



# UK Sustainability Report 2015



**Balfour Beatty**

# Introduction

The amazing projects we do have a long-lasting impact on the everyday lives of people everywhere that we operate. Our report summarises 2015's strong progress in continuing to make a positive, valuable and responsible contribution to society.

### Our customers

Building open and honest relationships with our customers helps us work together collaboratively to understand expectations and deliver projects successfully. We measured over 1,000 customer dialogues in 2015, achieving an industry-leading score and helping us hold our BS 11000 Collaborative Business Relationships certification.

### Our employees

We rely on the skill and expertise of our employees to deliver what we say we will do. Demand for skilled workers in our industry has never been higher and will increase, so we need a strong and diverse pipeline of skilled people. In 2013 we were the first construction company to sign up to The 5% Club. We are investing in a generation and committing to have apprentices, graduates or sponsored students on structured development programmes as 5% of our workforce.

We need to be able to retain and grow talent. We established a new learning and development programme (the Balfour Beatty Academy) to help our employees reach their full potential. We seek employee ideas for improvement through 'My Contribution' – with over 4,500 ideas shared since the launch in June 2015.

Everyone who works for us and with us expects to be safe. Our safety performance is improved against 2014. We continue towards our goal of Zero Harm and have started new ways to help inform and encourage people to safe behaviours.

### Our communities

We continue to reduce waste sent to landfill and to manage our use of power and water carefully.

We launched our community investment programme, Involved, in 2015. We now have over 200 live plans in place. We will deliver a positive skills and employment legacy by engaging with local suppliers and providing skills and training opportunities. Just under half of our total spend (£1.5bn) is with small and medium enterprises across the UK. We also partner with The Prince's Trust and new National Skills Academies.

### Our future

During 2016 we will research and plan our next steps to build on these achievements to innovate, ensure our future success and to tackle future challenges. These will help us to deliver on our promises and ensure a sustainable business for all of our stakeholders.

**Leo Quinn**  
Group Chief Executive



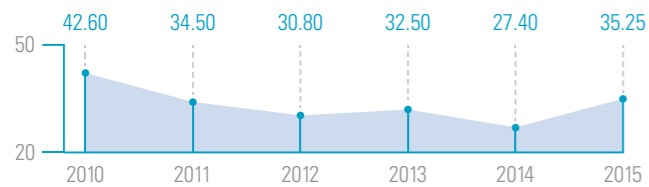
We are an international infrastructure group with expertise in:

- Civil engineering
- Construction
- Rail engineering
- Highways services and asset management
- Ground engineering
- Project finance
- Structural repair and maintenance
- Mechanical and electrical engineering services
- Mechanical and electrical module manufacturing
- Pipe fabrication and installation
- Switchgear manufacturing

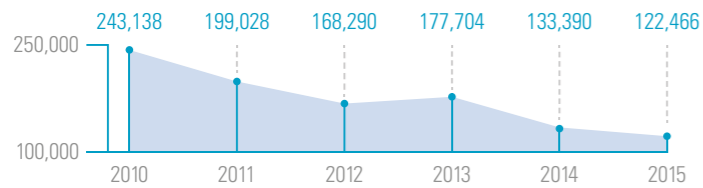
# Our performance

We have performed strongly in almost every area of our sustainability objectives.

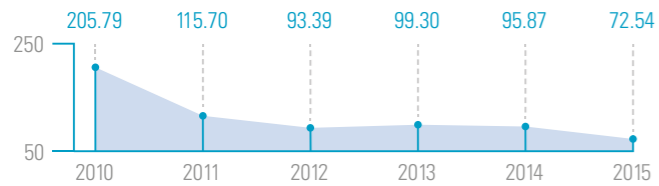
Scope 1 & 2\* emissions in tonnes of CO<sub>2</sub> equivalent / £m revenue



Absolute Scope 1 & 2\* emissions in tonnes of CO<sub>2</sub> equivalent



Total water consumption m<sup>3</sup> / £m revenue



\*Scope 1 & 2 cover direct emissions sources including fuel used in company vehicles and purchased gas and electricity. \*\*formerly the Carbon Disclosure Project

## London Youth Games

**£420,000**

of funding contributed by Balfour Beatty

**£25,000**

Worth of development grants spread throughout 12 different London boroughs

**150**

Balfour Beatty employees volunteering across the games calendar



**44%**

of our total spend is with

**SMEs**



Considerate Constructors

2015 ... **39.37**  
2014 ... 38.63  
2013 ... 37.79

(average score out of 50)

## Timber products

**92%**

(4,492m<sup>3</sup>) FSC or PEFC sources

**1%**

(56m<sup>3</sup>) Other legal and responsible sources

**7%**

(322m<sup>3</sup>) From unknown source

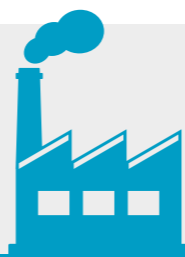


## Awards include:

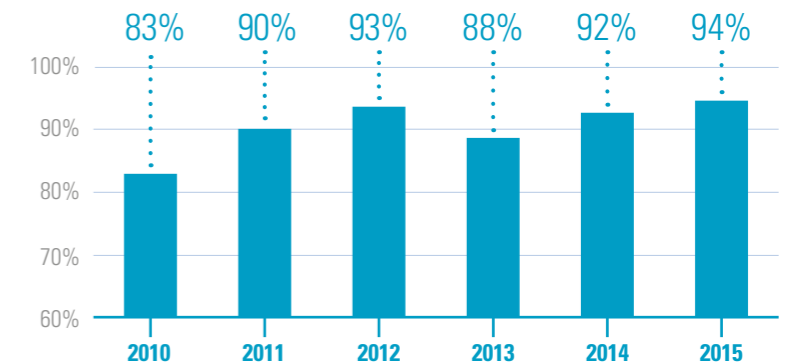
- Winner of the Hampshire Investors in Young People Gold Award
- Institute of Civil Engineering Thames Valley Infrastructure Project of the Year for Whitchurch Bridge Reconstruction
- Helix Canal Construction News Specialist Awards 'Sustainable Project of the Year'
- Five Green Apple awards

**97B**

Our highest ever CDP\*\* score



## Waste avoided from landfill



Reduction in annual public transport costs

**£2.3million**

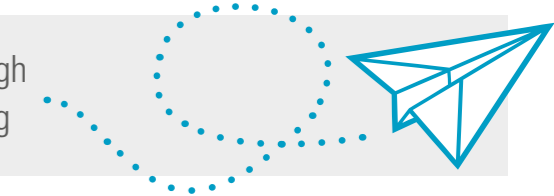


**4.6%**

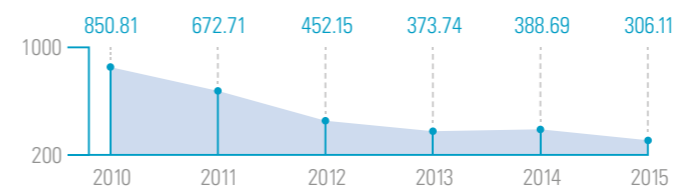
Of our workforce are apprentices, graduates or sponsored students

**1,445,812**

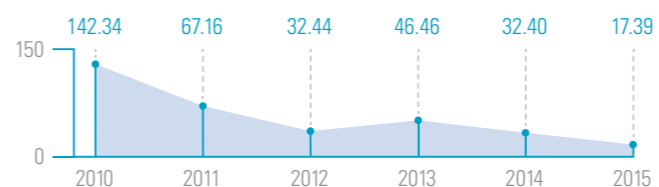
Sheets of paper saved through duplex and cancelled printing



Tonnes of waste produced/per £m revenue



Tonnes of waste sent to landfill/per £m revenue



## Charity

Charitable funds raised  
**£104,026.56**

Direct donations  
**£56,773.00**

Total

**£338,440.76**

Company match funding  
**£25,419.50**

Value in kind  
**£152,221.70**

# Our sustainability strategy

Our Blueprint for a sustainable business, summarised on the page opposite, acts as a framework for the successful and sustainable delivery of the infrastructure that society relies on. The implementation of our sustainability strategy is not the responsibility of one individual or one team, our entire business has a role to play with regular internal and external auditing to ensure we are delivering what we promise.



## Delivering our strategy

### Safety and Sustainability Committee

The Safety and Sustainability Committee sets out our Sustainability Policy and monitors progress against Our Blueprint. This ensures governance and accountability for delivery and performance at the highest level.

### Sustainability Working Group

Implementation of our Sustainability Policy is the responsibility of the Sustainability Working Group. This Group is responsible for the development of Our Blueprint and ensuring that it is embedded across all of our business.

### Local delivery

Each part of our business is responsible for developing a Sustainability Action Plan that sets out priorities and targets and how they will be met. Each of these plans is updated annually and considers local factors to make sure we shape our delivery to meet local needs.

### Internal & external audit

Our internal teams audit performance against Our Blueprint and the priorities set out in the relevant Sustainability Action Plans. External auditors are appointed to provide limited assurance over selected performance data that we are legally obliged to report each year.

## Our Blueprint for a sustainable business



	<b>Profitable markets</b>	<b>Environmental limits</b>	<b>Healthy communities</b>
<b>Customer focused</b>	Customer service programme	Customer satisfaction	Agreed sustainability goals
<b>Local</b>	Charitable fundraising	Community engagement	Ecology
<b>Efficient</b>	Projects to programme Projects to bid margin Overhead	Supply chain management	Scope 1 and 2 emissions Waste Water
<b>Innovative</b>	← Innovation →		
<b>Responsible</b>	Ethics	Health & safety	Responsible sourcing Environmental compliance
<b>Growing</b>	Profit Margin in the order book	Staff satisfaction Diversity	CDP score

### Listening to our stakeholders

The Blueprint Advisory Panel, who met for the first time in October, provides independent scrutiny and challenge on our performance in becoming a sustainable business. Co-chaired by two of our Managing Directors, it comprises of decision-maker level representatives from our key customers, industry bodies, non-governmental organisations, and Balfour Beatty senior leaders.

*"The commitment of Balfour Beatty to tackle sustainability has been demonstrated by the transparent way they have shared strategy and performance with the Blueprint Advisory Panel."*

*Toby Willison  
Executive Director of Operations  
Environment Agency  
(Blueprint Advisory member)*

# Delivering resilient infrastructure solutions

To help manage the impacts of climate change and provide robust solutions that meet the needs of society, both today and in the future, we are working with our customers to create more resilient infrastructure.

### The energy superhighway

The London Power Tunnels project, due for completion in 2018, will enhance the security of the high voltage electricity network across the capital. It will replace the current 275kV oil filled cable circuits with new 400kV and 132kV cables that will connect eight substations, provide energy feeds for vital infrastructure including Crossrail and reduce the need for disruptive roadworks required when upgrading and maintaining the existing infrastructure. It will also create capacity for renewable sources of energy to be integrated.

### Pen y Cymoedd wind energy project

Balfour Beatty has entered into a 50:50 joint venture with Jones Bros Civil Engineering to deliver the £46 million, 76-turbine Pen y Cymoedd Wind Energy Project. The project will become the largest onshore wind farm in England and Wales, generating enough electricity to power 140,000 homes. Balfour Beatty is also delivering works to connect the new windfarm to the electricity network.

### Connecting to renewable energy

Through increasing the capacity of 200km overhead transmission lines, from 132kV to 400kV, we are providing homes and businesses in central Scotland with access to renewable energy generated in the north of the country.

### Adapting to climate change

We are delivering three kilometres of coastal defence along the Flyde Peninsula; reducing the flood risk for 12,000 properties, providing critical drainage and protecting transport infrastructure.

### Reducing energy demand

Across five counties in England we have been delivering the installation of 75,000 new LED street lighting lanterns. The lanterns help to reduce our clients' annual energy consumption by £26 million over their project term resulting in an annual reduction of 11,500 tonnes of CO<sub>2</sub> emissions.

### Responding to climate change impact

The Gas Distribution Strategic Partnership (GDSP) contract delivered by Balfour Beatty in the North West and West Midlands is working on behalf of National Grid to design and install modern polythene gas distribution mains to replace ageing metal pipes. In Rainford, Merseyside the integrity of a main gas pipe was put under threat as severe flooding caused chaos in the area. Due to the swift response and mobilisation of the GDSP team within an hour, the existing gas main was diverted, the site made safe and gas supply to over 1,000 customers was secured.



### Balancing the needs of nature

The Brockholes Nature Reserve near Preston, Lancashire, completed by Balfour Beatty in 2011, has been constructed on a two-metre floating platform that is 60 metres long by 40 metres wide and weighs 4,800 tonnes. It is designed to rise and fall with the water level and is capable of reaching a height of more than four metres above its normal level.

On Boxing Day 2015, the height of the building reached its highest level so far at 1.5 metres above normal. During this time the building rose with the water level and bridges leading to the village disconnecting as planned. As the water levels reduced, the bridges reconnected and business could continue as normal, making it resilient to flooding.



Top: Brockholes Nature Reserve  
Above: New overhead transmission lines being installed in Scotland  
Left: London Power Tunnels

# 50%

of the vacancies on the Queen Elizabeth Olympic Park transformation have been filled by Black Asian Minority Ethnic (BAME) employees

# 45

apprenticeships have been created



Left: An artist impression of one of the new neighbourhoods

### Delivering an Olympic legacy

The mission of the London Legacy Development Corporation is to use the once-in-a-lifetime opportunity of the London 2012 Games to develop a new heart for East London. They aim to create opportunities for local people and drive innovation and growth in London and the UK.

Having constructed infrastructure for the new Olympic Park and the Olympic Aquatics Centre in preparation for the Games, we are now playing a key role in the post-Games transformation works through the modification of the Olympic Stadium to create a new home for West Ham United Football Club and UK Athletics.

We are also working in joint venture with Places for People to deliver two new neighbourhoods in East Wick and Sweetwater. This is part of the socio-economic programme designed to generate long term benefits including thousands of new jobs through spin-off developments. The new neighbourhoods will have a mixture of tenure homes constructed to go beyond Level 4 of the Code for Sustainable Homes along with commercial space, nurseries and community facilities constructed to BREEAM Excellent standards.

Left: The Olympic Stadium Transformation is a key part of the works to deliver a lasting legacy from the 2012 Games

# Open and honest customer relationships

Our customer feedback tool, MAP, helps us to build collaborative relationships that align our project delivery with the expectations of our customers. It helps our delivery teams to identify and put in place plans to make any required improvements. It also played a vital role in helping to retain our BS 11000 Collaborative Business Relationships certification.

### What our customers tell us

#### On our collaborative partnership

*"The relationship is open and honest. We are here to deliver the project as a team, and we always ask "how can we deal with this situation together?""*

*Denis Williams  
Project Manager  
Defence Infrastructure Organisation*

#### 10/10 at Hertfordshire Schools

*"We are totally satisfied with what has been done and completely happy to date."*

*Madeleine Harman  
Simon Balle School*

#### Local delivery and engagement on the A1 Coal House to Metro Centre Improvement Scheme

*"Balfour Beatty is giving a lot of support to the local community. This includes work experience for all levels of education, two work placements in the summer, improving the access for the local rowing club, working with Gateshead Council to support getting people active and providing fencing materials for a Christmas event."*

*Lynne Biddles  
Project Manager  
Highways England*

# 1,057

CUSTOMER DIALOGUES

# 8.2

AVERAGE SCORE

#### MAP Scale

- 9-10 Industry leading / Excellent
- 7-8 Amongst the best / Good
- 5-6 Typical of peers / Average
- 3-4 Not as good as most / Below average
- 1-2 Amongst the worst / Poor



### Performance transformation

Working in joint venture with Jones Bros we are delivering the largest wind farm in England and Wales at Pen Y Cymoedd. At the outset our performance in key areas of collaboration, cost management, programme and meeting our commitments was seen as poor by our customer. To turn this around we agreed with our customer and joint venture partner to hold 360 reviews to help improve collaboration. Over a period of nine months this helped transform our performance, taking us to "amongst the best" in the industry.

*"I personally feel that we have benefited from this as a client and it has been part of the secure building blocks for the project relationship at all levels."*

*Alistair Hinton  
Senior Construction Manager  
Vattenfall Wind Power Limited*

### Overall Satisfaction

2014-Q1: Typical of peers



2015-Q3: Amongst the best



# Delivering social value

Social value combines economic, social and environmental well being to go beyond traditional sustainability measures. It creates a holistic view of how our designs, operations and supply chain relationships add value across the UK.

Working with NEF Consulting (a social justice NGO) in 2015 we completed a study to understand the social value impact of our operations in 2014. This study concluded that across our UK business we:

- Created £1.12 billion of gross value added from our direct operations
- Created £2.92 billion of additional gross value added through our first tier supply chain
- Supported 19,692 jobs directly and 108,640 indirectly
- Supported 61,969 full-time equivalent jobs through our supply chain, of which 25,122 were with SMEs

By better understanding our clients' social value needs and our social value impacts, we are able to tailor a project specific approach through our Involved programme.

Social value is...



Social Wellbeing



Economic Wellbeing



Environmental Wellbeing



Photos: Fylde Peninsula Coastal Programme

**30**  
people employed through Blackpool Build Up

**36,000**  
vehicle miles saved

**>50%**  
of project spend has been with SMEs

## Creating social value on the Fylde Coastal Programme

The £86 million Fylde Peninsula Coastal Programme will reduce flood risk to 12,000 properties through the delivery of coastal sea defences at Rossall and Anchorsholme. At the centre of our strategy for the delivery of construction works is creating positive social value in the local community. In 2015 we carried out an assessment of the social value that the project delivered in 2014:

### Social

Blackpool Council has rated the socio-economic impact as positive as we delivered eight community engagement initiatives. This included two to improve the local economy, three to promote health & safety and three to improve the local environment.

The Rossall and Anchorsholme projects employed approximately 30 people through Blackpool Build Up. The six week course provided training and work experience in construction for those over 19 years old who are not in education, employment or training.

### Economic

Each £1 of gross project income has delivered £2.08 of spend in the local area with over 110 people employed by Balfour Beatty and its supply chain on the project. Over 50% of project spend has also been with SMEs.

### Environmental

We have diverted 99% of waste away from landfill and saved 36,000 vehicle miles through on-site lime stabilisation and donating excavated material to a neighbouring United Utilities project.

Innovative work with the University of Manchester led to thinner, more resilient precast units being developed – reducing waste, carbon and transport costs.



# Involved – making a real difference

In 2015 we launched our community investment programme Involved, by year end we had 237 community investment plans in place. Through Involved we have three simple goals; build local skills and employment, support local businesses and engage with the local community.

## Supporting local businesses

### Upskilling our supply chain

As a funding partner and gold member of the Sustainability Supply Chain School we actively support small, medium and social enterprises in the communities we serve. The School provides a virtual learning environment for our suppliers who can register for free and access more than 600 resources including regular workshops, eLearning modules and best practice materials for key areas of sustainability.

The School also helps us to benchmark our supply chain partners approach to sustainability. Following the completion of a confidential self-assessment, a 10 point action plan is produced to help each partner improve. They can also track their progress and compare their score with that of other supply chain partners.

### Engaging with social enterprises

Our Warwickshire Highways team have been supporting Social Enterprise West Midlands and recently completed a master class at their Social Value in Construction Conference.

Following on from the event we have established a relationship with Argonaut Community Enterprises. Through Argonaut we now employ deaf and disabled people in the facilities management of our offices in the Warwickshire and Solihull areas.

*"Balfour Beatty's enthusiasm for our company is contagious. The increase in confidence our staff have displayed as a result is astounding."*

Anthony Winstanley  
Argonaut Community Enterprises

### Learn Live at Runshaw College

As part of the Involved plan for our project at Runshaw College we wanted to provide employment and skills advice for pupils at the 39 feeder schools within a 30-mile radius.

To help facilitate this we worked with Learn Live, a local SME that specialises in providing careers advice from remote locations. Using their internet portal we were able to give presentations and tours of sites and offices to students to help them understand the range of careers available to them in the construction industry. This is the first time that the service has been used in the construction industry and we are now working with Learn Live to explore its use in other parts of the UK.

*"Working with Balfour Beatty has given us access and understanding to a wide variety of careers and providers. Their willingness to get involved with our events and promote opportunities has been invaluable."*

Stuart Heaton  
Learn Live

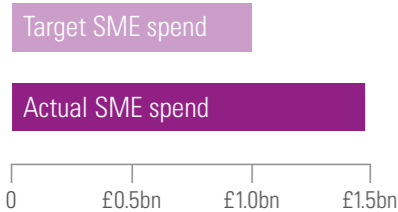
# 1,600

Suppliers registered with the Sustainability Supply Chain School

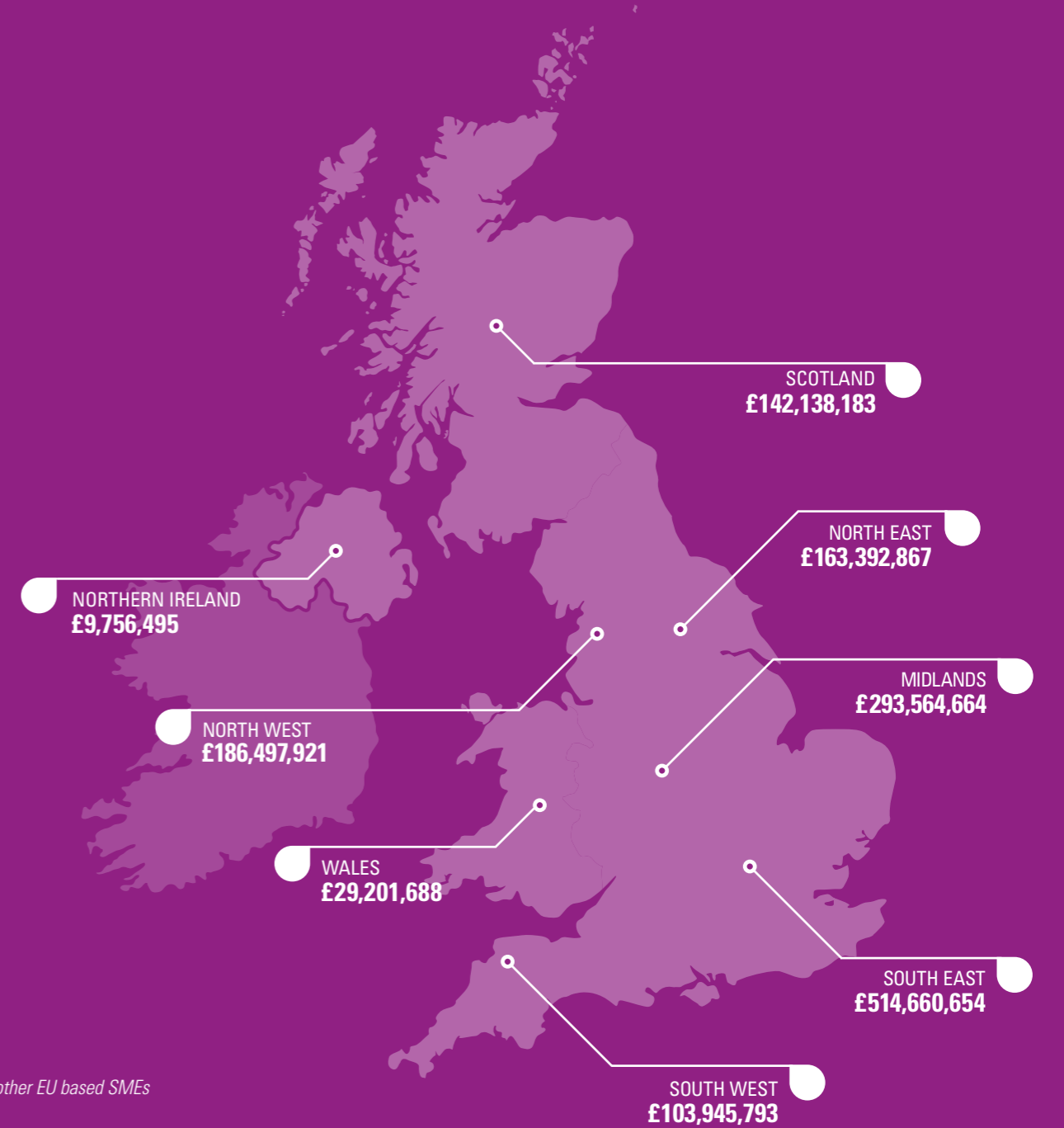
# 13.6%

Increase in the sustainability scores of our Supply Chain School members

## Exceeding our targets



## Our spend with SMEs



Total

# £1,499,246,615

## Engaging with communities

### Creating community facilities

Working with Aberlour, Scotland's Children's Charity, and a handful of our local suppliers we have refurbished a disused army barracks to create a new youth club in Elgin. The completed works included new internal partitions and ceilings, kitchen and toilet facilities, decoration throughout the building and new floor coverings.

This work was supported through our commitment to allow all employee's to complete up to two days volunteering each year.

*"Our partnership with Balfour Beatty is a great example of how a company can use its skills and expertise to help an organisation like ours. The work has been valued at around £30,000 so we couldn't have considered undertaking the project without the company's input and support."*

George Flett  
Service Manager  
Youth Point

### Helping the community to recover

In December 2015, Mark Hasting's home in Cockermouth, Cumbria was devastated by flooding leaving him without heating and lighting. Through the Flood Support Centre, Mark was put in touch with Scott Fisher, an Installation Manager working in the area for Balfour Beatty.

Mark continues his story: "I was linked to Scott by the Flood Support Centre and he mobilised a team of electricians and they worked at the property for two days stripping back, checking and testing the electrics. They have replaced sockets and then linked with Northwest Electric to have the main fuse reinstated.

Before the team left, they popped the central heating on for me so when I went to the house that night I had a genuine sense of recovery in sight - I had light and heating - WOW!

It is tremendous that companies such as yours do so much to support communities in times of challenge."

### Walking with the Wounded

When BBC's DIY SOS team undertook their biggest project to date, to transform 62 homes and create a support centre for veterans charity Walking with the Wounded, we were glad to help.

Teams from Balfour Beatty, our client National Grid, our supply chain and our joint venture partner Mott Macdonald provided expertise in surveying, groundwork, street scenes and gas design and installation to help complete the ambitious project.

The homes and support centre will be used by unemployed veterans who are re-training and learning new skills at a local College. The first veterans and their families moved in as soon as the project was completed.

*"This is an inspiring project that has brought together a wide-ranging selection of construction and building specialists to help support veterans into suitable accommodation. We're really grateful for the help we've received."*

Councillor Bernard Priest  
Deputy Leader  
Manchester City Council



A selection of photos from DIY SOS



## Bridges to Prosperity

Gaseke, Rwanda is a 2,700 person agricultural community, split by the Mwangi river. There was a lack of a safe, year-round crossing of the river isolating part of the community and limiting their access to local markets, schools, clinics and transport networks. Working on behalf of the charity Bridges to Prosperity, five Balfour Beatty engineers partnered with five engineers from the consultancy Flint & Neill to construct a 51m suspension footbridge spanning the river. The aim was to overcome poverty caused by rural isolation in the community.

During the two-week construction programme, the team worked with the local community, training them as the build progressed, leaving them with a new set of skills, as well as the new bridge.

As a result of these works, Bridges to Prosperity estimate that the footbridge will lead to:

- 12% increase in children enrolling at a school
- 24% increase in healthcare treatment
- 18% increase in female employment
- 15% increase in local business activity

As well as the population of Gaseke the bridge directly created access for 4,300 individuals, including approximately 900 school aged children.

The team also raised £12,210.75 for the charity.

Our employees working with Bridges to Prosperity in Rwanda

## Local employment and skills

### Prince's Trust

We have now entered our 10th year of working with the Prince's Trust to provide training and work experience opportunities for young people.

Having completed a BTEC Level 3 in Construction and the Built Environment Lizzie Gladwin needed to gain some hands on experience. Through the Prince's Trust Get Into Construction programme Lizzie completed two weeks at a local College before going onto The Diamond, University of Sheffield project for a further two weeks.

Working with our site supervisor, Glenn Dawson, Lizzie learned on the job and helped to review and mark-up drawings of internal walls. After the two weeks we invited Lizzie to stay on and work with us and continue to support and learn from Glenn.

*"I now have experience in this industry and have realised it is definitely what I want to do. I can plan my future to hopefully become a Project Manager one day."*

*Lizzie Gladwin (second from right)*

Below: Students at Glenburn Primary School, Glasgow completing a STEM project



### Attracting the next generation of talent

Our 79 Construction Ambassadors and 81 STEM Ambassadors are helping us to attract the next generation of talent into joining our industry. The ambassadors are graduates, apprentices and trainees who use our projects and their own job experience to demonstrate the exciting range of careers available to young people in our industry.



Below: A student from Aylestone Business and Enterprise College, Herefordshire gaining hands-on experience



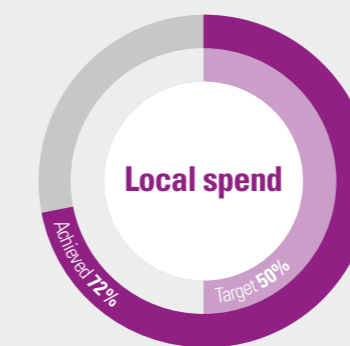
### Hereford Skills Academy

We have been working with Herefordshire Council to help establish their National Skills Academy. Working with the Academy in its first year we have:

- Employed six apprentices
- Provided placement opportunities for two graduates
- Created 10 new jobs
- Provided work experience placements to disadvantaged individuals
- Supported local schools in curriculum delivery including work experience opportunities for pupils
- Provided training and support to local subcontractors

### Performance beyond expectations

As part of our work on the Acute Mental Health Hospital in Irvine we developed a community benefits plan to deliver tangible benefits for local people and businesses. So far we are on track to meet or exceed all of our targets.



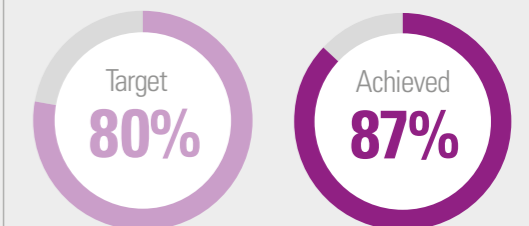
### Supporting existing apprenticeship opportunities



Guaranteed interviews for local people who meet skills required for new vacancies (Target: 100%):



Spend with Scottish based companies



## A high five for the future

In 2013 we were the first construction company to sign up to The 5% Club. Our commitment is to have 5% of our workforce being made up of apprentices, graduates or sponsored students who are on structured development programmes.

### Graduates deliver for the third sector

All of our 120 graduate employees undertook projects to deliver social value as part of their training. Working in teams of nine, the graduates were assigned to a third sector partner who have an existing relationship with Balfour Beatty and agreed mutually beneficial objectives to deliver. Once the objectives were agreed a project plan was produced and delivered with results including:

- The creation of world of work days for young people on Prince's Trust placements
- Being Highly Commended in Water Aid's Water Innovators competition for Best Fundraising and Best Learning and Development initiatives
- Delivering a "Routes into STEM" day for school pupils
- Adding careers awareness to the London Youth Games for competing young athletes
- Raising awareness of adoption and fostering with the UK's oldest children's charity, Coram
- Raising £20,000 for charity

### Partnerships for growth

As part of National Apprenticeship Week we announced we are creating 50 apprenticeships in civil engineering, construction and business roles. We have partnered with 12 universities to help deliver the Trailblazer apprenticeships and degrees and are also actively encouraging our 7,000 suppliers to join the 5% Club.

*"I'm delighted that Balfour Beatty is to encourage its supply chain to join 'The 5% Club' because it sends such a strong signal to smaller contractors that often feel that the time and cost involved is a barrier to taking on apprentices. If we are to develop the skills to deliver the strong growth forecast over the next five years, it is vital that we work together to help smaller businesses to overcome these perceptions and benefit from the boost that apprenticeships can deliver to their businesses."*

**Steve Radley**  
Director of Policy and Strategic Planning  
Construction Industry Training Board

### Trailblazer apprenticeships begin

We have been working with our industry peers to support the creation of new Trailblazer apprenticeship programmes in Highways Maintenance, Street Lighting and other construction areas at HNC and degree level.

The new apprenticeship programmes will be used in England and include testing at the end, grading and 20% of the apprentices time being spent learning off-the-job. Progress so far has included the recruitment of our first Trailblazer apprentices who are working on our gas and power transmission projects.

*"Balfour Beatty is playing a huge role in my long term career goals. They are providing both academic and on-site learning and there are lots of ways for me to develop. Within my first few months I was set targets that have a real impact and are important to project success."*

**Yunus Sharif**  
Commercial Apprentice



*"Since starting with Balfour Beatty I now believe that I can go far in construction, much further than I first thought. The career guides help me to push for what I want and succeed."*

**Bethany Welsh**  
Apprentice Civil Engineer Technician



Left: Graduates fundraising through the Palace to Palace cycle ride



Top: A world record being set for the most people doing a jumping high-5 at National Women in Engineering day

Above: Rose Donaghey (Co Chair), Claire Garrett (North England Rep) and Christina Riley (Co Chair) of our LGBT Affinity Network

Right: Davey Luker and Chris Cooper who graduated after completing their HNC in Construction

# Creating a skilled and diverse workforce

Our people are the experts that deliver for our customers and society as a whole. To develop their talents and encourage them to innovate we provide them with a safe, open and diverse workplace with the support they need to reach their full potential.

## Developing our experts

In 2015 we established the Balfour Beatty Academy to govern our learning and development activities. Within that is our commitment to deliver clear competency frameworks and aligned high quality development offerings that drive business performance.

A key initiative undertaken by the Academy has been the development of capability and skills in our key job families; Commercial, Planning, Project Management and Engineering. We have advanced business capability and developed individual expertise through the delivery of over 120 courses.

## Record breaking National Women in Engineering Day

On 23 June 2015 some of our employees helped to set the world record for the most people doing a jumping high-5. An 864-strong team from various organisations took part in the successful record attempt as part of National Women in Engineering Day to highlight the different careers that are available in engineering.

*"It was a really unique and fun way to mark the day, celebrate with other women in our industry and break a world record. We are both enjoying rewarding and exciting careers at Balfour Beatty having completed an engineering degree and would encourage more young women to consider a career in engineering."*

*Sofia Athanassiou, Bid Director and Nerissa Webb, Sustainability Manager.*

## Inspiring change in the workplace

In 2014 we established our LGBT network, now called LGBT Group & Allies. Since then, this group has grown to around 100 members and is playing an important role in creating a workplace that celebrates diversity. Co Chair of the group, Christina Riley was featured in the Independent on Sunday Rainbow list - ones to watch, and is also on the Financial Times top 100 OUTstanding list. Some highlights of the work we have been undertaking within our organisation and in the wider community include:

- Development of diversity toolbox talks
- Board membership of OFF SITE – the LGBT construction and infrastructure network
- Working with InterEngineering to empower LGBT engineers
- Winning the Civil Engineering Contractors Association Inspiring Change award
- Nominated for the ICON Network of the Year award
- Nominated for the Equality Networks Network of the Year award
- Fundraising for LGBT and mental health charities
- Building close networks with key customers
- Speaking on building an inclusive culture at the Stonewall conference

## WISE partnership

We have partnered with Woman in Science Technology and Engineering (WISE) to help inspire women and girls to pursue science, technology, engineering and mathematics as a pathway to exciting careers. Through the partnership WISE, a not-for-profit membership organisation, provide us with expert advice on how to attract, retain and develop female talent to improve business performance.

## Listening to our people

In response to feedback from our satisfaction survey of employees working on our long-term contract to provide highways maintenance for Rochdale Council, we have developed a new career development programme.

Through the programme employees can diversify their current skillsets so they can complete a wider variety of works as well as improve their skills in areas that are relevant to their current job role, all helping to deal with the skills shortage in our industry. Some successes of the programme include:

- Chris Cooper and Davey Luker joining the Step Up to Management programme in 2012 and graduating in 2015 with a HNC in Construction
- Eight employees gaining their large goods vehicle licence
- Active recruitment of local young people meaning that 23% of the workforce are under 25
- Training of three employees to become work based assessors and passing on their skills and knowledge to other staff members working toward Level 2 NVQ in Highways Maintenance
- Two staff members studying toward Level 3 and Level 6 qualifications in site supervision and construction management

# Making safety personal

Our safety objective is simple, Zero Harm. This means no injuries or ill health as a result of our work activities. In 2015, we achieved an 18% improvement on accident frequency rate (AFR3) and a 14% improvement on lost time injury rate in comparison to our performance in 2014. Whilst this improvement is encouraging we continue in our pursuit of Zero Harm and have launched several new initiatives and plans to help guide us on our way.

## Keeping Zero Harm at the forefront of everyone's mind

Throughout the year we focussed on key health issues including hand arm vibration, COSHH, dust and musculoskeletal disorders and four key safety issues of electricity, working at height, people plant interface and lifting.

Each campaign included a toolkit of materials consisting of toolbox talks and videos for delivery to everyone working on our projects.

## Leading by example

Our senior leaders, including the Executive and Safety & Sustainability Committee took part in a series of leadership tours to engage with the workforce, understand the challenges, provide support and demonstrate commitment to Zero Harm.

The new Safety & Sustainability Committee provide governance and is supported by the Executive Committee. Part of this governance is to ensure sharing, learning and best practice across all operations.

## Learning and sharing

We have introduced a weekly health & safety best practice and incident report that covers all operations in the UK. The report facilitates learning from any incidents and publicises details of best practice and innovative solutions helping them to be adopted quickly across all of our operations.

## Our Golden Rules

- 1 Be fit for work
- 2 Always receive a briefing before starting work
- 3 Report all unsafe events and conditions
- 4 Stop work if anything changes



Gas mains replacement works in Newcastle

## Reducing risk at the people plant interface

Our team on the A1 Coal House to Metro Centre Improvement Scheme have been trialling the use of illuminated batons to reduce the risk associated with plant and vehicles manoeuvring at night when the drivers find it difficult to see traditional hand signals. The batons are controlled by a single button and can be easily switched from green to red to help instruct the operator.

Following the trial, the use of the batons has been mandatory on night shifts and the best practice has been submitted to our national health & safety teams who will share it on future projects.

## Looking at streetworks from a different perspective

To help our teams who set up and supervise street works to understand the challenges that they can present to the visually impaired, we have held a first-of-its-kind training exercise.

Held in partnership with the WESC Foundation, The Specialist Centre for Visual Impairment based in Exeter, the exercise was attended by over 100 people. The participants analysed the use of barriers, ramps, footpath diversion routes and warning signs from the perspective of the visually impaired. They also learned about the different types of cane used by visually impaired people and were encouraged to try on simulation spectacles that illustrate different types of vision loss.

*"There are so many things I learned that you wouldn't even consider, simple stuff like telling someone with a visual impairment whether the steps go up or down. The training will help make it easier for the blind or visually impaired to negotiate the areas we work in."*

Andy Woolston  
Operations Manager



## Award winning performance

- Heathrow Airport Limited – Driver Training and Keeping Everyone Safe awards
- British Construction Industry Health & Safety Award – M4 M5 Smart Motorways Project
- Industry first – 4th consecutive Star Award
- RoSPA President's award for achieving 14 consecutive Gold awards at the Sellafield Nuclear Facility
- Two gold and two silver RoSPA awards

## Outstanding achievements

- Lighting Derby contract – 2,002 days lost time incident free
- Leicester Street Lighting contract – 1,001 days lost time incident free
- Silo Maintenance Facility, Sellafield – 1 million hours with no lost time incidents
- Providence Tower, London – 1 million hours with no lost time incidents
- Area 10 Highways Management – 1 million hours with no lost time incidents
- Olympic Stadium Transformation – 2 million hours with no reportable accidents
- Anglian Water @one Alliance – no lost time incidents
- Thames Water eight<sub>2</sub>0 Alliance – no lost time incidents
- Southampton Highways Services – 2 years accident free



### Delivering a circular economy

Situated in central London, the St James's Market project for The Crown Estate provides 340,000ft<sup>2</sup> of office and retail space along with 3,500m<sup>2</sup> of public realm. Throughout the project circular economy thinking was implemented.

Led by Balfour Beatty, an offsite prefabricated double height mansard roof was installed, a first for our specialised subcontractor. The initiative delivered a 26% reduction (8.5 tonnes) in off and on-site waste generation.

Many of the materials used were sourced within The Crown Estate's UK land portfolio and processed by a UK supply chain. This included:

- Over 10,000 tonnes of marine dredged aggregate used in the concrete
- Almost 500 tonnes of stone from Portland
- 5m<sup>3</sup> of London Plane timber from Windsor Forest.

The project also ensured valuable resources had their life extended by donating them to organisations including:

- PVC wrap, donated to Groundwork for a community market project in East London
- PVC wrap and lengths of timber delivered to Emmaus St. Albans for community projects
- A pallet of slates donated to Essendine Primary School for a school garden project
- A catering quality kitchen donated to a small charity working with homeless people

## Resource management

When developing and maintaining the infrastructure that society relies on we need to be efficient in our management and use of resources. To do this we are developing circular economy solutions that extend lifecycles, increase recycled content and reuse existing resources. In addition, we are focussing on reducing our carbon and energy demand through smarter design and changing behaviours – all helping to save our customers' money and reduce carbon emissions, waste production and materials use.

### Reuse, recycle or repurpose

On our rail projects we have been identifying materials that can be cleaned, graded and prepared for reuse. For example, after a number of years in service, a rail or a sleeper from a main line may be reused on a secondary, tertiary, freight, heritage or depot line. Alternatively a rail may be recycled through being manufactured into switches.

### Turning waste into a resource

Working at Junction 12 of the M40 we developed an innovative approach to reuse potential waste material from a nearby highways project managed by a different contractor and use it in the cut and fill of the site. The approach has seen 3,700m<sup>3</sup> of materials being retained in the local area and removed the production of 190 tonnes of carbon emissions associated with transporting the materials.

### Community Wood Recycling Project

The National Community Wood Recycling Project is a national network of wood recycling social enterprises. Working with our Crossrail West Outer team they have helped us reuse or recycle 100% of waste wood whilst providing jobs and volunteering opportunities for unemployed people.

### Energy efficient solutions

It is not always practical to connect our project sites to the electricity grid. When this is the case we rely on generators and have developed a selection tool to make sure we select the best generator for the job.

The tool helps our project teams to identify the optimum power set up for each project and considers the size of generator required, the costs to hire and fuel the generator and any benefits of swapping to smaller generators when there is a change in power requirements.

*"As a result of using the tool we changed our original power strategy to use a 50kVA generator for the first phase of the programme, then increased this to 100kVA when additional power was required on site. To further reduce fuel consumption we also used a hybrid unit."*

Andrew Henderson  
Site Manager  
Gateshead Energy Centre



### LEDing the way

We have been working with Leicester City Council to provide their most energy efficient street and highways sign lighting solution to date. This has included the installation of 33,000 new LED lanterns and a new district wide central management system to monitor and control every street light in the city. It has also reduced energy consumption by 5,615 MWh in 2015 and carbon production by 3,160 tonnes against a 2009 benchmark.

Left: St James's Market  
Right: New energy efficient lighting in Leicester



Tree felling  
at Drakelow

## Biodiversity

The natural environment ensures we have the essentials for life such as food, water and clean air. Through our works we must protect and where possible enhance the natural environment for future generations.



Scan here to  
view the video

### Moving an ancient woodland

As part of the A21 Tonbridge to Pembury project we have carefully translocated 9 hectares of ancient woodland to a new location. Our first monitoring report has shown that a high level of woodland coppice stools have been re-established at the new location with our management of the project in the coming year being critical to its overall success. We also coordinated the necessary archaeological mitigation, dormice watching briefs and watching briefs for unexploded ordnance as part of the translocation.

### Net ecological gain

In 2013 we were the first contractor to achieve a 25% net biodiversity gain in the rail sector on the £6.4m Tanners Hill Project, using the DEFRA biodiversity metric. The success of this has led to Network Rail implementing the methodology on the Thameslink Rail Programme. We are also applying the methodology to the Crossrail Western Outer Track Infrastructure and Electrification project and M3 Smart Motorway Scheme J2-4A to ensure all unavoidable losses of biodiversity are measured and compensated for.

### Improving the ecosystem

When installing new electricity transmission towers and conductors at Drakelow we were required to undertake tree felling. The normal process for this type of work is to fell the trees and stack them before taking them off-site. This approach limits the opportunity to use the logs to benefit the ecosystem and adds costs and carbon production associated with their removal.

At Drakelow we developed an alternative approach. Instead of stacking and removing the trees, they were felled and left to rot naturally allowing essential nutrients to return to the soil. This approach created the right environmental conditions for moss, ferns, lichens, fungi and invertebrates to colonise the timber. We cleared non-native laurel to increase natural light for wild flowers on the woodland floor. We also introduced a native woodland flower mix and created a hibernacula from the smaller tree branches to create shelter for wildlife.

Before work begins we calculate a baseline for the project and again when works are completed to assess any impacts. Using this information we produce a biodiversity strategy for the after works landscaping that includes a list of biodiversity enhancement actions, a preliminary plan to ensure no net loss of biodiversity and a preliminary plan to ensure a net positive biodiversity outcome. We then agree these plans with our client and deliver the required works.



# Building for the future

In 2015, we launched Build to Last to make our business better for all of our stakeholders. One year on we recognised the commitment of our people in helping to achieve our goals of being Lean, Expert, Trusted and Safe at our first Build to Last awards ceremony.

## And the winners were...

**Lean:** Those who have made the most significant contribution to improving our financial performance and/or reduced waste/made a process lean for a client.

- Tim Jordan, Supply Chain Manager, was named the Lean individual winner for his work shaping and driving the Tarmac Value Creation programme – a new innovative approach to how we work with our strategic supply base.
- Our Beaulieu Blackhilllock Kintore team was named the Lean winner. The team completed the final stages of the three and half year project, delivering over 100 miles of overhead line tower refurbishment between Aberdeen and Inverness.

**Expert:** People who add value to our business by demonstrating our expertise in engineering, design and delivery.

- Meik Jensen, Construction Manager / Appointed Person, was named as the Expert individual winner for leading the planning, construction and commissioning of the Western Approach Gantries – a hugely complex package of works that is part of the Thameslink project.
- Our Silos Maintenance Facility team was named as the Expert winner. The team was the first to adopt a BIM strategy on the Sellafield project and used this method to help speed up the approval process from site governing bodies, such as the Crane Committee.

**Safe:** People who have shown a strong commitment to the safety of others.

- David Hume, Health & Safety Coach, was named as the Safe Individual winner for his work supporting the Power Transmission and Distribution team in Scotland over the last 12 months.
- The Crossrail West Outer Track team was named as the Safe winner for successfully delivering multiple programmes of complex works without major injury.

**Trusted:** Those who have delivered on our promises, increased customer satisfaction and delighting all of our stakeholders.

- Robert Stone, Development Director, from our Investments team was named as the individual winner for his work developing Trusted relationships with the stakeholders for the successful transformation of the Olympic Park through a Balfour Beatty-led joint venture on the East Wick and Sweetwater development.
- Our Queen Elizabeth Class (QEC) Aircraft Carriers team was named as the Trusted winner as they have recently been awarded a further £21.2 million electrical installation contract to grow their involvement in the nation's delivery of two 65,000 tonne QEC aircraft carriers for the Aircraft Carrier Alliance.



The Build to Last Awards were an opportunity for us to recognise and shout about the outstanding efforts being delivered by our people.

Right: A selection of the Build to Last Award winners. Clockwise from top: Trusted team winner, QEC Aircraft Carriers team; Safe Individual winner, David Hume; Expert team winner, Silos Maintenance Facility team; Trusted individual winner, Robert Stone



### My Contribution

The My Contribution initiative encourages all employees to contribute to Build to Last by creating a mechanism for colleagues to propose and track ideas beneficial to the business. Ideas proposed so far include savings in IT delivery costs, changes to key processes and procurement benefits.

**3,000** IDEAS SUBMITTED IN THE FIRST SIX MONTHS OF THE PROGRAMME



For all our stakeholders, Build to Last will make our business:

- Lean
- Expert
- Trusted
- Safe

Rail cabling works, Liverpool

## The future

To support our Build to Last transformation programme and ensure that we are targeting areas of materiality for our customers we will review and update our sustainability strategy in 2016. We will also develop new ways to integrate our supply chain into the delivery of our sustainability strategy, improve the diversity of our organisation and reinforce the message that health and safety are equally important.

### Shaping our sustainability strategy

The sustainability leads from across our business will take part in an international hackathon, an event in which colleagues from across the world collaborate virtually to identify the key sustainability issues in our industry that we need to tackle.

We will also engage with a wide range of stakeholders, including customers and regulators, to ensure that we focus our strategy update on the areas of the most materiality to our stakeholders.

### Setting new supply chain standards

In 2016 we will update our current Sustainable Procurement Policy. It will outline our commitment to deliver more sustainable outcomes through our procurement activity and how our supply chain will support us in achieving best value results for our customers.

### Leading the way on diversity

It is our aim to lead diversity in our industry by 2019. The creativity, innovation and experience that a diverse workforce bring to our business is vital to our success. To build upon the positive work that is already happening with Stonewall and our LGBT community we will launch a new diversity and inclusion plan. The plan will help our customers to meet their own diversity and inclusion goals, help our industry to meet current and future skills demand and create a work environment where everyone can achieve their full potential.

### Improving health & safety performance

We will be creating a stronger focus on occupational health and hygiene as part of our relentless focus on health & safety. This will help us to eliminate occupational ill health and disease across our business and in the wider industry. We will also continue to deliver our Zero Harm action plans in line with business objectives and to make safety personal to all of our stakeholders.

# Balfour Beatty

5 Churchill Place,  
Canary Wharf,  
London  
E14 5HU

Telephone: +44 (0) 1332 661491  
[www.balfourbeatty.com](http://www.balfourbeatty.com)

