

CEO's Welcome



First and foremost a huge shout out to the creative geniuses, future engineers, problem solvers, positive thinkers, that's right, the stupendous students we have worked with this year. All of them. If you only have two minutes to glance at this report, look at pages 6 & 7 where you will be wowed by their Big Ideas.

With 3500 more young people full of #BigIdeas set to join us in September 2019, we spent time over the summer refreshing our Big Ideas programme. Having reached over 17,000 young people since 2013 we have learnt a lot about what works and what doesn't and, being committed to continuous learning for all means that we invest a lot of time in debriefing and designing improvements. We welcomed two new Coordinators, Claire Fitton (North England) and Kate Kirkwood (Scotland) in September 2018. We also welcomed two new Board members, Russell Brown and Melanie Taylor to our community this year. As always, I have a huge amount of respect and thanks for our entire delivery team: Sarah, Charlotte, Claire and Kate and Board: Simon, Kat, Mark, Melanie and Russell.

We continue to be part of the Natwest Entrepreneur Accelerator programme and have reworked our partnership packages so that in 2020 we will welcome our first 'local' business partners as well as regional and national partnership packages. We have been shortlisted in the Social Enterprise UK Awards for Employment, Training and Jobs category and I was honoured to be included in the shortlist as Entrepreneur for Good at the Great British Entrepreneur of the Year Awards in the South West.

Solutions for the Planet pledged to the #iwill4nature campaign and joined the Year of Green Action as we continue to build our community internationally across Europe with organisations working towards similar goals.

Huge thanks must go to our national business partners Tarmac and IGEM, multi-region partners SGN and regional partners Brammer Buck and Hickman, Mears Group and Suez. Together these partners smashed last years' volunteering hours record, doubling the number of hours to over 3000! Community engagement through employee volunteering is only one of the reasons why our partners get involved in the programme. They are also committed to upskilling the future workforce and customers, raising awareness of diverse careers in their industries, developing their own people, raising the profile of the work they are doing, and promoting creativity and critical thinking in solving major sustainability challenges.

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. Teachers have told us that they really value the year-long nature of the programme, the level of support from both our team and the mentors from industry and the emphasis on students ideas, independent learning and applied STEM skills.

In this year's report we share snapshots of the journey we have been on and the positive impact we have co-created with young people, teachers, schools, mentors and businesses. On a personal note, every year that passes I see the business going from strength to strength. I am as acutely aware now, as I ever was, that we wouldn't be where we are now without every single person that has been part of our story at Solutions for the Planet over the years. Thank you all. We are making a difference and we take seriously our responsibility to do so.

Jen Baughan, CEO





Our Environmental Impact

We are committed to:

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

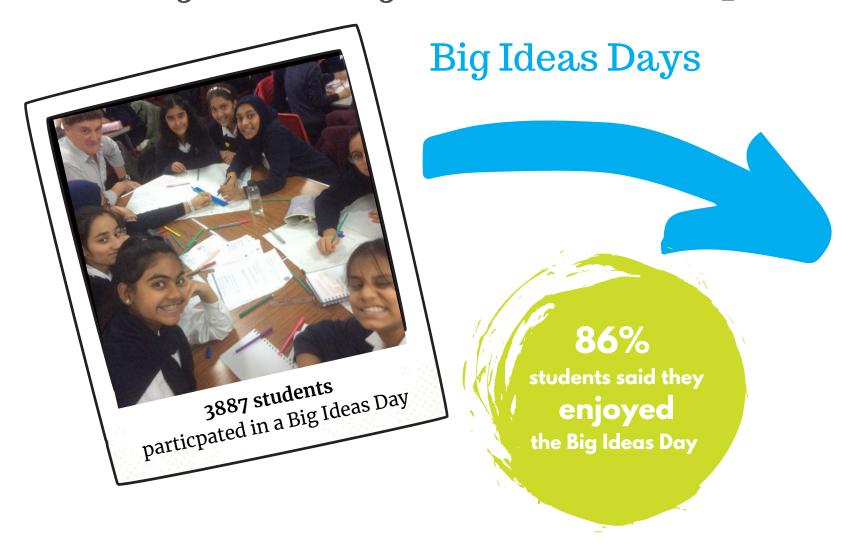
This year we have worked towards these goals in the following ways:

- Securing a product partnership with BIC who supply all of our schools with samples of their Ecolutions products
- Searching over 3552 times using Ecosia, the Solutions for the Planet team contributed to planting 79 trees
- Replacing paper envelopes with drawstring bags from ethically- and sustainably-sourced cotton for Big Ideas Day activities
- Working 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 material
- Using public transport and/or car share as much as possible
- Ensuring that our home offices and events don't waste electricity and paper
- Using printers that are capable of printing double-sided and are configured to use ink-saving settings. This is a minimum standard for future purchases.

Our Commitments for next year (2019-20) are:

- We will join Terracyle's used pens recycling scheme through our partnership with BIC
- We will join a Carbon Offsetting scheme
- We will continue to use Ecosia as our search engine and aim to plant over 200 trees

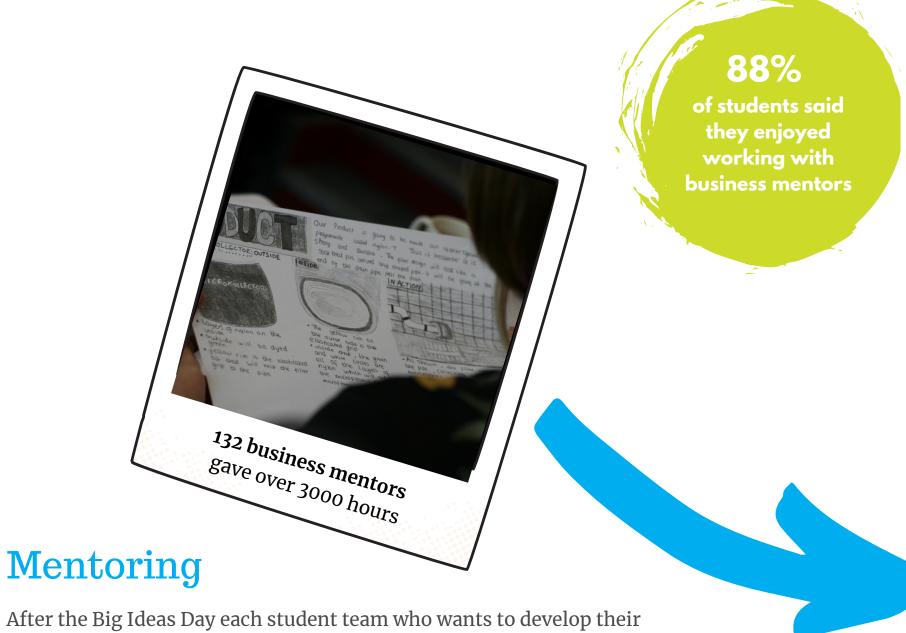
The Big Ideas Programme and its Impact



95% of teachers agree that the Big Ideas Day helps their students understand sustainability

82% of teachers said the Big Ideas Day encouraged them to be more creative in the way they tackled key issues like sustainability in the classroom

80% of young people said the Big Ideas Day made them feel confident working in a team



After the Big Ideas Day each student team who wants to develop their Big Idea is supported by our team of mentors. This year we had 150 business employees involved, 132 of which were mentors giving over 3000 hours to our schools teams across the UK.

At this first stage, the mentors support the teams to develop their idea so it's ready to submit to the competition in March. If successful at this stage they are then invited to present their Big Idea to a panel of judges at a regional final at a local university.

89% of young people think young people like them can make a difference to sustainability issues

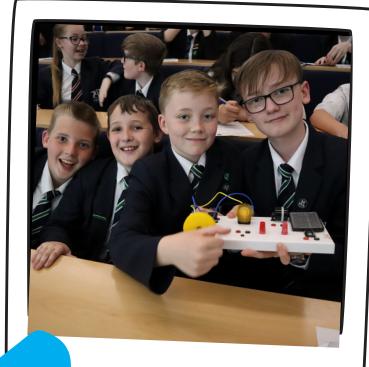
Regional Finals

This year 63 teams competed in one of 6 regional finals.

These events provide a unique opportunity for students to present their Big Idea to a large audience of their peers, teachers, mentors and judges; give and receive feedback; as well learn from fellow students about different presentation styles.

These events give students the opportunity to tour campuses and speak to current students about the university experience

12 successful teams were then invited to present their Big Ideas at our national Finals.



12 Finalist Teams

National Final

Our Final takes place at the Palace of Westminster, in London at the end of the summer term and gives our finalist teams the opportunity to visit Parliament and present their Big Ideas to an audience of Government Ministers, MPs, industry leaders and business mentors.

This year 12 teams from across the UK presented their aweinspiring ideas for sustainability. You can read about each of these ideas on the next two pages.



82% of teachers say they have a better understanding of the jobs requiring STEM skills as a result of attending the Big Ideas Day

85% of teachers said the Big Ideas programme has helped their students to think differently about their future career options

93% of teachers said the Big Ideas programme helped their students become more environmentally responsible



Our Finalists and their Big Ideas



RenewAbus from Mayfield School, Portsmouth came first with their completely self-sufficient, upcycled bus which uses 7 forms of renewable energy to power it. The judges were so impressed with the amount of scientific knowledge the students presented, as well as their prototype, and the connections they'd made and conversations they had already started having with companies like Stagecoach.

"RI've learnt so much about science just by this bus.
Piezoelectric energy is a year 11 subject and
I'm more than nearly an expert on that!
It's a big thing to get involved in but it's so worth it"
Year 9 Student





Second place went to Focus from Arden Academy, Solihull. This team want to tackle water wastage and help you save money and reduce your carbon footprint at the same time. They have designed a product called the Focus Flow, that attaches to your shower to alert you to finish your shower. The app tracks your time, water usage, money spent and CO2 emissions from showering so that you can use that information to bring all those figures down.

Third place was awarded to Bee Aware from Hall Cross Academy, Doncaster. This team are passionate about protecting existing bee habitats, educating younger generations about the importance of bees and creating new and exciting habitats. The judges were particularly impressed that the team were already generating income and had a very well-researched and well-presented idea.

Students are eligible for a CREST Discovery Award for participating on the Big Ideas Day. Each student who presents at a regional final receives a CREST Bronze Award. All our finalists are eligible to apply for a silver CREST Award.

We're proud to partner with the British Science Association and the CREST Awards to accredit the students time and commitment to developing their Big Ideas using science, technology, engineering & maths.











EcoFumes – a removable exhaust filter for vehicles which captures and dilutes carbon dioxide

Fast 'n' Fashion – a campaign (through workshops) to raise awareness of clothing waste and how to upcycle your old clothes

Love Life – a bracelet that tracks heart rate and blood pressure

Planet Savers – an all-ages app which tracks your CO2 emissions to encourage behaviour change

Power Down – an app that will limit daily use on mobile phones providing incentives for young people to turn off their phones and focus on the real world

Energy Gym – gyms where users work out on machines connected to a generator, generating energy that can be put back into the National Grid

O6 – a campaign using badges made from bottle caps to encourage the recycling of plastic bottles

Microkollector – a filter that retrofits to the waste pipe of a washing machine to collect microfibres













Our business partners and supporters

Our business partners tell us they get involved in the programme because of the opportunities to:

- Develop employees, upskill the talent pipeline and raise the profile of career opportunities in their industries (human resources)
- · Network with other businesses, school communities, local organisations and politicians, as well as increase their positive news stories (communications)
- Engage directly in communities that they service, encourage more young people into STEM and provide employee volunteering opportunities whilst stimulating sustainable solutions (social value)

Our business mentors are crucial to the success of the Big Ideas programme. This year, 149 mentors from our business and community partners supported the students and contributed over 3000 hours of their time.

94% of mentors say they've developed new communication skills from S4TP training and participating in the programme

"Solutions for the Planet gives the mentor experience in coaching and driving success. For me personally, it was a great project. It gave me a no pressure environment to practice my soft skills.

Coming from the construction environment into a school environment was a complete contrast. A very different approach was needed. Getting the children motivated about a STEM project was the hardest challenge. It was all well worth it in the end and seeing the team perform in the national final filled me with pride" Mentor















"The Big Ideas programme has made me realise that I have unlimited potential" Student

91% of students on Big Ideas Days said mentors helped them understand more about the range of jobs using STEM skills. The experience was overwhelmingly positive according to the feedback we received from mentors, 97% saying they saw the students developing key skills through the course of the programme.

94% of mentors felt that mentoring young people through the programme has helped them in their professional life and 82% felt it has helped them in their personal life

"The Biq Ideas programme is a once-in-a-lifetime opportunity that has taken me on an amazing journey" Student

To join the journey contact Solutions for the Planet at www.solutionsfortheplanet.co.uk









