Building a Sustainable Future

2017 Sustainability Report
Our vision

BAM is focusing on the positive impact we can have, by offering the best service to our customers by ‘building the present, creating the future.’

During 2017, BAM Construct UK continued to contribute to Royal BAM Group’s sustainability strategy, as part of its overall strategy ‘building the present, creating the future’. Working with colleagues from across the company, we have defined our key themes of climate positive, resource positive and enhancing lives. For BAM Construct UK these aspirations and new focus represents a natural evolution of our approach. Our ultimate goal remains to have a positive impact, so we can deliver more value for clients and the communities in which we work.

We continue to implement a consistent programme across the entire business to improve measurement and management of sustainability, which we see as key to improving performance. In 2017 we were recertified to the CEMARS Gold Standard and launched new challenging targets to 2020, based on a new 2015 baseline. We also began to report against our target to enhance 150,000 lives by 2020 as part of Royal BAM Group’s overall target to enhance one million lives by that date.

We have been particularly proud of the work our trainees and graduates have done as part of our enhancing lives challenge and in recognition they were finalists in the Investing in Talent awards, having delivered 75 student engagement activities, connected with 2,500 students, worked with nine charities and raised over £15,000.

BAM FM continued to improve its performance and was placed in the top 5 of the 2017 Sustainable FM Index and was one of only two companies awarded the Gold Standard.

In 2017 we continued to develop our understanding of how buildings perform, with the ultimate goal of reducing carbon, and improving the comfort, health and wellbeing of occupants. We now have an established network of building performance champions across the UK. During 2017 we worked with a range of clients to inform their approach to building performance evaluation and soft landings, including Coventry University, Lincoln University, ESFA, Argent, the NHS and the London Metropolitan Police.

BAM continues to take a leadership position on sharing best practice, raising awareness and enabling discussions on important issues such as building performance, digital construction and the circular economy.

Our vision
BAM is focusing on the positive impact we can have, by offering the best service to our customers by ‘building the present, creating the future.’

During 2017, BAM Construct UK continued to contribute to Royal BAM Group’s sustainability strategy, as part of its overall strategy ‘building the present, creating the future’. Working with colleagues from across the company, we have defined our key themes of climate positive, resource positive and enhancing lives. For BAM Construct UK these aspirations and new focus represents a natural evolution of our approach. Our ultimate goal remains to have a positive impact, so we can deliver more value for clients and the communities in which we work.

We continue to implement a consistent programme across the entire business to improve measurement and management of sustainability, which we see as key to improving performance. In 2017 we were recertified to the CEMARS Gold Standard and launched new challenging targets to 2020, based on a new 2015 baseline. We also began to report against our target to enhance 150,000 lives by 2020 as part of Royal BAM Group’s overall target to enhance one million lives by that date.

We have been particularly proud of the work our trainees and graduates have done as part of our enhancing lives challenge and in recognition they were finalists in the Investing in Talent awards, having delivered 75 student engagement activities, connected with 2,500 students, worked with nine charities and raised over £15,000.

BAM FM continued to improve its performance and was placed in the top 5 of the 2017 Sustainable FM Index and was one of only two companies awarded the Gold Standard.

In 2017 we continued to develop our understanding of how buildings perform, with the ultimate goal of reducing carbon, and improving the comfort, health and wellbeing of occupants. We now have an established network of building performance champions across the UK. During 2017 we worked with a range of clients to inform their approach to building performance evaluation and soft landings, including Coventry University, Lincoln University, ESFA, Argent, the NHS and the London Metropolitan Police.

BAM continues to take a leadership position on sharing best practice, raising awareness and enabling discussions on important issues such as building performance, digital construction and the circular economy.

James Wimpenny
Chief Executive
BAM Construct UK Ltd
Our partnerships

BAM wants to contribute to the wider development of the construction and property sector, and to the British economy. Our staff contribute to working parties and best practice forums in a range of organisations.

In 2017, we continued to promote a circular economy by taking part in a range of projects. We worked on BAMB (Buildings as Material Banks), a Horizon 2020 project aimed at helping the industry understand the design solutions that will enable a circular economy. If buildings and their associated materials can retain their value, the construction sector will use less virgin materials and produce less waste.

BAM Construct UK also held a series of circular economy workshops for members of our supply chain, was involved in designing and building a circular pavilion in London, and worked with Arup to produce a document exploring the benefits that circular business models offer stakeholders within the built environment. We forged new relationships with academic institutions, including the University of Cambridge, Bradford and Sheffield Universities, as part of their work on resource and material efficiency in construction.

We also supported London Waste and Recycling Board to produce its route map for a circular economy in London.

As a partner of the Supply Chain Sustainability School, we continue to engage our supply chain on sustainability by hosting supplier days, developing new guidance and tackling important topics such as modern slavery.
Our 2017 highlights

- Revenue generated through ‘green’ certified projects: £66%
- 99% Timber from legal and sustainable sources
- 1,048 Young people helped through charity partnership with CLIC Sargent
- 92% Waste diverted from landfill
- Demonstration of leadership in sustainable business

- Reduction in carbon intensity: 15.6% (2015-2017)
- 0 Pollution incidents
- 51% Projects fitted with low or zero carbon technologies
- 4 Circular projects delivered in Europe

- 47,918 Lives enhanced during 2017
- 20 Suppliers engaged on circular solutions during 2017
- 101g CO₂/km Average company car emissions
- 4 million Business miles saved since 2008 (2,000 miles per employee)

- 66% Revenue generated through ‘green’ certified projects
- 99% Timber from legal and sustainable sources
- 1,048 Young people helped through charity partnership with CLIC Sargent
- 92% Waste diverted from landfill
- 100 Tonnes of CO₂ per year avoided by BAM Energy installed PV

- 100% Projects that achieved or exceeded BREEAM target rating
- 92% Waste diverted from landfill
- 20 Suppliers engaged on circular solutions during 2017
- 101g CO₂/km Average company car emissions
- 4 million Business miles saved since 2008 (2,000 miles per employee)
Sustainable design

Sustainable design and collaborative working is at the heart of our approach to becoming resource and climate positive, and to enhancing lives. BAM’s teams assist clients to identify, develop and then achieve their sustainability goals, focusing on issues such as in-use performance and cost effective outcomes over the lifecycle of the building.

Working with our clients to ensure their buildings perform to expectations
Sustainable design

We work with stakeholders to understand their sustainability aspirations to make sure their developments exceed expectations from day one and into the future.

Understanding clients’ needs
BAM understands that collaboration is central to delivering a successful project and we work alongside our clients to understand their aspirations, such as exceeding legislative requirements, increase cost savings, enhance their brand and/or achieve LEED/BREEAM accreditation.

Our offerings
Our knowledge and experience in delivering a range of projects means our in-house team of sustainability specialists are there to help each individual project every step of the way, from developing designs, managing the construction process, to supporting customers and building users during the operation of a building. Our integrated approach means we are able to offer innovative solutions which reduce impacts on the environment, improve the experience for end-users, and ensure our buildings perform at a higher level so retain a higher asset value at the end of their life.

Taking a long term view
Our sustainable approach extends beyond design and construction. BAM also has a thriving FM business where we support customers and building users during the operational life of buildings. In 2017 BAM Energy installed new solar PVs at Rydens Enterprise School in Walton-on-Thames, a new school built by our construction division. “Through BAM Energy funding the installation of PVs, the Trust saved a significant provisional sum which was allocated for the PVs”, Rhys Lewis, Senior Project Surveyor at BAM Construction explains. “Without this, the budget would have come under significant pressure and the client would have had to make some difficult decisions in order to complete the project.”

Long term involvement also helps us to understand how our buildings perform over time and what we can do to improve this, the aim being to narrow the gap between designed and operational performance. We have a national network of building performance champions and have worked with a range of clients to inform their approach to soft landings and building performance evaluations. The ultimate aim is to feedback learnings so future projects can operate more efficiently and provide better environments for occupants.

In 2017 BAM Energy installed new solar PVs at Rydens Enterprise School

An integrated approach allows us to offer innovative solutions
Growing our building performance offerings
Understanding key drivers to deliver successful projects
Carbon

BAM’s long term ambition is to have a Net Positive impact, and reducing our own emissions is just part of this journey. By working with our supply chain and our clients, we hope to reduce their emissions too, helping to combat climate change and reducing the costs of constructing and operating buildings. We continue to improve efficiency in our business through rigorous management as well as using new technologies for construction sites and are starting to calculate and set targets for reducing our wider impacts.
Carbon

Tackling climate change by reducing energy and CO₂ emissions from our own, supply chain and partners’ operations, and the products we deliver.

Our performance
In 2017 our emissions were 13,208 tCO₂e (14,253 tCO₂e rolling average) and our normalised emissions were 13.8 tCO₂e/£1m turnover (15 tCO₂e/£1m rolling average). We track performance using a three year rolling average and have reduced our emissions intensity by 45% since 2008 on this basis. We’ve now set a new target for 2020 against a new 2015 baseline, to reduce normalised emissions by at least 15%. Our baseline is now made up of a three year rolling average to follow best practice. We have also worked with the Carbon Trust to carry out an assessment of our wider emissions (from supply chain and other sources) and plan to set reduction targets for these.

Being more efficient
Construction projects are the largest source of BAM’s direct emissions, so we set CO₂ reduction targets for every project, focusing on using less energy and fuel. In 2017 average emissions from our projects (including our subcontractors’ fuel use) reduced to 11.5 tCO₂e/£1m project value, a reduction of 10% compared to 2016 and 42% since 2008 levels (19.9 tCO₂e/£1m). This is a result of using energy monitoring and management tools, and using more efficient equipment. Our central energy management team continues to work with sites to help plan, manage and reduce energy and fuel use, and to test new technologies that offer greater efficiencies.

Low carbon transport
Transport is vital to our business but travel leads to emissions, and unnecessary travel leads to higher costs and affects employee wellbeing. Since 2008 we’ve worked hard to reduce these impacts. Our staff now spend less time on the road, which is good for the environment and their wellbeing. In 2017 both total business miles and average business miles per employee reduced (by 3% and 1% respectively). Employees are driving 2,070 fewer business miles on average each year than they did in 2008.

The average efficiency of our company car fleet is now 101gCO₂/km. This figure is set to rise in the short term due to real-world emissions tests. In the long term, we continue to aim to reduce our impact by introducing electric vehicles. Our car allowance fleet currently sits at 144gCO₂/km.

Low carbon buildings
We work with our customers and design teams to deliver low carbon buildings. Increasingly, this means looking beyond design targets towards actual performance of buildings e.g. achieving Display Energy Certificate ratings. We work with our clients, through a soft landings approach and by carrying out post occupancy evaluations, to ensure their buildings perform as well as possible. BAM Energy finances, installs and manages renewable energy installations and carries out energy efficiency improvements for our clients (on new and existing buildings).

Reducing wider impacts
Our targets have been largely based on the carbon emissions BAM creates directly from our own business activities. Now we are working with clients and suppliers to take account of the wider impacts that buildings have, for example, from embodied carbon. As well as working with suppliers to reduce embodied carbon impacts, we’ve also worked with WRAP to calculate the embodied carbon associated with waste. Ultimately we want to deliver buildings that are low carbon throughout their life cycle.

5,700 tCO₂e saved by reducing waste

BAM’s CO₂ reduction journey

We’re using 7,000 kWh per £1m turnover less than in 2010

7,000 kWh

5,700 tCO₂e
Our emissions inventory and carbon management plan have been independently audited and are certified through the international CEMARS scheme.

Emissions by key activity area

Our 2017 emissions were 13,208 tCO₂e (14,253 rolling average), this is a decrease compared with 2016. While turnover has reduced slightly, reduction in both electricity use and fuel use have meant we’re also reducing our normalised emissions.

Emissions by individual source

The continued downward trend of our normalised emissions shows we are performing well.

Emissions by scope

Visit our microsite for more information.
Resource efficiency

BAM has a long term ambition to become Net Positive. In order to achieve this we are planning our journey towards zero construction waste. This includes digital construction, engaging our supply chain to take steps towards creating a circular economy, and pushing boundaries with prefabrication.
Continual waste reduction

We work hard to reduce the production of waste at source. That is why we engage the whole supply chain, from designers through to subcontractors and materials suppliers, to understand how better design, improved packaging and the more efficient control of materials on site can contribute to waste reduction. We continue to hold design for resource efficiency workshops in order to work with clients and design teams at the earliest stage possible on projects, as a project’s design can have a large influence on the waste produced on site.

Although there is a priority to prevent waste in the first place, we continue to track the quantity of waste removed from sites with a target for reuse, recycling or as a last resort, recovery and landfill. This is normally by using specialist waste transfer stations that achieve the highest possible value from the waste materials taken from our sites. There are also a growing number of suppliers offering take-back schemes for their materials. They use the take backs as feedstock for the production of new product.

To align with new targets across Royal BAM Group, BAM Construct UK is beginning to record the tonnes of waste removed from our sites (we previously reported in m³), making use of more primary data from our waste management contractors. We have also set a new target against a new 2015 baseline. In 2015 the three year rolling average has been calculated as 40 t/£1m. The three year rolling average for 2017 was 34.4 t/£1m, a 14% reduction. This is a good start to the 25% reduction that has been targeted by 2020. We continue to pursue construction techniques and products that will help us to achieve our vision of zero non-hazardous waste to landfill. The proportion of waste diverted away from landfill currently stands at 92%.

Towards resource positive

Our focus has previously been on reduction, however our aim is not to just do things better, but to do new things. That is why we continue to use our position as an industry leader to share our experiences and drive the performance of the construction industry by working with the UK Green Building Council, Supply Chain Sustainability School and Build UK. And we are working with clients, suppliers and peers to facilitate the step change we need to do things differently, for instance we are one of 16 partners working on the ‘Buildings as Material Banks’ EU Horizon 2020 project, which hopes to catalyse a move to circular buildings.

We also recognise the whole lifecycle impact of buildings is where we need to focus in the future. In 2017 we have been learning how our Dutch colleagues have worked with their clients to deliver circular economy buildings, such as Circl for ABN AMRO. In the UK we continue to develop buildings using circular principles. This means finding ways to extend a building’s life by designing in flexibility, or repurposing it. For example, we created Elliot Hudson School in a building that was previously a call centre. During 2017 we also worked with our supply chain through a series of four workshops to upskill and engage on circular economy opportunities within their businesses.
Sourcing responsibly

Our journey towards becoming Net Positive includes focusing on the goods and services we procure and the positive impact we can have by selecting the right suppliers and setting the right standards. This means we aim to source products which are natural, safe and ethical, taking into consideration their impact on the environment and people, both locally and internationally.
Sourcing responsibly

Ensuring we source materials more responsibly by taking a life cycle approach, which considers sourcing, manufacture, flexibility and end-of-life.

How are we doing so far?
In 2003, we made a commitment to procure only certified legal and sustainable timber (current UK chain of custody schemes are certified by the Forest Stewardship Council and the Programme for the Endorsement of Forestry Certification). We can demonstrate that 99% of new timber delivered to our sites is from verified legal and sustainable sources, with more than 90% having full FSC or PEFC chain of custody. We also have experience in delivering projects with partial and full FSC certification. For example, we achieved FSC Full Project Certification (TT-PRO-006105, 2017) at 30 Broadwick Street, currently one of 75 fully certified FSC projects in the UK.

Awareness is key
Our regional environmental awards encourage our subcontractors to continually improve their performance. In 2017 we also delivered 280 environmental awareness training hours using the CITB Site Environmental Awareness Training Scheme (SEATS), and monthly environmental toolbox talks were delivered on all projects to advance the training and awareness of more than 16,700 BAM and supply chain operatives about important issues.

As a partner of the Supply Chain Sustainability School, we are helping the construction supply chain assess and improve their knowledge of sustainability issues. Since its launch in June 2012, the School has become established as the place for suppliers and sub-contractors to learn more about how to address both environmental and social sustainability issues. To date, over 5,000 members have joined the School from more than 2,500 companies.

BAM supports the school through sitting on five leadership groups, including being a founding member of the Welsh School. We have hosted four supplier days and continually engage to improve awareness of the School and to promote key issues among our supply chain. During 2017 we led work to develop a BIM maturity assessment tool to guide companies on where they need to improve skills/capabilities in relation to digital construction. We have hosted a number of learning workshops for our supply chain, including creating a bespoke course on circular economy.

Preparing for new challenges
The road ahead involves fostering even closer and more effective responsible sourcing relationships with our suppliers and subcontractors. Increasing the use of digital construction also helps us to evaluate the environmental life cycle costs of the materials used in our buildings. This will help to influence the construction sector as a whole, as a greater understanding of a product’s environmental impacts will allow more informed product choices.

Breakdown of total timber sourced on our sites

- 90% with full FSC or PEFC chain of custody certification
- 5,087m³
- 75% of our priority suppliers are registered with the School
- 75% verified legal and sustainable sources

Sourcing responsibly
Ensuring we source materials more responsibly by taking a life cycle approach, which considers sourcing, manufacture, flexibility and end-of-life.
Community

Royal BAM Group’s commitment is to enhance the lives of one million people by 2020. Our focus is to create a positive impact through our business activities in local communities. We aim to be open and transparent about the impact we have by measuring how we have connected, improved or transformed lives.
Community

Enhancing lives is about having a positive impact through activities that would not happen without our support or intervention.

Enhancing lives
Enhancing lives activities can be categorised as pro bono or in-kind, fundraising or donations, volunteering, opportunities for social enterprises or small businesses, training, employment, and health and wellbeing. Since 2010, BAM has invested £4,130,852 into local communities through these kinds of activities, which can be defined and measured as either connecting, improving or transforming lives.

Training and local employment
To best support apprentice development and recruitment, we need to be clear how many apprentices BAM supports, both directly and through our supply chain. We are working with access control system providers to develop bespoke monitoring and reporting capability, which we know will provide us with accurate data.

Inclusion of local communities
All BAM sites register with the Considerate Constructors Scheme (CCS). In 2017, our average CCS score was 41, against an industry average of 36. In 2017, 18 of our sites were awarded a Bronze, Silver or Gold CCS National Site Award. Portsmouth University Technical College was awarded an inspection score of 47 out of 50 and received maximum scores in two categories: ‘secure everyone’s safety’ and ‘value the workforce’.

Employee engagement
BAM employees can apply for two days’ paid leave each year to undertake voluntary work, and in 2017 our employees volunteered 5,687 hours. In addition, if teams of staff wish to work together on a voluntary project they can apply for a £1,000 grant to purchase materials. Since its launch we have funded 40 community volunteering projects, in support of hospices, SEN groups, community centres, local schools and the Prince’s Trust.

In 2016 we launched our first Enhancing Lives Trainee and Graduate Challenge. The overall impact of this challenge was significant, with more than 2,542 students engaged during the challenge from 44 schools, colleges and universities and the monies raised went to nine different charities across the UK. The 1,323 hours volunteered by our trainee and graduates meant they were able to support 20 charities and community groups.

Every two years BAM’s staff choose a national charity partnership. Our national charity partnership for 2017 and 2018 is with CLIC Sargent. In 2017, we raised £81,500 which will enable CLIC Sargent to give education and employment support to 1,048 young lives and funded 39 visits to schools by a nurse.

Enhancing education
In 2017, BAM’s Education Co-ordinators worked with 16,026 students providing support in lessons related to science, technology, engineering, maths, arts and business; offering employability sessions, conducting site visits and work experience, and providing CPD sessions for teachers and lecturers.

In 2017, BAM’s South East region ran another successful week-long summer school for year 10 students (14-15 year olds). Students attending local schools were invited to discover more about the construction industry and gain a Bronze CREST Award in Sustainable Communities.
Health and wellbeing

BAM wants to enhance the lives of both the communities in which we work, and the lives of the people who work with and for us. BAM is committed to a workplace where employees and partners feel healthy, safe and engaged and supported. We want to support our people so they can achieve their best for themselves and for our customers.

98% of BAM employees feel mental health is an important issue.
Health and wellbeing

BAM is committed to a workplace where employees and partners feel healthy, safe, engaged and supported.

Working safely
We continue to work towards eliminating accidents and preventing the causes of occupational ill health. We set annual objectives and targets including a series of leading indicators which we report against each month. Initiatives such as our Safe2Start daily briefings and internal health and safety awards, together with our ‘Handle Your Future’ campaign raise awareness across the business. Our current Incident Rate benchmark against other Build UK members is in the top quartile of performance. In addition to supporting Build UK we actively support health and safety through our memberships of RoSPA, British Safety Council and the Construction Health and Safety Group.

Health
We support our employees’ well-being by:
- Offering employees a comprehensive medical health screen every three years once they reach 40.
- Providing regular access to one-off health screening and occupational health checks at our sites and offices.
- Supporting the rehabilitation of employees with long-term illness.
- Subsidising gym membership and ‘Cycle to Work’ schemes.

Wellbeing
BAM has a subsidised a staff sports and social club. Our employees have taken part in events such as theatre trips, quiz nights and spa trips, and also taken the opportunity to try new sports and activities like yoga, ice skating, cricket and fishing.

We continue to promote the confidential Employee Assistance Helpline and are signed up to the Time to Change employer pledge, demonstrating commitment about raising awareness and ending stigma about mental health issues. 40 BAM employees have also volunteered to become Healthy Mind Ambassadors, to help us to be more open about mental health and encourage people to seek support if they need it.

In 2017, we launched Young BAM – a network for employees under the age of 35. Young BAM hosts events across the UK to allow colleagues to build their own networks, to understand the wider business, our strategy and our values and to provide feedback to our Senior Management Team on issues that impact the wider business.

Listening and engaging
Our Executive board stages an annual roadshow to provide updates on company performance and strategy and to hear the views of employees. Our intranet, social media channels such as Yammer, Facebook, YouTube and Twitter, and regular newsletters also keep our staff up to date.