

We can't tell you exactly how long the design and build process will take for a scratch built car, or how much it will cost, as each one has a different design, materials and manufacturing period.

Building a car from scratch is a large project. Scratch built cars must be built to the regulations of the year that you will be competing, which will be available on the Greenpower website:

greenpower.co.uk

If you want to check whether elements of your design will comply with regulations, or you have a technical query, contact: helpline@greenpower.co.uk

You will need to specify that you are buying a Kit Car for the F24+ category when ordering, as it comes with different gearing to that on the F24 specification car. You are always welcome to contact us for advice: helpline@greenpower.co.uk





THE TEAM

A Greenpower F24+ design, build and race project creates the opportunity to get involved through many different roles, giving experience of more than engineering and motor racing. Team members can take charge of media, sponsorship or race wear, for example.

RUNNING A TEAM

You can recruit a team in different ways. Some organisations use Greenpower as an inclusion project. Others offer the opportunity to participate by announcing it in meetings, newsletters, or on noticeboards and social media.

There are lots of different approaches to running a Greenpower team. Some F24+ teams meet during working hours, others during evenings and weekends. Most teams meet once a week, some more often, depending on how much time can be devoted to the project.

We have teams run by teachers, organisations and privately. Some F24+ teams are run by engineering students, apprentices and graduates.

HOW MANY IN A TEAM?

Teams at F24+ events consist of 12 members on average, within the 16-25 year old age range. A minimum of one driver is required for each race. The other team members at an event are mainly pit crew.





COSTS

THE CAR

As of 2024 a complete F24+ Kit costs £3,275.00 +VAT Please visit: greenpower.co.uk/shop for up-to-date costs. The cost of building your own car from scratch will vary.

To comply with regulations every team must have the same motor and batteries, which must be bought from us.

If you are building a vehicle from scratch you can buy the motor and batteries from our online shop: greenpower.co.uk/shop. Six batteries and a motor are included with the Kit Car.

Spares parts can also be purchased from our online shop.

EVENT ENTRY

There is a season fee charged per car. As of 2024 the cost for a F24+ season pass is £115.00 + VAT and then £15.00 + VAT per Entry. See our greenpower.co.uk/events and click on an event you are interested in attending to see up-to-date costs.



FUNDING

We encourage teams to contact companies regarding potential sponsorship, in terms of services, funding and resources. This can be very successful – many companies would like to see their logo on the side of a local school or organisation's F24+ car.

Some schools, colleges or universities are willing to contribute towards funding a Greenpower team. Team members can also help by organising fundraising events.

Students can help raise money by organising fundraisers such as supermarket bag packing and car washes, cake sales, etc.

Competing in Greenpower events could entitle you to certain grants. Organisations such as STEMNET, which supports Greenpower, regularly announce funding opportunities.

From time to time, we have grant funding available in specific areas to help teams to engage in the Greenpower challenge. Please follow the link below to find out if there is any funding available in your area: greenpower.co.uk/project-areas.

Formula 24+ is run as a championship and the season fee allows you to compete in as many rounds of the championship as you like. There are 10 rounds per season.

Teams must enter at least three events including the International Final Round in October to be included in the championship points table. Your team's top three results will determine its position in the final championship table.

If your team must withdraw entry to an event for any reason, we must be advised before the closing date for entries for that event or the entry fee will be charged in full.

LATE ENTRIES

F24+ Entries made after the entry deadline will be charged £25.

Teams will not be able to compete if they have not entered before the day of the event.

RACE DAY

RACES

F24+ races are 60 minutes long. Only one driver is required for each race but driver changes are permitted during the race.

Each team is allowed to use a set of batteries for practice and a separate set of batteries for the race. The winner of the race is the car that travels the furthest distance in 60 minutes.

PRACTICE

The practice sessions are open to both F24 and F24+ teams on race days. Drivers should be aware that there will be slower F24 cars on track with them during the practice session

You are allowed to use a new set of batteries for practice and for each of the races but you cannot change batteries during a race.

TEAM SIGN ON

The team sign on form will be included in the pre-race pack, which will be emailed to you before the event. The team must complete the sign on form with all members included and give it to staff in race admin. A countersignature from a parent or guardian is required for team members under the age of 18.



RACE TIME TABLE

Typical race day timetable:

7:30	Teams arrive
8:15	Scrutineering opens
9:00	Team briefing 1
09:30-11:00	Practice
11:10	Team briefing 2
11:30-13:00	Race 1 (F24 Ages 11-16)
13:45-14:45	Round 1 (F24+ Ages 16-25)
13:45-14:45	Race 2 (F24 Ages 11-16)
17:15	Prize giving





SCRUTINEERING

A scrutineer will check the car over to ensure it is safe to compete. The Greenpower scrutineering process checks that all elements of your car are safe and that the kit has been built according to the regulations.

The tallest driver, wearing a correctly fitting helmet, overalls, gloves and suitable footwear must be present, with the vehicle logbook and the car itself.

You will need to hand in your completed scrutineering sheet and team sign on form to race admin before you will be issued with a race transponder and can go out on track. All team members must attend the team briefing before practice begins.

The race day scrutineering checklist is available on the Events page on our website: greenpower.co.uk/events.

You can watch a video of the scrutineering process on our youtube channel: [@GreenpowerTrust](https://www.youtube.com/@GreenpowerTrust)

RISK ASSESSMENTS

A risk assessment for race days is available on the Events page on our website: greenpower.co.uk/events.

INSURANCE

All Greenpower operated events are run under a Motor Sports Association (MSA) permit and are fully insured with Personal Accident and Public Liability insurance. Each race meeting will have an event permit and number that will be on display at the event. Details of our insurance are available on the Events page on our website: greenpower.co.uk/events.



AWARDS

On race days we present the following F24 awards:

F24+ Winner

F24+ Runner Up

F24+ Third Place

ADDITIONAL AWARDS AT EVENTS ARE THE:

Ford Engineering Award

The team that shows the strongest engineering understanding, including how well the car is designed and made and the car's components. For example using innovative gearing mechanisms. This also covers performance enhancements via circuit boards or software to control how much current the car uses or a heads-up display.

Portfolio Award

Your portfolio should be a record of your journey throughout the project, from the early stages of fundraising, to designing, building, testing, fine tuning and finally racing your car.

Sustainability award

The team that prioritises sustainable practices in areas such as car design, materials, technology, power supply (battery charging/saving), event logistics (transport, food, shelter), marketing, sponsorship, and project longevity within the organisation.

Spirit of Greenpower

The team that stands out for their positive attitude and teamwork, even in adversity. This includes showing fantastic team spirit by helping others, lending tools, and solving issues. We seek to award a team that promotes teamwork and good relationships with competitors.

Best presented team

The team with the best overall appearance, including uniformity of team wear, teamwork, car presentation, and best behaviour throughout the day.

The criteria for all these awards can be found on our website: greenpower.co.uk/awards



TO GET STARTED REGISTER ONLINE

To register online go to greenpower.co.uk/start-team, scroll down the page and click the CREATE ACCOUNT button.

If you are planning on entering more than one car you only need one account per organisation. You can add another car (and contact details if they differ) on the same account.

If your organisation has registered a team with us before, please do not start a new account. Just contact us to reset the login details.

We will not automatically send you any equipment after registration. You will need to order it from our online shop: greenpower.co.uk/shop.

For more information on Costs of running a Greenpower project click [here](#).

HOW TO ORDER

The Kit Car can be bought from our online shop: greenpower.co.uk/shop

Or via email: sales@greenpower.co.uk

Call Greenpower on **01243 552 305** if you would like to discuss your order over the phone first.





SUPPORT

AMBASSADORS AND INDUSTRIAL MENTORS

We have Greenpower volunteer ambassadors covering all of the UK and Ireland who can assist you. Ambassadors may be able to introduce you to local sources of support. If we have an ambassador that covers your region we will give you their details when you sign up.

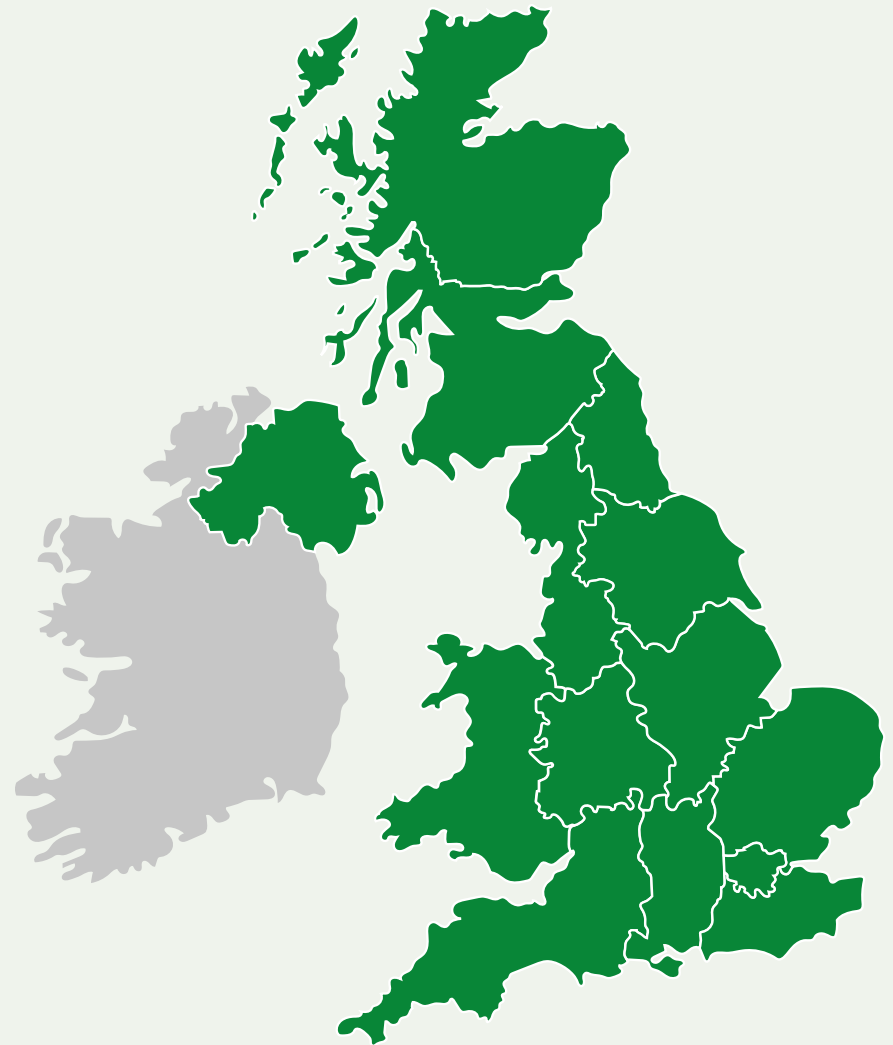
It can also be very beneficial to find a mentor to help your team during the design and building of your car. Mentors could be engineers from a local business, former Greenpower competitors or university/college students, for example. A local ambassador may be able to help you in finding a mentor.

GREENPOWER CENTRES OF EXCELLENCE

A Centre of Excellence acts as a hub for Greenpower teams, sharing expertise or facilities. Some schools and companies become Greenpower Centres of Excellence and offer support to other schools, colleges, or teams. Why not check if there is a centre in your area.

You are always welcome to contact us for advice during the build.
Email: helpline@greenpower.co.uk

Click here to visit the interactive Greenpower Ambassador map and find out the contact for your area



Get in touch for information on how to become a Greenpower ambassador, Industrial mentor, or a Centre of excellence: info@greenpower.co.uk



GREENPOWER

MORE INFORMATION

If you'd like more information,
please contact:

info@greenpower.co.uk

01243 552305

greenpower.co.uk

The Greenpower Centre
Arundel Road
Fontwell
West Sussex
BN18 OSD

Greenpower Education Trust
registered charity no. 1133536 in
England no. SC046969 in Scotland.



Greenpower Education Trust



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