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#### Greenpower INSPIRING ENGINEERS

#### • Greenpower Education Trust

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Greenpower Education Trust is a charity registered in England and Wales no. 1133536 and in Scotland no. SC046969

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### **Review of 2017**

It has been another eventful year for Greenpower, welcoming a great number of new teams, adding new events across the UK and developing our understanding of what works, all of which has contributed to our continued growth.

#### Humberside

In July 2017, our first project funded by the Careers and Enterprise Company and Greenport Hull culminated in the inaugural Humberside race at the KCOM stadium in Hull. An amazing 46 new F24/F24+ teams raced at this new event as well as 11 Goblin teams, grant funded by the Motorola Solutions Foundation. These teams were supported by over 40 employers across the region. The project proved that Greenpower provides a perfect platform for young people to work with employers, giving positive inspiration about the world of work and meaningful dialogue about careers in industry. The project also achieved its objectives with respect to inspiring young people to further pursue Science, Technology, Engineering and Maths (STEM) subjects or careers.

We have included more in-depth coverage of the project in this review, in addition the films on our Official Greenpower YouTube channel give a real flavour of the excitement of the day. We were delighted that one of our teams was able to showcase their driving skills to Her Majesty the Queen on her trip to the Siemens Gamesa factory in November 2017.

#### Extending our work with the Careers and Enterprise Company

We are delighted to report that Greenpower was successful in the 2017 round of funding from the Careers and Enterprise Fund (CEF) and is running a second project with existing and new teams across Devon, Cornwall, Somerset, Sussex, Hull, East Riding of Yorkshire and North Lincolnshire, all being partnered up with local employers.

#### **BMW** i

This year we welcomed BMW i as a new National Sponsor. With electric vehicles (EVs) becoming an increasing mass market reality, it is great to have a partner keen to invest in the skills of the future. Having real EVs at race events has provided a fantastic opportunity for young people and their parents to see what the future holds. We look forward to continuing to work with them in 2018.

"Really positive link for the kids to see, they love the i8" Secondary school teacher, Birmingham





Her Majestv the Oueen on her trip to the Siemens Gamesa factory

BMW i i8 at Rockingham

#### International growth

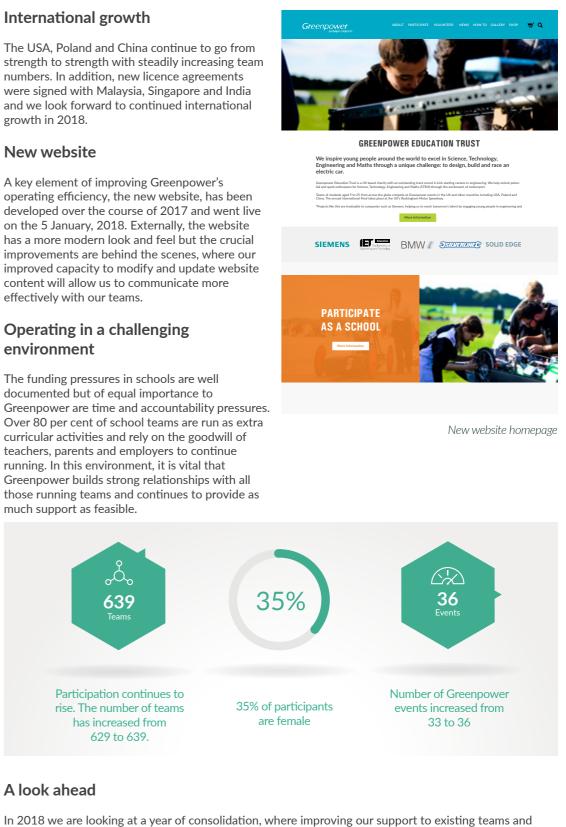
strength to strength with steadily increasing team numbers. In addition, new licence agreements were signed with Malaysia, Singapore and India and we look forward to continued international growth in 2018.

#### New website

A key element of improving Greenpower's operating efficiency, the new website, has been developed over the course of 2017 and went live on the 5 January, 2018. Externally, the website has a more modern look and feel but the crucial improvements are behind the scenes, where our improved capacity to modify and update website content will allow us to communicate more effectively with our teams.

#### Operating in a challenging environment

The funding pressures in schools are well documented but of equal importance to Greenpower are time and accountability pressures. Over 80 per cent of school teams are run as extra curricular activities and rely on the goodwill of teachers, parents and employers to continue running. In this environment, it is vital that Greenpower builds strong relationships with all those running teams and continues to provide as much support as feasible.



#### A look ahead

In 2018 we are looking at a year of consolidation, where improving our support to existing teams and helping new teams is the top priority. We will continue to look at regional expansion in carefully targeted areas such as secondary schools in East Anglia. We are looking forward to working with all our teams. partners and supporters to enable more and more young people to benefit from the Greenpower project.

### What impact does participating in Greenpower have on young people?

"In today's world, education has become a lifelong process through which people regularly upgrade their skills to adapt to fast-changing environments. But the foundations for advanced skills need to be laid at an early age - writing, reading, maths and science are core subjects on which learning should be built, combined with the development of those behaviours essential for success in work and life, such as resilience, enthusiasm, curiosity and creativity." Source: Helping the UK thrive CBI/Pearson Education and Skills Survey 2017

resolve these.

It is clear from our annual surveys and from independently commissioned research that the value of Greenpower is multi-dimensional.

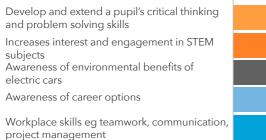
As an engineering project, it delivers an exciting and inspiring STEM enrichment opportunity, but the benefits extend far beyond this. Teachers, parents and young people themselves are telling us that children grow in self-confidence and their sense of agency and that the project develops their critical thinking and problem solving skills.

The most often cited value is the improvement in pupils' workplace skills which we know from extensive reports is an area of concern for employers. All of these benefits will be vital for our young people as they navigate an increasingly complex and fast changing world of employment.

#### The nature of the project

In many ways, the breadth of value is inherent in the project; offering pupils the opportunity to engage with a real and tangible project is key to this success. This is not a desk based exercise, they will have to get the car ready to race, practise their driving, prepare their portfolios, raise funds and get the car to a race event.

#### F24 Teachers evaluation of Greenpower value

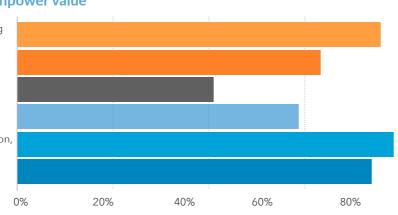


Character skills eg self confidence, agency, resilience



Once there, technical and logistical challenges may

well occur and they are all required to work together to

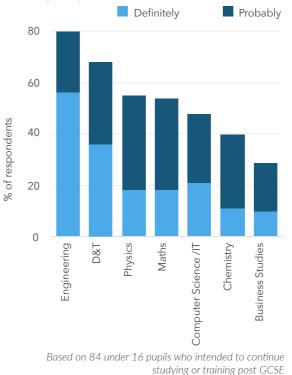


Based on 120 teacher responses. Greenpower internal survey, November 2017

#### Inspiring further participation in STEM

Our most recent quantitative research with participants was undertaken as part of our project in Humberside. Respondents report a substantial increase in intent to further study STEM subjects across the board but particularly in Engineering and Design and Technology.

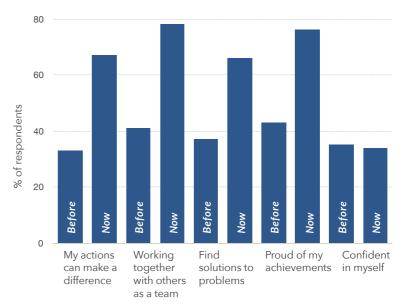
#### Has Greenpower increased your interest in studying or doing an apprenticeship in any of the following subjects?



#### Character and workplace skills

How did you feel/how easy did you find the following before you started taking part in Greenpower and now?

Very



Based on 135 secondary school aged pupils. Research carried out by Sphere Insights, in Humberside, July 2017

"Before Greenpower I did not think of engineering as a career choice but now I feel I can do it. I was thinking engineering was a boy thing. My brother does it but I never thought it would interest me to do it. Now we have a few girls in our team, I am not the only one and I succeeded in what I was doing and nobody told me that because I was a girl I could not do it. I now feel there are more opportunities for girls to do engineering." Student, female, 15 years

"I felt it was achieving something, not just standing in the background but accomplishing something. It makes me feel proud inside knowing what I have done. that I have helped to build the car, the portfolio and helped to get here." Student, male, 18 years

It made me want to carry on with things like this and keep going and not give up when times get tough." Student, male, 14 years

### Engineering, workplace skills and self-confidence - a winning combination for Dan

#### When did you take part in Greenpower?

I discovered Greenpower when I was in Year 7 and Collingwood was starting a Greenpower club. The turnout of students to the initial meeting was so overwhelming that an application process was required to narrow it down to a team of 15 students. I was fortunate to be chosen.

#### What did you do after leaving school?

While in sixth form, I applied to a sponsored pilot training course with EasyJet and was successful in gaining a place. This meant that just over a month after finishing my A-Levels. I started my commercial pilot training. I am currently in the last module of ground school. In March, I will be moving to Hamilton, New Zealand to complete eight months of flight training, before moving back to the UK to start my Airbus A320 type rating and line training with EasyJet.

#### How did Greenpower help you get to where you are today?

Greenpower gives a unique opportunity for school children to get involved in an extra curricular activity that develops both practical and life skills. On joining our team in 2010, I didn't feel comfortable talking in front of large groups of people, or putting ideas across to groups of older students.

However, it was down to the team to raise sponsorship money. This meant taking part in public speaking events and meeting with businesses to promote our team. As a result, I soon became more confident at speaking in front of large groups, so much so that I became Head Boy for Collingwood College in Year 13. Greenpower gave me the opportunity to build up my teamworking and leadership skills.

When it came to applying for the EasyJet course, I was up against thousands of applicants. As an 18 year old, I had far less life experience than some of the other candidates. It was what I had achieved with Greenpower which really helped me.

#### What do you think you have learnt from your time with Greenpower?

I gained hands on experience in engineering and electronics and was heavily involved in the design and manufacture of four Greenpower cars over seven years. The development of our cars over this period reflects the vast learning curve from our very first Kit Car, right up to the aluminium chassis fibreglass car we raced in 2017.

My knowledge of electrical systems, materials and construction techniques helped me to achieve an A\* grade in GCSE engineering and an A grade in A Level Systems & Control, subjects I would not have been likely to choose had it not been for my involvement with Greenpower. This knowledge continues to help me as I study aircraft design and systems.



Dan Martin at Rockingham



Dan Martin

## Putting team and community spirit into practice - a report by the Hornsea School and Language **College team**

As well as every member of the team learning fundamental engineering skills, we were able to show commitment and responsibility within our team.

We had the opportunity to really practise these team skills at our first race event at our local football stadium - the KCOM. Unfortunately our very first race resulted in a crash. This is where our intensive training came into play, the team immediately knew what to do and acted fast. Within nine minutes we were back on the track and screaming in celebration. We knew we'd lost a lot of time, but by now it didn't matter, "Morpheus is back and flying" belted through the speakers - that was all we needed to hear. We consistently had the fastest lap times which we believe was a result of our team spirit and support. We were presented with the Spirit of Greenpower Award for our efforts.

Another highlight was taking our car to the Careers and Enterprise Conference in Sheffield where we were able to access lots of different career paths. We also attended the Greenpower International Kit Car race at Rockingham which was unbelievable.

None of these fantastic opportunities would be available to us if it wasn't for our supportive and caring community and the copious amounts of financial help and advice we received. In the process of building our car, the community spirit surrounding our small coastal school became very clear as parents, teachers and local businesses united to support us.

We feel the impact that Greenpower Project Blyth has had on us should be shared throughout the community. We are planning more after school clubs accessible to the younger years in our school. This year, we have already made vast improvements to our car and are aiming to win the Hull race in 2018.

Greenpower Project Blyth significantly enhanced the team spirit and determination of the whole school. We are so grateful for all the opportunities and we would like to thank everyone involved for broadening our horizons.





Morpheus car racing at KCOM

Hornsea Car, Morpheus, racing at KCOM Stadium

### What do parents and teachers think about **Greenpower?**

Parents and teachers play a vital role in a young person's future, from affecting their attitude to education to providing advice and inspiration about what choices to make in life.

#### What parents say

Greenpower is an excellent project for encouraging parents to get involved in school life and over a third of Greenpower teams have parents providing assistance to teams in some way.

"Our headteacher says Greenpower is the best project for getting parents, particularly dads, involved in school." Primary school teacher, Berkshire

"I really liked it and my Dad loved it, it opened up more of an opportunity for racing for both of us and we were together", Primary school pupil, Hull

"She loved everything. Being able to be 100 per cent hands on and involved from start to finish. Being able to race the car is the icing on the cake. She is very enthusiastic when she comes back from Greenpower meetings and keen to tell us all about it. " Parent of 15 year old



#### What teachers say

In spite of the financial and time pressure teachers are under, they still choose to take on a Greenpower project as they can see the potential benefits for their pupils.

In recently commissioned impact research, teachers cited a whole range of reasons as to why they think Greenpower is a worthwhile project both for their pupils and for themselves.

school teacher



Some of the reasons given by teachers for running a Greenpower team

We asked some of the people who run Greenpower clubs to describe their clubs and the impact on their pupils: Ben Lloyd-King from Richard Lander School, an experienced Greenpower F24 school, winners of this year's F24 final; Anna George from St Paul's Primary school which started its first ever Goblin team in 2017 and Dan Sneller from West Sussex County Council Youth Service.





# Focusing on fundamental engineering skills is our route to success

Ben Lloyd-King is a physics teacher at Richard Lander School in Cornwall and runs both a self built car and a Kit Car in F24 events. In 2017, the team's scratch built car RLR 3 won both their races at the International Final.

#### When did your school start participating in Greenpower?

Our first car 'V24' raced in 2007, it qualified for the finals that year by default as it came third out of three in the Cornwall Heat at Wadebridge. It was a truly awful car and could barely make a lap of Goodwood without breaking down. I think we finished almost dead last at the finals that year.

### It's a long way from finishing last in 2007 to winning in 2017 – how has your car improved?

We are now running our fourth scratch built car, in each case making improvement to the design in terms of aerodynamics, rolling resistance and mass. RLR 3 still runs a single speed gear ratio operated by an on/off relay – no electronic control. My message is that a simple scratch built car can win this event, without the need for sophisticated electronics, multiple gear ratios, or gleaming curvy body shells. So get building and get the basics right – aerodynamics, rolling resistance and mass.

#### What has been the impact on students?

The students that have taken part in the project both past and present have always received a great benefit in being a part of a team that functions across year groups. Many students have moved on to STEM based careers involving apprenticeships and university courses.

"It's fantastic. My students will probably forget half of my lessons but they will never forget engineering, driving and competing in Greenpower."







### "Every single child has progressed hugely with their self-confidence and teamwork"

# Anna George is a primary school teacher at St Paul's School, Dorking. The school team completed its first Goblin season in 2017.

#### What range of activities has the team taken part in and when did you build the car?

The club was run before school, weekly, by one teacher and one governor, from January until the end of the summer term. It took the children 10 weeks to build the car and a few weeks to practise driving it. Alongside this, the children also wrote persuasive letters to companies to seek sponsorship, updated the school website with a weekly blog and engaged other children in the school with assemblies. They even drove the car to lead out our sports day procession.

#### What have been the highlights (and lowlights) of participating in Greenpower?

Every week was a highlight. The children ran to school in excitement every Friday, ready for the club to start. Their teamwork skills improved weekly and their confidence grew, not only in the club itself but also in their wider school life.

They were incredibly proud of their achievements. On top of this, because we have collaborated with our local secondary schools which purchased Greenpower kits at the same time, children are excited to take their knowledge of the Goblin and extend it further in secondary school.

#### What do you see as the key impact a Greenpower project has had on the team?

The key impact has definitely been the fact every child has grown in confidence. This impacted on their wider school achievements. The process has also given them the starting blocks to engineering, which otherwise, they would not have experienced.

#### Has there been any impact on the wider community, either within the school or outside it?

The whole school has been proud and excited by the achievements of the St Paul's Greenpower Team. Their blog won an award for Best Portfolio (they enjoyed writing for a purpose and were extremely happy when their efforts were recognised) and the car itself won the award for Greenest Bodywork at the Goodwood Festival. This really inspired the school in how we can all be a little greener in our everyday lives.

"It has been the first year we have taken part in the Greenpower initiative, and I can't emphasise enough what an impact it has had on the children who have been part of the club. I selected the children carefully, making the club truly inclusive, as well as ensuring a mix of girls and boys.

Every single child has progressed hugely with their self-confidence and teamwork. They are leaving Year 6 with a new found confidence and memories that they will never forget"



### **Using Greenpower to work alongside young** people and quickly build trust

Dan Sneller is a youth worker for West Sussex County Council, working with young people aged 11 to 25 on the Purple Bus, a mobile youth club that delivers support to young people in rural and isolated areas.

#### How does Greenpower fit into your job?

We use Greenpower as a tool around which to run our youth work. It allows us to work alongside the young people, getting to know them and their needs in depth and quickly build trust. Throughout the season, young people will work on team building, life skills, budgeting, problem solving, basic engineering skills and communication skills, along with many more topics that they have questions about.

#### Who are the young people you work with and how often and where do you see them?

The young people that access the project on the Purple Bus are from a mixed background. Some have a good home and a great family but may struggle with their emotions and need some extra support. Others may be getting in trouble in school or with the police and need guidance on their actions and consequences. These young people working together often create a well-balanced team, supporting each other through all areas of adolescent years. We meet either on The Purple Bus or in a village youth club or village hall on a weekly basis during term time.

#### Why is a Greenpower project so successful in your work with these young people?

I have created a number of activities that can be delivered alongside the hands on building of the cars. These activities have been chosen to help young people to explore their feelings and emotions, to help them to start to understand why others behave the way they do, and how they can make the most of their team mates.

We use the Greenpower project to help young people to set achievable goals to allow them reach their desired career choice. It is a chance to build basic life skills, such as budgeting and communication skills, along with presentation and interview skills.

We also deliver information, advice and guidance on subjects such as Drugs and Alcohol, and Sexual Health. Because we are running these basic youth work sessions around the building of the car, it gives the young people the security of a regular activity that they can focus on, meaning they feel more comfortable to talk about other topics without the feeling of being watched or judged by others.







#### What do you see as the key impact a Greenpower project has on the participants?

Young people often find that they have built strong, long lasting friendships with others that have taken part in the project, creating life time memories that will help them when problem solving in the future. They have the opportunity to develop their personal and social skills that help them to focus on a potential career path. One of the sessions that we run within the project is to visit an engineering company. This gives the young people a chance to not only see what career options there are in engineering but also to ask questions about how they may be able to improve their own car. Giving the young people the power to explore the options that a visit like this offers, builds their self-confidence and self-esteem.

### Working with employers

Employers want to work with young people for a variety of different reasons and find Greenpower is an effective way to direct that involvement.

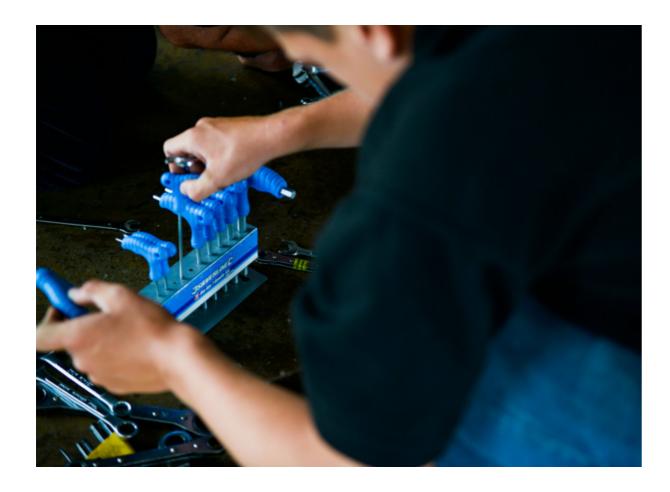
#### Improving the talent pipeline by enhancing skills of potential applicants

All employers need to be sure they can recruit talent to fully manage their businesses. Partners such as Siemens and KMF have worked with Greenpower to go into schools and inspire young people about the opportunities locally.

This year we are working with KMF once again on their award winning Young Engineer Programme with schools in Staffordshire. We are also working with Siemens to set up Greenpower secondary school teams local to their sites in four key locations in the UK.

"Young Engineer of the Year allows us the opportunity to talk to young people and show them how much fun engineering can be. Greenpower directly met this brief; the project encapsulates and develops the skills our future engineers, designers, programmers and planners will need to succeed in industry." Gareth Higgins, Managing Director KMF

"We are trying to open their eyes and encourage them into STEM as we have Siemens coming to the area. Engineering is going to be a big development for us in the local jobs market." Hull secondary school teacher



#### Careers advice - giving a real life example of what a career in engineering is about

It is clear from the recent government careers strategy that employers will play an ever increasing role in supporting schools with their careers education, and we believe that Greenpower gives them an exciting project around which to build this support. By having a hands on experience of the reality of an engineering project young people are learning more about what it might be like to have a career in engineering.

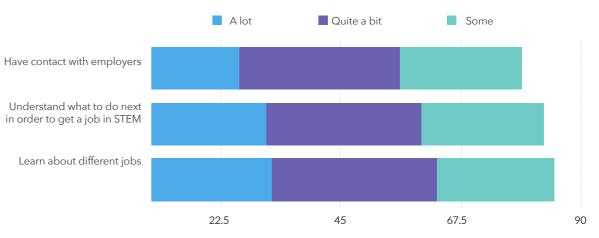
"It teaches the youngsters a lot about teamwork and it's good for us to be able to go out into the community and build relationships in this way. We're able to share our knowledge and experience with these talented young people and it's great to be able to help them overcome the engineering challenges they may be facing. The programme gives them valuable experiences for the future, particularly if they are looking for a job or apprenticeship in the industry." Shane Nicholson, Head of Quality Management at Siemens Gamesa

Involvement with Greenpower is providing young people with evidence that impresses future employees. Two young people who took part in Greenpower in Hull reflected on the role Greenpower played in their successful job interviews.

**David Shuttleworth** is now a **Higher Level Technician Apprentice at BAE** and said that the Greenpower programme gave him lots to talk about during his interview. David said: "The programme allowed me to talk about a real project. It was great to show them images of me driving the car during my interview."

**Ross Loncaster:** "I took part in the programme at South Hunsley School by getting involved in a race car project. The interviewer said that this was one of the reasons why I was offered a **Higher Level Apprenticeship with Audi** this year."

#### To what extent has Greenpower increased the opportunities you had for any of the following?



Based on 135 secondary school aged pupils. Research carried out by Sphere Insights, in Humberside July 2017



### Demonstration of CSR objectives - supporting the local communities in which they operate and fixing the broader skills shortage issues

Support of the local communities is pivotal to many organisations of all sizes. These are the communities from which they draw their best assets, their people.

"It is about our ethos as a company, about promoting engineering as a career. Like lots of organisations in Hull, we look after our own, putting something back into the community and helping schools." Hull employer

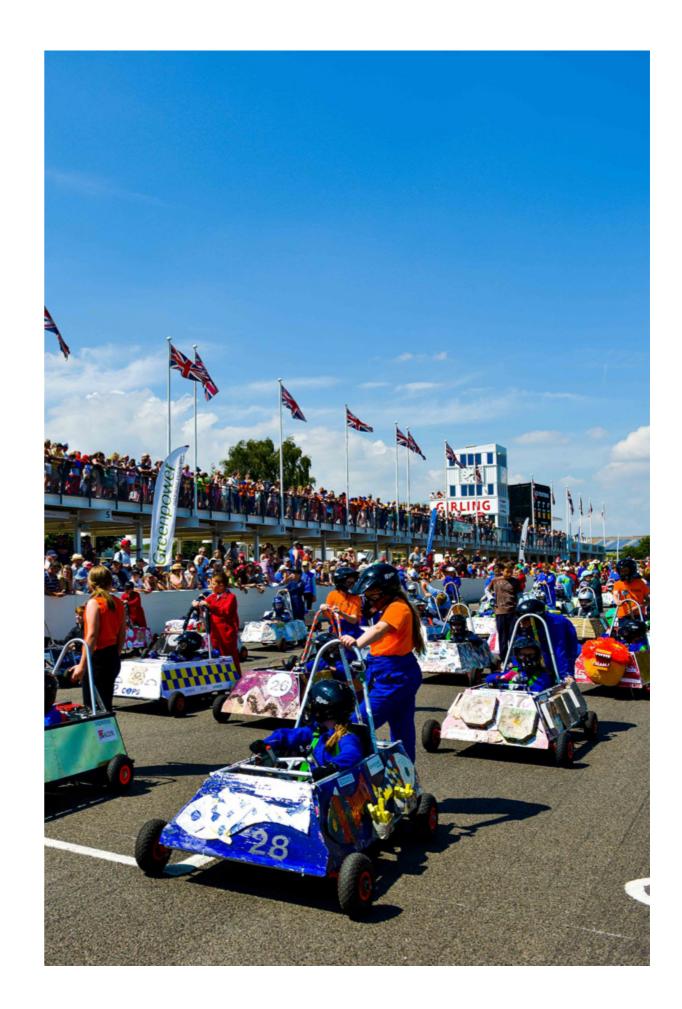
For many of our larger partners there is a professional expectation that something needs to be done to address the skills shortage in engineering. In supporting Greenpower many of our partners such as Siemens, Ford and the IET are demonstrating their commitment.











### Working with sponsors and funders

Our national partners support us because:

- we have shared values around inspiring young people into sustainable engineering
- they are in a position to provide vital investment that allows us to run the programme

Sometimes we have partners with specific regional objectives; be they charitable organisations founded by benefactors wishing to give back to a region, or commercial organisations keen to invest directly in the local community. Here we are able to work with these partners to help realise their objectives and grow our organisation. In talking to teachers, two of the most common reasons given for not getting involved with Greenpower are the cost of purchasing the car kits and the distance to race events.

To tackle these barriers, we have worked with funders to set up targeted projects in specific regions. These projects typically consist of providing funding for a reasonable number of 50 per cent car grants to encourage new teams to participate, followed by using the critical mass of new teams to gain sponsorship for a new race event in the locality.

This approach has been very effective in Norfolk, in South Wales using money from the Waterloo Foundation and in the North East with the support of the Reece Foundation and Platten Family Fund via the Community Foundation.

### **Regional expansion in Norfolk**



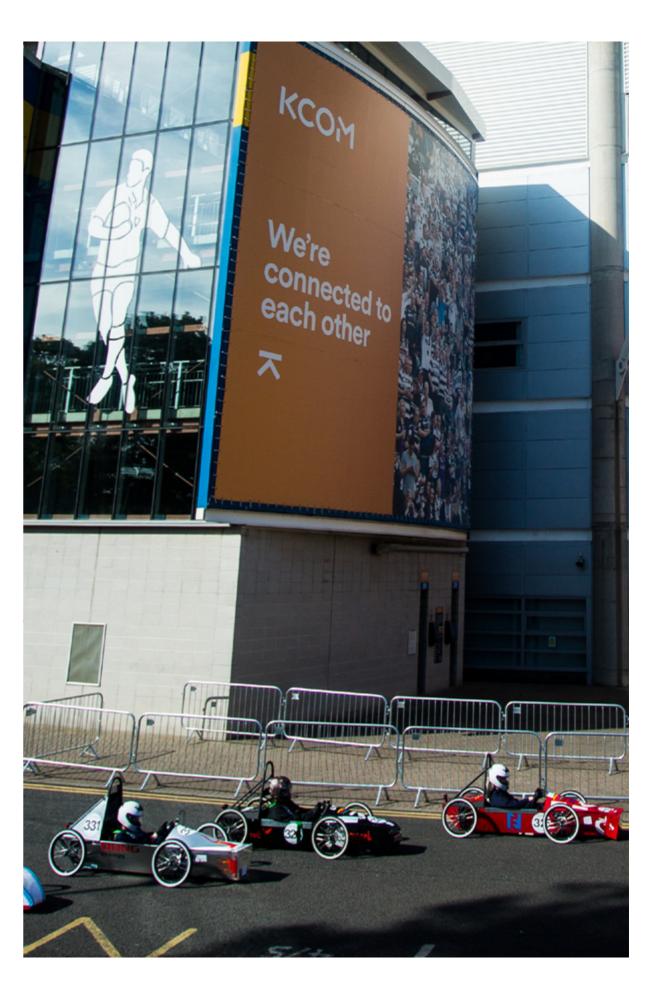
Photo credit: HexCam Ltd

The Motorola Solutions Foundation provided car grant funding to set up 20 new Goblin teams in Norfolk in 2017. Local Greenpower Ambassador, Matt Buck, used the availability of funding to engage with a wide range of Norfolk teachers, industry networks and local supporters and generated a huge amount of enthusiasm for Greenpower Goblins.

All of the car grants were allocated in the first five months and a significant number of schools were so enthusiastic, they bought a second car to enable more children to participate. The wider network also provided funds to support the very first Goblin race event in Norfolk, held at Scottow Enterprise Park in June 2017.

This inaugural event was hugely successful with over 25 cars attending, significant press coverage in local media and a fantastic response from the teachers and participants.

"It has been a great project. The children have thoroughly enjoyed the build and those who took part in the first Norfolk race event had an amazing day." Norfolk teacher



# Working with funders to achieve specific objectives: an amazing project in Humberside

"A bunch of kids came together with a business to build a car which was very successful and culminated in an amazing day. To get that many teams and that many students and businesses in year one was very impressive. The day was very well organised." Humberside employer

The project in Humberside was set up by the Greenpower Education Trust in April 2016 with the aim of:

"Inspiring young people in the Humber LEP region to consider a STEM career and increasing the quality and quantity of their contact with prospective employers."

It was funded by a grant from the Careers and Enterprise Company, Greenport Hull and match funding (both cash and in kind) from local employers and schools. We worked extensively with local stakeholders including Hull City Council, further education organisations and a wide range of local employers to create a real buzz around the project.

The project involved recruiting and setting up new teams of young people to design and build Greenpower IET Formula 24 electric Kit Cars, who would then compete against each other in a race event at the end of the project. Each team worked with local employers to design, build and improve the cars and in doing so, increased their understanding of the future career opportunities in STEM, improved their workplace and interpersonal skills and also experienced a range of employer encounters.



Humberside was a fantastic success, exceeding all expectations both in terms of the number of teams and young people participating and the outcomes for young people.

Plans are in place to ensure the future sustainability of Greenpower in the Humber region. Greenpower has secured funding from the CEC to add more teams and keep existing teams in operation. In addition, we are in advanced discussions with local employers and organisations regarding future support of the race event in Hull for 2018 and for further expansion of the number of teams in the Humber region.

"The level of enthusiasm girls have now for engineering is fantastic. Some of them have said they are going to look at engineering as a possible career." Humberside teacher







### Why and how our volunteers work with us

Greenpower depends on legions of enthusiastic volunteers, and while financial support is vital it is also fair to say that the time these loyal supporters give for free is equally essential to making everything happen.

#### Alistair Shaw (Hogan Lovells) – Pro Bono legal services

#### When did you start working with Greenpower?

Myself and a couple of junior lawyers in my team started doing trade mark and related intellectual property work for Greenpower in 2012.

#### What sort of work do you do and typically what does that involve?

I specialise in intellectual property (IP) law, with a focus on dispute resolution work in relation to copyrights, trade marks, designs and trade secrets. Colleagues at Hogan Lovells who work for Greenpower with me have different specialisms; for example, Helen McGowan, a commercial contracts lawyer, advises on and drafts contracts for Greenpower. I can also call on



Alistair Shaw, Hogan and Lovells

our network of fantastic colleagues all around the world when we need advice on the laws in other countries.

#### How does pro-bono work compare with your day job?

Actually, it's not hugely different because even though Greenpower is a charity it needs to approach legal issues in much the same way as a company would. One major difference is that whereas most companies we work for have their own legal departments, Greenpower does not, and so more wide ranging issue spotting is needed to make sure that the key legal points have been covered.

#### What other help and support have you provided for Greenpower?

In addition to the 2012 registration of the Greenpower trade marks in the UK we have since filed trade marks for Greenpower in a number of other countries where Greenpower programmes are run. We also negotiated Greenpower's contract with Formula E in 2014, and have helped Greenpower grant licenses to affiliated entities to run Greenpower programmes in Poland, China, India, Singapore, Malaysia and the United States.

#### What would you say to anyone thinking about getting involved with Greenpower?

It's a fantastic way to improve young people's enthusiasm for science and engineering, build teamwork skills and have fun in a competitive environment. And there are multiple ways you can get involved, with a big range of experience needed from volunteers. I don't know how to scrutinise a race car or marshal a race, but I can help in other ways!

### Matt Buck (Town Close School) - Greenpower Ambassador

#### How did you first get involved with Greenpower?

I was hunting for a 'flagship project' to raise the profile of Design and Technology at my school. I found Formula Goblin on another school's website, attended a Greenpower event, spoke to teams and knew (from their enormously positive comments) that we had to become involved.

#### What do you do and what does it involve?

Each ambassador has their own approach. Mine has been to develop a network; bringing together interested parties in the region and enthusing them about Greenpower's work. I've worked with a STEM provider to recruit schools, liaised with schools directly, led training for teachers, located funding, liaised with sponsors, talked to firms, industry bodies and councillors and promoted our inaugural event in the local media.

#### What do you get out of it?

Trying to spread enthusiasm has been a buzz. Working with teachers and pupils who bring energy and new perspectives to the projects, but who hadn't been aware of Greenpower previously, is good. Having a local event means less driving for my own school's team. Town Close House has also been recognised by being nominated in the TES award for independent-state school partnership 2018 for our work in promoting Formula Goblin in Norfolk.

#### What would you say to someone thinking about being a Greenpower Ambassador?

Find out as much as you can, speak to existing teams and organisers and then, if you are keen to interest young people in science and engineering, sign up. There can't be a better initiative out there.



### Julian Bond – Race volunteer

#### When did you first get involved with Greenpower?

I first got involved with Greenpower about five years ago through the STEM Ambassador network.

#### What exactly do you do and what does that involve?

As a volunteer at events I get to do a couple of roles. Firstly I act as a scrutineer, someone who reviews the safety of each of the cars. Once all that is done I go on to being a race marshall, usually in the pit lane. This usually entails checking to make sure the cars and the drivers are all ok, all the safety rules are being obeyed and that everyone obeys the race rules.

#### Why do you do it?

There are a few reasons I get involved and continue to do so. Firstly I truly believe that the only way we are going to secure the next generation of engineers and scientists is by getting kids involved in activities that promote engineering, like Greenpower. Secondly it's fun! The team at Greenpower is always very welcoming and work hard to make every event a success, whatever the weather! The third is that as engineers it's our responsibility to encourage the next generation. If we don't, who will?

#### What would you say to anyone thinking of helping out at a race?

Go for it! Wear decent boots too.



Julian Bond left





funds to support schools. Steel Charitable Trust, Waterloo Foundation, IMechE Eastern Region, Sir James Reckitt Foundation, McRoberts and AGManly. We would like to thank all the other employers who have supported school teams directly.

## Thank you — from Chief Executive

I would like to thank all our supporters for making 2017 such an exciting and transformative year for Greenpower. The continued financial support from our sponsors has meant we can help more teams to get set up, run more races and make operational improvements to help us manage the increasing number of teams more efficiently.

This year, for the first time ever, we have sought to get back in touch with our past participants. This has been to ask them to reflect on the effect they think Greenpower had on them and to encourage them to continue to support Greenpower as they progress through their careers. I would like to thank all those who have got back in touch and am delighted that we are able to include Dan Martin's account of what Greenpower meant for him.

I would also like to thank those who give their time to support Greenpower. As you can see from our case studies these volunteers are quite simply indispensable to the running of the organisation.

Finally, I would like to thank all those who set up and run teams in school, be they teachers, parents, governors or other volunteers. The enthusiasm of these individuals, whether 'old-timers' or new recruits, to offer this challenging opportunity to young people over and above their 'day job' is quite simply a source of great personal inspiration to me.

This will be my last year as Chief Executive of Greenpower. I went to work part time for Greenpower when I left school in 2003 and became so hooked I stayed for 14 years. I have decided that it is time for a complete change of direction in my career and I am off to work in a very different industry. I will be remaining in a scaled back leadership role to ensure a smooth transition and I know that the very capable team will take the organisation forwards.

Jeremy Way Chief Executive, Greenpower



