



Solutions for the Planet

Impact Report 2017-18



CEO's Welcome

“Above all we must realize that each of us makes a difference with our life. Each of us impacts the world around us every single day. We have a choice to use the gift of our life to make the world a better place - or not to bother” Jane Goodall.

We are all here because we have bothered, we are bothered about the people and the planet around us. This year marks the tenth anniversary of the Solutions for the Planet programme.

In 2008, a Bradford-based organisation called Partners in Innovation held the first Solutions for the Planet competition. It was called ‘Solutions for the Planet – the Great Debate’, and the final was held at the Palace of Westminster in London. 5 years and 4 more winners later, in 2013, a new organisation was born – Solutions for the Planet Ltd. The programme and competition that had successfully run

since 2008 continued, with a new name – the Big Ideas programme and the Big Ideas Competition.

Since then, we have worked with over 13,500 young people across England and Scotland. This year has been a wonderful year to lead Solutions for the Planet, as we expanded our footprint to include North-East England, Hampshire and Scotland, worked with our first SEN school and reached over 3800 students nationwide.

The Big Ideas programme has also received international recognition by winning Gold for the Best Education Project (in Environmental Impact) at the Global Good Awards 2018.



Jen Baughan & Andy Swain, Tarmac collecting the Global Good Award

I have had the honour of working alongside our three fantastic Programme Coordinators Sarah Milburn, Jessica Mitchell and Charlotte Hosier. They are an incredible team and I'd like to say a huge thank you to them all for their hard work, passion, commitment and their own desire to make a difference.

My thanks also go to our Board of Directors, who continue to provide much wisdom and guidance to me and the organisation.

I'd also like to personally thank our national partner Tarmac, our cross-

regional partner SGN and regional partners Arcadis, Brammer Buck and Hickman, IGEM and Mears Group, for supporting us this year and giving over 1200 employee hours to the programme.

We cannot underestimate the huge contribution these businesses make, which enable the programme to work so well.

My thanks also go to the dedicated teachers who give their time to support the students in developing their ideas in after-school clubs and curriculum time across the country.

In this year's report we share the stories of those involved and the positive impact we have made on the young people, teachers, schools, mentors and businesses involved.

What an incredible 10th anniversary year it has been. Thank you all for being part of it.

Jen Baughan, CEO

Solutions for the Planet

Our vision: A world where sustainable practices are commonplace; every young person is equipped with enterprise skills that benefit people and planet; and social creativity, innovation and diversity is alive in every business and workplace.

Our mission: To work with schools and businesses delivering programmes that educate and inspire people to make a change and improve the world around them.

Solutions for the Planet (S4TP) aims to:

- Encourage innovative, sustainable and entrepreneurial solutions to environmental and societal problems, led by young people
- Inspire young people to consider education, training and career routes in STEM and the green economy
- Support creativity and innovation in the delivery of education for sustainable development in schools, communities and businesses
- Enable cross-sector partnerships with businesses for innovation, creativity and entrepreneurship

Currently we deliver on these aims primarily through our core education programme, the Big Ideas programme, in partnership with secondary schools and businesses.

We also deliver other services and programmes to achieve our aims, which are explained later on in this report.

Solutions for the Planet is a member of Social Enterprise UK. As a social enterprise, we exist to tackle social problems – to improve communities, our relationship with the environment and young people's life chances. We provide valuable services in the open market and reinvest our profits back into the business to benefit more young people and local communities. When we profit, society profits.

Solutions for the Planet has four paired core values. They inform how we approach our work and how we interact with everyone we work with. They are:

- Responsibility and Sustainability
- Transparency and Integrity
- Creativity and Innovation
- Partnership and Collaboration



Big Ideas Competition

Solutions for the Planet's award-winning Big Ideas programme is a science, technology, engineering and maths (STEM) programme, with a focus on sustainability and entrepreneurship.

Through our annual engagement cycle thousands of young people learn about sustainability challenges and how to solve them through designing their own innovative, enterprising solutions – or Big Ideas, as we call them.

The programme focuses on five key themes: energy, water, waste, food and biodiversity. However, there is flexibility for students to identify and tackle any local or global sustainability problem they are passionate about, be it environmental, social or economic.

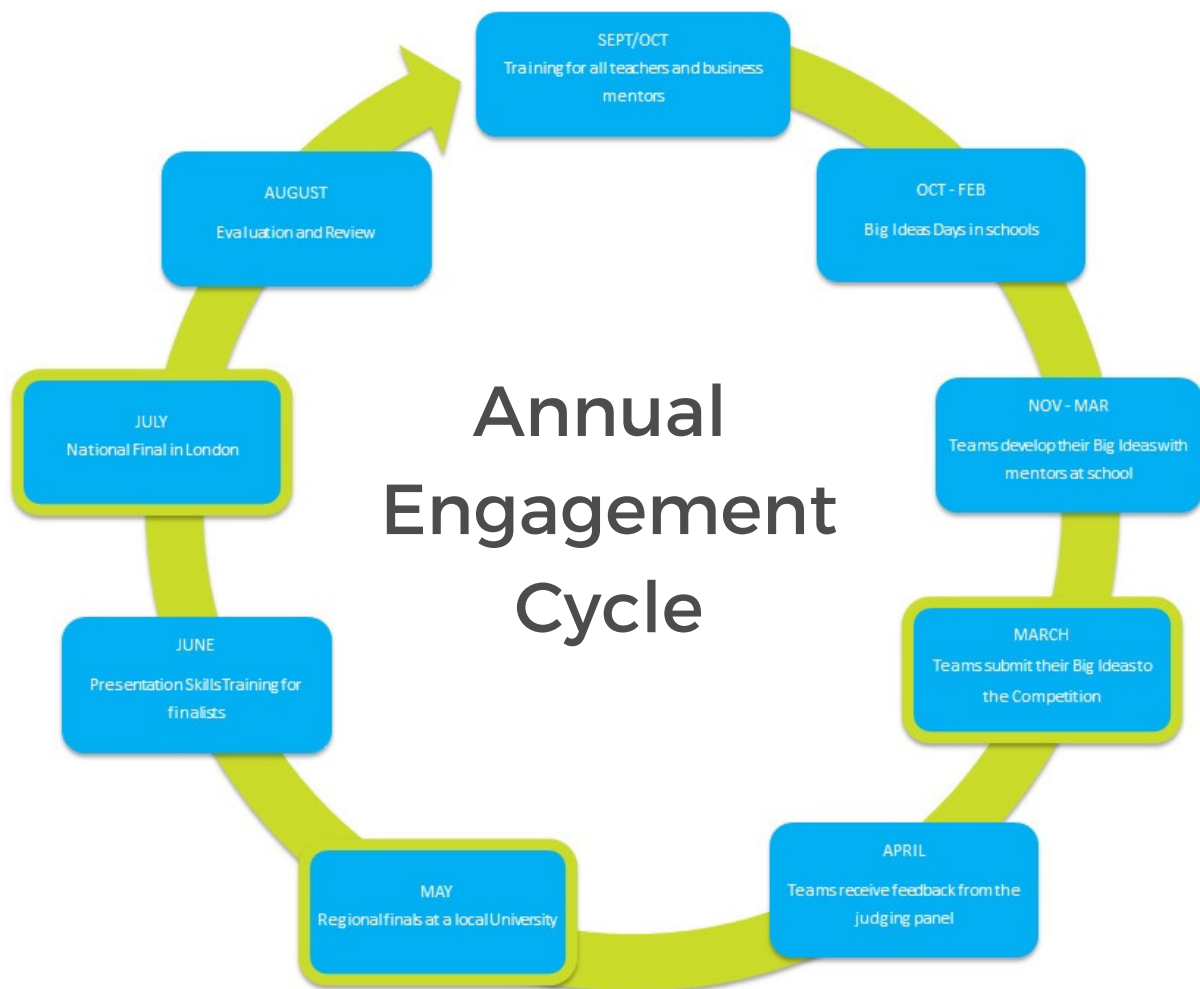


During the programme young people work together in teams to develop a solution (a Big Idea) to a sustainability problem that matters to them. We work with students in Years 7 to 9, or S1 to S3 in Scotland (11-14 years old) and deliver our initial Big Ideas Day in schools with the support of teachers and business mentors.

Those students who wish to take their idea forward, to enter the Big Ideas Competition, do so in weekly development sessions led by teachers and supported by our business mentors. These ideas are developed over a period of several months into a business plan and presentation for submission into our national Big Ideas Competition, which takes place annually.

Following competitive area heats, the top teams from across the nation are invited to present their Big Idea at the Palace of Westminster, London, in July. This year's finalists designed products, services and campaigns tackling a diverse range of issues.





Output in numbers

168 Big Ideas submitted to the competition from 840 students

3804



students took part in a Big Ideas Day

298 students (72 teams) participated in one of 7 regional-finals

36



schools participated

55 students from 12 teams attended the Final

850



Big Ideas generated



A British Science Association programme

298 students achieved a CREST Bronze Award and 2 were eligible for a CREST Silver Award

Students' feedback from the Big Ideas Days



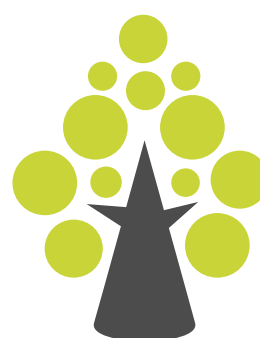
72% say they are more interested in STEM subjects as a result

70% understand more about the job opportunities using STEM skills



85% say they know more about sustainability

88% feel young people, like them, can make a difference to sustainability



79% know more about how companies are using STEM skills to tackle sustainability

Social Impact

Last year, we devised a Theory of Change for the Big Ideas programme. This is the process by which we determine what outcomes and impact we and our partners consider most important to evaluate and evidence.

We identified six areas in which we wanted to be able to demonstrate change and developed our evaluation methodology around this. Our evaluation captures the journey towards some of these changes throughout this report.

The six areas in which we wanted to demonstrate change in are:

1. Schools asking and understanding more of businesses and their relevancy within the curriculum
2. Increasing sustainability awareness among young people and in business
3. Creating greater opportunity for creativity within the curriculum
4. Development of STEM knowledge and entrepreneurial and employability skills in young people
5. Widening the talent pool for our business partners
6. Empowering the voice of young people in key global issues

Throughout this report we demonstrate how we have delivered outcomes towards these six key areas as well as other outcomes we feel are important to highlight. In this section we simply draw your attention to the overall difference we've made towards our social impact in these priority areas, and where we need to improve in future years.

“As an employee it refreshed my sense of creativity and helped me look at projects through a different lens”

1. Schools asking and understanding more of businesses their relevancy within the curriculum

Our programme clearly brings schools and businesses together, in most cases for the first time, through mentoring. Overall, mentors tell us this is a positive experience, with 76% saying it creates more interaction between young people and the organisation.

We are not yet clear to what extent schools ask our business partners to support with additional activities such as open days, career talks, site visits or work experience however, we do know this goes on from conversations with both teachers and business partners. We will do more to capture how often this happens as a result of our introduction between schools and businesses.

Anecdotally, we know that bringing schools and businesses together through the Big Ideas programme helps schools and teachers understand the relevancy of entrepreneurship, sustainability and STEM to the world of work and careers guidance, within the curriculum.

We now have data to support this anecdotal evidence with 78% of teachers saying they had a greater understanding of the sustainability issues facing companies after attending the Big Ideas Days. 77% said they had a greater understanding of the types of jobs requiring STEM skills, putting them in a better position to advise and guide students around future careers.

Likewise, our partner businesses now understand more about the needs of schools in accessing up-to-date information and examples of new technologies, scientific applications or business practices. Without these partnerships, education and business are at risk of operating very separately and not supporting one another in terms of developing the right skills for the future.

For us, this partnership is particularly important when considering the opportunities of sustainability, the green economy and social entrepreneurship.

2. Increasing sustainability awareness among young people and in business

As detailed later in this report, our data shows we have a significant impact on young people's awareness of



sustainability. 85% of students reported a positive distance travelled to the statement "I know about sustainability" from when they started the Big Ideas Day to when they finished it. 100% of teachers said the Big Ideas Day helped their students understand the concept of sustainability and 72% of teachers and mentors said the day generates new ideas on approaching sustainability. 69% of teachers also said it gives them a better understanding of young people's attitudes towards sustainability.

3. Creating greater opportunity for creativity within the curriculum

Our Big Ideas Days and programme more generally demonstrate to schools alternative ways of delivering key aspects of the curriculum, by using a variety of different methods and involving teachers from the start. Teachers are also invited to the training we deliver to mentors about the programme, so they can learn about and understand the approaches we adopt throughout it.

Although there is less evidence to demonstrate “greater opportunity for creativity within the curriculum”, when asked how they would describe the programme, creative was one of the most popular words used by teachers. 83% of teachers said the Big Ideas Day encouraged them to be more creative in how they tackle issues such as sustainability within the curriculum.

4. Development of STEM knowledge and entrepreneurial and employability skills in young people

This is evidenced throughout the report as it is a key priority throughout our Big Ideas programme and Competition.

5. Widening the talent pool for our business partners

Widening the talent pool and increasing diversity within STEM careers is important to Solutions for the Planet and we elaborate how we do this later in the report. We believe this diversity of participants on our programme helps employers think differently about their talent pools and from where they seek to recruit. We also hope that building partnerships between schools and local businesses will help young people widen their horizons, increase their aspirations and enable them to apply for a more diverse range of opportunities after school – including work experience, apprenticeships, training and higher education.

Although only 34% of mentors said the



programme enabled their organisation to recruit from a more diverse talent pool, we see this as a long-term strategy and hope to share more examples of this in the coming years.

6. Empowering the voice of young people in key global issues

This year fifty-five 11-14 year olds presented twelve Big Ideas at the Palace of Westminster in front of an audience that included their MPs. They covered global issues of our time such as pollution and plastic waste in our oceans; the decline of bee populations; excessive greenhouse gas emissions in farming; as well as issues of more national significance such as homelessness; the cost of people missing their medication; and bullying in schools. All the judges expressed how the quality of this year’s finalists, both in terms of presentation and actual ideas, surpassed all previous years.

Diversity

It is important to S4TP to capture the diversity of students we work with throughout the year, as it's an organisational priority to widen the talent pool for business. We focus in particular on increasing awareness of and access to STEM careers for young women and young people from different BME backgrounds.

43% of Big Ideas Day participants were from a BME background

49% were female
(this includes two girls' schools)

23% received free school meals (a common indicator of deprivation in education)

10% were identified as having special educational needs

(NB two school data sets were not submitted, the inclusion of which would likely increase this percentage.)

This year, again, S4TP investigated whether demographic factors influenced the success of the Big Ideas programme on pupils. The local areas, schools and demographics of students involved in a Big Ideas Day can differ substantially.

This year's analysis of the impact of

student demographics shows that gender, ethnicity, deprivation, number of mentors, year group region and group size have no overall impact upon the students' enjoyment or distance travelled against 10 key benchmarks for the Big Ideas Day.

The few exceptions which we think are important to note in this report are:

- Reduced group sizes on a Big Ideas Day for this year's programme has shown that lower numbers of mentors in group sizes of less than 150 makes no difference to the distance travelled by students and their enjoyment
- Year 7 students showed a bigger distance travelled in relation to the statement "I know about sustainability" when they were asked this at the beginning and the end of the day
- Scottish students showed a smaller distance travelled (compared to other regions) in relation to the statements "I know how companies are using STEM skills" and "I know about jobs using STEM" which may simply reflect the different curriculum in Scotland and England.

This is convincing evidence that S4TP provides an accessible, inclusive and consistent programme for 11-14 year-olds regardless of their demography or background.

The Big Ideas programme has always been inclusive of young people with special educational needs (SEN) in the schools in which it is run. For the 2017-18 academic year we delivered within a specialist SEN school for the first time, running a Big Ideas Day with 100 of their year 7 to 9 students, all of whom had moderate to severe SEN needs.

Alongside the school's keenness to be involved in the programme, S4TP's main motivation to engage SEN students was the lack of careers advice and personal development options available to these young people. Our programme aims to raise aspirations and highlight the range of career opportunities available, particularly within the STEM sector. We strongly believe that all young people should have access to this kind of support if it can be delivered in a way that is accessible to them.

S4TP worked collaboratively with the school to prepare for this Big Ideas Day and the ensuing programme. S4TP staff observed lessons, chatted to students, and discussed learning needs with teachers. Resources were modified to use fewer words and simpler language, but the content remained much the same.

On the day, students were supported by one adult (either teacher or mentor) to every team of 4-5 students. This worked well to keep teams focused, clarify instructions, and push them to complete each task to the very best of their abilities.

Our delivery style was also modified to incorporate simpler language, shorter periods of listening, and a greater focus on team-based tasks, which again worked well in terms of keeping students engaged. Over the course of the day, the SEN students completed all but one of the same tasks we set to mainstream cohorts; they followed the same workbook; they negotiated, in teams, a key problem to tackle and came up with a Big Idea to solve this; and many of them presented their Big Ideas at the end of the day. The S4TP team was incredibly pleased with how well the day ran but recognise that the support of the teachers in both the planning and delivery stages was key to this success.



We were keen to capture the students' experiences of the day but realised that our standard evaluation form may have been daunting for these students to complete. As such, we simplified our statements and asked the adult supporting each team to read aloud and record each student's response. These responses have therefore been included separately in this report.

Overview of the Big Ideas Day

More than 850 Big Ideas were generated at Big Ideas Days this year, with 170 teams submitting their ideas to the Big Ideas Competition in March 2018.

Students choose sustainability issues that matter to them, whether they be social, economic or environmental.

The types of solutions the teams come up with are equally diverse, from improving existing products, to developing new technologies, to designing new services, to creating new campaigns for people to engage with.

In addition to our social impact through education and skills development of young people, the Big Ideas generated through the programme have the potential to have significant environmental and social impact themselves.

This was the case with Hodge Hill College's Sea Savers, who not only made significant changes in their school to become plastic free, but also convinced their catering supplier to reduce single use plastic in the canteen. The catering supplier, Aspens, then went on to implement this policy across the 63 other schools it operates in and plans to roll it out across the other 400 schools it will work with in 2018-19.

This year's finalists and their Big Ideas:

Team	School	What's the Big Idea?
Sea Savers	Hodge Hill College	A campaign to make Hodge Hill College (and then other schools) plastic-free
Cap Beast	Biggar High School	A methane-capture cap for farmers' slurry tanks and a system to re-use the methane for energy production
Skills 4 Change	King Richard High School	A service focused on educating homeless people, living within shelters, to grow their own produce
Save Our Seas	Pudsey Grangefield School	A sea-cleaning vacuum complete with a frequency-emitting sound to frighten fish and prevent them being caught in the product
PPU	CTC Kingshurst Academy	A drone to collect and spread pollen to counteract the decline in bees for pollination
Rent-a-Bike	Plashtet School	A rental bike scheme that uses old recycled bikes that would otherwise end up in landfill
Medi-Ping	Corpus Christi Catholic College	A medical app designed to remind young people to take and complete courses of medication
Workout Energy	Cams Hill School	Exercise equipment and gyms powered by kinetic energy
Stop Bullying	Moseley Park School	A website and interactive Virtual Reality game that puts the bully in the shoes of the victim
Operation ReCraft	Corbridge Middle School	A recycling competition in school where waste is used to create beautiful sculptures and art work
Biomass Battery	King James I Academy	A battery fuelled by algae to solve the issue of battery waste and pollution
Turbo Turbine	Alderbrook School	A product of capturing and separating CO2 from factory chimneys and using it to generate energy using a turbine and producing carbonic acid to sell to fizzy drinks companies

Big Ideas programme and Competition

The Big Ideas Day

This year Solutions for the Planet ran 32 Big Ideas Days from Portsmouth to Glasgow involving approximately 3800 students. This included two consecutive Big Ideas Days at each of three particularly large schools in East London, Leeds, and Bradford, plus a joint Big Ideas Day between four schools in the West Midlands. We also worked with our first special educational needs (SEN) school and four primary schools. Data in this report refers to student feedback from 29 of the Big Ideas Days.

Solutions for the Planet aims to engage our students with sustainability issues, STEM skills and raising awareness of careers in this sector. As such, this year we decided to measure the 'distance travelled' over the Big Ideas Day (BID) in terms of student's STEM knowledge and sustainability awareness.

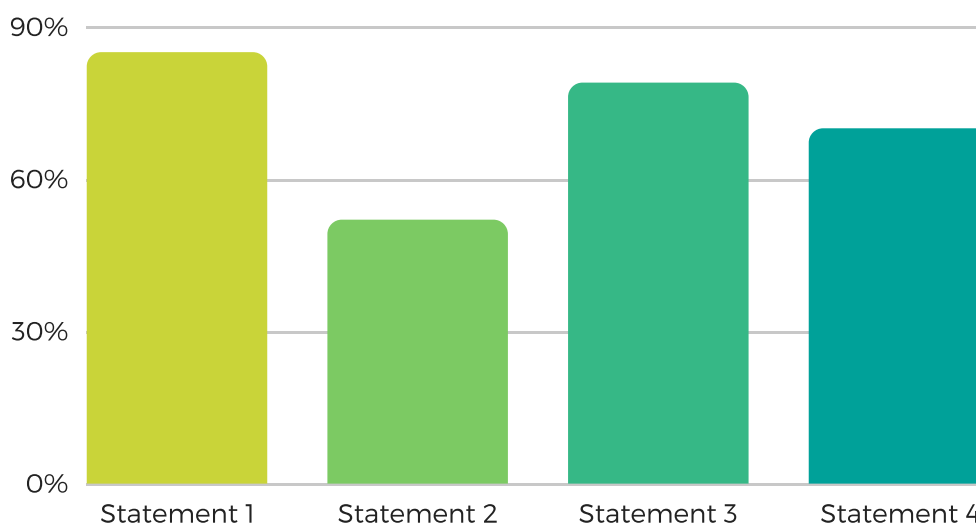
At the beginning of each BID students were asked to benchmark themselves on a 10-point scale expressing their agreement with, or knowledge of, the following four statements:

1. "I know about sustainability"
2. "I am interested in STEM"
3. "I know about how companies use STEM skills"
4. "I know about jobs using STEM skills"

At the end of the BID students re-assessed their agreement with, or knowledge of each statement, allowing us to calculate their 'distance travelled' for each one.

Based on the 29 Big Ideas Days where full data was collected we can see that for each of the four statements, over 50% of students reported positive distance travelled by the end of the BID.

Graph 1: Mean percentage of students across all BIDs showing positive distance travelled per statement.



Graph 2: Mean distance travelled per question, represented by mean baseline responses (bottom) and mean increases (top in grey). Figures represent mean values across all BIDs.



85% reported a positive distance travelled for “I know about sustainability”; 79% for “I know about how companies use STEM skills”; 70% for “I know about jobs using STEM skills”; and 52% for the statement “I am interested in STEM”.

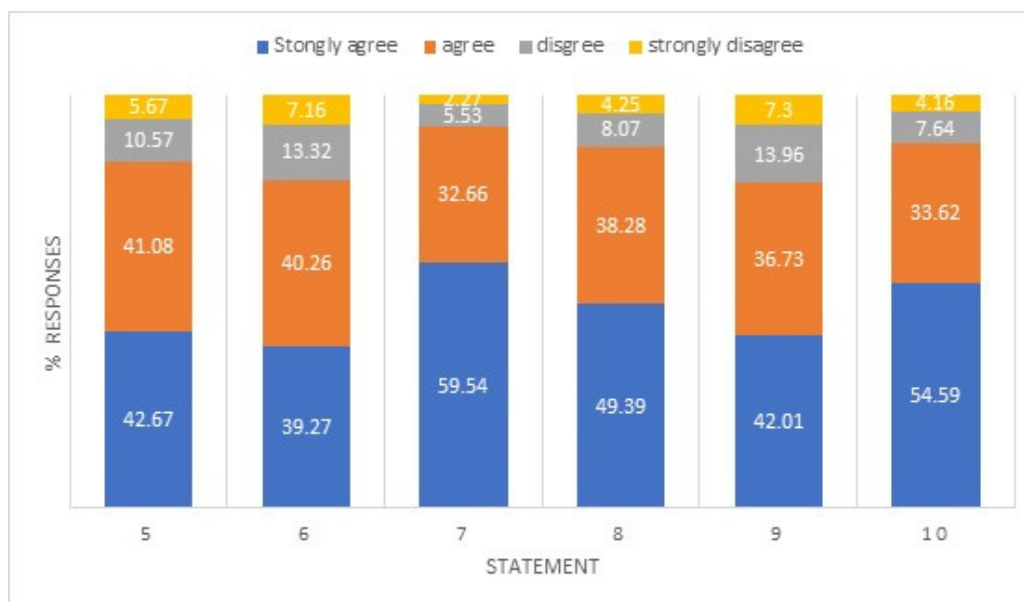
Results suggest that students are acquiring knowledge during the Big

Ideas Day and feel confident to self-report an increased understanding of sustainability, and an increased awareness of STEM skills and jobs. Students do not travel as far in their responses to statement 2, “I am interested in STEM”, by the end of the day, however their baseline response to this statement is higher at the start of the day, than for the other three statements.

Most significantly our evidence shows that we make most progress in increasing students’ knowledge of sustainability and how companies use STEM skills.

Distance travelled data gives S4TP a good indication that students are making learning and awareness gains through the BIDs, however we are also interested in their experience of the day. Therefore, in our end-of-BID feedback we also present the following six statements relating to

Graph 3: Mean student response to each statement for the 2017-18 Big Ideas programme cohort.



their enjoyment of the day, soft-skill development, and their experience of mentor support. All statements are answered on a scale of 'strongly agree' to 'strongly disagree'.

5. I enjoyed the Big Ideas Day

6. I would recommend the Big Ideas Day to a friend in another class

7. The mentors helped me understand more about the range of jobs using STEM skills

8. I enjoyed working with the mentors

9. The Big Ideas Day has made me feel more confident about working in a team

10. Young people like me can make a difference to sustainability issues

Over 75% of students agree or strongly agree with each of these statements (graph 3). The feedback shows that 84% of students enjoyed the Big Ideas Day.

The evidence shows that they benefit from the mentor support available, particularly in terms of careers support - 87% said they enjoyed working with mentors, and 93% said the mentors helped them understand more about the range of jobs using STEM skills. We also see evidence for softer skill gains in terms of confidence (79% agreeing with statement 9) and social responsibility (89% agreeing with statement 10).



85%
enjoyed the BID



87% said they enjoyed
working with mentors



79% said they feel
more confident
working in a team



89% feel that young
people like them can
make a difference

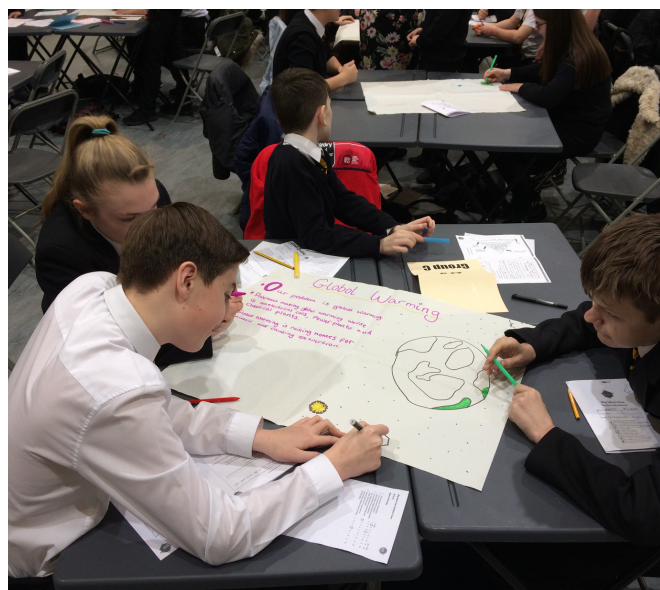
Submissions

186 Big Ideas submitted to the competition

These 186 teams collectively involved 840 students. This was 22% of all students involved in a Big Ideas Day this year. This is an increase from the previous year where only 133 teams and 19% of the cohort went on to submit Big Ideas to the competition.

Regional Finals

298 students (72 teams) presented at one of our seven regional finals. This year's regional Finals were held at Aston University, the University of Glasgow, the University of Portsmouth, the University of Wolverhampton, the Centre for Life in Newcastle and the Museum of London.



Photos of Regional Final events 2017-18



Photos of Regional Final events 2017-18

Big Ideas Competition National Final

55 students from 12 teams progressed through the programme to the competition's National Final. Once again, it is clear that extended involvement in the programme continues to improve the students' skills and offers them new opportunities.

We ask students who progress through to the National Finals where they feel they have improved as a result of participating in the programme. Similar to the responses after the Big Ideas Days, 67% of students said their interest in sustainability has increased and 76% said their science, technology, engineering and maths

(STEM) skills have improved. Perhaps unsurprisingly, students also reported improved team work (93%), confidence (80%), and presentation skills (91%). 64% also reported an improved ability to think outside usual subject areas. When given an 'other' option a couple of students said that they learnt how to overcome challenges and work with constructive criticism.

Three-quarters of students said their STEM skills had improved as a result of the programme

For a third of students the programme increased their interest in school and two-thirds said it improved their relationship with teachers. More than half said it improved their project management and entrepreneurial skills, and 42% said it increased their knowledge of future career options.

Summing up the programme, finalist students' comments reflect the skills they developed:

"Great experience, fun, made me more aware of our world."

"I have learnt a lot about STEM and how to run a business."

"This has helped me know about my options for the future."

"It is a great programme which gives people bigger opportunity."

"Influential and a chance to see people think outside the box."

"I now know how to present confidently and help start others with business ideas."

"We have worked together as a group to develop our idea from the beginning and now we all have better entrepreneurial skills."

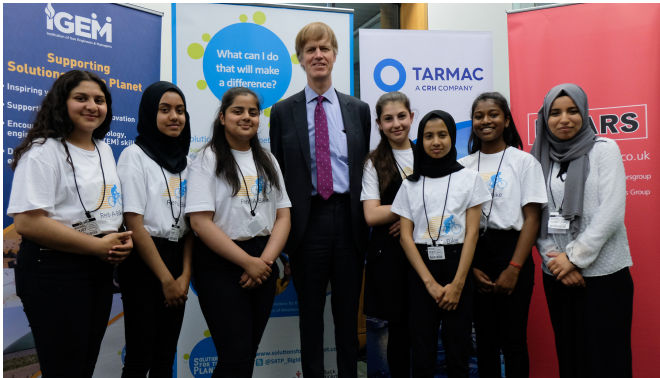
"...it was an amazing, once-in-a-lifetime experience that I enjoyed very much. It was also very educational and helped me with the ability of presenting."

"I have learnt important life skills and it has influenced me to think about jobs to do with STEM in the future."

"This has been a huge step forward for me as I have met my local MP and presented my business design."

"S4TP has helped me understand the process of setting up a service and lots of skills that will be beneficial in the future."





Impact on schools – teachers

As with previous years, S4TP collects feedback from teachers directly after their schools Big Ideas Days. This helps us to understand how teachers view the day, what is working well and how we can improve the service we provide. It is for this reason that we have designed a rigorous evaluation which captures teachers' satisfaction of the Big Ideas Day, what they've learned, and their perceived benefits for students. Teachers are asked to rank their agreement with the following eleven statements;

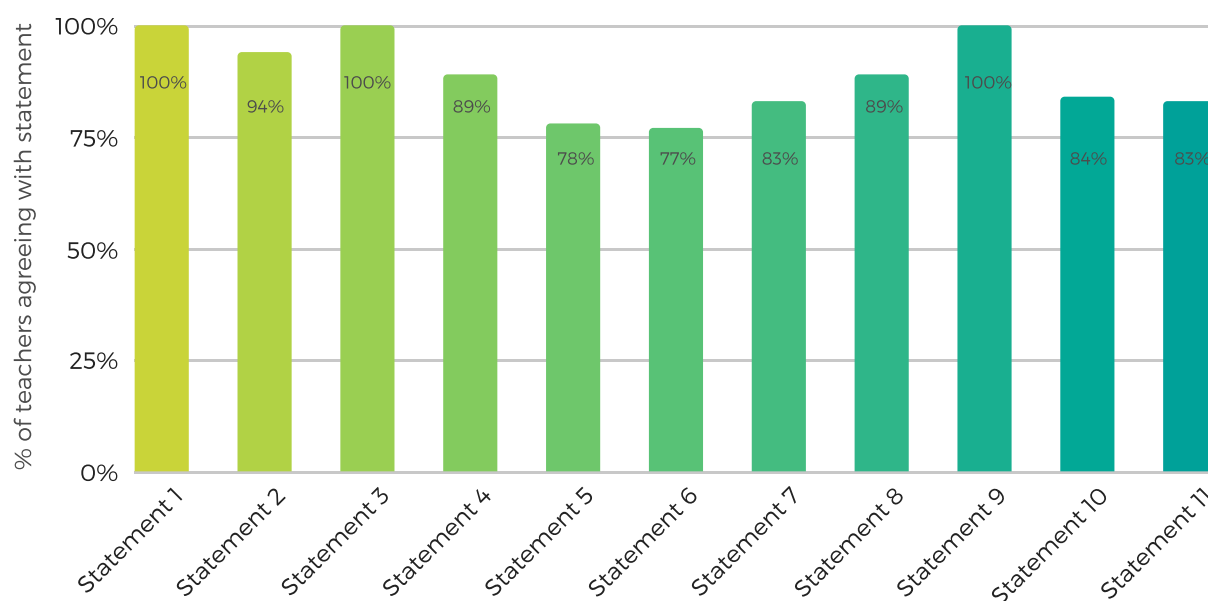
1. I am happy with how the Big Ideas Day worked
2. I would recommend the Big Ideas Day to friends and colleagues
3. The BID has helped our students understand the concept of sustainability
4. The BID has empowered our students to make a difference
5. I have a greater understanding of the sustainability challenges companies face

6. I have a greater understanding of the jobs requiring STEM skills
7. The BID encouraged us to be more creative in how we tackle issues such as sustainability
8. The BID enabled the students to think about a wider range of careers options using STEM
9. The Big Ideas programme will benefit the students involved
10. The Big Ideas programme will benefit the school
11. The training provided in advance of the BID was useful

As detailed in graph 4, all statements received predominantly positive responses from teachers, particularly those linked to the success of the day and what students learned. However, S4TP sees that there is room for improvement in the way we link sustainability challenges to companies and how we highlight the need for STEM skills across



Graph 4: The 2017-18 feedback of teachers involved in our Big Ideas Days across the country. Statement numbers refer to the specific statements detailed above.



Teachers sum up the Big Ideas Day as inspirational, thought-provoking and creative. The word-cloud below shows the variety of terms used by teachers to describe the Big Ideas Day. S4TP is pleased that such positive language is repeated across participating schools and feels this provides strong evidence for consistent teacher satisfaction with the BIDs.



Impact on schools – mentors

Mentors are crucial to the success of the Big Ideas programme. This year, 107 mentors from our business and community partners supported the students. 67% of students who reached the National Final said mentors were helpful to them during the programme. Each Big Ideas Day was supported by mentors. The experience was overwhelmingly positive according to the feedback we received from mentors, with 91% keen to recommend the programme to colleagues and friends, and 97% saying they saw the students developing key skills through the course of the programme.

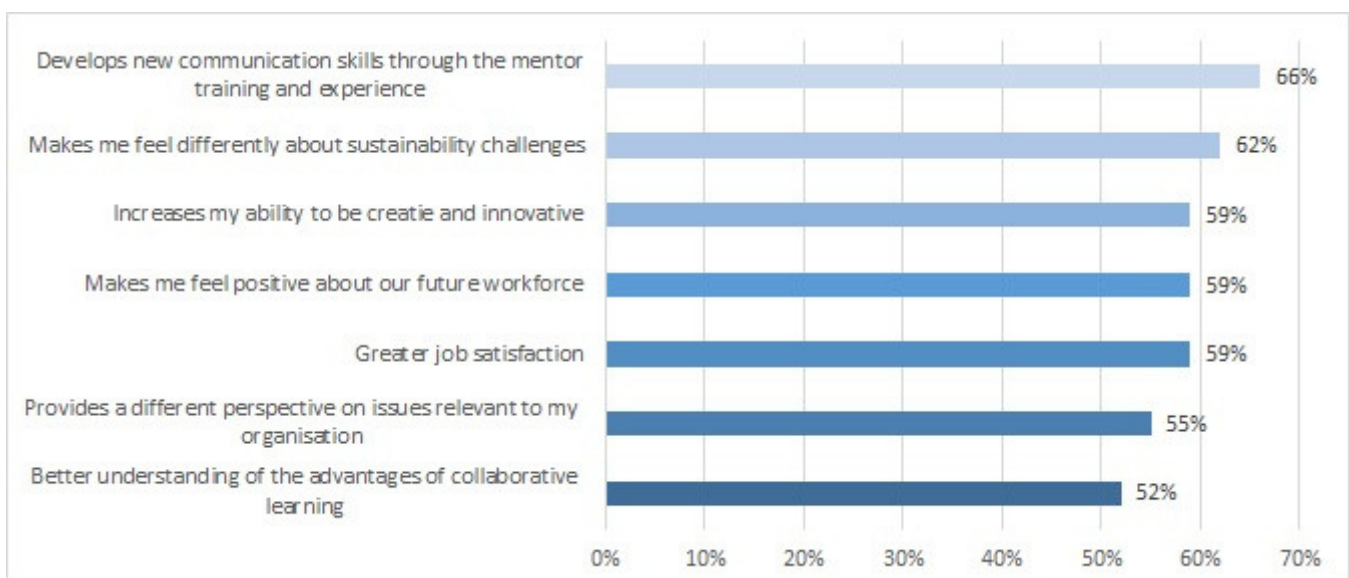
84% of mentors felt that mentoring young people through the programme has helped them in their professional life and 71% felt it has helped them in their personal life.

107 mentors supported the programme this year

Although only 17% of mentors felt mentoring on the programme directly benefited their job, more than 50% said it provided a different perspective on issues relevant to their organisation; gave them greater job satisfaction; developed their communication skills; gave them a better understanding of the advantages of collaborative working; and increased their ability to be creative and innovative.

59% also said it made them feel more positive about their future workforce.

Graph 5: What mentors see the benefits are from participating in the programme



Benefits that mentors felt the programme brought more widely to their business included: building the organisation's reputation with regards to sustainability among the local community (83%); building a better understanding of young people's attitudes towards sustainability (69%); creating more interaction between young people and the organisation (76%); and generating new ideas on approaching sustainability (72%).

We asked mentors to sum up their mentoring experience in three words, and the most used words were: Fun, Enjoyable and Rewarding.

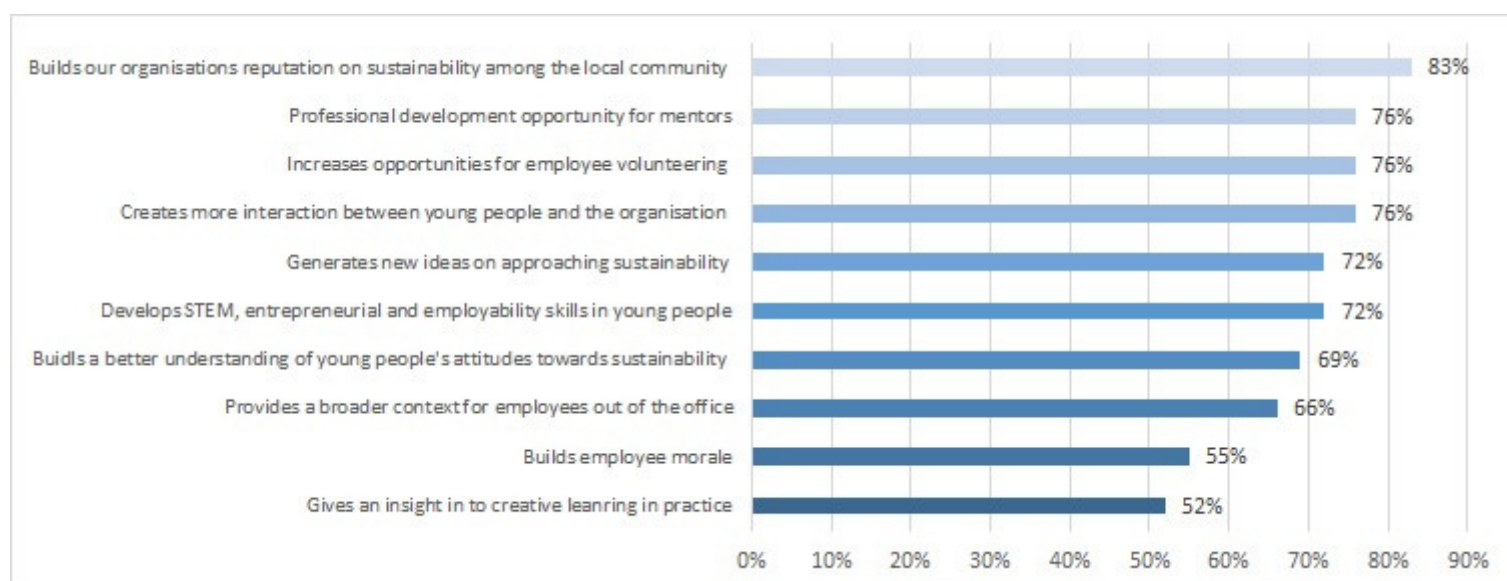
As well as the clear impact on the young people involved, there is also a gain for businesses who support the programme. 59% of mentors said they feel more positive about their employer as a

result of their mentoring experience and 55% said it builds employee morale.

Many companies want to increase employee engagement and satisfaction as this is widely known to have a direct impact on retention rates. The feedback from our mentors supports this with 75% of them saying one of the business benefits is the increased employee volunteering opportunities.

**“[The S4TP programme] gives the business a better idea of local areas and its community”
Business Mentor**

Graph 6: The benefits Mentors see for their companies from being part of the programme



Stakeholders & Partners

We collaborate with a range of stakeholders and partners who support the programme in a variety of ways.

We work with business and community partners. Our business partners, university partners, local organisations and community members work with the young people on our programme and help them realise their potential.

Our University partners include: Aston University, the University of Glasgow, the University of Leeds, the University of Portsmouth and the University of Wolverhampton. We have also hosted events this year at the Centre for Life in Newcastle and the Museum of London.

Below are our business partners this year:



Hosts of our Regional Finals this year:



CREST Awards

CREST is the UK's only nationally-recognised scheme for student-led project work in the STEM subjects (science, technology, engineering and maths). There are six CREST Award levels, the fourth of which is Bronze, 'an introduction to STEM project work for 11-14-year-olds working in teams'.

Since the start of the 2016/17 Big Ideas programme, Solutions for the Planet has been working with the British Science Association as a CREST Award delivery partner. Our award-winning Big Ideas programme is CREST-accredited to Bronze level.

All the members of the school teams that participate in a Big Ideas Day, submit their completed business plan into our Big Ideas Competition and continue on to present their Big Idea at a regional final, are eligible for a CREST Bronze Award. These Awards are sponsored by Solutions for the Planet's business partners.



A British Science Association programme



National Geographic Kids Magazine

This year we approached National Geographic Kids Magazine to see if they would consider offering a year's subscription as a prize at the National Final. It is the first time S4TP has offered any prize apart from the awards themselves, and we think it is a fantastic way to help motivate our young people to continue exploring and expanding their knowledge of science, innovation, the environment and biodiversity. They provided us with 6 one-year subscriptions, one for each member of the winning team plus their teacher.

Our partnerships & other activities

Throughout the year we also engage with a number of other partners to deliver activities that support our organisations' objectives and enable us to showcase our unique approach and expertise.

Green Innovation in Schools Pilot

Climate-KIC is the European Union's main climate innovation initiative. It is one of three Knowledge and Innovation Communities (KICs) created in 2010 by the European Institute of Innovation and Technology (EIT). The EIT is an EU body whose mission is to create sustainable growth.

Last year, our CEO Jen Baughan travelled to Amsterdam, Valencia and Zurich to consult on Climate-KIC's exciting new pilot 'Green Innovation in Schools'. This year we have been working in partnership to test a range of visual learning tools to encourage creative and critical project development.

These tools were originally designed for adult users to facilitate project management and idea development within the workplace. However, Climate-KIC and S4TP saw the potential for such tools to be adapted for use with much younger students to support problem solving and project management within learning tasks.

Your Green Future, Solihull

Your Green Future is an interactive event run by the charity Severn Wye Energy Agency, which engages hundreds of 11- to 18 year-olds with the role of sustainability in the economy and what this could mean for their future careers.



It does this through a series of creative workshops, which see students work with businesses to investigate genuine industry challenges and the role of STEM and sustainability in innovation, business, waste management, energy use and urban design.

This year, for the second year in a row, S4TP created and ran an interactive workshop at the event. It focused on the theme of Your Future City, and during each workshop (which was 70 minutes long and ran 7 times over the 2-day event) around 30 students were split into 6 groups, each with an industry business mentor to guide them.



NCS Enterprise Challenge, Leeds

Solutions for the Planet was invited to Leeds to set an enterprise challenge for 40 students aged 16-17 as part of their National Citizenship Service. S4TP's challenge was broken down into two parts:

- 1) What barriers do 11-14-year-olds face when engaging with extra-curricular activities?
- 2) How can we make extra-curricular activities more attractive to 11-14-year-olds?

Three groups of 12-15 students were asked to brainstorm and discuss these problems then share their learning with the group.

Other events that we have attended throughout the year include:

- * Build Bangladesh
- * Big Bang Fairs
- * Ernst and Young Careers Fair
- * BITC Birmingham Community Conversation

We also took delivered a #ShowTheLove workshop at Old Trafford.

To read more about our involvement in these different projects, visit the Programmes and Impacts page on our website: <https://solutionsfortheplanet.co.uk/programmes-and-impacts/>



Our Team

S4TP is committed to developing a learning organisation with an aspiring and inspiring team.

Jen Baughan, CEO, leads the team of three regional Programme Coordinators – Dr. Jess Mitchell, Sarah Milburn and Charlotte Hosier. This year we have also expanded our associate pool and our regional finals were hosted by professional actors.

At the end of July we were sorry to say goodbye to Jess after a fantastic two years. Jess was a highly-valued member of our team and did a fantastic job launching the programme in the North of England and Scotland this year. We shall miss her expertise as a scientist and Doctor of Zoology, which brought knowledge and insight to the programme and to many of the teams' ideas, as well as her development of our impact data collection and analysis. Two new Programme Coordinator appointments will be announced in Autumn 2018 to join Sarah and Charlotte.

After his support as interim Chair (in Kevin Schofield's absence) we were pleased to formally announce Simon Pringle from Project Rome as Chair of our Board of Directors in September 2017. It was with regret that Nicola Martin stepped down from the Board this year and her expertise will be missed. Two new exciting Board appointments will be announced in Autumn 2018. They will join Jen Baughan, Simon Pringle, Kat Luckock and Mark Wood.

This year we have continued to grow our Advisory Board and were joined by Morgan Philips. Morgan is Co-Director of UK charity The Glacier Trust who work with NGO partners to enable climate change adaptation in Nepal. He is also an associate director at Green Schools Project and a trustee of the National Association for Environmental Education. We're already benefitting from his extensive and varied experience.

You can read more about our Board of Directors, Programme Coordinators and Advisory Board on our website.



The Solutions for the Planet Team - Regional Coordinators & Board Directors

Environmental Impact

At Solutions for the Planet we recognise we have an impact on the environment and are committed to proactively reducing the negative, enhancing the positive impacts we have, as well as seeking to continually improve our environmental performance as an integral part of our business strategy and operating methods.

We're committed to...

- Using eco-friendly and sustainable materials and supplies throughout our operations and programmes e.g. recycled printing and flip chart paper
- Recycling e.g. ensuring materials are recycled after Big Ideas Days
- Reducing our carbon emissions and vehicle emissions
- Keeping food waste to a minimum at events
- Identifying and using sustainable suppliers

This year we have worked towards these goals in the following ways...

- All staff and volunteers work from home or in other organisations' premises which significantly reduces our environmental impact in terms of travelling to work and using additional lighting, heating or materials
- We use public transport and/or car share as much as possible
- When we are not in our home offices we ensure all (non-essential) electrical equipment is switched off when it's not being used
- All staff and volunteers take care to limit the amount of paper waste they produce and recycle paper waste whether in their home office or at an event
- All printers are capable of printing double-sided. This is a minimum standard for future purchases.
- All printers are configured to use ink-saving settings
- We always purchase recycled paper supplies
- We have made a conscious effort to purchase our stationary from a social enterprise to ensure we support this supply chain (Supply Shack)
- We use Ecolutions Glue Sticks and markers (from BIC)
- We use Ecosia as our search engine on our work and personal computers (as a result an average of 5000 trees are planted)

Our Commitments for next year (2018-19) are

- We will collect and send used markers, broken pens, glue sticks to Terracycle
- We will source drawstring bags from ethically- and sustainably-sourced cotton for Big Ideas Day activities
- We will look into options for carbon offsetting

Looking forward in 2017-18

As we reflect on the past twelve months, it's also good to look forward to the next twelve. We are currently recruiting for the Programme Coordinator role in the North of England and Scotland and will also have exciting announcements to make about our expanding Board of Directors in the autumn.

The team are looking forward to delivering the programme in 2018-19, involving over 3000 students in our Big Ideas Days, from 30 schools nationwide. We will be continuing to deliver the programme in Glasgow, Biggar, Falkirk, Leeds, Bradford, Wolverhampton, Solihull, Birmingham, London and Portsmouth. We will be growing the programme's reach along the South Coast and into Sheffield and Doncaster.

We're grateful to Tarmac who now support the programme across all three regions and IGEN, our first national charity partner. We are also grateful for SGN's ongoing support in Scotland and the South East and regional support from Brammer Buck and Hickman, Mears Group and our new partner, SUEZ.

In line with our environmental commitments and ambitions, we have secured a partnership with BIC, who will be supplying the coloured markers and glue sticks for all the Big Ideas Days and training events throughout the year, from their Ecolutions Range, "a complete range of writing products made from recycled material". It is important to us to align ourselves with companies that have a positive and progressive stance on sustainability issues, so BIC is a perfect fit. We will be developing our partnership with CREST through the British Science Association and with National Geographic Kids Magazine.

S4TP will also be looking to increase our understanding of the individual impact the programme has on students and increasing our presence at events where we can promote our impact and develop our next 3-year strategy.

Here's to another fantastic year!

Please stay in touch by signing up to our newsletter (via our website www.solutionsfortheplanet.co.uk) and by following us on social media.



@S4TP_BigIdeas



Solutions for the Planet

