

BUILDING PLACES THAT WORK FOR EVERYONE

Industry insights into key
Government priorities

February 2017



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The role of policy in making this happen



Foreword

Under Theresa May's leadership, the current Conservative Government has set out its vision of a country, an economy and a society that works for everyone.

Achieving this vision requires the Government to address some of the fundamental challenges facing British people today – the urgent need to build new homes and thriving communities; to reduce energy bills for those that are just about managing; for improved health and wellbeing to reduce the burden on the NHS; and for jobs to be created, skills to be developed, and productivity to be boosted in a post-Brexit Britain.

The UK Green Building Council (UK-GBC) and its multitude of diverse and progressive member businesses believe that the built environment is fundamental to addressing these challenges. We know that building places that work for everyone can and will support the Government's policy priorities.

UK-GBC has a proud history of ten years working with industry to achieve radical improvements in the sustainability of the built environment. Many of our members are at the forefront of best practice in delivering environmental and socio-economic improvements to buildings, neighbourhoods, towns and cities. And they can increasingly point to the commercial value and business benefits that result from their sustainability leadership

positions. Indeed, many would argue that the terms 'sustainable' and 'green' are themselves out of date – and that such considerations should simply be synonymous with good quality, well designed, and high performing buildings and places.

We know that building places that work for everyone can and will support the Government's policy priorities.

This paper provides tangible and inspiring examples of such leadership, drawn from our member businesses. It demonstrates that smart construction can deliver new homes at scale and at speed; that people will live healthier and happier lives in buildings and neighbourhoods that have good air quality and access to nature; and that thriving communities can be created through sustainable place-making. We can do all of this in addition to providing the most cost-effective route for Government to meet its legally binding carbon targets.

These shining examples show not just what might be possible in the future, but what is possible right now. With the right combination of industry expertise, community engagement and a clear steer from Government, they can be the norm, rather than the exception.

UK-GBC is uniquely placed to help the Government achieve its vision in close partnership and collaboration with the built environment industry – and in publishing this paper, we are launching a new conversation with policy-makers to set us on the right path. We look forward to working with all our partners to deliver on a shared vision in which the places we live and work can support multiple economic, social and environmental priorities - ultimately, building places that work for everyone.



Julie Hirigoyen,
CEO, UK-GBC

1 Delivering the homes the UK needs

Government is rightly committed to a major housebuilding drive. We need to close the gap between demand and supply and put new homes within reach of those being left behind. Delivering the quantity of homes is crucial, but so too is delivering quality. Fortunately, putting high quality design and smart construction methods at the heart of the housebuilding process is not only compatible with delivering volume, but can actually help achieve scale and reduce build times.

The Government's Housing White Paper identifies the need for high density developments, especially on brownfield sites. But it also recognises that homes have to be built that people want to live in. High density developments are more likely to be attractive if they are also high quality and perform efficiently. Sensitively planned densities can also enable good public transport links, social amenities and efficient energy systems.

We are seeing evidence that well designed developments, built to be future-proofed and to enhance the local environment, are less likely to suffer planning objections and therefore support speed of delivery. This is especially so if local people have been fully engaged in the development process. Community engagement can also support custom-build, where people have much more control over the design of their home, and other forms of community-led development, which tends to result in good social and environmental outcomes, as well as driving supply.

Finally, there is a win-win through offsite manufacture, or smart construction, which can reduce construction waste, produce homes that are better built and cheaper to run, and enable quicker and more reliable build times. Delivering a greater volume of homes, sustainably, is now within reach.

KEY STATISTICS

- Brownfield sites can provide up to **1.4 million** new homes^[1]
- Over **6 million** people would like to get involved in a custom build project^[2]
- Offsite construction can reduce waste by **90%** and reduce time on site by up to **80%**^[3]

LEADING BY EXAMPLE



HAB Housing, Lovedon Fields, Winchester
This semi-rural development site near Winchester consists of 50 homes – 30 for sale plus 20 affordable homes. Situated on the edge of the village development boundary, initial proposals for the site were adjusted to provide various different options which the local community could comment on. The final scheme chosen included a commitment to double the size of local parkland – including the introduction of new allotments for the local parish. The care and attention to enhancing local wildlife and providing amenity value is a central feature of the sensitive design – with sports facilities and a wildflower meadow amongst the attractions. Tenure-blind design across the development ensures consistent quality for affordable homes.



Berkeley Group, Kidbrooke Village, London
Situated in the London Borough of Greenwich, this development is the first to include a new compact home design - the Urban House - which enables twice as many homes to be built on a site compared to traditional terraced housing. The use of off site manufacture addresses the current skills shortage in construction and shortens delivery times, while also reducing the carbon footprint by cutting waste and energy use during construction. A highly energy efficient specification reduces regulated carbon emissions by more than 15 per cent compared to current Building Regulations.



Barratt Developments, Kingsbrook, Aylesbury
This development by Barratt Homes and David Wilson Homes (Barratt Developments' brands) will deliver 2,450 new homes including affordable housing, within three villages. Concerns within existing communities about the local environmental impact have been allayed by a partnership with RSPB that has set a new benchmark for nature-friendly housing developments. Nature reserves, allotments, a community orchard, new flood defences and 250 acres of wildlife-rich open space will be accessible to all residents of Aylesbury Vale.



igloo Regeneration, Dundas Hill, Glasgow
Dundas Hill is a former distillery site in the Port Dundas area of Glasgow, on the banks of the canal. The 600 home masterplan provides an opportunity for high density urban and custom-build housing focused on the strong creative and design led identity of the city. There is a pioneering spirit in the area, which has been harnessed in the regeneration. Dundas Hill is a great example of the use of community design charettes, to engage local people in the development process right from the start. This sense of co-ownership helped the application go through planning with no objections.



Lendlease, Cobalt Place, London
Located in the London Borough of Wandsworth, Cobalt Place consists of 104 new homes, including two 'Zero Carbon' townhouses, and is one of the world's largest Cross Laminated Timber (CLT) residential developments. The CLT structures are factory produced and allow a cleaner, safer construction site thanks to fewer deliveries, less high-risk work on-site, and reduced noise and dust compared to concrete frames. For residents, improved thermal and acoustic performance results in less noise and lower energy bills, while indoor air quality is improved thanks to the elimination of Volatile Organic Compounds (VOCs) produced during construction.

LEADERSHIP INSIGHT Dan Labbad, CEO International Operations, Lendlease

There is a strong consensus that we need to deliver more homes, faster. It is my contention that we will achieve this by delivering better homes and better places, that create jobs, opportunities and healthier environments for local people.

We need to make development more acceptable – more desirable – to local communities. While the original masterplan for our regeneration of the Elephant & Castle was resisted by local people who feared the impact it might have, since delivery has begun, plot planning approvals have been rapid, because local people can see for themselves the benefits development is bringing to the area. This includes high quality public amenities such as a new leisure centre, improvements in transport infrastructure, green space and jobs – as well as beautiful award-winning, tenure-blind new homes. We have already created over 700 jobs for Southwark residents, roughly half of whom were previously unemployed. This is a win-win for Lendlease and local people, given the acute shortage of skilled construction workers.

Greater diversification of tenure is a crucial part of the plan to deliver the homes that we urgently need and will also help create great places and mixed communities. This will include new, high quality homes for rent that provide the services and amenities that many people living in urban areas want. It will also include various forms of shared ownership, enabling people to get on to the housing ladder in an affordable way. And it will include a greater proportion of social homes, for those in greatest need. A mix of tenures also accelerates delivery as it caters to a range of budgets and demands, overcoming the challenge of absorption rates in market sale-only developments.

Delivering high quality, environmentally sustainable new homes will also contribute to accelerating supply. Increasingly we use modular, offsite construction to reduce waste and improve the efficiency of delivery. Building with 'carbon positive' materials like Cross Laminated Timber is cleaner, quieter and safer – enabling construction that has less impact on our neighbours, whether they are residents or schools. Sustainability and supply not only go hand in hand – the former will accelerate the latter, and ensure we deliver the homes and places people need now and for the long-term.



2 Getting bills down, for families and businesses

Much of Britain's older housing stock is well loved – and for good reason. But many of these homes waste a huge amount of heat and are expensive to run. Refurbishing them – without compromising their character - will permanently drive down household bills.

This is particularly important for households that are just about managing, for whom reduced fuel bills can make a big difference to their standard of living and their disposable income. With energy prices rising and mortgage-providers increasingly mindful of lending risks, homes that are cheaper to run are also likely to be more attractive for mortgage lenders in the future.

The problem also exists in our older commercial buildings, where more efficient use of energy can help bring bills down for businesses, large and small. This frees up money to invest in the core business. Many of the same issues apply to public sector buildings, where lower energy bills mean savings for the taxpayer and more money freed up to deliver key frontline services.

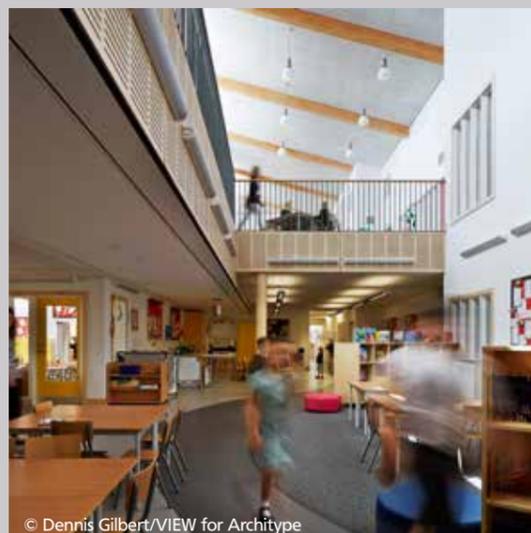
Improving our existing building stock is important, but so too is making sure that we don't add to the problem when building new. Our new homes and commercial buildings, when built to the highest standards, can reduce energy costs to very low levels and play a part in reducing national demand for new energy infrastructure. High standards at the outset also avoid the need for costly retrofit at a later stage.

The cheapest energy is the energy we don't use in the first place. It's time to make energy efficiency the cornerstone of energy policy, for the benefit of households, businesses and UK Plc.

KEY STATISTICS

- From 2010 to 2015 the Greening Government targets saved **£139 million** in energy, waste and water costs across the central government estate^[4]
- Energy efficiency can reduce energy bills by **£300 each year** and lift **90%** of fuel poor households out of fuel poverty^[5]
- Many SMEs could reduce energy bills by up to **25%** with energy efficiency measures that pay back in 1.5 years. **40%** of these savings would require zero capital cost^[6]

LEADING BY EXAMPLE



© Dennis Gilbert/VIEW for Architype

Architype, Wilkinson Primary School, Wolverhampton

The redevelopment of Wilkinson Primary School for Wolverhampton City Council utilised Passivhaus techniques to create a healthy internal environment which has low running costs. The design maximises the use of natural daylight and ventilation, including shading angles which ensure maximum shading in the summer while reflecting sunlight on to the internal ceilings in the winter. The result has been to reduce energy costs to around £5,000 per year, compared to energy costs of approximately £45,000 per year for an equivalent sized school built to current Building Regulations.



© Rick McEvoy Photography

Rockwool, Wilmcote House, Portsmouth

In Portsmouth, the council have joined forces with Rockwool to super-insulate Wilmcote House, three 11-storey 1960s social housing blocks, which had very poor energy efficiency that led to very high heating bills for tenants. The project, which is nearing completion, is 'about adding value without breaking the bank' and will reduce demand for heating by 90%, while extending the building's life by at least 30 years. Tenants are already reporting much warmer flats and substantially reduced fuel bills.



© Land Securities

Land Securities, Lewisham Shopping Centre, London

Land Securities established a resource efficiency programme which has generated cost savings that can be passed on to customers. In the past year, 64 energy reduction initiatives were agreed across 23 leading commercial and retail sites around the UK at a total cost of £2.6m, saving customers 8.2 million kWh of energy, equal to £940,000 per annum. An example of this is at Lewisham Shopping Centre, where lighting upgrades to LEDs will reduce landlord energy consumption by 20% - with benefits shared with customers including Marks & Spencer, Clarks and H&M.



© Willmott Dixon

Willmott Dixon, Keynsham Civic Centre

Bath and North East Somerset Council made energy efficiency a priority for their new civic centre, the focal point of their £36m Keynsham town centre redevelopment. So contractor Willmott Dixon, in an industry first, included in-use energy performance targets in the contract. The A-rated building contains a host of energy saving design features – and a four-year programme of support from the contractor has enabled the client to make the most of them. The building is now saving the council around £45,000 a year in operating costs.



© AGMA

Greater Manchester's 'Little Bill' scheme

The Greater Manchester GDC Programme has seen the city-region's Combined Authority deliver radical energy efficiency improvements to over 1,300 homes through its commercial partners. Over 900 of the homes upgraded had previously been considered 'hard to treat', but have now had their external walls successfully insulated. The majority of the households who have benefited are on low incomes. As well as reporting a more comfortable home and a better understanding of their energy usage, residents are delighted by lower fuel bills, with average annual savings amounting to an enormous £350 per household.

LEADERSHIP INSIGHT

Tony Cocker
CEO, E.ON UK

Our customers have a legitimate expectation of having secure, affordable energy when they need it. But as our traditional sources of energy diminish and we transition to a low carbon energy system, we need to look through the lens of the customer and ask ourselves how we can deliver their energy needs as cost-efficiently as possible. It is clear that providing the right level of comfort at home and at work but with less energy consumption is the best place to start in helping our customers get their energy bills down.

Through our track record of delivering energy efficiency measures in people's homes over the last 25 years, we have seen how much of the housing stock remains poorly insulated, leading to energy bills that are far higher than they should be.

Delivering the fifth Carbon Budget will require an even bigger focus on driving down energy use. We must also treat our customers fairly and help them do the right thing. We want the energy efficiency market to mature, which is why I am delighted that E.ON is part of a new consortium that has secured EU funding to develop energy efficiency mortgages and deliver them to the mass market.

We must also help our businesses become more productive. Through working with some major UK businesses over the last few years to help them reduce their energy requirements, I have seen the true potential that our innovative solutions can provide to all businesses. But I know that for company boards that have many competing priorities, it can be difficult to support an energy efficiency investment proposal, even when it has a short pay-back. Government must therefore join with industry to make much clearer to businesses the multiple benefits of investing in energy reduction and demand response. This in turn will help them compete more effectively in the global market.



3 Healthier places to live and work

There is nothing more important than our own, and our families' health and wellbeing. For most employers meanwhile, a healthy, happy workforce is a vital component of a productive, successful business. But many of our neighbourhoods, homes and places of work or learning are making us less, not more healthy.

Air pollution has reached well-documented crisis levels, and is responsible for 40,000 premature deaths per year in the UK^[7]. It requires a coordinated response, in which the planning of our communities, including design of streets, integration of public transport and green space can all be part of the solution.

Health problems can also be adversely affected by indoor temperature and air quality. Cold, damp homes double the risk of respiratory problems in children; increase fivefold the chances of adolescents developing mental health problems; and exacerbate chronic conditions for vulnerable groups including Britain's ageing population^[8].

Similarly, at work or school, the quality of the air we breathe and the amount of daylight we receive can materially affect our physical and mental health. With staff costs typically accounting for 90% of a business's operating costs, this does not just impact human health, but also the bottom line.

The good news is that living and working in high quality buildings and well planned neighbourhoods, with good public transport and access to nature, reduces the risk of health problems – both physical and mental. With our national health system severely stretched, we must use every tool at our disposal to help.

KEY STATISTICS

- It costs the NHS **£1.4bn** a year to treat people made ill by living in poor housing^[9]
- People living within 50 metres of a busy road are **7%** more likely to develop dementia than people who live at least 300 metres away^[10]
- Office workers in green buildings achieve **61%** better 'cognitive function' because of a healthier indoor environment^[11]

LEADING BY EXAMPLE



© Tim Crocker 2015

Levitt Bernstein, Loudoun Road, London

This development of 42 mixed tenure apartments for Origin Housing was completed in 2013 and has been monitored after completion to check performance. The architects used careful building orientation, high levels of insulation, appropriate shading and a mechanical ventilation and heat recovery system to produce a living environment that supports health and wellbeing. Internal temperatures and humidity levels remain comfortable for residents, who reported high levels of satisfaction, despite large fluctuations in the external temperature from summer to winter.



© Gentoo

Gentoo, Boilers on Prescription pilot, Sunderland

In a landmark pilot from 2014 to 2016, Gentoo carried out energy efficiency upgrades to the homes of a small number of vulnerable residents, and worked with Sunderland Clinical Commissioning Group to study the impact on resident health. At the end of an 18 month trial, there had been a 60% reduction in GP appointments and a 22% reduction in outpatient appointments, compared to a control group where no home improvements had taken place. The pilot has been replicated elsewhere, and has generated a huge amount of interest from healthcare professionals.



© Andy Marshall

Saint-Gobain, King's Hawford Junior School, Worcester

The Bartholomew Barn is a multi-purpose sports and drama hall designed by Associated Architects, and is the UK's first ever building designed to Saint Gobain's 'Multi-Comfort' standard, designed to produce excellent daylighting, air quality and acoustics. It is also certified to the Passivhaus standard, which requires high standards of thermal insulation, airtightness and filtered heat-recovery ventilation. Teachers and pupils alike describe it as light, warm and with better sound quality.



© Skanska

Skanska UK, Bentley Works, Doncaster

Bentley Works is Skanska UK's regional engineering, manufacturing and servicing hub. Skanska rebuilt the facility, which included constructing a modern 1,800m two-storey office building. A central light well was used to supplement natural daylight, reducing the need for electric lighting and no hazardous substances were used in construction to improve the resulting indoor air quality. Skanska saved £28,000 in 2015 in staff costs, by achieving 3.5 times fewer building-related sick days, alongside increased employee comfort and satisfaction.



© British Land

British Land, York House, London

In the recent refurbishment of its head offices at York House, British Land opened up space to maximise daylight, added a central staircase to encourage both exercise and interaction between employees, integrated a large number of indoor plants and enhanced ventilation systems to improve indoor air quality. The results have been impressive. After the refurbishment, 99% of staff found it an 'enjoyable environment to work in' compared to 69% before, and 99% of staff thought the refurbishment was good for corporate image.

LEADERSHIP INSIGHT

Veronique Laury, Chief Executive Officer, Kingfisher

A good home is more than simply a place to live. A good home is functional, durable, sustainable, and stylish. And a good home directly affects our health and wellbeing. At Kingfisher we believe everybody should be able to have a home they can feel good about, so our purpose is to make home improvement accessible for everyone. We try to understand the reality of how people really live. We base everything we do on this and we've spent time in thousands of our customers' homes to see how they live day to day.

What we've learned is that, regardless of whether your home is owned or rented, large or small, old or new, what matters most is that it is yours. And, in the 20 years I've been working in this industry, I've never met a single person who didn't want to make their home better.

Homes, and communities, make a difference to people's lives. The air we breathe walking down the street; the chemicals in products in the home; the quality of lighting; or the nature outside in our garden, window-box or local park. These things can all impact on our health and wellbeing.

So we can help millions of people every day to feel safer, more secure, warmer, more comfortable, content, happy and healthy. And as an employer, we know that many of the same principles apply to our places of work. Fresh air and good light are just as important to our colleagues as our customers. But as a country we could do much more to ensure everyone has a home that feels good to live in and our Government has a key role to play. For example, with increasing numbers of people renting, if there was the opportunity to secure longer tenancies, without the risk of sudden rent rises, more could be done to give families greater stability and security in their home – increasing their wellbeing.

We could also do more to help people understand the clear link between energy efficiency and warmer, more comfortable homes with reduced energy bills. And there could be more support for businesses who want to improve their places of work for their colleagues.



Good homes, good workplaces and better health and wellbeing. That is something that works for everyone.

4 A world-class, productive industry, with good quality jobs in every region

A construction industry equipped to meet future challenges can support and drive a strong, resilient economy in what are testing times. It has a crucial role to play in creating jobs, improving skills, providing national infrastructure and growing exports.

In a rapidly changing employment market, the built environment sector can provide high quality jobs in every constituency of the country, causing a positive economic and social ripple effect into communities nationwide. New construction methods are transforming the way that places are designed and constructed, and will require new skills and qualifications in engineering, planning, manufacturing and information technology.

We need to bring all of these skills to bear on the twin demands of building new homes and refurbishing the existing stock, which – with the right enabling conditions – could provide a secure pipeline of work which will allow local SMEs to grow and prosper for years to come.

As the National Infrastructure Commission has recognised, efficient buildings represent one of the most cost-effective means to ease the burden on the national grid, and can help offset the need for expensive new energy generation while reducing the UK's reliance on insecure gas imports. Investing in energy efficiency can address the triple challenge of security of supply, affordability and sustainability, helping to provide a reliable energy system which can underpin a successful and productive economy.

UK designers, engineers and manufacturers have been at the forefront of resource efficient buildings and infrastructure design, in part thanks to past policies that have driven the market towards higher standards. We cannot afford to let this reputation slip, and have a golden opportunity to export cutting edge products and services, just when we need it most.

KEY STATISTICS

- Fully exploiting the potential market in home energy efficiency alone could create more than **108,000 jobs**^[12]
- By 2030, investment in domestic energy efficiency could result in a **26%** reduction in natural gas imports, worth **£2.7 billion** a year^[13]
- Sustainable construction globally represents an industry worth **\$288 billion**^[14]

LEADING BY EXAMPLE



Buro Happold, Shimoga Processing Centre, India
UK-based engineers Buro Happold were approached by architects Chadwick International to turn the Shimoga Processing Centre into a fully passive office building in a tropical climate. The team undertook climatic analysis and optimisation studies to determine building massing, facade design, air flow within the building floorplate and systems design. The building now achieves 100% shading of direct solar gain, high levels of daylight and no air conditioning, saving 25% in operating costs. The project was an exemplar of exporting UK expertise and was awarded the Outstanding International Design project 2016 at the British Expertise International Awards.

Arup, Stavros Niarchos Foundation, Athens
The Stavros Niarchos Foundation cultural centre houses the Greek National Opera House and the Greek National Library. The Centre also includes vital new green space where cultural events and activities will be held. Arup provided design strategies across a wide range of services, which will deliver state-of-the-art engineering to the centre. The design focuses on the reduction of energy and water demands using passive design solutions where possible. A 10,000m² canopy of PV cells will produce a large amount of electrical energy, whilst offering solar shading for the building and reducing its cooling demands.



Balfour Beatty, Fylde Coastal Programme, Rossall and Anchorsholme

The £86 million Fylde Peninsula Coastal Programme reduced flood risk to 12,000 properties through the delivery of coastal sea defences. The project employed approximately 30 people through Blackpool Build Up which provided a six week training course and work experience in construction for those over 19 years old who were not in education, employment or training. Each £1 of gross project income 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.

Lendlease, Elephant and Castle, London

Lendlease is investing £2.5 million in local employment and training in the major redevelopment of Elephant and Castle, which includes using Lendlease's own not-for-profit organisation, Be Onsite. Be Onsite, along with the project's supply chain and the Southwark Construction Skills Centre, have helped connect job and training opportunities to the local people who need them most, including ex-offenders and currently serving prisoners. The project has employed more than 700 local people so far and is set to provide a further 1000 jobs when the development is complete.



Interserve Construction, Priority Schools Building Programme, Hertfordshire, Luton and Reading

This programme delivered seven secondary schools across Hertfordshire, Luton and Reading, and involved an engagement and training programme for local students and apprentices. Overall there were 437 work placement days on the construction sites including 140 days of Work Placement Bootcamps with hard-to-reach school pupils that were unable to attend work experience due to behaviour, confidence or other barriers. Training was provided for the local supply chain including 60 individuals completing NVQ training and 67 taking Advanced Health and Safety courses. A total of 150 education events directly engaged with over 4000 people, mainly local students, about construction-related careers and training.

LEADERSHIP INSIGHT Mark Naysmith, UK CEO, WSP | Parsons Brinckerhoff

In a world where new technologies are routinely being developed, the built environment sector is capitalising on these changes. Modular techniques, automation and 3D printing are three new innovations which will change what and how we build in the future. Building Information Modelling approaches are already delivering huge savings in our projects. The UK is at the heart of much of this innovation and has the opportunity to export these skills worldwide.

These are skills and jobs which are available across the country, allowing "every place the opportunity to prosper" – a goal of the Government's proposed Industrial Strategy. The result is not just a boost to local employment but the long-term improvement in living standards, increased local spending and regenerated communities.

As well as providing skilled jobs, our sector can deliver efficient and sustainable infrastructure, recognising that quality infrastructure can increase the nation's energy security and improve performance and productivity. It is no surprise the Government has included the upgrade of infrastructure as one of its Industrial Strategy pillars. The Government understands the link between infrastructure investment and economic growth.

As we look to the challenges of the future – population growth, urbanisation and extreme weather patterns – it is clear that resilient, quality infrastructure will be of importance to accommodate the pressures brought on by these trends. Our industry can lead the world in low carbon, sustainable, future-proofed design and engineering expertise, and foster new commercial relationships.

We can be proud of the world-class standards set by the built environment sector and its contribution to the economic and social wellbeing of the UK. But we can't be complacent. "Adapt or Die" was a clear message from Mark Farmer's review of the UK construction labour model. And other markets – from China to the United States – are innovating fast.



5 Supporting thriving, socially cohesive communities

Communities thrive when people are better connected. People in strong communities experience better health, particularly mental health, are happier and more prosperous. The built environment around us is crucial to how our local community functions, and to supporting the outcomes that we all want to see.

Well-designed buildings and the spaces around them affect our sense of pride in where we live, and can have a very real impact on our lives and opportunities. They help us to meet our neighbours, make us feel safer, increase our sense of belonging and support employment opportunities. They can also enable social activities that bring communities together or provide a local service.

Strong communities can, in turn, further improve their physical surroundings. Communities can mobilise to support the delivery of new housing, social amenities, community energy and home refurbishment. This enables local economies to expand, businesses to succeed, and creates a virtuous circle of improved education, health and social cohesion.

We could think of the built environment as the 'hardware' and community as the 'software' that makes it work. Both are equally important, but community is much harder to see and understand, so it can be neglected in the process of place-making. The construction and property sector builds places for communities, not just buildings, and should embrace that responsibility. Government also has a clear role to play to help this process, using smart policy levers to encourage and nurture those relationships, networks and institutions.

In particular, we need to use the planning system, regeneration projects and retrofit programmes to genuinely involve people in place-making, bringing people together to help make their communities work even better.

KEY STATISTICS

- **66%** of people think how a street looks and feels makes a real difference to crime^[15]
- **82%** of councillors say greater benefits for the local community would make housing development more acceptable^[16]
- **2 in 5** job seekers say lack of available transport from their neighbourhood is a barrier to getting a job^[17]

LEADING BY EXAMPLE



Dulux, Community RePaint

Across the UK over 50 million litres of paint is thrown away and goes to waste each year but over half of it is good enough to reuse. Community RePaint, sponsored by Dulux, aims to collect leftover paint and redistributes it to benefit local communities, charities and those who can least afford to decorate. Currently the Community RePaint network is made up of 71 schemes across the UK. Once beneficiary is the charity Emmaus North East, which is renovating a derelict building in South Shields to serve as a residence for 15 formerly homeless people who are ready to make a fresh start.



Bioregional, North West Bicester eco town

The development is a long-term partnership between A2Dominion and the local Cherwell District Council. Elmsbrook, the ground-breaking first phase of North West Bicester, is already underway, with support from sustainability charity Bioregional. As a One Planet Community, Elmsbrook will be a 393-home true zero carbon development with a primary school, a convenience store, an eco-pub and a community centre, creating a village feel and providing social hubs. A pro-cycle culture, abundant green space and local food growing will promote healthy and happy living while delivering low energy bills, reduced carbon and resource efficiency.

Argent, King's Cross, London

Argent has fostered community engagement with the Global Generation Skip Garden, an urban garden made out of moveable skips. Local young people, the "Generators", have worked alongside construction and office workers to build and run this urban oasis, picking up invaluable skills and connections along the way. As well as growing food, tending beehives, making furniture and creating jams from scratch, the Generators learn how to market and sell their produce. Over 2,500 children have visited the Skip Garden to learn about sustainable urban gardening.



M&S Energy Society

The M&S Energy Society has raised capital to install, own and operate solar panels on roofs of M&S retail stores, for a period of 20 years. The result is an extensive new community energy portfolio, comprising 841kWp of solar electricity, generated through 3,236 solar panels located on the roofs of eight different M&S stores including Longbridge in the West Midlands and Hayle in West Cornwall. 100% of the Society's distributed profits are going to help local causes and charities. Successful projects could range from insulation improvements for community buildings, to helping local residents cut their fuel consumption and save money.



Play Streets, Waltham Forest, London

Play Streets is a community-led scheme that allows Waltham Forest residents to close their streets to traffic on certain days so that children can enjoy playing outside in a safe environment. Sessions normally take place after school or at weekends for a couple of hours. Residents report that "New friendships have formed between children and adults. Our street has become a community". The borough is using similar principles to inform its 'Mini Holland' approach to street design, using funding received from Transport for London.

LEADERSHIP INSIGHT Chris Brown, Executive Chairman, Igloo Regeneration

Community-led development is growing fast especially through Community Land Trusts. There is strong demand for group custom build, in which a building group leader assembles a number of people wishing to purchase a home, involves them in the design process and then delivers the entire scheme for them. And also for co-housing for 'intentional' communities, which is delivered through a group self build process by people with shared ambitions, each getting a private home while sharing communal space and activities. Putting communities in charge of both the planning and the development process generates better social and environmental outcomes.

Land owners can make the local community their first point of call when disposing of land. Is there an existing community group? Do they want to be part of a public sector developer procurement process helping the local authority choose the best developer? Do they want to be the developer themselves? Historic or 'legacy' private land owners often want to facilitate community strengthening, for example on the edge of rural villages. If there is a community group that wants to be the developer they may need support, and developers can act as development managers to do this.

When igloo visited Berlin last year we were blown away by the social benefits delivered by community-led development. Residential buildings with theatres, workspace and cafés as integral components. Communal rooms used to house Syrian migrants as well as for parties and events. Strong communities delivering real estate designed to strengthen their community.

Developers can be frightened by communities. They have often bought land with a clear idea of how to maximise their profit and fear being knocked off course. This is not their fault, it is a system failure. And one that can be corrected.

And developers can bring the new future residents and the existing residents together during the build period to start creating those community-building networks and create opportunities, like community food growing, for those relationships to prosper.



The role of policy in making this happen

As this paper demonstrates, many businesses in the construction, property and infrastructure sector are already going further than business-as-usual and delivering leading examples of places that work for everyone. However, realising the full potential of high quality places will require a collaborative approach between industry and government, to ensure that examples like this become the norm. Government policy, including the Emissions Reduction Plan, should be based on a range of key principles which can set the conditions for industry delivery and unlock private sector investment:

CERTAINTY

Businesses need the right conditions to invest in innovation and skills, and chief among these is clarity about future policy direction. The use of smart regulation and target-setting can provide a long term framework:

- Re-introduce a clear timetable for improving energy standards in building regulations, with the aim of eliminating carbon emissions from new homes and commercial buildings as soon as viably possible.
- Recognise energy efficiency as a national infrastructure priority and set a long-term trajectory to increase energy standards for existing homes and commercial buildings over the next 20 years. A national delivery programme should include a range of finance options and incentives which provide an offer for all tenures and household circumstances.
- Work with both industry and local government to ensure retrofit-led estate regeneration, sustainable construction skills and innovation are integral parts of a place-based Industrial Strategy.

PUBLIC SECTOR LEADERSHIP

The public sector has a unique role to play in creating high quality, sustainable places and driving good practice in the market. Best practice in public procurement can ensure that public money is invested wisely, and saves money for the tax-payer in the long-term:

- Renew the Greening Government commitments every five years, setting targets for the reduction of emissions, water use and waste from all public buildings.
- Use public procurement and public land ownership to drive higher sustainability standards in public and commercial buildings, in publicly funded homes, and private homes built on public land.

LONG TERM APPROACH TO VALUE

The policymaking process should take account of the positive impact that good development has on society over the long term. This is increasingly well understood through advances in the measurement of 'social value'. A comprehensive 'whole life' analysis of policy interventions can support the creation of sustainable places:

- Enable local Clinical Commissioning Groups to make investments in poor quality homes to protect vulnerable households and offset future costs of health service interventions.
- Extend the Social Value Act to new developments on public land, which would require the relevant public body to consider how they can also secure wider social, economic and environmental benefits.

FOCUS ON OUTCOMES

The primary aim of policies should be to create benefits for people, their community and their environment. Unnecessary red tape can be avoided if regulation focuses on getting the right outcome for building users, while allowing flexibility as to the best design or technical solution to achieve it. This approach works best if there is maximum transparency about how a building is actually performing:

- Introduce mandatory operational energy ratings for all commercial buildings to enable transparency of performance and drive investment and innovation.
- Set a timetable for transitioning towards building regulations based upon actual energy performance to tackle the 'performance gap' (i.e. the difference between how a building is designed to perform and how it performs in reality) and minimise ongoing running costs for occupiers.



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References

1. http://www.cpre.org.uk/media-centre/latest-news-releases/item/4414-more-than-a-million-homes-possible-on-suitable-brownfield-land?gclid=CLjV2ur1_9ECFcYp0wodPXYEmA
2. <https://www.ipsos-mori.com/researchpublications/researcharchive/3171/Survey-of-selfbuild-intentions.aspx>
3. <http://cic.org.uk/download.php?f=offsite-housing-review-feb-2013-for-web.pdf>
4. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/585350/ggc-annual-report-2014-2015.pdf.pdf
5. http://www.energybillrevolution.org/wp-content/uploads/2012/02/Energy-Bill-Revolution_full-report.pdf
6. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/417410/DECC_advice_guide.pdf
7. <https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution>
8. https://www.foe.co.uk/sites/default/files/downloads/cold_homes_health.pdf
9. <https://www.bre.co.uk/filelibrary/pdf/87741-Cost-of-Poor-Housing-Briefing-Paper-v3.pdf>
10. <http://www.nhs.uk/news/2017/01/January/Pages/People-who-live-near-busy-roads-have-higher-dementia-rates.aspx>
11. <http://naturalleader.com/thecogfxstudy/>
12. https://www.e3g.org/docs/Jobs-growth-and-warmer-homes_Executive_Summary.pdf
13. https://www.e3g.org/docs/Jobs-growth-and-warmer-homes_Executive_Summary.pdf
14. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/210099/bis-13-955-construction-2025-industrial-strategy.pdf
15. <http://www.designcouncil.org.uk/sites/default/files/asset/document/the-value-of-good-design.pdf>
16. https://www.landscapeinstitute.org/wp-content/uploads/2015/12/ProfitablePlacesOctober2014_002.pdf
17. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/461120/3a_Social_isolation-Full-revised.pdf

With the right combination of industry expertise, community engagement and a clear steer from Government, the shining examples in this report can become the norm, rather than the exception.

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