

# Physical review

**We want to ensure our physical assets and infrastructure are designed, built and managed in a way that enhances their value to society and the environment. Here, we review our progress this year.**

## Climate change

### Context

Throughout the past decade, Landsec has established itself as a global sustainability leader in its sector. We've set and achieved ambitious carbon targets, invested in renewable energy, and reduced energy use in our buildings.

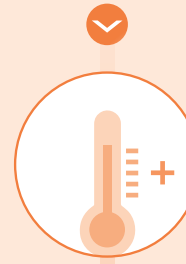
However, in 2019, the world's carbon emissions continued to increase, and so the coming decade is critical for the world's response to climate change, and the need to limit the worst of its impacts. The independent Committee on Climate Change recommended, and Government accepted, that the UK should aim to be net zero carbon by 2050. It stated that this is technically feasible with known technologies, and those who can, should aim to be net zero carbon sooner than this.

As a leader in our sector, we have committed to become a net zero carbon company by 2030. On the following page, we set out our strategy for achieving this. It is an ambitious but credible strategy with clear actions to support the world to limit global warming to 1.5°C.

Business models need to adapt to stay relevant. Since the launch of the Task Force on Climate-related Financial Disclosures (TCFD) recommendations in 2017, we have been assessing and reporting on the financial impact of climate-related risks to our portfolio. By assessing both physical and transitional risks in various scenarios and timeframes, we can put the appropriate strategy in place.

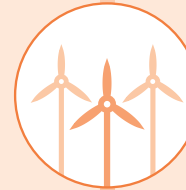
Our ambition to become a net zero carbon business by 2030 is effectively ensuring the long-term resilience and relevance of our business and helping us meet the high expectations of our stakeholders.

## Our net zero carbon strategy



1

Reduce operational energy use in support of our updated science-based carbon reduction target, aligned with a 1.5°C scenario



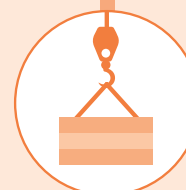
2

Invest in renewable energy through REGO-backed contracts and Power Purchase Agreements and implement on-site renewables across our assets



3

Use an internal shadow price of carbon to clearly communicate climate-related risks and opportunities in investment decisions



4

Reduce construction impacts through asset retention, efficient design and responsible sourcing



5

Offset remaining emissions through carefully selected projects which actively take carbon out of the atmosphere

## Our net zero carbon strategy

### 1. Reduce operational energy use

#### Meeting our science-based target 11 years early

In 2016, we became the first commercial real estate company in the world to set a science-based carbon reduction target – which was to reduce carbon intensity by 40% by 2030, from a 2013/14 baseline. This year we achieved our target 11 years early, having reduced our carbon intensity by 48% since 2013/14.

#### Setting an ambitious new carbon target

Following the success in achieving our original science-based carbon target, and in response to the Intergovernmental Panel on Climate Change (IPCC) report on the impacts of global warming of 1.5°C, we have made our carbon reduction commitments more ambitious.

The IPCC report made it clear that the world should aim to limit global warming to 1.5°C to mitigate against the worst effects of global warming. In line with the Science Based Targets initiative's new methodology for 1.5°C targets, we have formulated a new target of a 70% reduction in absolute carbon emissions from Scope 1, 2 and 3 (Scope 3 being downstream leased assets we procure energy for) by 2030, against a 2013/14 baseline. This has been approved by the Science Based Targets initiative. This year we reduced our carbon emissions by 42% in line with the updated target.

#### Reducing energy use across our portfolio

A key way we can reduce carbon is by lowering the energy use of our assets, and this has the additional benefit of reducing our customers' energy costs. In line with our ISO 50001 Energy Management System, every property we operate has its own energy reduction plan. These plans look at retrofitting energy-efficient equipment, optimising our buildings to use less energy, and working with our customers to reduce the energy they use in their spaces.

Our Hatfield Galleria Outlet Centre has installed corridor temperature sensors which has allowed closer monitoring of our energy usage and allowed early switch off of gas burning boilers. This has achieved a 75.5% reduction in gas use and an overall reduction of 13% in energy use at the site.

To optimise our buildings, we provide detailed energy reports to some of our customers with the largest energy consumption, to help them reduce their energy use. The reports showed how they were using energy in their spaces, and made recommendations to reduce energy wastage. After following some of our recommendations, one customer reduced their energy use by 9%.

These interventions supported our decrease in energy intensity against our 2013/14 baseline, by a further 4% when compared to last year, and it is now 22% below our 2013/14 baseline. We therefore remain on track to achieve our 2030 target of a 40% energy reduction.

Within our commercial developments, we are using the Design for Performance approach to set energy intensity targets for our base building performance, in line with achieving our 2030 targets. This tool aims to close the performance gap by ensuring that new office developments operate as efficiently as they were designed to.

### 2. Invest in renewable energy

Since 2016, all the electricity we procure is REGO-backed renewable and we are looking to move our procurement towards direct purchasing from renewable projects through Power Purchase Agreements (PPA).

We aim to increase the amount of renewable electricity we generate on our sites. Our current on-site renewable electricity capacity is 1.5 MW, halfway to our commitment of achieving 3 MW.

### 3. Use an internal shadow price of carbon

To support our net zero ambitions, we calculate an internal shadow price of carbon, so we can consider the carbon cost as well as the financial cost when making investment decisions.

We established our internal price of carbon by estimating how much we're spending on carbon reduction projects currently, and how much more we would need to achieve our 2030 goals. We balance this with figures reflecting the fact that making early design decisions with a low cost increase can have significant carbon-saving potential. Our figure is in line with the Commission on Carbon Pricing's recommendation for a carbon price level consistent with the Paris Agreement, and aligned to guidance from the UN Global Compact.

Importantly, our shadow carbon price is not a tax, but a way to strengthen our decision making, and to highlight carbon risks associated with key decisions. The risk may be an increase in the market price of carbon offsets, or the possibility of being forced by regulations to enter a carbon-emissions trading scheme.

### 4. Reduce construction impacts

We're committed to continue reducing the carbon emissions associated with our construction activities. When developing a new building today, we include embodied carbon emissions from our supply chain in this commitment. These are emissions arising from the extraction of natural resources, manufacturing, transport and construction, and represent a significant footprint – typically about half of the total emissions associated with the building over its entire life.

Importantly, retaining the existing structure or repositioning assets has the most impact when creating high-quality spaces at minimum carbon emissions. At Portland House, the embodied carbon intensity of our proposed repositioning is about a third of that of a new development, which means we're able to create a high-quality space with less carbon emissions.

We set embodied carbon targets for all our major developments and assess them through a recognised methodology, to understand where to focus our efforts for maximum impact. The first step is to simplify our designs to limit the cost of materials. Buying fewer materials is the best way to reduce carbon. For instance, at Lucent W1, we're reducing embodied carbon by 20% by designing the structure to be leaner and simpler to build, alongside specifying low-carbon materials. This will save materials and programme costs. We're also adopting modern methods of construction, such as a platform approach to design for manufacture and assembly, reducing the construction time, waste and cost. At Sumner Street, this approach achieves a reduction of over 19% in embodied carbon compared to traditional construction methods.

We then focus on the properties of the materials we specify and procure (alongside cost and availability), to adopt low-carbon alternatives wherever possible. This means careful analysis and selection of every raw material we use. Our aim is to avoid materials with a high-carbon intensity such as traditional steel and concrete. We replace them with materials that have a high recycled content, an inherently low-carbon profile, such as engineered timber, or that are sourced locally. Examples from our current development pipeline include Lavington Street which is designed around the partial retention of the existing structure on-site complemented by a hybrid steel and timber structure. The result is embodied carbon emissions associated with the structure are reduced by about 50% compared to a typical office, and timber elements avoid 15,000 tonnes of carbon compared to traditional construction.

### 5. Offset remaining carbon

As a last resort to achieve a net zero development, we offset the remaining carbon from our construction activities. We will also offset any remaining fossil fuel energy consumed across our portfolio by 2030.

We aim to do this by funding projects that remove carbon from the atmosphere via procurement of carbon credits. By financing projects in developing areas around the world, these credits have a further social impact through job creation and the support of sustainable living in line with the United Nations (UN) Sustainable Development Goals.

Our carbon offsetting projects will meet stringent requirements of due diligence, verification and reporting, as evidenced by third-party standards such as the UN Gold Standard and Verified Carbon Standard. In doing so, we're looking for projects that provide assurance of their impact and backing up credible claims with third-party monitoring and verification.

We'll disclose annually the amount of carbon offsets we buy, so we are open about the carbon reductions our developments and portfolio achieve.

# Physical review

continued

## Sustainability progress

### Waste management

Effective management of waste throughout our business is important in helping ensure a sustainable operation.

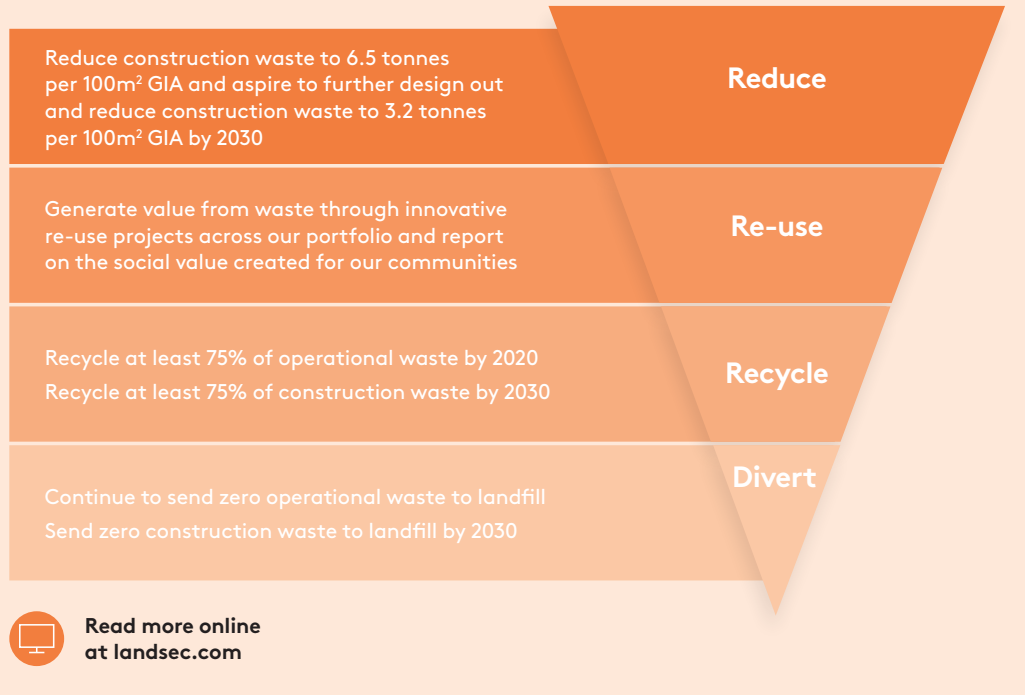
We continue to divert 100% of our operational waste from landfill and have achieved a recycling rate of 72.7% towards our target of 75%. The decrease in our recycling rate has been driven by two main factors; our work with our waste service providers to deliver more accurate and transparent data and the inclusion of new sites with lower recycling rates in our reporting.

As managing waste responsibly becomes an increasingly important issue, we have expanded our waste management commitments to cover both operational and construction activities with demanding targets for re-use and reduction.

We will also continue to work with employees and customers to reduce waste through targeted campaigns and incentives across the business.

We continue to support our customers in reducing single use plastic by partnering with Ape2o and installing two of their filtered water dispensers within the public area of our One New Change and New Street Square sites. The machines allow the public to refill their own water bottles with chilled and sparkling water and since September 2019 have dispensed the equivalent of over 21,000 plastic bottles.

## Our updated waste commitments



### Wellbeing

With staff costs typically accounting for about 90% of a company's overall operating costs, we know that investing in features that improve health and productivity of employees makes good business sense. Creating workspaces that positively influence our customers' physical and mental wellbeing remains a priority.

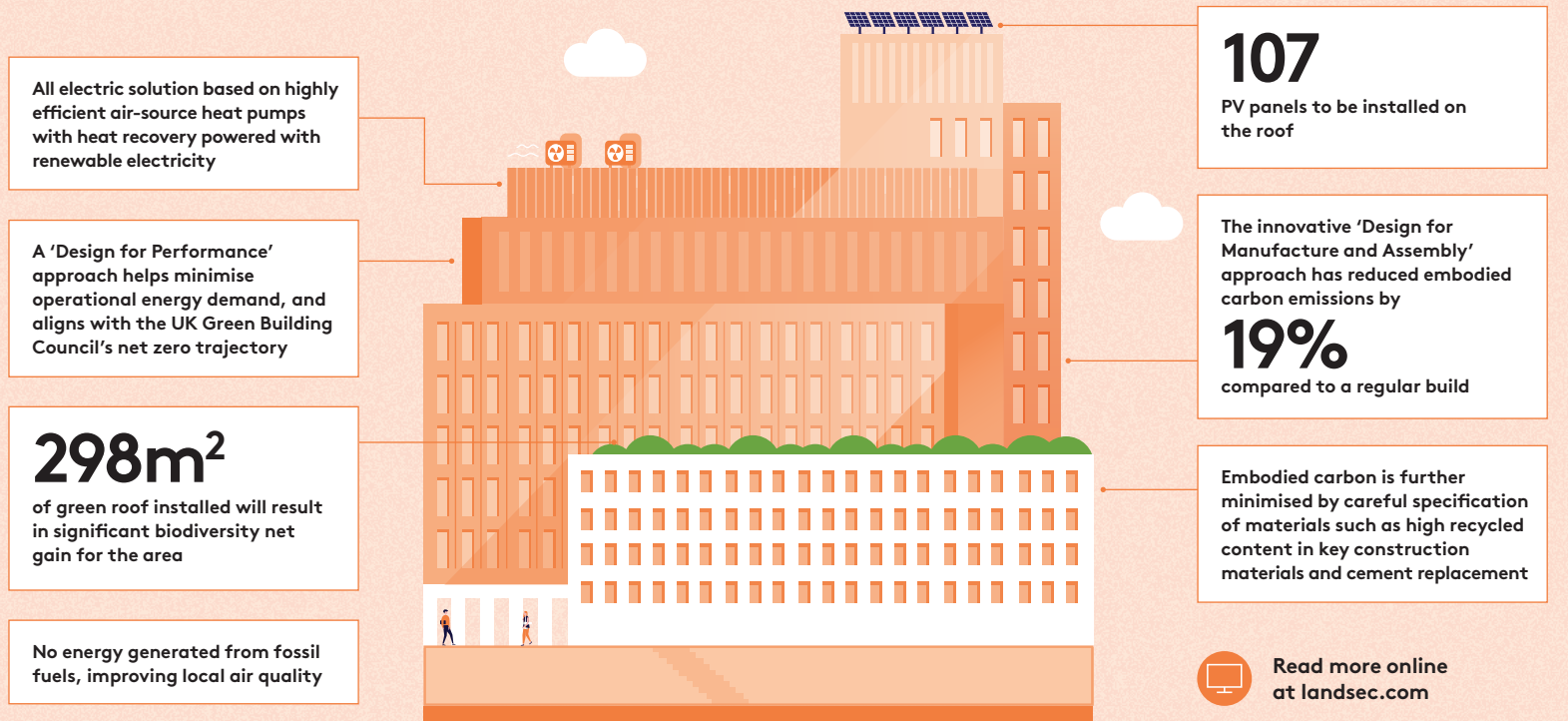
The WELL Building Standard is a performance-based certification scheme developed to put occupant health at the centre of building design. Our own headquarters at Victoria Street

are certified to the WELL Building Standard; and we've started the process to recertify: as a performance-based certificate, we're reviewing the quality of the space every three years.

In addition, we're embedding occupant health and wellbeing in the very early design of our developments where we include appropriate features from the WELL Standard.

The interior design at Nova East, for instance, revolves around the use of a palette of natural materials such as locally-sourced timber, recycled porcelain tiles and cork. Lucent will also feature

## A net zero carbon building at 105 Sumner Street





a planted winter garden and atrium, bringing daylight and natural elements deep within the building. In addition to these tangible features we're also delivering less visible benefits critical to a healthy building including clean air in abundant volumes, filtered water, non-toxic materials and high-quality lighting.

Where we provide HQ space for our customers, we make sure the quality of our base-build designs enables them to achieve certification to the WELL Building Standard for their own operations, just as we've done at 80 Victoria Street.

## Materials

What we buy and where we buy it matters at every level of our supply chain. To get it right, we take a thorough approach to sourcing sustainable materials. This includes environmental and ethical sourcing, health impacts, embodied carbon impacts and resource efficiency considerations.

Across our development pipeline, we have early in-depth conversations with specialist contractors, to be able to influence design and specification, and we request information from suppliers to improve transparency in our decision making.

At 21 Moorfields, we're buying 99.9% of our core construction materials from responsible sources. Steel, in particular, is of paramount importance for the building, given its prominence in the design. This is why we're asking our specialist contractor to get detailed information from their own suppliers about the sustainability of their products – matters such as method of fabrication, recycled content and distance travelled, alongside the necessary responsible sourcing accreditation. From this information, we rate our preferred suppliers, and factor this rating, alongside cost and lead-time, into the decisions we make when placing orders.

What's on the surface matters too, and for our material finishes we're recommending we select, wherever possible, natural low-carbon materials that can be sourced locally. At Nova East, the proposed palette includes extensive areas of carbon-negative materials such as cork and timber.

## Biodiversity

Green infrastructure plays an important role not only in increasing ecological habitat in dense urban environments, but also as a resilience feature to lessen surface rainwater on our sites. Importantly, it provides our customers and local communities with a much-needed connection to nature in their daily lives. Our spaces have a vital role to play in linking enhancements for biodiversity with better customer experiences, and we're committed to maximising the ecological potential of our development and operational sites.



## Building materials

With our growing development pipeline, we've taken a closer look at our procurement policies to equip ourselves and our partners with the right tools for meeting our expectations. That's why this year we've published our new Prohibited Materials List, to strengthen our fight against modern slavery in the sourcing of construction materials. The list is based on the Walkfree Global Slavery Index and on the Ethical Trading Initiative, to enable us to assess materials and geographical areas at risk, and promote sourcing of responsible materials. We're laying out our expectations from our partners clearly, so we can address

human rights challenges within the industry and discuss how we'll work together to increase transparency and minimise risk.

This Prohibited Materials List complements our Sustainability Brief for Developments.



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Across our development pipeline, we're going well beyond compliance and achieving significant biodiversity net gain as part of all of our designs, in a way that's considerate to each site's ecological context. At Nova East for instance, green infrastructure permeates the design from public realm planting, a 15 metre-long green wall, climbing plants at street level and planted terraces, not forgetting a 385 m<sup>2</sup> green roof. These features enable us to achieve an exemplary improvement in the local biodiversity and create a green corridor to the nearby Royal Parks.

To strengthen our approach, this year we developed a new Biodiversity Brief to guide our partners and expand on our requirements.

We continue to partner with The Wildlife Trusts to enhance biodiversity net gain at five operational sites. We implemented a number of biodiversity enhancements across these sites including over half a square kilometre of wildflower planting. During 2020, we will be undertaking an ecological survey at each site to assess the effectiveness of these enhancements, and to measure progress towards our biodiversity net gain target of 25% by 2030.

## Sustainable Development Goals



In 2015, the UN General Assembly adopted a blueprint for building a sustainable future for all by 2030: the 17 Sustainable Development Goals (SDGs). Delivering them requires productive partnerships between business, government and society.

Last year we became a signatory to the UN Global Compact (UNGC), a voluntary initiative which brings together leading businesses committed to UN goals and universal sustainability principles. This year we're pleased to report our first annual Communication on Progress (COP) in our 2020 Sustainability Performance and Data Report.

By demonstrating our ongoing commitment to the UNGC's Ten Principles in the areas of Human Rights, Labour, Environment and Anti-Corruption, we're substantially advancing our vital work towards meeting the SDGs.



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