



A message from our Head of Sustainability

THE FUTURE IS NOW

As environmental and economic concerns align, change accelerates.

Across the world, business development models are being reshaped and economic and innovation cycles are shrinking. Mind-sets and practices are shifting from linear resource use to circular resource management, from simple conservation to sophisticated reuse.

The collective impact of these mindful actions is exponential for both business and the world. We see the transformation around us as promising opportunities to create a better world. We have a vision for Architecture to deliver a sustainable future built on social equity and diverse energy resources.

We are transforming our business to create sustainable economic, social and environmental value for all. We believe the power to shape the future is in all our hands and by working together we can turn this vision into a reality.

Thank you for joining us.

Chris Trott

Partner, Head of Sustainability

Opposite: masterplanning workshop



Introduction

Foster + Partners believes that good design can improve society and the natural world. We are true advocates of sustainable design, upholding sustainable practices in both our projects, and how we run our campus.

Our projects are spread across the world. This means we are uniquely able to shape the built environment for ourselves and the generations to come. Our global influence means we have a responsibility to advocate designs that are environmentally and socially responsible. We believe design should support culturally rich, healthy, and happy communities who can manage their resources effectively.

To be a champion of sustainability first we must minimise the direct environmental impact of our own business. For this reason, we are committed to evaluating our operations using the same Responsibility Framework we use to evaluate our projects. This year we installed Arc® devices on every building in our campus to simplify the process of collecting data and allow us to look in greater detail at our performance. This state-of-the-art technology is designed to collect, manage and benchmark performance data and the data it collects is used to monitor progress and inform decisions at the highest level, including at the management board and environmental leadership group. Going forward, the information collected on the platform will replace or augment our existing procedures for several criteria, as explained later in this document. This means that in some areas, our performance is not directly comparable to last year's report, but we believe this is justified because of the benefits to evaluating our performance in future.

Opposite: Main studio at the London office.



Trends and Outlook



Architecture and Climate Change

As Architects, we have a responsibility to help implement the commitments made by the 115 signatories of the Paris Agreement to deliver communities that are socially just, culturally rich and ecologically restorative. Designing responsibly from a social, environmental, and economic perspective has always been – and continues to be – at the foundation of our approach.

An even stronger sense of urgency guides our work as we look forward to 2020; significant and immediate action is required to address the systemic planetary challenges posed by climate change, overpopulation, energy and resource scarcity, social inequity and the rise of persistent toxic chemicals.

Key Trends

Carbon reduction

The Paris Agreement has set the direction of travel for the global transition to a modern low-carbon economy; leading nations are developing ambitious energy efficiency policies and Net Zero is becoming a sought-after goal for buildings worldwide. Now is the time to translate ambition into action and speed up implementation. Next year will be a key moment to ensure that we are on track to meet our first deadline: completing the Paris work programme by 2018.

Wellbeing

The promotion of health and wellness through buildings, businesses and communities is gaining global momentum. We believe comfort* is enhanced by an exemplary indoor environment and biophilic design. Many developments provide substandard conditions for health and productivity, leaving human potential greatly diminished. By focusing attention on the major pathways of health, we can create environments designed to optimise our wellbeing. We already apply these principles to our designs, and we continue to work to implement the same ideas in our operations and on our own campus.

<u>Technology</u>

The electronic and digital revolution has quickened the pace of change considerably. New software and hardware tools allow us to better understand and control our environment. Adopting CO_2 and VOC sensors to visualise our impacts are part of our commitment to technological change.

Reinventing density, co-living | co-working With transformations in digital technologies, office and housing-price pressures, changing living and working habits, people will not only possess fewer physical objects in the future, but also occupy less space. These spaces are decreasing in size to become more efficient, more sustainable, more affordable and, for some, more desirable.

Conclusion

We must consider all these elements as designers and builders, to create spaces that can meet future demand and make efficient use of our resources. The long-term impact of our work should always be considered. Complex social, economic and ecological challenges posed by rapid urbanisation and population growth cannot be solved by technological means alone. We must therefore harness the skills, enthusiasm and knowledge of integrated design teams, clients and communities. Advancements in building technology must be fully utilised along with our deep understanding of natural heating and cooling systems, to address the issue of sustainability at the scale of buildings and entire cities. Everything about a building must be examined; its flexibility and life span; its orientation, form and structure; its heating and ventilation systems; and the materials used. All these factors impact the amount of energy required to build, maintain and use it, and to travel to and from it. By evaluating these factors in the operations of our own business, we gain valuable handson experience in understanding what works; by responding to these factors in our designs we can ensure we continue build in the most sustainable way possible.

^{*} Visual, acoustic, thermal and olfactory.

Our Approach



Foster + Partners Responsibility Framework

Developed almost five years ago by the Sustainability Group, the Foster + Partners Responsibility Framework is supported by ten themes (Wellbeing, Community Impact, Energy and Carbon, Water, Resources, Mobility and Connectivity, Land and Ecology, Social Equity, Planning for Change and Feedback). These themes capture all the requirements of commonly used sustainability assessment methodologies including LEED® and BREEAM® and are well correlated to the UN Sustainable Development Goals. They also review social justice and equity concepts, which are often poorly captured by entirely environmentalbased methodologies. The Framework ensures we maintain a responsible approach to creating and evaluating buildings, products and cities, as well as operations on our own campus. The Framework is continuously improved and refined based on feedback received. Our aim is always to improve the efficiency of data acquisition and knowledge transfer. Six themes – Community Impact, Mobility and Connectivity, Land and Ecology, Social Equity, Planning for Change, and Feedback – are reviewed and assessed manually using a range of tools. The remaining four themes – Energy & Carbon, Water, Resources, and Wellbeing – are now assessed using Arc®. By transitioning the measurement of these four themes to Arc®, we hope to collect ongoing performance data more regularly, allowing us to report on progress more often.

Measuring Green Performance

We have partnered with the United States Green Building Council (USGBC) to roll out a new data collection and visualisation platform that captures the ongoing performance of buildings in real time. It allows buildings and spaces to compare performance metrics and connect those metrics to green building strategies. The platform also enables incremental improvements and can put

a project on track for LEED® or another rating-system certification.

This year we acquired licenses for all the buildings in our London Campus. We can now input data across five categories – Energy, Water, Waste, Transportation and Human Experience – which generates a performance score. This score enables us to monitor performance and better inform decisions by measuring improvements and benchmarking our buildings against similar projects, locally and globally.

The platform makes the invisible actionable and offers a means for interaction with the building on multiple levels: visitors can 'see' performance on a physical devise installed in the reception area of each building. Members of staff and occupants can provide feedback on their experience, and building managers can view trends to make informed decisions to optimise the building, benefiting people, planet and profit.

Our Approach



Our CSER Programme

The concept of sustainability has been embedded in Foster + Partners since the practice began in 1967 and sustainable design is a critical aspect of the services that we provide. Our expertise in this arena demands that we actively seek to reduce and manage the impacts of our own operations. We also recognise that through our work as designers, the projects that bear our name have a direct impact on the communities that they serve and the wider environment.

Our CSER operational framework mirrors our project sustainability framework to ensure we practice in our own day-to-day operations the sustainability principles we advocate in our designs. This also allows us to transfer innovative ideas between project and operational teams.

Matthew Streets, Managing Partner, has overall responsibility for our CSER policy, so it is governed at the highest level.

Supply Chain

Our supply chain ranges from office supplies, technology and transport, to hotel accommodation and external contractors. Of all our supply chains, the flights and accommodation associated with our business has the largest environmental and financial impact.

Over the financial year 2016 -17 the practice has experienced an impressive 33% growth in the number of projects completed. As our projects are global, there is a direct relationship between business activity and the impact on transport. Travel related emissions, when measured against per unit of turnover, have increased at a relatively low rate. This is in part due to the increased use of video conference technology; something that we started monitoring in January 2016 to help track its impacts on travel emissions.

Stakeholder Engagement

We engage with external organisations, our staff and suppliers to identify the significant impacts of our company and how we can best meet the needs of each relevant stakeholder.

Foster + Partners is a member of and actively collaborates with the following organisations:

- UK Green Building Council
- US Green Building Council
- Royal Institute of British Architects (RIBA)
- Chartered Institution of Building Services Engineers (CIBSE)
- Waste and Resource Action Programme (WRAP)
- Health and Safety Executive, Working Party Groups
- Centre for Window and Cladding Technologies
- TRADA
- British Standards Institute (BSI)
- New London Architecture (NLA)
- Confederation of British Industry (CBI)



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1. Wellbeing



Approach

Foster + Partners wants to create an environment that allows our people to flourish and achieve their full potential. Wellbeing aims to protect and improve the environment for all building users, so they work in a healthy and positive space. This will help us attract and retain a talented and ambitious workforce, who can thrive.

2016-2017 Performance Highlights

The responsibility for the wellbeing of our staff is led by our Human Resources department, supported by Health and Safety, Facilities, and several social committees. This system is successful because it embeds wellness across the business.

We investigated attaining the WELL® Building Standard, and discovered that there is no standard for existing buildings. However, we have incorporated the standard's principles into our ongoing assessment of our campus.

We continue to offer several wellbeing initiatives to support a healthy lifestyle for our employees:

Healthy Living

Our employees are offered a variety of different therapies and health checks to support and promote healthy living and wellbeing. Employee wellbeing therapies provide a health boost to employees, ease tension, help any aches and pains, lower blood pressure, and offer a calm space for reflection and thought.

Every fortnight we release a selection of 20 minute appointments with our on-site therapist from Wellbeing People. These include head massages, back massages, reflexology and reiki for all staff.

Sports clubs are strongly supported at a corporate level, and we have a variety of teams and clubs for staff to join. Climbing, football, fitness boot camp classes, golf, and yoga are all popular with staff. We also support the organisation of annual events such as the 'Foster + Partners Football World Cup' and an in-house sailing regatta.

At regular periods throughout the year we hold on-site health checks including blood pressure testing, glucose and cholesterol testing, weight, height and BMI, lung health, and stop smoking campaigns.

Employee Assistance Programme

This programme is provided by Unum Lifeworks as an easy to access, confidential support service available to our staff. It offers our staff and their immediate family members a range of advice related to issues such as legal, bereavement, carers, stress, as well as counselling services. The service is available 24 hours a day, 7 days a week by telephone or online.

CO_o and VOC Monitoring

It is well known that long-term, high-level exposure to Volatile Organic Compounds (VOCs) can have negative effects on both health and wellbeing. Because we have in-house model shops and 3D printers, our workplace is likely to have higher levels of VOCs than the typical working environment. In addition to providing staff with appropriate safety equipment and regular training, we also monitor VOC and CO₂ levels in all our workspaces continuously as part of our commitment to wellness.

We have sensors which contain a metal oxide semiconductor based gas component that detects gases associated with bad air quality such as alcohols, aldehydes, ketones, organic acids, amines, and aliphatic and aromatic hydrocarbons.

The measured gas concentration is calculated with an algorithm into a ${\rm CO_2}$ equivalent which is then displayed as an air quality level.

We consider air quality to be of paramount importance, and as a result, we voluntarily downgrade our energy performance score by using more fresh air so we can improve levels of indoor air quality, particularly in the Main Studio and the Model Shop.



Regular health screening



Regular social events

Opposite: Health kiosk at a Wellbeing event.

CSER Report May 2016 – April 2017



Indoor air quality and ventilation

The greater the ceiling height, the better the air stratification, which naturally encourages air flow. On our campus, ceiling heights, air distribution systems and monitoring are different in each building. For our mechanically ventilated spaces we would look into upgrading the ventilation rate procedure to comply with ASHRAE 62.1–2010, this standard provides the methodology to push in more fresh air, thereby reducing the amount of indoor pollution. It determines the minimum outdoor air intake flow for mechanical ventilation systems, so we can benefit from fresher air, using the least amount of energy.

Opposite: Sketch Modelshop at our London office.

2. Community Impact





Approach

In the past, our community impact has focused on the social effects of our operations on users and wider communities. Having achieved improvements, we are broadening our scope to look at our economic impact on communities through our corporate spending and the spending of our staff.

2016-2017 Performance Highlights

Working in partnership with a range of educators and businesses we have maintained our commitment to the Science, Technology, Engineering, Mathematics (STEM) ambassadors programme which aims to encourage young people to enjoy and study these subjects.

Foster + Partners is also planning a 'Green Sky Thinking' event on 17 May, focusing on how we can improve the wellbeing of users of healthcare

buildings; the talk is sold out and we are expecting a fruitful evening of discussion and debate. In November 2016, we attended the COP22 (the 2016 UN Climate Change Conference) to host the Urban and Rural Areas Resilience Programme 'Oasis Cities', a collaborative project looking at ways to mitigate the community impact of desertification in hot dry desert regions.

We have also considered other approaches to expand our outreach activities in the local community, in particular, an attempt to better understand through data analysis and visualisation what are the additional economic benefits accrued to our community from capital being spent in the local economy and what our direct and indirect contribution might look like.

Case Study

Foster + Partners is a net contributor to the UK economy. By value, ninety percent of our revenue is generated beyond our shores — even the ten percent related to our UK projects is often funded by investors from our overseas interests. Our direct operations account for more than half of our economic impact. The rest is driven by what we spend with our suppliers, and the salaries that our people, and the employees of our suppliers, spend in the economy.

We make a substantial contribution to the UK economy through the taxes arising from our business. These are not only the aggregated taxes we pay and collect on behalf of government but also the taxes our suppliers pay relating to the goods and services we purchase from them; and the taxes that our people and the employees of our suppliers pay through spending their personal income in the general economy, largely through Value Added Tax.

Our staff typically spend more than a quarter of their monthly salary before tax on rent and 65% of their total income on a 400-metre radius from their residence. The vast majority of our employees lives within 2km of our Campus. We contract with vendors from around the UK with the vast majority being incorporated in the Greater London area.



We will explore how to expand our initial analysis of our local impact to look beyond financial impact and provide objective evidence of community benefit, sustainability measures, and social value, and ultimately deliver an auditable Corporate, Social and Environmental Responsibility commitment.

Foster + Partners is proud to be a member of RE100, a collaborative, global initiative uniting more than 100 influential businesses committed to 100% renewable electricity, working to massively increase demand for - and delivery of - renewable energy.

3. Energy and Carbon



Approach

Our goal is to continually reduce our energy consumption and carbon emissions, both absolutely and in terms of consumption per unit of growth.

2016-2017 Performance Highlights

We are delighted that our Main Studio is now run on 100% renewable resources.

Outreach

In March 2017, we hosted a 'Building Ambition' workshop which was jointly planned with We Mean Business, a global coalition of non-profit organisations working with the world's most influential businesses to take action on climate change. This had a wide-ranging agenda centred on how the built environment can address climate change and exploring how to converge and accelerate global, regional and local efforts in this area. The overall aim was to understand how we can best and practically help deliver the targets of the Paris Agreement.

Following this workshop, we are now revising our policies on how the buildings on our campus operate and reviewing our project designs so they can better align with our commitment to the Paris Agreement.

The Foster + Partners Responsibility Framework (FRF)

The FRF has been in use for five years now. Over this time the world has progressed; legislation, regulations, guidance and assessment systems are continuously updating. The Sustainability Group is continuously reviewing our framework criteria to ensure our approach remains in step with best practice, with a particular focus on improving the quality of data we collect and the underlying understanding of the sustainability of our operations.

Building Better Data

The big change in our Energy + Carbon initiative this year has been the installation of $Arc^{\$}$, which means we can now closely and regularly monitor the energy and carbon our operations are using. The new data is not directly comparable to last year's data, which means there is no meaningful comparison this year. However, this step is significant as the new data will become our benchmark from which we can measure improvements and track progress over time.

Average annual consumption per Sqm GEA* | Occupant



*GEA is broadly speaking the whole area of a building taking each floor into account.

GEA includes: * perimeter wall thickness and external projections * areas occupied by internal walls (whether structural or not) and partitions * columns, piers, chimney breasts, stairwells, lift wells etc * lift rooms, plant rooms, tank rooms, fuel stores, whether or not above roof level * open-sided covered areas (should be stated separately) GEA excludes: * open balconies * open fire escapes * open sided covered ways * open vehicle parking areas, terraces and the like * minor canopies * any area with a headroom of less than 1.5m (except under stairways) * any area under the control of service or other external authorities.



To further our commitment to finding renewable sources of energy we will explore involvement in other organisations such as Carbon trust and Science Based Targets initiatives.

Opposite: Main Studio at the London office.

4. Water



Approach

Water issues like scarcity and pollution intersect with climate change risks and affect communities and businesses everywhere. According to WaterSense, an EPA partnership programme, less than 1 percent of the planet's water is available for human use and the remaining 99 percent is salt water in oceans, freshwater frozen in polar ice caps or water inaccessible for practical use.

It is therefore vital that this critical resource is carefully managed.

2016-2017 Performance Highlights

Currently we receive one estimated water bill which provides one set of data for all our buildings. To receive a more detailed breakdown of our water usage, we are assessing the feasibility of sub-metering water systems including domestic hot water, solar thermal shower system, HVAC systems and reclaimed water. This will enable us to track usage more closely and accurately, and introduce bespoke initiatives to help reduce our water consumption.



Planet water available for humans



Salt water or inaccessible water



We will explore options for reducing our non-potable water consumption. We will also review sub-metering as an option to help us better understand the sources of our water consumption.

5. Resources



Approach

With the world's resources being depleted at unsustainable rates and landfill space in the UK rapidly filling up, we are paying more attention to the lifecycle of raw materials used in our practice. We are therefore focussing on the impact of the materials we use and exploring how to reduce their environmental consequences.

A long-term, waste and material consumption strategy is being implemented that progressively adopts the principles of the circular economy – reducing, reusing, recycling and transitioning to circular solutions.

2016-2017 Performance Highlights

Zero Waste to Landfill

We have set an aspirational goal to achieve zero-waste-to-landfill for the London Campus by 2020 and to get as close as possible to 100% reuse and recovery of our operational waste. To achieve this target, we must combine waste management, employee awareness and supplier engagement; this collaboration will help us find and pioneer better solutions.

Since 2012, the practice has used a fourstream waste sorting system compostable waste, recyclables, paper, and landfill. This has allowed us to gain a better understanding of the types of waste we produce and look at ways of improving our performance. Non-recyclable paper cups from our canteen and coffee bars stood out as the highest volume of waste in our general landfill stream, so this year we looked at alternative cups.

In September 2016, we introduced compostable cups and lids for hot drinks, replacing the non-recyclable cups. Because these are a caféstandard size and quality, our catering teams could seamlessly transition into the new cup system, with no operational difficulties, and we immediately reduced the amount of general waste being produced.

Fantastic progress has been made on reducing our paper consumption over the past 5 years. We remain committed to the paper reduction initiatives we implemented in 2013, and have been certified by the Forest Stewardship Council – who promote responsible management of the world's forests – for 4 years.



We want to be 100% zero waste to landfill by 2020. Our strategy for this is threefold: we will explore options for simplifying our waste strategy in the office to encourage less cross-contamination, look at alternative materials for the next largest volume of waste (currently plastic cutlery and containers in our canteens and coffee bars), and investigate new waste management providers to see if we can increase the percentage of our waste that is recycled through better data.

6. Mobility and Connectivity



Approach

Mobility and Connectivity evaluates how people move around the building and/or site, and how they connect to the local area via different methods of transportation.

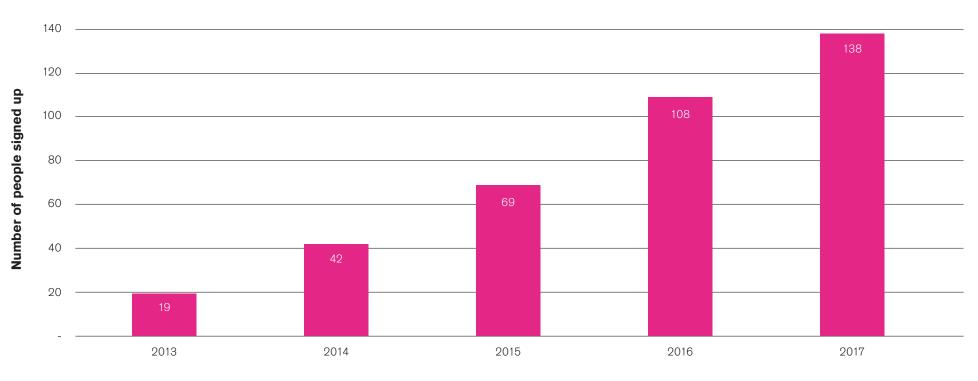
2016-2017 Performance Highlights

We have expanded our cycle-to-work programme and promoted cycle safety. We have also started monitoring our usage of video and teleconferencing technology, so we can assess its impacts in reducing staff travel – in 2016/2017, videoconferencing take-up increased by approximately 20% year on year. Our Corporate Travel Management agency has teamed up with a third-party provider to offer a carbon footprint option by supporting emissions reduction projects that make a tangible impact.

Company Wide Surveys

To support the deployment of of our new data collection programme we have run two company-wide campaigns to survey and understand exactly how our staff move. Going forward, this data will be updated quarterly. This has given us an unprecedented level of detail and the ability to monitor changes over time.

Cycle to Work Scheme Stats



As a company that promotes sustainable transport, we continue to do everything we can to ensure the safety of employees who travel sustainably such as cycling, walking and public transport. Cycle to work Cycle to work is a cost-effective way to get a bike to ride to work. Employees choose a bike and safety accessories from a registered cycle store for up to £1,000 inclusive of VAT, and complete a hire agreement. Foster + Partners then makes deductions from their salary each month via salary sacrifice. Safety and maintenance As part of our cycle safety programme we offer free cycle safety training to employees and free summer and winter cycle maintenance sessions. Continuing to support our staff to make safe and sustainable transport decisions remains a high priority. We will continue to raise awareness and support cycle safety.



We would like to open a cycle repair station on our Campus to offer our cyclists a free facility where they can repair their bikes. This will keep our cyclists on the move with minimum disruption in the case of any faults and support increasing safety in the form of well-maintained equipment.

Opposite: Cyclist crossing Ransome's Wharf.

7. Land and Ecology



Approach

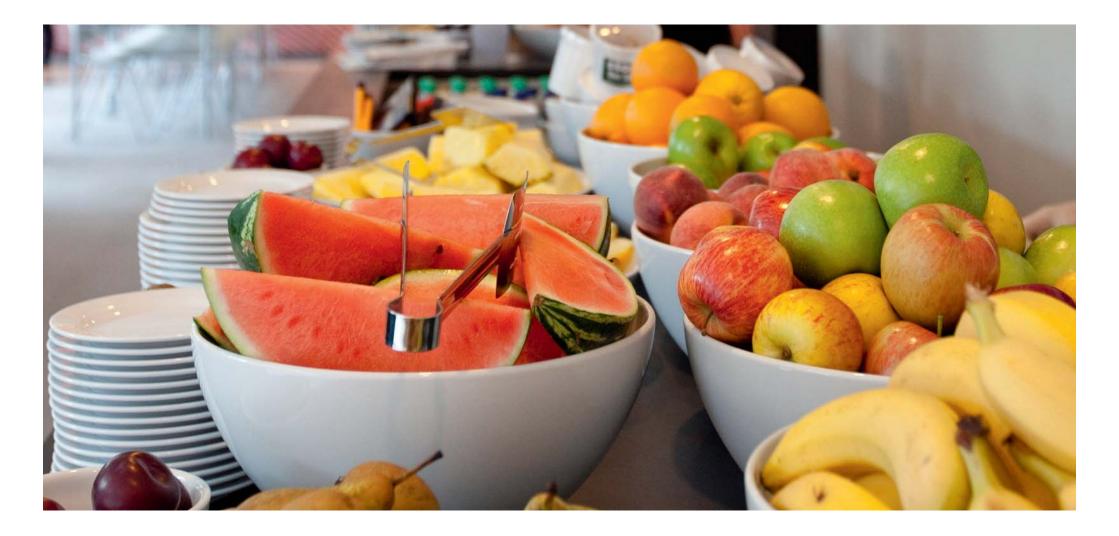
Land and Ecology focuses on protecting and maintaining the ecosystems and natural habitats surrounding and within our project boundaries.

We have an impact on the natural environment directly through our own on-site activities, and indirectly through the harvesting and manufacture of products we purchase from our suppliers.

We aim to reduce the environmental impact of the products and services we procure and work with our local community to ensure that our surroundings are well maintained.

2016-2017 Performance Highlights

We considered developing a custom site management plan and pest management policy and investing in on and off-site green space development. However, we decided that improving our performance would benefit from a more robust and structured approach that is directly comparable with our peers. So instead we will explore the possibilities of using a third-party reference scheme, BiodiverCity®, to help us improve the performance of both our construction projects and our operations.





We will look into participating in the BiodiverCity® assessment programme. BiodiverCity® evaluates and rates the performance of construction projects that take biodiversity into account. Drawing on an innovative approach that combines organic features and construction, it aims to promote the design and construction of a new kind of building system that reserves an important place for nature in the city.

The BiodiverCity® label complements Green Building certifications which often consider biodiversity features without necessarily adopting an in-depth assessment of them.

8. Social Equity



Approach

Social Equity aims to ensure prosperity without exclusion, offering added value through design optimisation and performance.

2016-2017 Performance Highlights

Foster + Partners was the first Architectural practice to sign up to the London Living Wage, setting a benchmark for fair pay across the industry. Everyone working at the company, regardless of whether they are permanent employees or third-party contractors, cleaners and suppliers, receive a minimum hourly wage that is significantly higher than the national minimum wage.

We also remain fully committed to facilitating an ethical and responsible approach to workers' rights globally. Although we have no direct control over our contractors' and sub-contractors' hiring policies, we continually seek to apply our influence through the supply chain and improve health and safety conditions in a collaborative manner.

This year we are also helping to create the first Architectural apprenticeship in the UK, which we hope will increase the social diversity of our practice and the wider profession.

In line with the requirement to report gender pay gaps coming in 2017-2018, we are improving our dataset and embarking on a broader analysis to identify areas of concern and target policies for improvement.



First Architectural practice to sign up to the London Living Wage

Apprenticeship / Recycling



Foster + Partners are chairing the Architecture Trailblazer - an industry wide group of employers creating the first Architectural apprenticeship in the UK. They are working with universities across the country, as well the ARB and RIBA, to develop this new model of Architectural study – one with the potential to increase inclusivity in the profession and that offers students the chance to earn as they study. Once approved by government, the scheme will be open to any employer across England interested in taking on Architectural apprentices.

We will start reporting on the gender pay gap, release a diversity questionnaire and present the draft requirements for our apprenticeship programme to the regulator for approval.

9. Planning for Change



Approach

Planning for Change encourages future thinking in the design process covering issues like climate change, certifications and technological developments.

We received ISO 9001 quality certification in September 2015 for projects run from our Abu Dhabi office, as a trial run. Having found this useful in understanding and improving the quality of our systems and processes, we intend to explore the feasibility of obtaining ISO 9001 certification for our global workload. We will also increase the number of LEED® and BREEAM® certified staff and seek to learn more about the WELL® buildings certification process.

2016-2017 Performance Highlights

Sustainability and Corporate Social Responsibility continues to be one of the metrics against which we assess our corporate performance, looking at both our operational improvements and our commercial projects, and also supporting a certain number of theoretical projects which support future technological change. This year, our lead partnership in planning for the future was a collaboration with Branch Technology in California exploring techniques and materials for autonomous 3D-printed habitats on Mars. We have also won a European Union Horizon 2020 research grant with a team of nine leading research organisations to explore new tools and technologies for metal-based 3D printing.

Over the next year, we will continue to explore systems for certifying the environmental credentials of our design process, and expanding the scope of third-party quality audits.

10. Feedback



Approach

Feedback covers a range of data collection and engagement issues, using this information to improve design and operations.

2016-2017 Performance Highlights

The overarching theme of our 2016/2017 CSER efforts has been data: collecting it, improving it, and analysing it. By introducing Arc®, we are now able to collect data more frequently, and the data we collect has a higher level of confidence. This technology also helps us to put the data into context by offering simple and straightforward ways to track improvements and leverage comprehensive global data analytics to benchmark our performance against our peers. The improvements we've seen this year in our understanding is a powerful motivation to continue refining and enhancing the data we collect.

Harnessing the Power of Feedback Loops



Feedback loops are powerful tools that can help people change bad behaviour patterns, even those that seem intractable. Just as important, they can be used to encourage good habits, turning progress itself into a reward. In other words, feedback loops change human behaviour. And thanks to an explosion of new technology, the opportunity to put them into action in nearly every part of our lives is quickly becoming a reality.

A feedback loop involves four distinct stages. First comes the data: A behaviour must be measured, captured, and stored. Second, the information must be relayed to the individual, not in the raw-data form in which it was captured but in a context that makes it emotionally resonant.

But even compelling information is useless if we don't know what to make of it, so we need a third stage: consequences. The information must illuminate one or more paths ahead. And finally, the fourth stage: action. There must be a clear moment when the individual can recalibrate a behaviour, make a choice, and act. Then that action is measured, and the feedback loop can run once more, every action stimulating new behaviours that inch us closer to our goals.



Alfonso Ponce
Associate



Going forward we want to continue to expand our understanding of our operations, our process, and best practice globally.

Over the next twelve months, our focus will be on increasing the visibility of our green building performance programme, improving the frequency with which we collect and report data, establishing a framework for collecting and analysing data in future, and exploring what's possible in terms of further centralising and standardising the environmental data we collect.

 $\label{thm:continuous} Opposite: Norman\ Foster\ at\ the\ Graduate\ show.$

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