

# CONSTRUCTION

SECTOR GUIDE









## Sector-specific guide: Construction

The future is in flux. Social injustice and the climate crisis are increasingly important concerns for consumers, and lead to them changing their behaviour. Customers want to buy from businesses that have a clear purpose and positive impact on society and the planet.

With this in mind, Enterprise Nation has launched the Plan it with Purpose campaign. There are six million small businesses across the UK.

Together, they represent a powerful collective that can make a significant dent in the challenges facing our world. If each business made a small, conscious change to the way it operates, the effect would be game-changing, nationally and globally. This kind of impact could be a crucial weapon in tackling climate change and changing society so people can live fairer, better lives.

Excitingly, all of this doesn't have to be at the expense of profit.

Over the course of the campaign, we'll be launching a number of sector-specific guides to help you understand how you can increase your business's social and environmental impact.

This guide looks at the construction sector.

"Construction underpins our economy and society. Few sectors have such an impact on communities across the UK or have the same potential to provide large numbers of high-skilled, well-paid jobs.

"The construction sector reaches every corner of the United Kingdom and touches each of our lives. It is fundamental to our economy as we invest in our future: building the homes we live in, the schools and hospitals we rely on, and the offices, factories, and transport and energy infrastructure that keep the wheels of industry turning." — Construction Sector Deal, Department for Business, Energy and Industrial Strategy

The construction industry continues to be one of the UK's largest sectors, contributing nearly £90 billion to the economy, with a quarter of output in the public sector and three quarters in the private sector. As a result, it accounts for around 10% of all jobs in the economy as a whole.

In an industry whose actions can have such profound effects on individuals, the opportunity for positive change through tweaks to operating processes and the way the sector is run is massively exciting. Not only do those changes have a direct effect on the planet, people and communities, but have a multiplier effect that carries them over into value chains and the wider industry.

Nationally, we've committed to cut our emissions by 80% compared to 1990 levels by 2050, and to halve them by 2025. In 2009, buildings accounted for about 43% of all the UK's carbon emissions. If the government is to meet its commitment, buildings must become considerably more efficient. Complicating this is the fact that around 80% of the UK's buildings that will exist in 2025 have already been constructed. So, while buildings need to become more efficient, if the climate changes as predicted they must become more resilient too.

As the construction industry generates 39% of the world's carbon emissions, globally it's a major focus for national governments, with the UK being no exception. In January 2021, off the back of a consultation on the Future Homes and Buildings Standard, the government established that by 2025, any new homes built must produce 75% to 80% less carbon emissions. Until then, new-build homes will have to reduce their emissions by 30%, while new buildings must cut emissions by 27%.

The combination of targets, and the focus placed on an industry with such a large influence on society, has created an opportunity. Construction organisations can be recognised as leaders in successful sustainable business practices that create significant positive effects for people, both directly through affordable housing and inclusive design and indirectly through local hiring and training and the creation of communities. There are businesses already seizing this opportunity to lead, some of which are highlighted in this guide.

#### In this guide we will cover:

#### The business case:

Why investing in your social and environmental impact is good for construction businesses

#### **Industry trends:**

What the key players are doing and what best practice is emerging

#### **Opportunities for impact:**

Where and how you can start thinking about social and environmental impact across your business

#### Case studies:

Real businesses in the construction sector that are innovating and leading the way in how they manage and increase their positive impact

#### Actions you can take:

Measures you can put in place now to make your own social and environmental impact

#### Supplementary resources

#### LOWER YOUR OPERATING COSTS

You can cut operating costs significantly by better managing resources like water and energy and making as little waste as possible. Research has shown that a business's investments to lower its carbon footprint – not to mention lower recruitment costs by keeping its team engaged in purposeful work – can have an internal rate of return of between 27% and 80%.

Goscombe is a property developer that does much more than develop properties. The company also sets out to prevent homelessness by providing affordable homes, creating local jobs and building stronger communities. A key term in this model is 'hyperlocal'. Goscombe finds all its labour, and most of its materials and suppliers, within 30 miles of the new home's final location. This hyperlocal focus not only benefits the community, but also reduces operating costs by shortening delivery journeys. More importantly, by building within a certain area, Goscombe can more accurately predict what it needs to procure to carry out the work. That, in turn, means fewer expensive delays due to transport hold-ups.

#### **FUTURE-PROOF YOUR BUSINESS**

Social justice and environmental sustainability are business challenges. What affects people and the planet will affect your business too. According to estimates, the impact that these challenges can have on your reputation, your ability to comply with regulations, and the efficiency of your supply chain could reduce your business's earnings before tax by 25% to 70%. Managing and limiting these risks, and proactively looking for opportunities to bring what you do into line with the needs of people and the planet, will make your business more resilient and ready to thrive in the future.

First signed in 2013, the Social Value Act demonstrated the government's efforts to use procurement (the process of obtaining goods or services for business purposes) as a lever for change. It established that any construction projects over £10 million must include social value measures that make up at least 10% of the overall cost. That means those companies that are actively making a positive social and environmental impact are now more likely to win large public-sector contracts.



#### INNOVATE

Making commitments that not only benefit the people who hold an interest in your business, but have a net-positive impact on the environment too, will encourage new ideas and innovation. Organisations have used their sustainability goals to develop new, innovative products, disrupt traditional business models and access new markets. They're choosing to be proactive in the face of new social and environmental challenges.

Osco Homes uses technology and creative design to build affordable, innovative houses. It adopts off-site construction methods, where the elements of the building are designed, manufactured and fabricated in a factory before they are moved to the site. This approach makes construction much more sustainable as it reduces waste. It also improves safety for workers, raises quality standards and, importantly, lowers costs. Housing panels are then assembled on-site for maximum speed and minimum disruption. The simplicity of this process means no time-consuming snagging lists, just homes that are durable, appealing and distinctive.

# THE BUSINESS CASE



Construction is an industry in transition. As the growing need for more houses and infrastructure in the UK collides with the recognition of the scale of impact on the environment of traditional construction methods the industry is finding innovative and interesting new ways of operating.

#### CERTIFICATIONS

BREEAM (the Building Research Establishment Environmental Assessment Method) and LEED (Leadership in Energy and Environmental Design) certifications assess the performance of new or existing projects. The assessments encompass a building's design, construction and operation to make sure it's achieving best practice when it comes to its sustainability credentials.

#### **BUILDING METHODS**

Virtual design and construction of facilities allows for more accurate projects with fewer unforeseen errors. Indeed, it's estimated that reworks of faulty or incorrect builds account for nearly 30% of costs in the construction industry. The use of virtual methods in the industry is growing simply because they lead to better performance, not only on a business level but environmentally as well.

The growth in prefabrication and modular methods shows the value in constructing sections of buildings offsite before transporting the pre-made building or section to the final location for construction on-site. This not only makes faults and errors less likely, but also reduces local disruption to roads. Additionally, it can be more environmentally efficient as you're only transporting exactly what you need.

# INDUSTRY TRENDS

# OPPORTUNITIES FOR IMPACT



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### 1. INNOVATIVE MATERIALS

The construction industry uses a huge range of materials that affect people and the planet in different ways. The challenge for the industry is two-fold: (1) to produce and work with the most commonly used materials in the most environmentally effective way and (2) to develop completely new materials in an innovative way that has a lower impact on people and the planet.

#### **GREENING CONCRETE**

Concrete is the most used building material in the UK. Given its durability and long lifespan compared to plastic, wood or brick, there is a great need for innovation that limits the impact this material can have:

- Producing concrete using waste or residual materials from other industries means the industry is relying less on natural resources, which lowers emissions and costs (for example, Ashcrete).
- Innovative forms of concrete are being developed that use carbon dioxide in the manufacturing process, capturing the CO2 within the material (for example, CarbonCure).
- Students at UCL's Bartlett School of Architecture, in partnership with Transport for London, have experimented with the idea of 'living concrete', where the surface of concrete structures becomes a selfregulating ecology for living species.

#### **ALTERNATIVE MATERIALS**

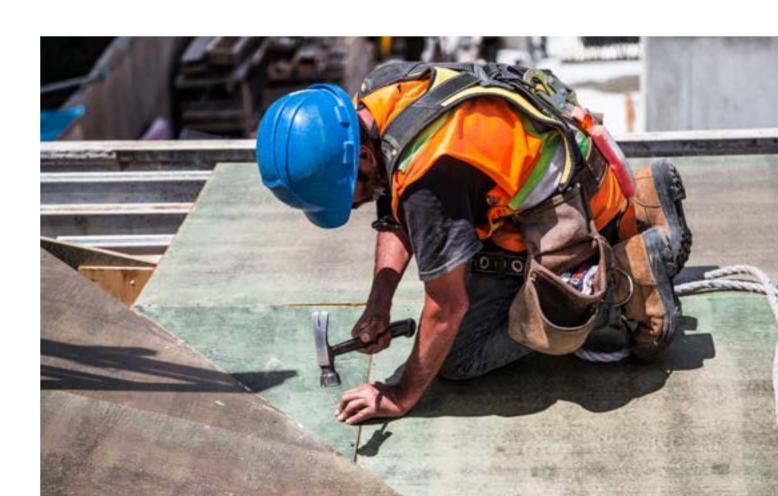
Another approach to reducing the impact of materials is to identify alternatives. In the case of concrete, there are many alternatives reaching the market. These include the following:

- Ferrock: A carbon-negative concrete alternative, composed mainly of waste steel dust and ground silica glass. The material generates significantly less carbon dioxide than concrete. It's also very strong and flexible.
- Rammed earth: A material made by compacting dampened subsoil between temporary formwork.
   Once cured, the earth is strong, long-lasting and, with the right treatment, resistant to the elements.
   It can be strengthened further using construction techniques such as rebar and steel frames.
- Greencrete: An umbrella term for a number of eco-friendly materials meant to mimic the structural properties of concrete. In practice, greencrete is typically made from recycled materials, like used plastics and polystyrene.

## 2. TRANSPARENT SUPPLY CHAIN

As an organisation in the construction industry, you can unlock significant opportunities by mapping and understanding your supply chain. By identifying points of stress and then making changes to tackle them, you can lessen the impact of delays in the construction process, reduce transport congestion, limit disturbance to the local area, reduce the environmental impact of homebuilding and lower the cost associated with longer journeys.

Mapping your supply chain seems like a no-brainer in terms of efficiency and opportunities for positive impact. The next positive step is to communicate openly and transparently about your supply chain and where the materials, tools and skills that go into construction come from. Doing this not only promotes your good practice to customers, employees and investors but shines a light on those companies in the industry that aren't operating to the same high standards.





## 3. CIRCULAR ECONOMY

Our current linear economic model

— where materials are mined,
manufactured, used and then thrown
away — causes man-made climate
change, depletes resources, and
leads to deforestation, a loss of
biodiversity, and pollution of land,
air, rivers and oceans.

As the largest user of materials and the biggest generator of waste in the economy, the construction sector must take the lead in moving away from this linear model and towards a circular economy. Extending the life of buildings and recovering and reusing materials at the end of their life can help reduce the demand for virgin materials and waste arising from the built environment.

A circular economy report from the Mayor of London lays out some practical steps businesses can take:

- Lessen demand for materials and use more secondary materials.
- Reduce waste and identify ways to move items up the waste hierarchy – in other words, away from disposal and towards recycle, reuse and reduce.
- Support reuse and recycling through sharing facilities.
- Create buildings that are high-quality and flexible and built with its lifespan in mind.



## 4. HUMAN-CENTRED CONSTRUCTION

#### **BUILDING AND MAINTAINING COMMUNITIES**

"Real estate companies have a social obligation. The quality of built environment has a large impact on our quality of life. The places we live and work have tangible and symbolic importance. There is therefore a direct responsibility for everyone working in real estate to deliver the best places and spaces possible."

Sara Bailey, head of real estate at Trowers & Hamlins



Increased attention is being drawn to the role of the property industry in shaping the built environment. A role which should aim to reflect individual communities, listen to their distinctive needs, and contribute positively to an area's social character.

There are many factors that go into designing a built environment that promotes and maintains healthy communities. A report from Naturvardsverket, the Swedish environmental protection agency, identifies a number of key elements that a good built environment should aim to achieve. Some of the most interesting ones include the following:

- Cities and other urban areas, and the connection between urban and rural areas, are planned on the basis of a coherent and sustainable approach to social, economic, environmental and health-related issues.
- Public transport systems are environmentally friendly. energy-efficient and accessible, and attractive, safe and efficient pedestrian and cycle paths are available.
- There are good-quality and accessible natural areas and green spaces and corridors close to built environments.
- The cultural, historical, and architectural heritage in the form of valuable buildings and built environments, as well as sites and landscapes, are preserved, used and developed.
- The built environment is based on and supports people's needs, allows for experiences of beauty and pleasure, and offers a varied range of housing, workplaces, services and culture.

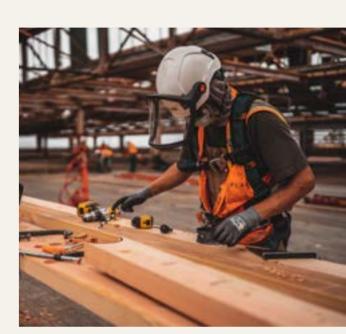
#### **Innocent Smoothies**

Communities can come in different forms. Innocent Smoothies is building the first WELL-certified factory in the world, a factory that will have all the things a great working environment needs. Designed with the workers in mind so people work better and go home happier. The people who will work there form one community but the factory also influences the local community surrounding it. Innocent is planning to hire local workers, invest in local suppliers and volunteer for local causes to make sure it's a positive force in the community.

#### Leaving a legacy

When London was submitting its interest to host the Olympics in 2012, full consideration of the Games' legacy sat central to the proposal. The city's vision, beyond constructing the site and hosting the Games, was "to transform the post-industrial landscape while preserving local heritage, and to create stronger economic conditions and better life chances for its residents". Since the Olympics, the park has played host to a number of sporting events and concerts, and the local community and area has developed immensely. This continued development has largely come about because of the London Legacy Development Corporation, which was established to further galvanise the ambitions and aims laid out in the original proposal.

Considering the oldest building in the UK still in use dates back to 1072, understanding the legacy of projects is vital in the construction industry. The Olympic Park is only one example of the lasting effects a building can have, both on its physical structure and in how it develops and protects the communities around it. Understanding and attending to a project's legacy ensures that the hard work and efforts will continue to improve people's lives centuries later.



#### **INSIDE YOUR BUSINESS**

- + Apply for certification: ISO 14000, BREEAM, LEED, WELL
- + Consider what you do with any leftover waste products.
  - Try to consider how to move every waste product up the waste hierarchy as far as possible.
  - Enviromate is a platform on which you can buy, sell or give away building materials you haven't used.
- + Consider the impact of the materials you're using and understand the viability of using alternatives or innovative solutions.
- + Create an ambitious circular economy target.
  - Understand how your work could take on as many circular economy principles as possible.
  - Consider your role in the wider circular economy and link up with other key organisations to implement your plans.

- Consider who you're hiring, promoting and supporting.
  - A part of any hiring process involves deciding where and how to advertise the role, even if it's just word of mouth. Actively considering this and looking for ways to widen the search is a crucial first step to building a more diverse workforce.
  - + Getting started can be hard but organisations exist that are actively promoting these opportunities and working with businesses to help realise them for example, BAME in Property and Building People.
- + Actively consider the impact of your work on current and future communities.
  - + Are you making things better or worse for the people who currently live there?

#### **OUTSIDE YOUR BUSINESS**

- + Map out your entire supply chain.
  - Create a checklist of practices you want suppliers to keep to, and review them to make sure they're doing it.
  - + Give suppliers guidance and resources for meeting new labour and environmental standards and hold them accountable for shortfalls in performance.
- ➡ Use your voice for good. Actively engaging in industry campaigns or local community actions that promote the world you're trying to build. The UK Green Building Council (UKGBC) is a membership organisation for those working towards a better build environment. CO2nstructZero is a platform for construction companies to showcase their work towards net zero and provide learnings and inspiration for others in the industry.

# ACTIONS YOU CANTAKE

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#### SUPPLEMENTARY RESOURCES

- A useful comparison of green building certifications
- Corporate sustainability lessons learned (PwC)
- A guide to social value
- UK Green Building Council (UKGBC)
- Construction Zero Carbon programme
- BAME in Property an organisation encouraging diversity in property
- Building People an organisation creating connections across the built environment sector
- Circular economy report from the Mayor of London
- A report on what is a good built environment from the Swedish Environmental Protection Agency
- ZeroWaste Scotland funded by the Scottish Government and ERDF, it provides advice and support services to help construction companies that want to engage in the circular economy.

#### **ACKNOWLEDGEMENTS**

#### **About Enterprise Nation**

Enterprise Nation is the UK's leading small business network and business support provider delivering support to more than 50,000 small businesses every month. Its aim is to help people turn their good ideas into great businesses - through expert advice (including a comprehensive resources library), events, acceleration support and networking. In 2020 it launched two high profile business support initiatives: the Amazon Small Business Accelerator and the Recovery Advice for Business scheme which collectively aimed to support thousands of small firms impacted by the pandemic. Enterprise Nation's small business active membership grew by 34 per cent in 2020. It now has more than 120,000 members and subscribers, ten per cent of which are professional advisers from a range of sectors offering strategic support to small firms. The adviser platform sees hundreds of connections every week with small firms reaching out for advice.

#### **About Aviva**

Aviva is a savings, retirement and insurance business with 18 million customers across the UK, Canada and Ireland. Aviva's purpose is to be with you today for a better tomorrow, and is invested in its people, customers, communities and our planet. In 2021, Aviva announced its plan to become a Net Zero carbon emissions company by 2040, the first major insurance company in the world to do so. This plan means Net Zero carbon emissions from Aviva's investments by 2040; setting out a clear pathway to get there with a cut of 25% in the carbon intensity of our investments by 2025 and of 60% by 2030; and Net Zero carbon emissions from its own operations and supply chain by 2030. Aviva has been leading this agenda for decades: as the first international insurer to go operationally carbon neutral in 2006 and champions of renewable energy and energy storage at its offices, allowing the business to achieve our 2030 carbon reduction target (70% reduction on 2010 levels) 10 years early. Find out more about Aviva's climate goals at www. aviva.com/climate-goals and the company's sustainability ambition at www.aviva.com/sustainability.

#### **About TSB**

TSB is a retail bank with a trusted customer brand. heritage stretching back to the start of the savings bank movement 200 years ago, and a committed workforce that offer full service banking to more than five million customers. We operate on a modern banking platform and serve our customers through digital channels, over the phone and in branches across the UK. As the world's first savings bank, our history is rooted in social good. Today, as it was then, TSB is committed to its wider role in society and to help communities thrive. This means creating social, environmental, and economic value, by doing what matters for our customers, the businesses we work with, our colleagues, local communities, and the environment. Doing what matters for the environment is an increasingly important consideration for customers, colleagues, and other stakeholders we work with, including regulators. Our strategy focuses on reducing our impact on the environment and meeting the highest international standards. We've committed to reducing the environmental impact of our own operations by becoming net zero no later than 2030.

Find out more about our climate goals at www.tsb.co.uk/do-what-matters/planet

#### **About Impactful**

Impactful is an impact strategy agency that works with forward thinking businesses to design commercial solutions to social and environmental challenges. It does this by making the world of social impact more accessible and actionable for every business through workshops and thought leadership. For their clients, they help them maximise their impact, through every part of their business, and instil a culture of innovation, enabling them to actively develop solutions to society's biggest challenges. Impactful brings expertise from the social impact sector into the commercial world, to help businesses develop ambitious and sustainable impact strategies. Every business has the power, ability and responsibility to change people's lives for the better and co-exist regeneratively with our planet.