

# 2017 Sustainability Report

**Positive  
Places**

Hammerson



Front cover shows light display on the ancient city walls in Southampton. The development of Westquay South enabled us to significantly improve public access to this important piece of the city's history.

# 04-05

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# CHIEF EXECUTIVE'S STATEMENT

2017 has been a busy year for Hammerson and one which has seen a step change in our approach to sustainability. The launch of our Net Positive campaign in March set the business on a path to changing the way we understand and mitigate our environmental impacts and maximise the social benefit of our commercial activities.

**"The sustainability agenda is moving forward rapidly as the impacts of climate change become ever more apparent. The policy agenda may change but it is clear to me that these are business risks and opportunities that need to be grasped if we are to remain fit for purpose in a 21st century operating environment. Our Net Positive campaign and wider sustainability strategy continue to lead the sector and, as the results presented here demonstrate, make good business sense."**

I am enormously proud that Hammerson is the first property company globally to launch such comprehensive net positive targets but also very aware of the challenge they bring. This report demonstrates the great progress being made already as teams across the business have been inspired to look at how they are able to contribute.

A particular highlight this year has been the work of the retail parks team. The development of phase 2 of Elliott's Field, Rugby as the world's first carbon neutral, BREEAM Outstanding retail park was a major achievement and demonstrates what can be done. Their work, particularly with the tenants to agree maximum levels of energy demand for each retail unit, is ground breaking and we expect it to lead to further conversations with retailers more widely about what they can contribute to reducing the impact of their operations through design, fit out and operation.

We set a target to install PV on at least one additional existing asset in 2017 and have installed the first of three arrays planned at Cabot Circus. This is now generating clean electricity that is used on site bringing our total capacity across the portfolio to 1.1 mWp including the Elliott's Field array, almost three times the capacity we had in 2016.

Rising energy costs and the falling cost of panels means the business case for PV is compelling. The co-benefits of on-site clean electricity generation and reduced demand from an increasingly overloaded national grid make this technology even more appealing. In 2018 we will be exploring the use of battery technology to allow us to make more extensive use of PV across our assets, particularly where on-site demand tends to be during hours of darkness.

Increasing pressure on the energy supply network in the UK presents a continuing risk for our business and for the wider economy. We are addressing this through investment in metering at our existing assets that will enable us to both manage demand more quickly and ultimately provide a response service to the network. One of the key opportunities this presents for the business is to be able to operate as a supplier of power as well as a user. We will be looking in 2018 at how developments in battery storage, combined with our investment in metering, renewable electricity generation and in electric vehicle charging facilities can be combined to completely change the relationship our assets have with the electricity grid in the UK.

2018 will see changes in the international market for recycling that will have significant impacts for the UK. We started working with our waste providers in 2017 to better understand what the implications will be for the business and ultimately for our retailers. We are already achieving high recycling rates across the portfolio and are working with our partners to do more.

For example we have sent over 68,000 clothes hangers, approximately 5.5 tonnes, for re-use or recycling rather than for disposal across our portfolio in 2017 through a re-use initiative with Mainetti, one of the UK's largest clothes hanger suppliers.

Our Net Positive targets and wider Positive Places strategy reflect our key material issues and align with the UN Sustainable Development Goals that we have identified as most effectively supported by our business activities. Having such a comprehensive strategy embedded across the business also supports a consistent and managed approach to the monitoring of our exposure to climate change risk, as recommended by the Financial Stability Board's Task Force on Climate Related Financial Disclosures. An updated climate risk assessment is currently being conducted across our portfolios. We are confident that direct risk remains low but we are keen to understand how this may change so are looking at the impact of current climate change forecasts to 2030 and 2050 for our assets.

Positive engagement with our local communities and stakeholders is an area Hammerson has a particularly strong and long standing track record in, of which I am very proud. This year we revisited our market leading research analysing the impact our assets have in their local economy and society, extending the scope of the work to cover our entire portfolio. The results are compelling and a timely reminder of the importance of retail as a sector and of the local value created by long term, responsible asset management. I was delighted with the positive response the launch of the research received from the very people most closely impacted by our assets.

Hammerson is an ambitious business and we continue to grow our asset base through both development and acquisitions. Development activity remains high on the agenda for the coming year. All our development projects reflect our Sustainability Vision and contribute to the achievement of our targets but our larger schemes have a particularly important role to play. Our major projects at Brent Cross, London and Les 3 Fontaines, Cergy in Paris will contribute to our Net Positive targets and we are already engaged with the design teams and contractors to optimise their sustainability elements. This includes plans for extensive on site renewables at Brent Cross and significant resource use reductions at Cergy.

In late 2017 we announced plans for a merger with Intu to create the largest retail property company in the UK. This is a tremendously exciting development for the business, bringing new challenges and opportunities for all of us. For the Sustainability Team this presents an opportunity to potentially scale up the positive impacts of our sustainability strategy in exactly the way we need to, to bring about real change. I have no doubt they are up to the challenge.

**MORE**



### OUR NET POSITIVE TARGETS

We have set out a plan to be Net Positive for carbon emissions, resource use, water and socio-economic impacts from 2030. The impacts of the tenanted space within our managed assets are included within this.

**For more visit:**  
[sustainability.hammerson.com/347/our-net-positive-objective.html](https://sustainability.hammerson.com/347/our-net-positive-objective.html)

The sustainability agenda is moving forward rapidly as the impacts of climate change become ever more apparent. The policy agenda may change but it is clear to me that these are business risks and opportunities that need to be grasped if we are to remain fit for purpose in a 21st century operating environment. Our Net Positive campaign and wider sustainability strategy continue to lead the sector and, as the results presented here demonstrate, make good business sense. I hope you find the report useful and look forward again to bringing you further updates through the course of the year.

**David Atkins**

Chief Executive, Hammerson plc



## A BRIEF OVERVIEW FROM OUR GROUP HEAD OF SUSTAINABILITY

I am pleased to report that Hammerson made significant headway in our sustainability work in 2017. The launch of our target to be a Net Positive business was a great way to start the year and is a flagship project for the company.



Visit our dedicated sustainability website  
[sustainability.hammerson.com](https://sustainability.hammerson.com)

Our Net Positive campaign has been recognised as the most ambitious sustainability target set by a property company. Whilst this is certainly a challenge it is an incredibly exciting project to be leading and has already re-energised the focus on sustainability across the business, with our latest Great Place to Work Survey scores showing an engagement score of 88% for Corporate Social Responsibility for the UK and Ireland teams.

It has been encouraging to see other businesses beginning to make similarly bold sustainability commitments. The business community seems to be very clear about the necessary direction of travel in tackling climate change and is increasingly leading the debate. This response makes sense against a backdrop of increasing environmental risk and investor awareness.

Hammerson has been able to set out this level of ambition because of the work we have already done to embed sustainability across our business through our Positive Places strategy. This has continued to drive efficiencies and innovation and has delivered impressive outcomes for 2017.

### Particular highlights include:

- Opening the first BREEAM Outstanding, carbon neutral Retail Park at Elliott's Field, Rugby
- Achieving our 2018 energy demand reduction target 12 months early
- Achieving a further 3% reduction in carbon emissions intensity of the business as a whole
- The delivery of our second net zero energy EcoPod for Costa

Our focus remains on energy, waste and community engagement as they are our key material issues. Vigilant onsite management combined with investment in new technologies has produced energy demand savings across our managed portfolios in 2017. This has translated across the year into a saving of over £400,000 shared between our retailers, ourselves and our JV partners. The publication of our environmental and socio-economic footprints as part of Net Positive provided additional insight into where the best opportunities are to continue to drive real change in these areas.



**Our socio-economic footprint:**  
[sustainability.hammerson.com/356/our-socio-economic-footprint.html](https://sustainability.hammerson.com/356/our-socio-economic-footprint.html)

**Our environmental footprint:**  
[sustainability.hammerson.com/365/our-environmental-footprint.html](https://sustainability.hammerson.com/365/our-environmental-footprint.html)

We are experiencing more frequent spikes in grid electricity prices as electricity demand rises, and are expecting the long term trajectory to continue upwards with regulatory costs increasing even faster than unit energy prices; this is clearly a risk but also an opportunity. Investment in energy efficiency and renewables is paying back more quickly than originally anticipated. The next phase of efficiencies require more sophisticated metering across our centres so we have a big programme of investment in metering across the UK shopping centres is planned for 2018. This will enable us to manage demand more closely and ultimately to provide a demand response service to the national grid.

Waste management costs have risen and we expect this to continue in 2018, particularly following the changes to the international market for recyclables. Diversion of waste from landfill is still saving significant landfill tax costs for our retailers, particularly in the UK. Organic waste has grown as a proportion of our total waste and is of course expensive to manage. The introduction of the BioWhale at Westquay, Southampton and at Cabot Circus, Bristol is supporting more effective waste separation, further reducing cost, both financial and environmental.

Two key developments within the French portfolio Italik at Italie Deux and Les 3 Fontaines, Cergy in Paris, are providing important opportunities for delivering best-in-class new retail assets. Working closely with Bouygues, our contractor for Les 3 Fontaines, we have already identified significant potential carbon savings within materials. Italik is on track to be a BREEAM Excellent building including solar PV and adding much needed bio-diversity to the area. The French managed assets delivered an impressive 11% reduction in energy demand over the year.

As climate change risk becomes increasingly recognised, particularly amongst longer term investors, we have commissioned a climate change risk review of the portfolios in the UK, Ireland and France. Our current exposure to climate risk is relatively limited but, as a long term developer-manager of assets we are keen to understand how that may change in response to more frequent extreme weather events, particularly in conjunction with pressure on energy supply and rising energy prices.



Hammerson celebrated its 75th year in business in 2017. We understand the importance of long term thinking.

As we calculate the results for 2017 our thoughts have already turned to targets and plans for 2018. Our Net Positive targets require new thinking and new solutions from across the business. The announcement of the planned merger with Intu at the end of the year also presents a potential major new opportunity to scale up our impacts.

We are looking forward this year to exploring a range of projects including the potential for battery storage, power purchase agreements, the expansion of electric vehicle charging and working with the development team to make sure Brent Cross delivers positive environmental outcomes over the course of its operational life. We will also be monitoring the performance of our carbon neutral Retail Park, particularly for our retailers, and sharing what we learn.

This report sets out a wealth of information on the projects we delivered during 2017 and the outcomes we achieved. I hope you find it both useful and interesting. Our website is also a valuable source of information on our activities so do please visit as we routinely share updates on our progress across the year.

If you have any questions, comments or feedback we would be pleased to hear from you. Contact details are available at the back of the report.

**Louise Ellison**  
Group Head of Sustainability, Hammerson plc

# ABOUT US

## OUR VISION

Hammerson is an owner, manager and developer of retail destinations in Europe. Our portfolio includes investments in 22 prime shopping centres in the UK, Ireland and France, 15 convenient retail parks in the UK and 20 premium outlets across Europe.

**Our sustainability vision** is to create retail destinations that deliver net positive impacts economically, socially and environmentally. We aim to be Net Positive for carbon, water, resource use and socio-economic impacts, group-wide, by 2030.

**Positive Places is our strategy for making our vision a reality.**

### FIVE COMMITMENTS SHAPE OUR POSITIVE PLACES ACTIVITY

<p style="text-align: center; font-size: 24px; margin: 0;">1</p> <hr style="width: 50%; margin: 5px auto;"/> <p style="text-align: center; font-weight: bold; margin: 10px 0;">Protect &amp; Enhance</p>	<p>We will protect and enhance our natural environment by minimising resource consumption and delivering restorative projects to deliver a net positive environmental impact</p>
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<p style="text-align: center; font-size: 24px; margin: 0;">2</p> <hr style="width: 50%; margin: 5px auto;"/> <p style="text-align: center; font-weight: bold; margin: 10px 0;">Serve &amp; Invest</p>	<p>We will deliver social value to the communities we serve, measured in jobs, skills, civic pride Serve and investment</p>
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<p style="text-align: center; font-size: 24px; margin: 0;">3</p> <hr style="width: 50%; margin: 5px auto;"/> <p style="text-align: center; font-weight: bold; margin: 10px 0;">Upskill &amp; Inspire</p>	<p>We will invest in our people, as well as recognising and rewarding those delivering change that delivers on our net positive objective</p>
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<p style="text-align: center; font-size: 24px; margin: 0;">4</p> <hr style="width: 50%; margin: 5px auto;"/> <p style="text-align: center; font-weight: bold; margin: 10px 0;">Partner &amp; Collaborate</p>	<p>We will take a stakeholder led approach to create collaborative projects that deliver Partner &amp; net positive outcomes</p>
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<p style="text-align: center; font-size: 24px; margin: 0;">5</p> <hr style="width: 50%; margin: 5px auto;"/> <p style="text-align: center; font-weight: bold; margin: 10px 0;">Challenge &amp; Innovate</p>	<p>We will challenge the status quo and trial new approaches and solutions to support the transition to a net Challenge positive business</p>
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**OUR PORTFOLIO  
INCLUDES  
INVESTMENTS IN:**

- UK shopping centres

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- France shopping centres

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- Ireland shopping centres

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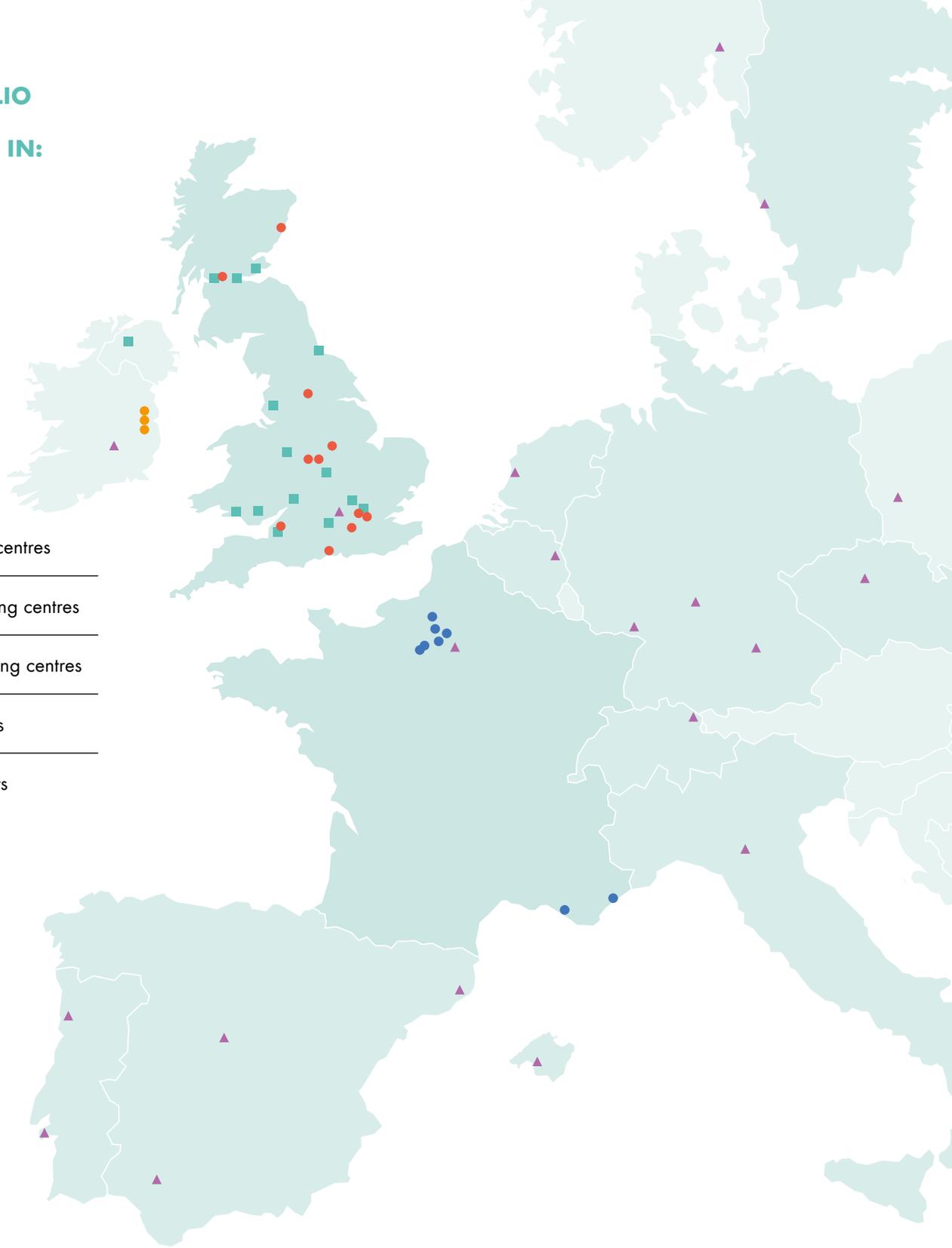
- UK retail parks

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- Premium outlets



**A full list of our  
properties is  
shown on pages  
104 and 105**



**22**  
**prime  
shopping centres**

in the UK, Ireland and France, including Bullring, Birmingham, Brent Cross London, Dundrum, Dublin and Terasses Du Port, Marseille

**15**  
**convenient  
retail parks**

in the UK, including the world's first BREEAM Outstanding retail park - Elliott's Field in Rugby, UK

**20**  
**premium  
outlets**  
across Europe



# CREATING LONG-TERM STAKEHOLDER VALUE

**OUR NET POSITIVE TARGETS PLACE US AMONGST THE MOST AMBITIOUS COMPANIES IN THE WORLD FOR SUSTAINABILITY.**

To deliver on these targets, we must ensure that sustainability is embedded across everything we do. Our Business Model outlines our vision for retail destinations we create, invest in, and manage. Our sustainability strategy is part of this model.

## WE UTILISE KEY RESOURCES...

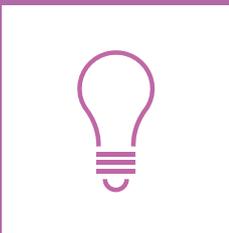
The success of our business depends on a number of principal inputs.



**HIGH-QUALITY PROPERTY**



**TALENTED PEOPLE**



**RETAIL INSIGHT**



**FINANCIAL CAPITAL**



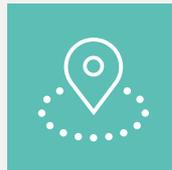
For more information on **Our People** see more on our commitment to Upskill and Inspire on [pages 30-33](#)

## THROUGH CLEAR OPERATIONAL ACTIVITIES...

The main activities that we undertake towards delivering our strategy.



**FOCUS ON GROWING CONSUMER MARKETS**



**CREATE DIFFERENTIATED DESTINATIONS**



**PROMOTE FINANCIAL EFFICIENCY AND PARTNERSHIPS**



For more information on **the financial impacts of Positive Places** see [Section 5](#)

## UNIQUELY DIFFERENTIATED BY OUR PRODUCT EXPERIENCE FRAMEWORK...

Our Product Experience Framework is embedded across everything we do, providing a unique point of differentiation.



ICONIC DESTINATIONS



EXPERIENCE LED



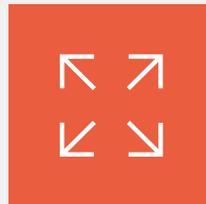
CUSTOMER FIRST



RETAIL SPECIALISM

## TO DELIVER VALUE FOR OUR STAKEHOLDERS

By successfully employing our business model we aim to deliver a positive result for all our stakeholder groups.



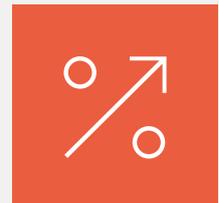
SHAREHOLDERS



RETAILERS



COMMUNITIES



PARTNERS



OUR PEOPLE



SHOPPERS



For more information on the Product Experience Framework see the Hammerson Annual Report 2017, available at [hammerson.com](http://hammerson.com)



For more information on our stakeholder engagement activity see [Section 1](#)

# SHAPING OUR APPROACH TO SUSTAINABILITY

**Our sustainability vision** is to create retail destinations that deliver net positive impacts economically, socially and environmentally. **Positive Places** is our strategy for making our vision a reality.

## Our five Positive Places commitments:

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**1**

**PROTECT AND ENHANCE**  
TO PROTECT AND ENHANCE OUR  
NATURAL ENVIRONMENT

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**2**

**SERVE AND INVEST**  
TO SERVE AND INVEST THE  
COMMUNITIES IN WHICH  
WE ARE LOCATED

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**3**

**UPSKILL AND INSPIRE**  
TO UPSKILL AND INSPIRE OUR  
EMPLOYEES TO DELIVER  
OUR VISION

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**4**

**PARTNER AND COLLABORATE**  
TO PARTNER AND COLLABORATE  
WITH OUR STAKEHOLDERS TO  
DELIVER CHANGE

---

**5**

**CHALLENGE AND INNOVATE**  
TO CHALLENGE AND INNOVATE  
OURSELVES AND OUR PARTNERS  
TO DELIVER NEW SOLUTIONS

**THERE ARE A NUMBER OF KEY DRIVERS BEHIND OUR AMBITIOUS SUSTAINABILITY VISION, AND FORCES THAT HELP TO SHAPE OUR STRATEGY.**

**CLIMATE CHANGE**

As the most significant global sustainability risk of the 21st century, climate change and the drive to reduce carbon emissions provides the overarching context for the environmental aspects of our sustainability strategy.

**SOCIAL IMPACT**

The social aspect of our work builds on the role our assets have as important elements of local infrastructure that drive local economic growth.

**UN SUSTAINABLE DEVELOPMENT GOALS**

The UN has set out 17 goals designed to ensure a sustainable future, which have been adopted across the globe.

Our Positive Places vision and Net Positive targets directly align with four of the 17 UN Sustainable Development Goals:



[www.un.org/sustainabledevelopment/sustainable-development-goals/](http://www.un.org/sustainabledevelopment/sustainable-development-goals/)

**NET POSITIVE TARGETS**

In 2017 we launched a new set of targets to be Net Positive for our carbon emissions, water, resource use and socio-economic impacts by 2030. This has significantly increased the scope and ambition of our Positive Places strategy in a way that has inspired the business and set a new benchmark for the industry.



We are convinced that this is the level of ambition required of all businesses if we are to avert the worst effects of climate change, which carry with them significant business risk.



[sustainability.hammerson.com/347/our-net-positive-objective.html](http://sustainability.hammerson.com/347/our-net-positive-objective.html)

**MATERIAL ISSUES**

Positive Places, our sustainability strategy, has been designed to ensure we maintain our focus on those sustainability impacts that are most material to the business and our stakeholders and over which we have sufficient influence to bring about change. Our most recent materiality review confirmed our key material issues as understood by our internal and external stakeholder groups.

Each material issue is incorporated within at least one of our five Positive Places commitments. This ensures that all our sustainability projects and initiatives focus on those areas that are material to the business.

**Table 0.1** sets out material sustainability issues identified by our stakeholders and their relevant GRI Topics for disclosure.

**Table 0.1**

THEME	ISSUE	MATERIALITY
Environmental	Energy security and demand	High
Economic	Technology	High
Social	Community engagement investment and relevance	High
Environmental	Waste	High
Economic	Meeting customer Sustainability objectives	High
Environmental	Water	Medium
Environmental	Material use and sustainable procurement during development and operation	Medium
Social	Placemaking	Medium
Environmental	Adapting to climate change and related policy	Medium
Economic	Impact of sustainability on value	Medium
Social	Local economic development and demographic change	Medium

# BECOMING NET POSITIVE

In March 2017 Hammerson launched a target to be Net Positive for carbon emissions, water consumption, resource use and socio-economic impacts by 2030. These are the areas where we have the most significant material impacts and therefore the greatest opportunity to drive change.



## Carbon

Net Positive for carbon means carbon emissions avoided exceed emissions generated.



## Resource Use

Net Positive for resource use means waste avoided, recycled or re-used exceeds materials used that are neither recycled, renewable nor sent to landfill.



## Water

Net Positive for water means water replenished by external projects exceeds water consumed from mains supply.



## Socio-economic

Net Positive for socio-economic impacts means making a measurable positive impact on socio-economic issues relevant to our local communities beyond a measured baseline.



For more information on progress made so far in phase 1 look out for our Net Positive icons throughout the report

## TAKING A PHASED APPROACH

The programme of work to deliver on this ambition is structured around three five-year Net Positive target sets.



## OUR REPORTING APPROACH

Our Net Positive reporting this year focuses on our progress during 2016 and 2017 against the 2015 baseline established under our environmental and socio-economic footprinting work.

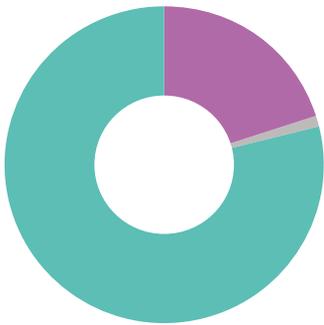


For more information on our reporting approach and how it has changed for 2017 see [Section 8](#)

## OUR ENVIRONMENTAL FOOTPRINT

Our targets are based on extensive environmental and socio-economic footprints we have had calculated for the business. The analysis shows that our operational portfolio is the main source of our environmental impacts. It also shows that the impacts flowing from the tenanted areas of our assets significantly outweigh those from the areas we have direct responsibility for. This knowledge was a key driver behind our decision to include these impacts in our Net Positive targets.

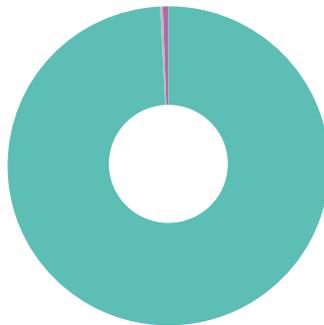
### OUR CARBON EMISSIONS



- Operational emissions **153,012 - 79%** tCO<sub>2</sub>e/yr
- Development emissions **38,571 - 20%** tCO<sub>2</sub>e/yr
- French shopping centres **1,650 - 1%** tCO<sub>2</sub>e/yr

The majority of operational carbon emissions come from tenant activities with 127,409 tonnes of CO<sub>2</sub>e/ year coming from the utilities, refrigerants and waste services our tenants procure for the space they occupy within Hammerson's assets.

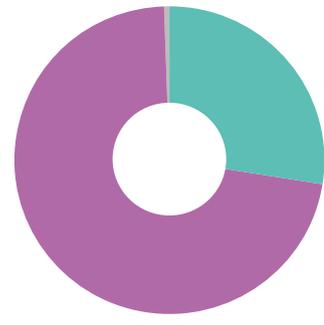
### OUR WATER



- Operational water **1,573,997 m<sup>3</sup> - 99.3%**
- Development water **5,877 m<sup>3</sup> - 0.4%**
- Corporate water **5,076 m<sup>3</sup> - 0.3%**

Water demand from the operational portfolio will be a major focus of attention for Net Positive. Improved metering will be the first project implemented to address this, along with increased rainwater harvesting.

### OUR WASTE



- Operational waste **33,860 tonnes - 27.7%**
- Development waste **88,667 tonnes - 72%**
- Corporate waste **341 tonnes - 0.3%**

Our development pipeline represents the key challenge and opportunity for tackling our resource use. We are achieving good outcomes on construction waste and working with the development team and contractors on materials.



For more information on our environmental footprint [sustainability.hammerson.com/365/our-environmental-footprint.html](https://sustainability.hammerson.com/365/our-environmental-footprint.html)

## OUR SOCIO-ECONOMIC FOOTPRINT

Our footprint research shows that our local community impacts are positive and that our business activities attract significant additional investment into local economies.

The analysis also revealed a wide range of challenges facing the communities we operate in. This knowledge is informing our asset plans as we seek to ensure we tackle issues that are meaningful for the people we want to connect with.



### 40,000 FULL-TIME JOBS

created across Hammerson's portfolio of retail destinations, with a combined annual wage bill of **£800m**



### 82% OF LOCAL RESIDENTS

secured retail jobs with almost half (48%) of those under the age of 25



### £250 MILLION

is currently contributed to the public purse through Business rates from our UK shopping centres and retail parks

### £300 MILLION

in taxes and national insurance contributions generated by employment through Hammerson's portfolio

### £7 MILLION

is the estimated yearly cost savings to Government from reduced unemployment benefits

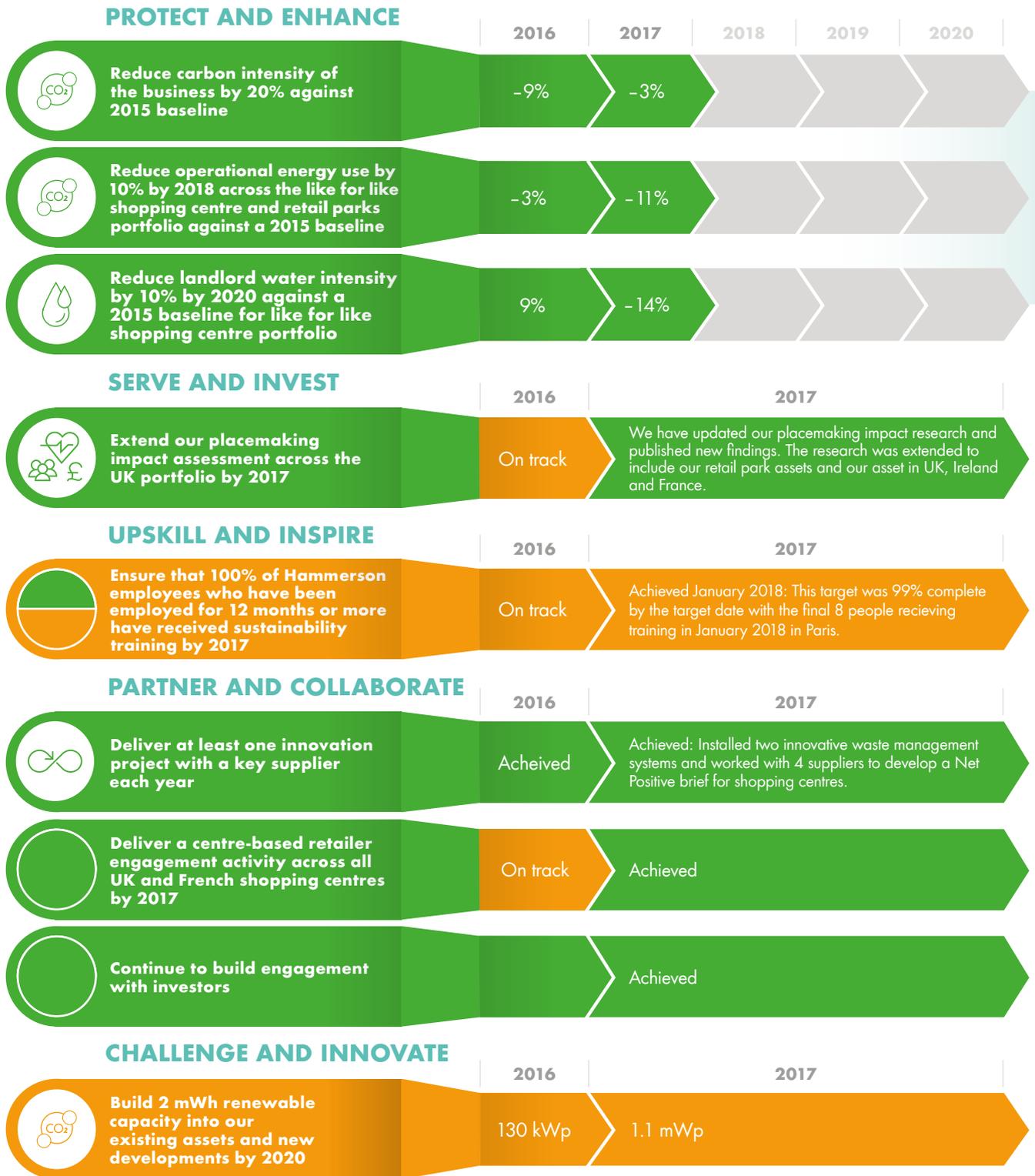


For more information **View the True Value of Retail report available on the Positive Places website**

# PERFORMANCE AGAINST 2020 TARGETS

## TARGET STATUS

Table 0.2



### KEY



# 2017 CARBON EMISSIONS PERFORMANCE

Reducing the carbon emissions intensity of the business is a corporate key performance indicator. We track this on the basis of tonnes of carbon emitted per £m adjusted profit before tax. Using a financial metric enables us to monitor the de-coupling of business growth from emissions growth. Focusing on carbon emissions reduces our exposure to carbon pricing risk and focuses attention on related business opportunities such as investment in renewables. We calculate and report this on a location-basis so these figures do not reflect the carbon reductions made through purchasing clean electricity.

This figure is based on total group portfolio and includes emissions from assets held for development and from our corporate sites. It is the widest indicator of carbon emissions for the business. Carbon emissions intensity measured on this basis has improved a further 3% year on year, falling from 155 to 150 tonnes per £m adjusted profit before tax. This is in spite of an increase in the size of the portfolio through the completion of our acquisitions in Ireland.

This has been driven by a further reductions in energy demand across our managed assets. The decarbonisation of the grid in the UK through increased deployment of renewables, also contributed to carbon emissions reductions in the UK over the last two years.

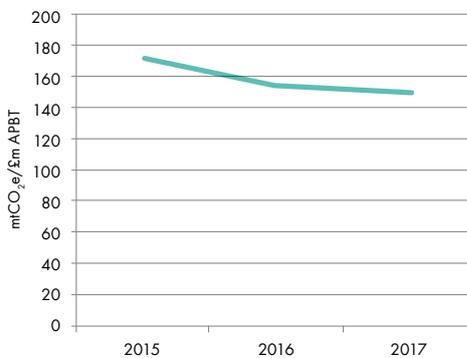
The contribution grid decarbonisation is making to all UK business' carbon emissions should not be underestimated. Unfortunately the grid mix in France has worsened over the last 12 months but in spite of this we have still achieved absolute carbon emissions reductions across the French managed assets.

These factors have contributed to our achievement of our 5 year target of reducing absolute carbon emissions

across the like for like managed shopping centre portfolios by 18% by 2020, three years early. This is a demonstration of the improvements that are being made across our managed assets but also of the impact decarbonisation of the grid is having in the UK. It is a significant achievement and gives us the opportunity to share examples of good practice and successful innovations with new assets coming into the portfolios.

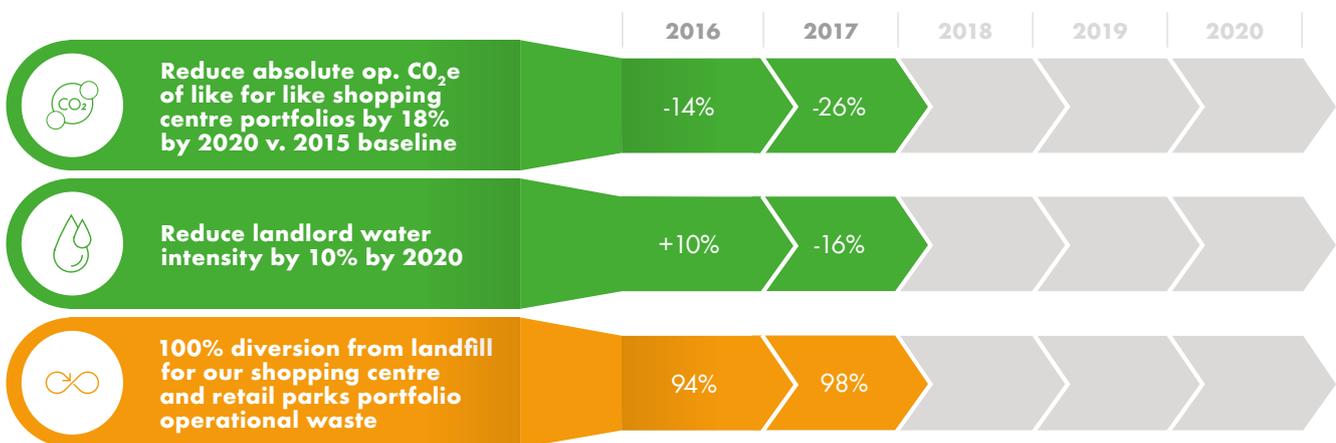
Chart 0.1

### GROUP CARBON INTENSITY (mt CO<sub>2</sub>e/£M ADJUSTED PROFIT BEFORE TAX)



— Group Carbon Intensity - Location Based<sup>1</sup>

<sup>1</sup> This data is calculated for the dates 1 October 2016 - 30 September 2017. It is assured data reported in line with requirements set out in the Companies Act 2006 within our Annual Report and Accounts. This is the only data within this report that is not reported on a full calendar year basis.



Our 2017 performance against targets has been assured by JLL Upstream. Our carbon, waste and water data has been assured by Deloitte.



Assurance reports are available on our website here: [sustainability.hammerson.com/monitor-and-evolve/gri-disclosures.html](https://sustainability.hammerson.com/monitor-and-evolve/gri-disclosures.html)

# OUR PERFORMANCE IN 2017

## PROTECT AND ENHANCE

### 2017 PERFORMANCE

Table 0.3

TARGET	OUTCOME	2017 STATUS
Achieve 5% year-on-year reduction in energy use for like for like UK assets	Achieved 5% reduction	
Achieve 85% recycling rate for operational waste across the managed portfolio.	Achieved 73% Interrogation of our waste management systems and data reporting has improved waste and recycling data in 2017.	
Continue to manage F&G rated EPCs out of the portfolios subject to Minimum Energy Efficiency Standards (MEES) through active asset management	Over 2000 leases within scope of MEES regulations. 530 EPCs undertaken, 311 F&Gs left in portfolio to be managed out through planned leasing events.	

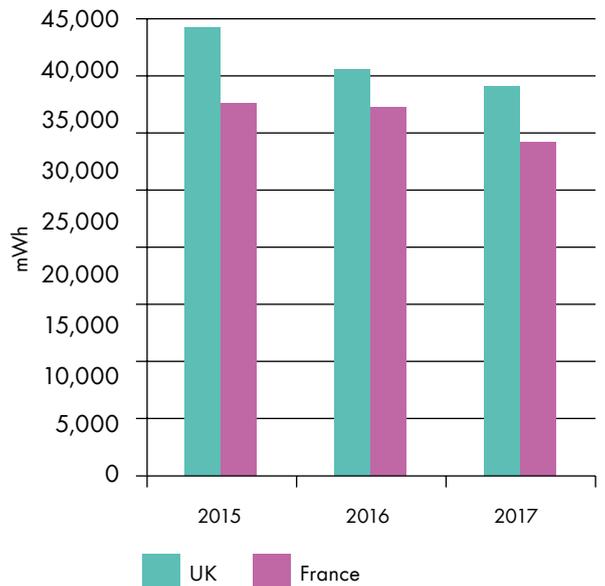
## ENERGY DEMAND AND SECURITY OF SUPPLY

Energy demand for landlord services within our assets is responsible for over 90% of our operational carbon emissions. Energy efficiency has therefore always been the priority for our environmental targets and we continue to make consistent savings across the portfolios

1. Electricity consumption decreased by 9% year on year across our French assets
2. 150mWh of clean electricity have been generated at Westquay in 2017
3. The PV array at Westquay, Southampton generates a 9% yield on cost financial return for the joint venture
4. 11% improvement in energy intensity of our French assets
5. 3% reduction in electricity demand for landlord services across our UK like for like shopping centres

Chart 0.2

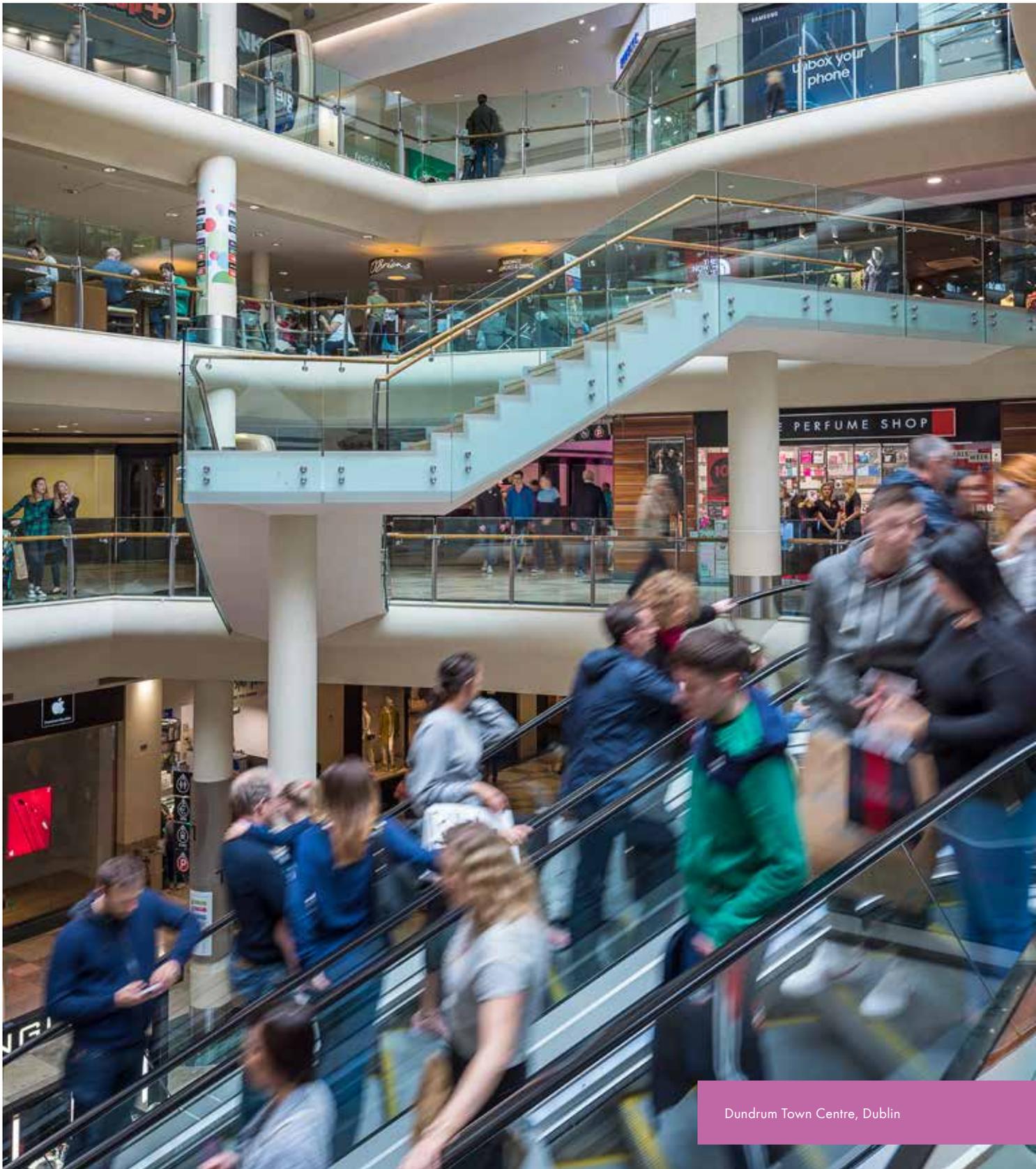
TOTAL ENERGY DEMAND BY REGION (2015 BASELINE)



## MAJOR REDUCTION DRIVERS

The key areas feeding into these reductions include:

- Investment in plant and technology: LED lighting, variable speed drives for fans, cold air curtains to maintain mall environments, replacement gas boilers.
- Close monitoring of demand by our on-site teams.
- Investment in on-site renewables – our first PV array became operational at Westquay North in August 2016 and our second in August 2017. 780 mWp of PV has been installed at Elliott’s Field, Rugby during 2017. Two further arrays are planned for existing assets during 2018. We expect to achieve our 2020 target of installing 2mW of PV ahead of schedule.



Dundrum Town Centre, Dublin

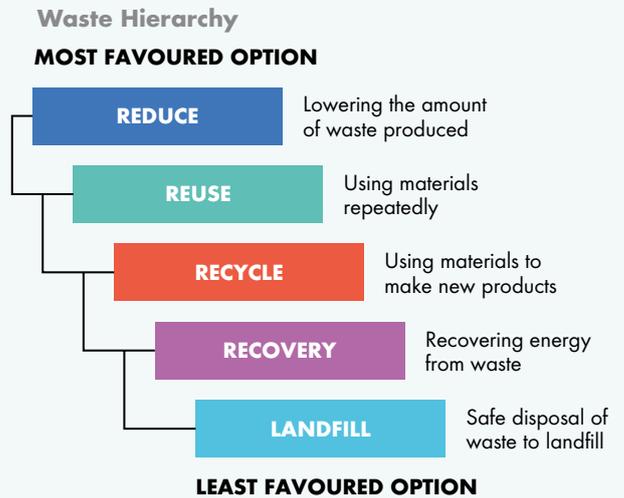


For more details on our cross portfolio energy performance see [Section 2](#)

## WASTE AND RESOURCE USE

Waste and resource use is one of our material environmental impacts. Our operational portfolios and development activities have quite different waste profiles but our management approach is similar for both and reflects the well established waste hierarchy.

The changes in the international market for recycled plastics are expected to create a major challenge to the waste industry in 2018. However, increasing awareness of the issue may also focus attention in policies to reduce waste at source.



### OPERATIONAL WASTE

Our operational portfolio is our major source of waste and we have achieved strong recycling figures in 2017 although we have not achieved our 85% recycling target across every asset. We have identified projects that increase reuse, such as a project supporting the reuse of plastic clothes hangers. We have also introduced water fountains at selected centres to support the reduction of single use plastic bottles for water.

**In 2017 we sent approximately 5.5 tonnes of plastic clothes hangers for reuse.**

The introduction of the BioWhale at Westquay, Southampton in 2016 to support the management of organic waste has worked well. The system generated additional benefits of improving waste separation by the restaurants which continues to support recycling rates at the site. A second BioWhale has been installed at Cabot Circus, Bristol in 2017 and is, again, supporting better waste separation and recycling.

At Victoria Gate, Leeds we have installed a bio-digester to manage the on-site organic waste. This system uses enzymes to reduce the organic waste to water and pulp, reducing lorry trips to site, and uses significantly less space than a traditional organic waste management system.

Whilst we have yet to meet our 85% recycling target overall, some of the assets are achieving it. Notably Cabot Circus, Bristol; Centrale, Croydon; Highcross, Leicester; Silverburn, Glasgow and Union Square, Aberdeen have all achieved or exceeded the 85% recycling target this year.

### DEVELOPMENT WASTE

Waste management at our development projects is ultimately the responsibility of the contractor but we set stretching targets against which data is provided on a monthly basis.

Our 5 year target is to achieve 100% diversion from landfill for construction waste from our UK sites by 2020. We estimate that during 2017 over 90% of our total development waste was diverted from landfill. However, full assurance of this figure has been challenging as it relies on documentation from our supply chain and this has been hard to verify to our external verification team's satisfaction. We are confident that the figure is in excess of 90% and will be working with our supply chain in 2018 to improve waste reporting.

### MATERIALS AND RESOURCE USE

The major source of our materials impacts is our development pipeline. Developments within the sector are enabling designers and contractors to specify materials that are renewable, particularly FSC timber, and have increasing levels of recycled content. Our Sustainable Development Vision and the Sustainability Implementation Plan focus attention on material selection as an area where we can significantly influence outcomes.

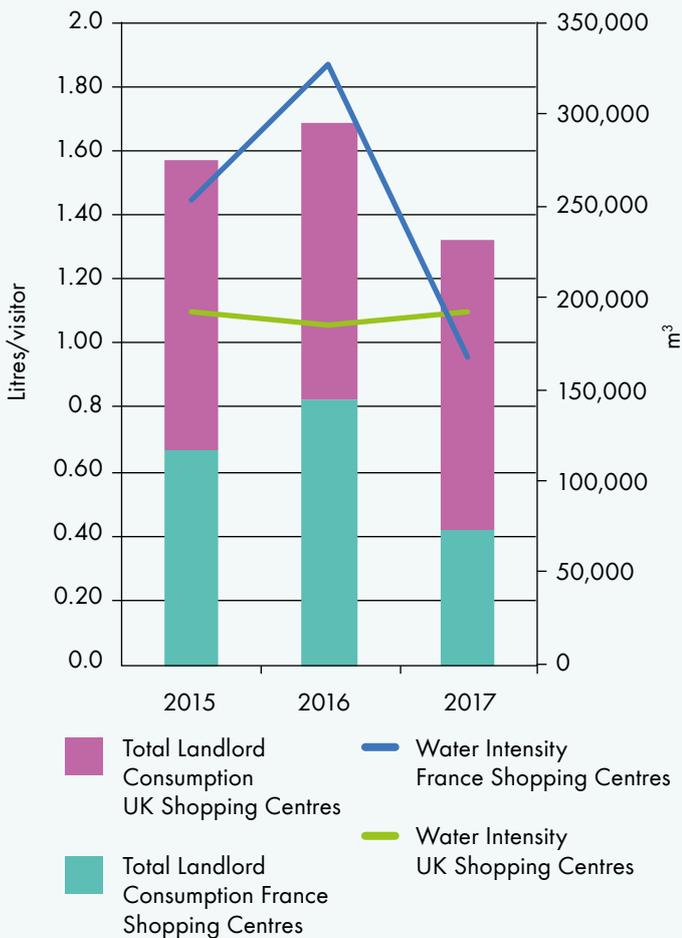
During 2017 we successfully engaged with Bouygues, the contractor appointed on one of our developments in France, and have been able to specify concrete with recycled content. As the major component within the scheme this is expected to achieve a significant reduction in the use of virgin materials and related embodied carbon.

By applying knowledge from the development of the EcoPod to the retail park development at Elliott's Field, Rugby we were able to significantly reduce the materials impact of the scheme, contributing to its achievement of BREEAM Outstanding certification. This included switching 38 tonnes of steel for FSC timber.

One of our biggest schemes in the pipeline is the Brent Cross, London development. We are currently working with the design team to review material specifications to ensure opportunities to design out waste and design in lean materials are taken. This work will be continuing through 2018.

Chart 0.3

**WATER DEMAND FOR LANDLORD SERVICES  
(2015 BASELINE LFL PORTFOLIOS)**



**WATER**

Whilst our assets are not located in regions that are water-stressed, we recognise the significance of water as a valuable resource and are committed to reducing water demand across our assets. Furthermore, the continuous supply of clean drinking water to all of our assets has a significant carbon footprint so managing down consumption has the additional benefit of reducing our emissions.

The vast majority of water consumption across our portfolio comes from our operational assets. This is split between landlord services and tenant demand. Landlord services includes any water for public realm features such as fountains, supplies for toilets and back of house uses for example for washing down service yards and landscape irrigation. In some instances we have water cooled air conditioning systems which also generate additional demand.

We installed Waterblades in 2017 and in some UK assets this has led to reductions in water consumption at our UK managed assets. We also continue to include waterless urinals as part of our toilet upgrades and are trialling toilets with significantly reduced water demand successfully at one site.

Tenant water consumption makes up an increasing proportion of total water demand across our operational assets, and this is linked mainly to the increase in the proportion of food and beverage businesses within the assets. Water supplied to these units is sub-metered. Detailed data is set out in the tables in section 3.

Our water contracts have been reviewed and renewed across the portfolio during 2017 as part of the deregulation of the water markets. This has presented opportunities for improved metering and monitoring of water consumption. A comprehensive programme of work on utility metres across the UK will begin in 2018 that will support further savings in water demand.

**Our total water intensity has decreased by 22% year on year across our like for like portfolios.**



Highcross, Leicester



**For more details on our water data and performance see [Section 3](#)**

## OUR FOCUS FOR 2018

### Our Protect and Enhance focus for 2018 remains firmly on:

- Reducing energy demand
- Increasing recycling and particularly reuse rates for waste
- Driving down potable water consumption where we can

Energy is the key driver of carbon emissions from our portfolio and an identified risk. Rising demand for electricity continues to place unprecedented pressure on the electricity supply infrastructure in the UK. This leads to pricing uncertainty as charges rise at peak periods. We expect these pressures on the grid to increase as electricity demand rises faster than supply capacity.

Each of these areas will contribute to our Net Positive targets whilst also supporting the resilience of the portfolios to energy demand and pricing risk and rising waste management and water costs.

## PLANS FOR 2018

1. Achieve 15% reduction in energy use for like-for-like UK assets against 2015 baseline – having achieved our 10% reduction target 12 months early we have set a more stretching target for 2018.
2. Implement automatic metering project across UK Shopping Centre assets to facilitate better demand management controls – this is a key project for 2018 which will facilitate further improvements in energy efficiency and enable energy demand response.
3. Continue to roll out LED focusing in particular on opportunities in French assets and Retail Parks.
4. Install 2 additional PV arrays on existing assets.
5. Increased training for contractors, suppliers and operational teams within our assets to improve recycling.
6. Work with waste contractors to apply Better Buildings Partnership waste framework.
7. Work with the design team to optimise specification and sourcing of materials for our Brent Cross, London development.
8. Investigate options for carbon offsetting.





## CASE STUDY

Protect &  
Enhance



Elliott's Field, Rugby

## TWO WORLD FIRSTS THAT DEMONSTRATE OUR COMMITMENT TO PROTECT AND ENHANCE ELLIOTT'S FIELD, RUGBY

Our achievements at Elliott's Field, Rugby are a demonstration of how our Positive Places strategy can deliver sector leading sustainability outcomes. The project achieved its exemplary targets of BREEAM Outstanding and net zero regulated carbon by building on the successes and lessons learnt from collaborating with retailers and innovative design teams on previous retail park schemes. Knowledge gained from the Costa EcoPod, the first phase of Elliott's Field and the B&Q Eco Learning Store in Merthyr Tydfil has been applied to good effect here.

The BREEAM Outstanding and zero carbon status were achieved by combining a 775kWp solar PV array with highly efficient building fabric and tenant fit out. This was made possible by close engagement with and commitment from tenants. Understanding how energy efficient each retailer's fit out was, before legal documents were agreed was key to this and typically does not occur during conventional leasing arrangements. Each fit out was required to meet minimum sustainability requirements covering heating, ventilation, power and lighting. Compliance with the minimum requirements ensures that each unit achieves zero carbon status and was included in the lease documentation.

As an incentive to comply and enhance fit out specifications as necessary, the electricity produced from the PV is supplied direct to each tenant. The efficient fit out will also reduce tenant operating costs. The design team provided support and advice to each tenant on fit out and each one was able to meet and in many instances exceed the requirements we set. This is forecast to save over 300 tonnes of carbon per annum over the lifetime of the scheme.

Embodied carbon reduction was also an important target at Elliott's Field contributing as it does to both carbon emissions and resource use. The B&Q Eco Learning Store, completed in 2014, had set a whole life embodied carbon target of 340kgCO<sub>2</sub>/m<sup>2</sup> of floor area (excluding operation carbon, tenant fit out and external works).

The design of Elliott's Field exceeded this by 7%. The key change to deliver this was replacing the steel frame and aluminium soffit of the external canopy with timber, which also significantly reduced the quantity of new-renewable resources used within the scheme.

The development sets a new benchmark for our retail parks and future schemes will be identified to replicate and preferably exceed the performance achieved on Rugby.

# SERVE AND INVEST

## 2017 PERFORMANCE

Table 0.4

TARGET	OUTCOME	2017 STATUS
Extend our placemaking impact assessment across the UK portfolio by 2017	We have updated our placemaking impact research and published new findings. This is providing baseline data for each of our assets that is used to inform our 2018 Positive Places Plans and will enable us to measure performance over time as part of our Net Positive objective.	
Establish a cross portfolio programme that has a positive impact on asset specific local skills and employability profiles	Job brokerages are now in place at Westquay, Brent Cross, Bullring and Silverburn. The new socio-economic toolkit incorporates baseline data for each asset and a dashboard with local issues.	

## OUR SOCIO-ECONOMIC IMPACTS

We take a long term strategic approach to **community engagement and investment, with a company-wide framework focused on material issues:**

- Employment and skills
- Enterprise
- Young people
- Health and wellbeing

As part of our Net Positive work, in 2017 we published our Socio-economic Footprint Report. Research undertaken by JLL and Envoy Partnership, combined with data collected from across our UK, France and Ireland portfolios, enabled us to understand and measure the socio-economic contributions of our assets and developments. It provides a baseline from which we can measure future progress.

The findings are being used to shape asset plans that ensure we optimise the positive impacts generated from our portfolio, and create great retail destinations through both best in class asset management and development.

Our work in each of these issues is tailored to focus on local issues. Our community engagement commitments cover our development life cycle, asset management and corporate activities.

We focus on developing local partnerships with organisations that maximise opportunities in the communities where we are located and help to mitigate any potential risks associated with our business activities. We set both national and locally specific targets and measure performance against these.

Targets under our Serve and Invest commitment ensure we remain focused on the key material socio-economic issues for our group, and locally for each of our assets. Each of our developments and assets has a community plan with targets responding to our national focus areas and addressing local needs.

As part of the socio-economic footprint work undertaken this year, we have created a socio-economic dashboard, which highlights material issues close to our developments and assets. This enables us to focus activities on the issues most relevant to those areas.



To see the full report visit:  
[hammerson.com/media/press-releases/hammerson-launches-true-value-of-retail-report/](http://hammerson.com/media/press-releases/hammerson-launches-true-value-of-retail-report/)

## TAKING A LONG TERM APPROACH TO DELIVERING SOCIO-ECONOMIC BENEFITS

Our aim is to optimise the positive benefits a development brings to an area. As a long-term investor we see ongoing community engagement at our managed assets as key.

Once operational, our assets aim to create and deliver locally tailored programmes that suit the specific needs of the community. For both development and ongoing community engagement, community consultation is key and we use a variety of means, both physical and digital, to reach out to those communities local to our centres, in order to better understand their needs.

### OPTIMISING SOCIO-ECONOMIC BENEFITS FROM VICTORIA LEEDS

Our development of Victoria Leeds is a great example of the impact new development can create for local people and a local economy. The benefits come from both the development and the operation of a retail destination over time.

#### Development - Victoria Leeds



**£16m**

Wages generated



**£2.2m**

Income tax to the Exchequer



**£82m**

An estimated £82 million of attributable inward investment

#### Operational - Victoria Leeds



**600 Retail**

Jobs created (overall fte)



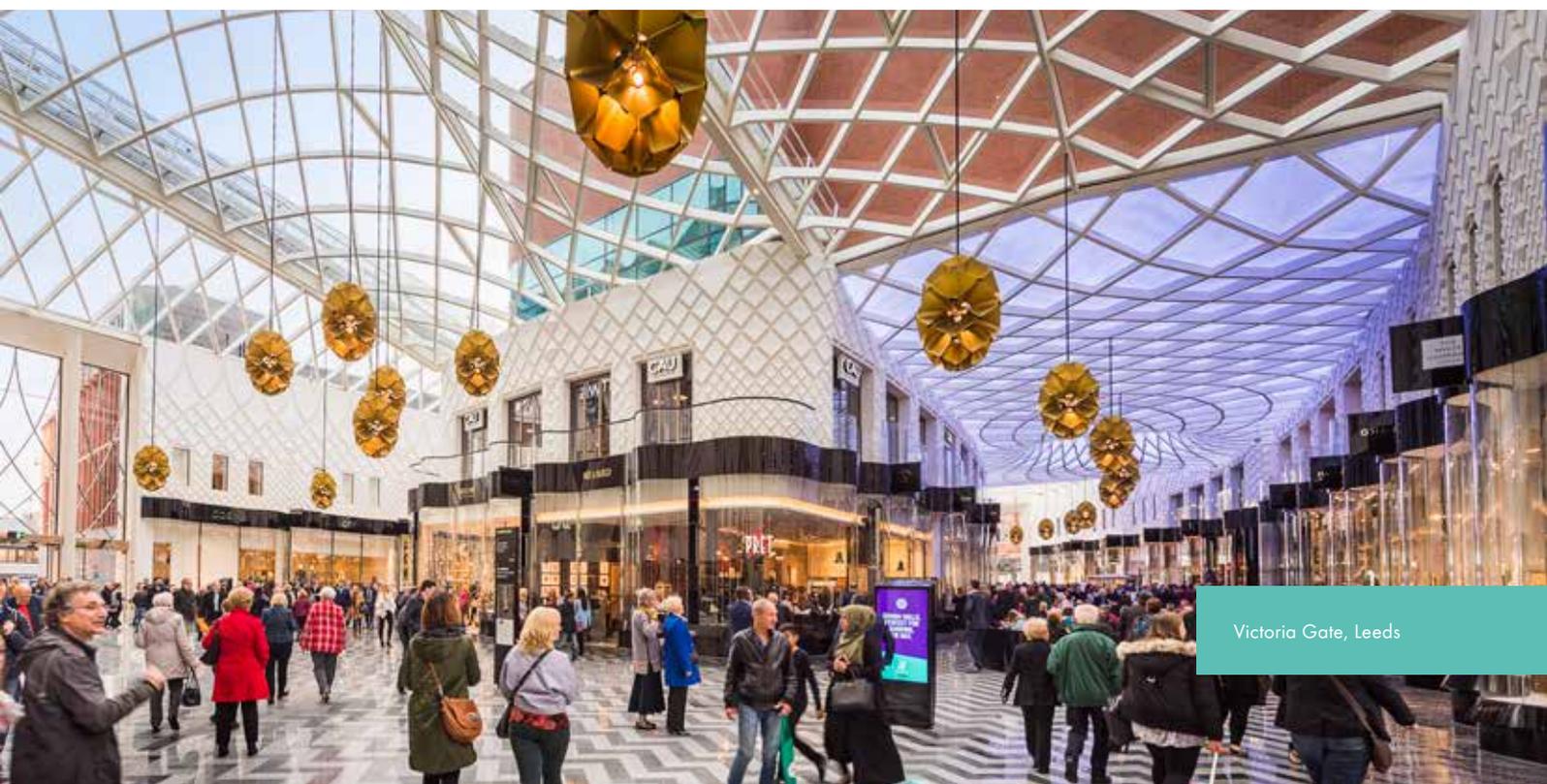
**£2.8m**

Invested by retailers in on site training



**£4.9m**

In business rates to the public purse



Victoria Gate, Leeds

## COMMUNITY PROJECTS

We develop community projects that focus on four key areas: employment and skills, enterprise, young people and health and wellbeing. The data below sets out how many people we have engaged with under each of these themes during 2017 and the key projects that have enabled us to achieve this.

### Numbers engaged under each socio-economic theme

Table 0.5

THEME	NUMBER OF PEOPLE ENGAGED
Employment and Skills	1544
Enterprise	1799
Young People	1510
Health and Wellbeing	57 people and 12 families



**For more on the community projects delivered see [Section 7](#)**

We develop long term partnerships with organisations that share our community focus areas. Below is a selection of some of our key corporate and local partners and the projects we run with them.

### Key community engagement projects

Table 0.6

PARTNER	FOCUS	PROJECTS
Retail Trust	Employment and Skills / Enterprise	Retail Enterprise:- fashion start up with Glasgow Caledonian University Pre-employment training in retail
Alzheimer's Society	Health and wellbeing	Staff charity partner Dementia Awareness Research
Pop-Up Business School	Enterprise	Pop-Up Business Schools run at 5 assets kick starting 105 enterprises with local people
Department for Work and Pensions	Employment and Skills	Employment & skills across the UK assets
Urban Plan - Urban Land Institute	Employment and Skills	Regeneration schools engagement programme
Sports inspired	Health and Wellbeing / Young People	Youth engagement programme
Inner City Homeless	Health and Wellbeing	Support for homeless people in Dublin area
Initiative France	Enterprise	Start-up funding and mentoring across France

## BENCHMARKING PERFORMANCE

Hammerson uses the London Benchmarking Group (LBG) to measure our socio-economic performance both within our sector and the wider business community. As members of LBG, we are able to share best practice with the business community.

We also work with industry peers through committees to share knowledge, including REVO and Constructing Excellence.

## COMMUNITY INVESTMENT

We invest in the local community both directly through project funding, donations and bursaries. We provide in-kind support through providing skills, space and marketing support. We also provide indirect funding by enabling organisations to reach and engage our audiences, including both our employee base and shoppers.

### Community Investment

Table 0.7

Direct contribution	£2,222,736
Indirect Contribution	£260,413
No. Of Organisations Supported	476



### CASE STUDY

Serve & Invest

## URBAN PLAN

In 2017 our relationship with Urban Plan saw us working with over 1000 pupils at 45 different schools, including nine new schools in Ireland. In Ireland we engaged 250 pupils, 32 industry volunteers and 25 teachers. A feature of our expansion of this initiative into Ireland for 2017 has been the number of volunteers coming from local authorities and public bodies including. Dublin City Council, Fingal County. Council and the Housing Agency.

The schools who participated were hugely positive about Urban Plan. In schools where resources are very tight a day with Urban Plan makes a real contribution to the students and the school as a whole.

**“Urban plan helps us to reach the hardest to engage. A couple of lads who would otherwise struggle to get involved became fully engaged on the model building and presentations.”**

**Teacher from participating school**



Bullring, Birmingham



CASE STUDY

Serve & Invest



## SUPPORTING LOCAL ENTREPRENEURS

The Pop-Up Business School offers those interested in setting up their own business a completely different approach to getting started. Run by business professionals, through a series of workshops, participants learn how to establish a successful business from the seeds of an idea and based on the concept of doing something they enjoy. Workshop content covers a range of topics including how to start a business with no money, creating a website for free and effective use of social media.

During 2017, Pop-Up Business School has run at 6 of our assets including Union Square, Aberdeen, Silverburn, Glasgow, Cabot Circus in Bristol, Martineau Galleries, Birmingham and Dundrum in Dublin. The project is delivered in collaboration with local authorities, registered housing providers, Business

Improvement Districts and other partner agencies, demonstrating the power of good collaboration. At several of our assets we have offered participants temporary retail space, giving them direct access to an established, high footfall retail environment to test their products and services.

**“Pop-Up business school is absolutely fantastic, it has helped me gain a very good understanding of the challenges in running a business and how to overcome them.”**

**“Unmissable! Hands down the best course I have been on. I feel energised and motivated and ready to make Best Day Ever Party Shop the successful business I know it can be!”**

**Pop-Up Participant**

People

Websites created



26% of people told us they had started trading by the end of the course.

A further 71% were almost ready and still setting up their business



## CASE STUDY

Serve & Invest

# SUPPORTING HEALTH AND WELLBEING FOR LOCAL PEOPLE

'Active Families' is an initiative to provide the local Southampton community with a programme of events specifically targeting families that are in need of support in staying active.

The project aims to inform people how to change their lifestyles, by giving them the tools to develop healthier eating and exercise habits for the whole family. Creation of the initiative follows NHS data revealing that the life expectancy of those living in Southampton is almost eight years lower for men and three years lower for women in the most deprived areas compared to the national average. In addition the data highlighted that almost 20% of children aged 10-11 living in the area are classified as obese.

Over three days the families participated in a number of physical activity workshops learning fun games

that they can incorporate into their own activity time. Seven workshops were hosted, by Westquay restaurants offering sessions on simple food prep and healthy cooking techniques that can be easily implemented at home - for instance grilling instead of frying - alongside general healthy tips and ideas to engage young people.

On completion of the Active Families programme, participants will be rewarded with a fun family activity day organised by Saints Foundation at Moores Valley Country Park.



**For more on Saints Foundation Active Families, view the videos:**

<https://www.youtube.com/watch?v=ZJlEn6u9YT4>

<https://www.youtube.com/watch?v=60CRzSB1V68>

## PLANS FOR 2018

1. Extend relationship with Pop-Up Business School to include additional assets.
2. Extend employment and skills brokerages further UK shopping centres.
3. Explore working with our major retail partners to and industry organisations on the measurement of the socio-economic impacts of retail.



# UPSKILL AND INSPIRE

## 2017 PERFORMANCE

Table 0.8

TARGET	OUTCOME	2017 STATUS
Maintain staff engagement in volunteering activities	Staff volunteering has grown again during 2017 with 239 people participating in 31 different projects. Butterfly Bank - our staff volunteering and sustainability engagement platform has supported this take up.	
Support six senior leaders through the Cambridge Institute for Sustainable Leadership (CISL) programme	Five senior staff members attended the CISL programme in 2017	
Extend sustainability training and develop new learning programmes use the usines wide online training platform	Two sustainability training modules have been developed for the new on-line learning platform. 99% of staff employed by Hammerson for at least 12 months having had received sustainability training by 31 December 2017.	

## OUR PEOPLE

One of our core Positive Places commitments is to Upskill and Inspire our employees. The skills and approach we develop within the company will help us to deliver our ambitious sustainability vision. Our Net Positive targets make it even more important that we inspire our employees to invest in personal development, and to seek out new ways of working and innovative approaches.

One of our public targets has been to provide sustainability training to 100% of Hammerson employees who have been with the business for more than 12 months by the end of 2017. We are delighted to have achieved this, albeit it with the final 8 Hammerson France people received training in January 2018. This is a significant achievement and indication of the importance the whole business places on sustainability. To build on this we have set a new target of ensuring 100% of Hammerson people employed for 12 months or more have had sustainability training within the last 24 months with an

initial completion date of December 2020. We will be working with our HR team to make full use of our new online learning management system as the key means of delivery for this target.

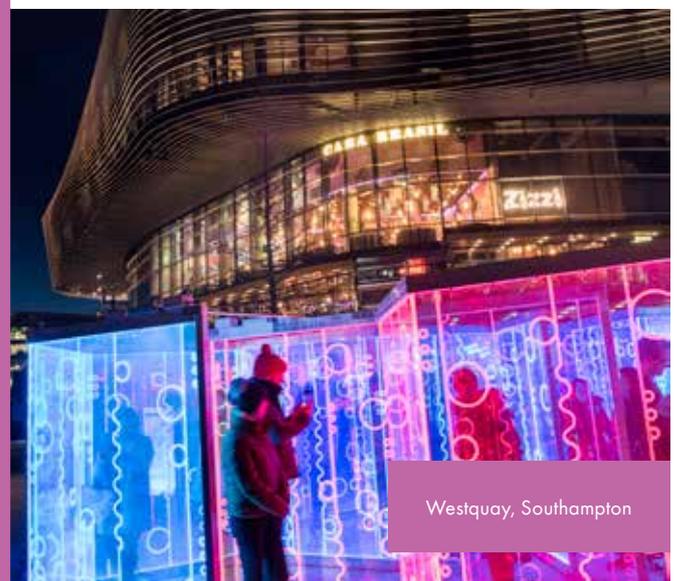
## FEEDBACK FROM OUR PEOPLE

Hammerson uses an annual employee satisfaction survey to monitor a range of issues from how happy our people are at work to how they think the senior management team are performing. Views on the company's approach to sustainability are sought as part of this process.

The most recent staff survey, carried out in Autumn 2017, revealed very high scores for Hammerson's approach to corporate responsibility. Our approach was the highest scoring category within the questionnaire this time at 88% positive, and ahead of the Great Place to Work benchmark for similar sized companies. The response rate to the staff survey was 80%. Further information on outcomes of this survey and actions are available in the Annual Report.

## PLANS FOR 2018

1. Launch new operational management environmental training course for UK shopping centres to support new sustainability training target.
2. Support 6 senior leaders through the CISL programme
3. Increase the use of Butterfly Bank to promote sustainable lifestyles and share experiences.
4. Increase our internal communications on progress with Net Positive.



Westquay, Southampton

## ANNUAL COMMUNITY DAY

Our Annual Community Day is a major event in our volunteering calendar. Here are just some of the opportunities we provided for employees to get out into the local community and do something good.



### CASE STUDY

Upskill & Inspire

## BARNET HOMES

Working with Barnet Homes and Solace Women's Aid, Hammerson volunteers took on the task of redecorating a safe house for families of domestic violence. The project benefited the 6 families who currently call the refuge home, and any families who will stay there in the future.



**"Thank you to Hammerson for their lovely work the children in particular love the garden!"**

**Organiser from Barnet Homes**



### CASE STUDY

Upskill & Inspire

## SPORTS INSPIRED

Sports Inspired and Hammerson have been working in partnership since 2010 in communities across London and Reading providing opportunities for Hammerson employees to connect with the local communities they are working in. This year Hammerson engaged Sports Inspired to deliver volunteering opportunities in our Games programme in Barnet. The games engaged local primary and secondary school students to get more active while also developing young people's leadership and employability skills.



**200 students took part – 60% reported an improved liking of sports.**



### CASE STUDY

Upskill & Inspire

## DIDCOT RAILWAY CENTRE

Hammerson volunteers helped Didcot Railway centre staff gear up for their upcoming transport rally. From polishing the outer paint wear and cleaning the old brass engines, volunteers also learnt about the history of these models.



**"It was great to be able to help the centre staff prepare for their rally and learn about the history of the centre and the engines."**

**Volunteer, Hammerson**



## CASE STUDY

Upskill &  
Inspire

# ENGAGING EMPLOYEES IN SUSTAINABLE BEHAVIOUR AND VOLUNTEERING

2017 was the third year we have used The Butterfly Bank platform to engage employees across the group in volunteering and adopting sustainable behaviours. Employees can find volunteering opportunities or actions to take that will have a positive sustainability impact and 'bank them' with the reward of virtual butterflies. Every month we recognise the most active participants.

All 11 of our UK shopping centres are now active on the platform, plus our UK offices, and our Ireland teams joined in 2017.

In 2017 we created some 'Next level' sustainability actions, to challenge those who were already very active on the site. The Life-Less Plastic challenge created by the Butterfly Bank team is one example - a 30 day challenge to give up eight of the most common types of plastic entirely, this included disposable cups, cutlery and some food packaging. The shopping centre team at Bullring took on the challenge, and when Selfridges decided to support World Oceans Day with a campaign to reduce the use of single use plastic bottles we were able to join them in the campaign.

## Activity in 2017



# 70,625

**individual actions recorded.**

By 418 employees across the group. Actions range from a mentoring school children to giving a garden a makeover.

### Employee designed actions

The Butterfly Bank also enables our employees to create and promote their own actions, helping to inspire colleagues. Here are just a few from 2017:

**HAVE A  
MEAT FREE  
MONDAY**

**571  
TIMES**

**PUMP  
UP YOUR  
TYRES**

**261  
TIMES**

**SWITCH ONE  
FOOD ITEM  
TO ORGANIC**

**197  
TIMES**

## Impact in 2017

Below is just a snapshot of the impact our employees have had in just one year. With The Butterfly Bank designed to support the adoption of new habits, we hope the impact extends for years to come.

# 7,483

**ACTIONS DEDICATED TO PROTECTING OUR OCEANS**

Following the major focus on Ocean Health in the media in 2017 we have seen an increase in activity under our Love Oceans theme with it becoming the most popular source of inspiration for action

# 2,296

**DISPOSABLE CUPS AND 3302 PLASTIC BAGS AVOIDED**

A focus on plastic reduction and reuse of cups in particular have been areas where we have promoted activity

# OVER 6

**YEARS OF WATERWISE MORNINGS**

Our Waterwise Habit former is a series of actions to take throughout your morning routine. Banked 330 times representing a week of Waterwise mornings each time, that's 6 years of Waterwise morning routines

# 690

**PLASTIC FREE DAYS**

23 employees, many from Bullring, signed up to the Life-less plastic challenge. At Cabot Circus the team has now banned all single use plastic bottles amongst the team and below we hear from Lisa at Bullring on how her behaviour has been impacted:



**"It was a real eye opener. I never realised how many sandwich bags, carrier bags and water bottles I can get through. I'm saving about 2 to 3 water bottles a day whilst at work, a fresh sandwich bag for lunch, at least 3 or 4 new carrier bags when out shopping, not to mention the wrapping on produce I brought"**

Lisa, Car Park Administrator, Bullring Birmingham

**"We've seen the impact of the media and internal campaigns from Hammerson this year, as for the first time in three years the Love Oceans theme has overtaken Love Forests as the most popular for Hammerson employees. We have seen a huge increase in actions around plastic and associated reuse, especially of cups."**

**Donna, Director of Coriander Cows - creators of The Butterfly Bank**

## Benefits of great employee engagement

The benefits of such high level employee engagement are two fold in relation to our ambition to become Net Positive for carbon, water, resource use and socio-economic impacts by 2030.

We are working with The Butterfly Bank team to identify clear, attributable environmental savings from the actions being taken and recorded by employees. Even in these early stages of looking at the tangible impact of the action we can see the power of engaging employees:



# 1.7 TONNES

of carbon avoided through 571 meat free days



# 280,000 LITRES

of water saved through 800 weeks of shorter showers

# PARTNER & COLLABORATE

## 2017 PERFORMANCE

Table 0.9

TARGET	OUTCOME	2017 STATUS
Deliver at least one innovation project with a key supplier	Installed two innovative waste management systems and worked with 4 suppliers to develop a Net Positive brief for shopping centres.	●
Deliver a centre-based retailer engagement activity across UK and French shopping centres by 2017	We continued to promote the Positive Growth Awards across our UK shopping centre assets and have worked with retailers on a range of engagement activities at our French assets.	●
Continue to build engagement with investors	Participated in three Socially Responsible Investment conferences and had direct engagement with 17 different shareholders covering 18% of the share ownership.	●

Working with our stakeholders is the most effective way of scaling up our positive sustainability impacts. The most direct relationship is with our retailers and this continues to be an area of focus. However there is a wealth of expertise within our suppliers, particularly on the operational side of the business which we are increasingly looking to tap into.

Our active investor engagement strategy both drives and informs our sustainability strategy. We very much value our communication with both the SRI specialists and mainstream

investors and are pleased to have seen dialogue increase over the last two to three years. We will be expecting this to continue in 2018 alongside rising investor awareness of potential climate change risk, the requirements of the Non-financial reporting regulations (NFRR) and the recommendations of the Task force for Climate related Financial Disclosures (TCFD).

### PLANS FOR 2018

1. Continue retailer engagement through Positive Growth Awards at asset level and build the profile of the scheme
2. Improve engagement with service partners to identify and deliver energy, water and waste savings
3. Extend dialogue with key investors and JV partners on Net Positive
4. Extend updated Supply Chain survey to France and Ireland





## CASE STUDY

Protect &  
Enhance



Costa EcoPod, Parc Tawe, Swansea

## REDUCING OUR TENANT CONTROLLED EMISSIONS THROUGH PARTNERSHIPS WITH OUR RETAILERS

We have no direct control over the use of utilities in the tenanted areas of our managed assets but we do have a level of influence. Furthermore, we are of the view that the emissions from these areas within our portfolio are too significant to ignore. We are therefore working with our tenants to ensure their space within our assets operates as efficiently as possible. Benefits in the form of reduced running costs flow directly to them making good business sense.

### We use a number of approaches to do this:

- Sustainability clauses in our leases
- Energy efficiency standards in our fit out guides and retail delivery process
- Centre level engagement through our Positive Growth Awards
- Corporate level engagement through a Retailer Forum
- Designing assets to be as carbon efficient as possible

Leases agreed with retailers at Elliott's Field Retail Park, Rugby include agreements to achieve minimum energy performance standards in their fit out to ensure the scheme can maintain its carbon neutral status for regulated energy over its life time. This has significantly reduced the energy demand of each retail unit and has ensured that all electricity demands will be balanced by the renewable energy generated on site. This market-leading initiative has demonstrated what retailers can achieve through good fit out and the benefits that flow to them. We will be monitoring performance at the site during 2018 and will share outcomes over the course of the year.

This built on our work with Costa on the EcoPod where operational costs are significantly below those of a standard Costa unit. We produced a second EcoPod for Costa this year at Parc Tawe in Swansea.



For more information on the Costa EcoPod see the Positive Places pages of our website: [sustainability.hammerson.com](https://sustainability.hammerson.com)

# CHALLENGE AND INNOVATE

## 2017 PERFORMANCE

Table 0.10

TARGET	OUTCOME	2017 STATUS
Deliver net zero carbon, BREEAM Outstanding retail park	Elliott's Field Retail Park, Rugby Phase 2 delivered as BREEAM 'Outstanding' and zero net carbon scheme	
Deliver one further Eco-Pod	The second Cost Eco-Pod opened for trading at Parc Tawe in Q4 2017	

The challenges presented by climate change and our depletion of natural resources are significant. Resolving them will require a drive for real innovation. Our Net Positive targets are a clear statement of our intent in this area and we will continue to look to work with the most innovative people and companies across our sector to deliver them.

We have already demonstrated what can be achieved through taking this approach and we will continue to look for the best opportunities to ensure our new and existing assets are fit for the future.

### PLANS FOR 2018

1. Explore potential for battery technology linked with PV
2. Explore the potential for Power Purchase Agreements across the UK portfolio
3. Trial at least one asset level innovation environmental project
4. Identify at least one innovative material for trial at Brent Cross, London.



Nicétoile, France

## NET POSITIVE DESIGN CHALLENGE



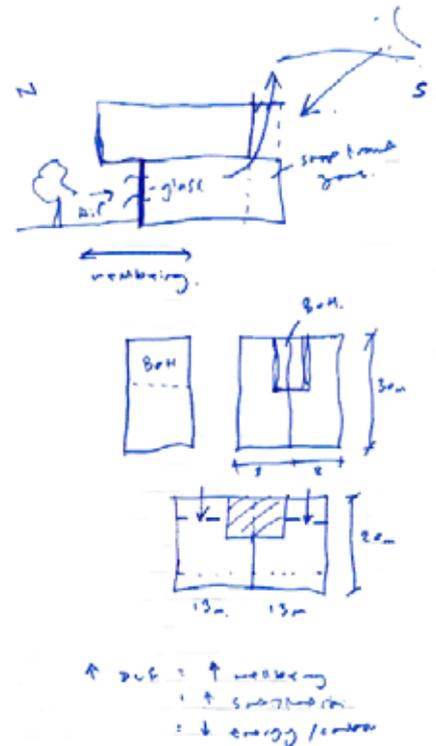
### CASE STUDY

Challenge &  
Innovate

A successful project starts with a well-defined brief and this is particularly the case for a project that is part of a target as challenging as Net Positive. Articulating clearly what we want and key areas of focus provides suppliers with the necessary direction to encourage the level of creativity needed to move beyond a 'business as usual' response. To help us develop our own thinking on key areas of focus and what we might look for, we brought in some expert help.

We commissioned four consultants to come up with what they considered to be pushing the boundaries of design-thinking in the key areas that will enable a shopping centre to make substantial progress to becoming net positive.

The consultants were asked to challenge current shopping centre design and business as usual thinking and take the opportunity to get creative.



### At a workshop held to explore the findings, some key themes emerged.

Changing patterns of energy demand and supply were a common thread but the open nature of the project enabled more radical solutions to be explored such as:

- Rethinking building shape completely to design-in daylight
- Incorporating bioluminescence for lighting
- Creating materials banks and exploring different approaches to procurement and delivering of services for example buying or providing lighting as a service.

The work generated useful insight and new thinking which we can reflect across other projects. Next steps will be to develop a Net Positive design brief including a process for option evaluation for all development projects being worked up from 2018 onwards.

# STAKEHOLDER ENGAGEMENT

## SECTION 1

An understanding of, and clear engagement plan for stakeholders is at the heart of our Positive Places framework. In 2015, the framework for Positive Places was reviewed and evolved from a simple reflection of Hammerson's five key stakeholder groups to form our five sustainability commitments. The commitments retain the ethos of ensuring our stakeholders are reflected within all our sustainability initiatives and activities but give clarity to the breadth of work we are doing as part of the Positive Places strategy.

**Table 1.1** right and overleaf sets out the five stakeholder groups reflected within those commitments and the type of engagement work that we have undertaken during 2017 with each group.

### Key Stakeholder Groups and Engagement Activity

#### STAKEHOLDER GROUP

#### EXAMPLE ENGAGEMENT ACTIVITY

#### COMMUNITIES

Local residents, people working at our assets and local community organisations and groups.

Roadshows and events

Work experience, apprenticeships

Community Access Forums



#### CUSTOMERS

Businesses operating from our assets.

Retailer forum

Hospitality forum

Retailer engagement at asset level through tenant meetings and retailer teas and Positive Growth Awards



#### SUPPLIERS

Our tier 1 supply chain includes businesses providing services to our operational assets, design and build services to our development programmes and business and consultancy services for our corporate functions.

Supply chain survey

Annual Supplier Report

Group meetings with key suppliers

One to one meetings with key suppliers



We also provide updates on projects and initiatives on the Positive Places website: <http://sustainability.hammerson.com>

Table 1.1

PROJECT/ CORPORATE LEVEL ENGAGEMENT	FREQUENCY OF ENGAGEMENT ACTIVITY	TOPICS RAISED	RESPONSES
Corporate and Projects	Throughout the year	Employment opportunities Training and skills, consultation on development programmes and planned activities	Further development of community engagement activity across the portfolio, consultation on development programmes and planned activities
Project	Monthly	Skills and training	Increased number of apprentices across the portfolio, expansion of asset based employment and skills programme
Project		Inclusivity and accessibility	Engagement with design teams to review plans. Inclusivity workshop held at Oracle, Reading
<p>Community engagement is a major area of work for Hammerson and one where we consider our approach to be market leading. Our Positive Places Plans provide a unique programme of community engagement work for each asset.</p> <p>In 2017 we published <a href="#">True Value of Retail</a>, an extensive review of the positive social impact generated by our retail assets. This work has informed the development of our 2018 Positive Places</p>		<p>plans, enabling us to focus on those issues most relevant for each community. Launch events in Leeds, Bristol, Edinburgh and London have generated very positive feedback.</p> <p>Community activity in 2017 is highlighted under our Serve and Invest Performance on pages 24-29 and in our corporate data pages found in section 7 of this report. We also provide updates on projects and initiatives on the Positive Places website.</p>	
Corporate	Two meetings each year	Fit out standards, retail deliver process	Redrafting of fit out guidance, feedback on Net Positive targets
Corporate	Three meetings each year	Energy management, regulation, waste management	Review of sustainability responsibilities within retail delivery process
Project	Regular tenant meetings	Risk management	On-site engagement to support waste management
<p>Our retail customers are a key stakeholder for us and we maintain a programme of active stakeholder dialogue with this community. This operates at both a corporate level where our Retailer Forum is helpful in working together on cross portfolio issues and at asset level where we focus on direct engagement with store staff and rewarding strong sustainability performance through our Positive Growth Awards.</p> <p>The Positive Growth Awards were introduced five years ago as a means of engaging with and incentivising store level staff</p>		<p>on sustainability by recognising and rewarding good practice. Continuing to grow take up of the Awards was a target for 2017 and we have been delighted with the response. 33 retailers from 5 centres have participated in the awards demonstrating high levels of engagement and interest from on-site teams.</p> <p>We will continue to extend the reach of this programme in 2018 and see this as an important platform for building asset-level engagement on sustainability which will be important for delivering our Net Positive targets.</p>	
Corporate	At initial tender	Code of Conduct, treatment of workers, CSR, environmental policies, Health and Safety, training and skills	Refreshed supplier survey to better reflect different supplier types and sizes.
Corporate	Annual	Code of Conduct, treatment of workers, CSR, environmental policies, Health and Safety, training and skills	Development of case studies to show case good practice
Corporate	Biannual	Collaboration to achieve positive environmental and community outcomes	Supplier breakfast briefing on Net Positive held
Project	Ad hoc	Sustainable Design Standard	Sustainable Design Standard updated to reflect Net Positive targets
<p>We rely extensively on suppliers to deliver important areas of work for us from constructing new assets through to managing waste across or managed assets. We take a very active approach to engaging with them and have a range of policies and processes in place both to support and monitor. Our Supply Chain Survey is an initial engagement opportunity where we raise awareness of our sustainability requirements and alert suppliers to the obligations set out within our Code of Conduct in relation to labour standards and other legislation. The survey has been completely updated and relaunched in 2017, reflecting feedback</p>		<p>from suppliers that it needed to be more reflective of different types of business. We published our 4th annual Supplier Report in 2017.</p> <p>The achievement of our new Net Positive targets will require our supply chain to work closely with us to identify opportunities to drive improvements. Following the positive reaction of suppliers to the launch of our targets we have started to engage on specific issues, included the retail delivery process, the inclusion of sustainability standards in refurbishments and extensions and most recently on design ideas for a Net Positive shopping centre.</p>	

## Key Stakeholder Groups and Engagement Activity (continued)

STAKEHOLDER GROUP	EXAMPLE ENGAGEMENT ACTIVITY	PROJECT/ CORPORATE LEVEL ENGAGEMENT	FREQUENCY OF ENGAGEMENT ACTIVITY
<b>EMPLOYEES</b> Directly employed Hammerson people working at our head offices or our operational assets.	Great place to work survey	Corporate	Annual
	Corporate induction	Corporate	Annual
	Sustainability induction	Corporate	Two each year
	Sustainability updates	Corporate	Two each year
	Environmental awareness training	Corporate	Initial training followed by biennial refresher
	Promotion of volunteering through Butterfly Bank engagement platform	Corporate	Continuous

Hammerson people are a key stakeholder group for us and essential to the delivery of the company's sustainability vision. Upskill and Inspire is our Positive Places commitment focused on ensuring Hammerson people have the right skills and sufficient motivation to do this.

Key projects for 2017 included the launch of the Environmental Awareness training module on the new on-line training platform, the expansion of Community Day activities to include Ireland and a wealth of volunteering activity from mentoring to gardening.

The launch of our Net Positive targets has re-energised the focus on sustainability across the business. Having a clear, unequivocal and challenging target has been inspiring for teams and led to a strong sense of combined ownership across the business.

The 2017 results of the Great Place to Work Survey show the overwhelming view is that the business takes sustainability very seriously. We have very high levels of staff volunteering across the business and of participation on our annual Community Day which has become a popular fixture in the Hammerson calendar.

**INVESTORS**

Our shareholders and joint venture partners.

One to one meetings	Corporate	Ad hoc
Representation at investor conferences	Corporate	Annual
Participation in industry sustainability benchmarks	Corporate	Annual
Quarterly Board reports	Corporate	Quarterly

Investor interest in sustainability is rising rapidly as awareness of the business risks presented by climate change increases and examples of reputational damage flowing from poor governance and responsibility emerge.

There is a clear and growing expectation that sector leading companies must understand where our sustainability risks lie and have a comprehensive mechanism for their management in place. Investor response to the launch of our Net Positive targets has been particularly encouraging.

This rising awareness is demonstrated through wider opportunities to engage with investors and respond to

questions. During the course of 2017 we presented again at J P Morgan's SRI specialist conference and participated at Oddo's SRI conference. We have also continued to expand our one-to-one dialogue with investors and have participated in panel discussions.

The investor universe is wide and the number of ESG specialists limited, so engagement with this community remains challenging. However, we are making good progress having met with 17 different investors this year, representing 18% of the shareholder base and will maintain our efforts in this area.

Table 1.1

TOPICS RAISED	RESPONSES
Corporate approach to sustainability and performance	Breakfast briefings
Corporate targets and achievements	Employee engagement platform for volunteering and community day
Role specific responsibilities and tasks	Match funding of charity fund raising
Performance against business plan	Role specific small group inductions
Supporting young people, environmental awareness, charity fundraising	Establishment of corporate teams and monthly prizes
Environmental performance against targets and industry benchmarks	Publication of performance data
Environmental performance against targets, community engagement, strategy, governance	Continued engagement on all topics raised.
Risk management	Participation in GRESB, CDP, REEB, Vigeo; Inclusion in DJSI, FTSE for Good
Performance against business plan	Maintaining quarterly reporting and disclosure of performance



## 1.1 INDUSTRY PRESENCE

In addition to our five key stakeholder groups, Hammerson has an important role to play in engagement across the industry both on issues of sustainability but also on broader industry topics including policy-making. We engage in a number of ways both directly and through industry groups on topics we consider to be directly relevant to the business.

Hammerson has a strong presence across a number of key groups.

Positions/Committees in 2017 Table 1.2

ORGANISATION	POSITIONS / COMMITTEES 2017
Accessible Retail	Member
Better Building Partnership	Chairman and participation in a range of BBP Working Groups
REVO	Board, Sustainability and other committees Member
EPRA	Board member Sustainability, Commercial Property
British Property Federation	Chair of Sustainability Committee
International Council of Shopping Centres	Sustainability and other committees Member
Urban Land Institute	Executive Committee representation
Property Industry Alliance	Chairman, Research Committee

Carbon Disclosure Project	B-
GRESB	Green Star 4, 77
FTSE 4 GOOD	91
DJSI	63
EPRA sBPR	Gold

## 1.2 SHAPING OUR PLANS THROUGH STAKEHOLDER ENGAGEMENT

As a business, we actively map and manage key stakeholders and adapt our approach according to priority and need.

Our community engagement process covers the full development cycle, involving communities in the design process, ensuring views and concerns are heard and maximising the benefits of a development for the local community, such as jobs and charitable giving.

From an asset perspective, we are actively involved in local authority steering groups as well as creating and contribution towards Business Improvement Districts.



### CASE STUDY

Stakeholder Engagement



## UNDERSTANDING COMMUNITY NEEDS

In Croydon, we have supported Disability Confident Action Group, an initiative established and led by Croydon Council. In collaboration with key stakeholders in the borough such as Department for Work & Pensions, support providers and educational institutions, the group work to address the needs and create opportunities for people with a disability.

In October, we attended a Reverse Jobs Fair, which enables local employers to engage with those who have a disability. Several work placements were made

available to applicants across a range of sectors including customer service, marketing and facilities management.

One of these placements was at the Visitor Information Point within the Whitgift Centre. The applicant undertaking this placement has since secured permanent employment.



## CASE STUDY

Stakeholder  
Engagement



## INCREASING OUR UNDERSTANDING ON KEY ISSUES

Leeds Poverty Truth is an independent project supported by Leeds City Council, brought together by a number of partners and stakeholders from across the city. The project involves civic and business decision makers and 'experts by experience' of poverty building relationships and sharing experiences.

Ordinary people have the chance to relate their personal experience of struggling against poverty. Our involvement during 2017 has included two dedicated Hammerson

representatives who have attended monthly sessions to look at opportunities for working in partnership to tackle poverty and support some of Leeds' most disadvantaged communities.

# ENERGY AND CARBON DATA AND PERFORMANCE

## SECTION 2

### 2.1 2017 PERFORMANCE

Table 2.1

TARGET	OUTCOME	2017 STATUS
Achieve continued improvement in carbon intensity of the business	3% reduction in carbon emission/£m adjust profit before tax year on year.	
Achieve 10% reduction in energy use for like for like retail assets against the 2015 baseline	12% reduction across the like for like UK retail portfolio 10% reduction across the French like for like portfolio 2018 target achieved 12 months early	
Continue to extend LED lighting across the portfolios	Installed LED at Silverburn, Union Square, Highcross and Centrale.	
Begin implementing energy audit recommendations for the French assets	Energy audit recommendations being implemented throughout the French portfolio.	
Install PV on one existing asset	50 kW array installed at Cabot Circus. Two further arrays planned for 2018	

Energy consumption and related carbon emissions are a key material issue for the business and as such a major focus of our sustainability strategy and a Net Positive target area. Energy demand drives over 90% of our carbon footprint so the two areas are intrinsically linked.

We have identified the risks of energy use and carbon emissions as financial, regulatory and reputational. Specifically, the cost of energy, security of supply issues, particularly in the UK, and the potential for future carbon pricing.

We are also subject to climate change risk. Previous risk studies have confirmed our assets as not being at direct threat from climate change but increasing occurrence of extreme weather events has the potential to directly affect operations and, like all businesses, we will be exposed to the wider economic implications of climate change. A climate risk study, commissioned in 2017, is examining these risks in more detail and will be used to inform strategy.

2017 was our second year working towards our 2018 target of reducing operational energy demand of our like or like retail assets by 10% against our 2015 baseline. Combining good management with investment in technology continues to generate efficiencies from across the portfolio and we are delighted to have achieved this target 12 months early. We have reduced operational energy use by 12% in the UK and 10% in France, 11% overall.

Every asset and team working across our portfolios has contributed to this achievement in some way.

#### Particular highlights include:

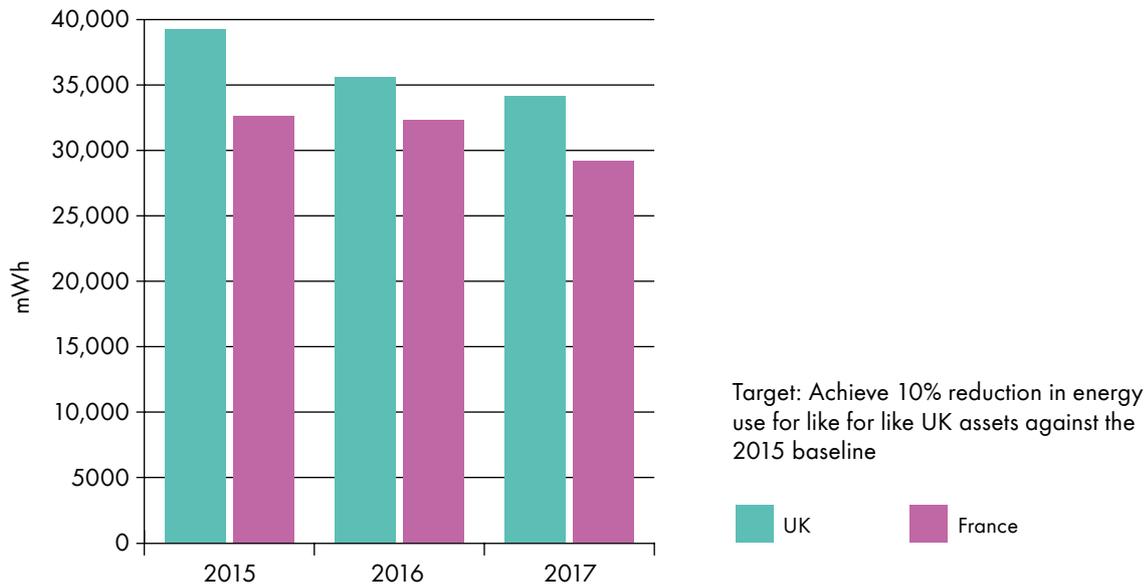
- Bullring, Birmingham - a further 4.2% reduction in electricity consumption and an impressive 39% reduction gas demand. This has delivered 19% reduction in carbon emissions, a saving of 658 tonnes of carbon.
- Union Square, Aberdeen - the replacement of gas boilers has significantly improved the energy performance of the asset with gas consumption reduced by 30% year on year. The new boilers were fully operational in February 2017 so we expect to see further reductions in the first quarter of 2018.
- Centrale, Croydon - the installation of LED lighting combined with effective on site management have led to electricity demand falling 12% year on year at this site.

Energy demand across our UK Retail Parks portfolio is largely for car park lighting. We upgraded two sites to LED lighting in Q4 2017 and this has already generated a 5% reduction in electricity demand. We expect these savings to continue through to 2018 and will be extending the upgrade work to other sites across the portfolio.

## PERFORMANCE IN PICTURES

**TOTAL ENERGY DEMAND  
(2015 LFL PORTFOLIOS)**

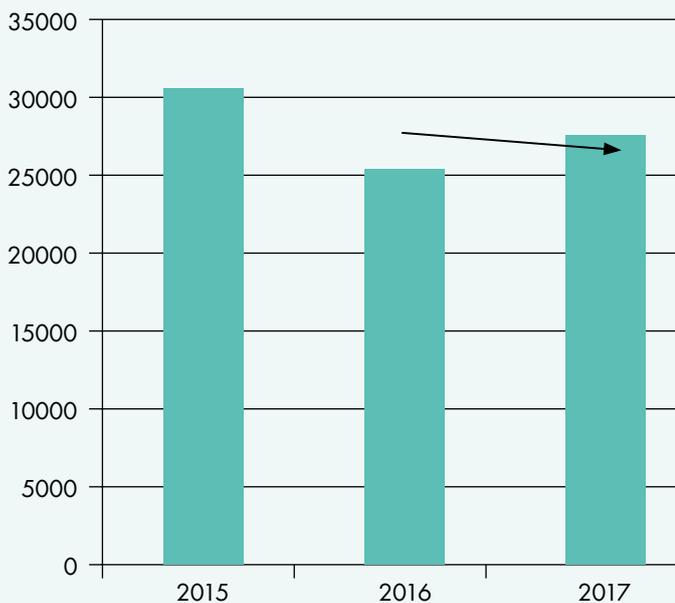
Chart 2.1



### NET POSITIVE CARBON FOOTPRINT

Achieving Net Positive for carbon emissions means tackling every area of carbon we can. It will require continued, concentrated work on efficiencies in both operational and embodied carbon, expansion of onsite generation and the exploration of offsetting. We have just started on this journey but the data below shows we are already making progress. We are also and starting to focus on new areas such as employee actions. The footprint reflects our equity share of the impacts of the assets we hold as at 31 December of the reporting year. Consequently it may increase in some years which is why we use a three year moving average to monitor progress.

Chart 2.2



Progress against our net positive carbon emissions target has been achieved mainly through operational energy demand reductions. Embodied carbon savings at our developments have also contributed, along with onsite generation and the effects of employee actions inspired through Butterfly Bank.



**For more information on our Net Positive targets visit the Positive Places pages of our website: <http://sustainability.hammerson.com/347/our-net-positive-objective.html>**

Net Positive phase one carbon emission  
 → 2 per. Mov. Avg. (Net Positive phase one carbon emission)

## 2.2 IN THIS SECTION

This section of the report contains comprehensive data on carbon emissions and energy demand for our operational portfolios in the UK, France and Ireland.

The following tables include carbon emissions and energy demand disaggregated by:

- Group

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- Region - UK, France and Ireland

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- Asset type - Shopping Centres and Retail Parks

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- Comparative portfolios
  - Whole portfolio

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  - 2015 Like for like portfolio - for our corporate 5-year targets

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  - EPRA Like for like portfolio

## DATA MANAGEMENT AND QUALITY

We aim to be as comprehensive as possible in our reporting of environmental performance across our assets and over time. Establishing a robust, long term performance data set is an important part of our contribution to the better understanding of the sustainability performance of commercial property more broadly.

Our Group energy demand and emissions reporting includes our strategic portfolio (assets held for development purposes only) and our corporate offices. These are broken down by geography. This portfolio has expanded for this reporting period, reflecting developments and acquisitions completed in 2016.

Our portfolio-level reporting includes our actively managed assets in the three key geographies. We do not report the strategic assets separately.

We provide like for like analysis of our actively managed portfolios by geography. These include two years of data for those assets held continuously for the last two years with no major changes as per the EPRA Best Practice Reporting Guidelines. Data coverage is set out within each table. We also provide data for the whole portfolios for the past three years. This includes assets that we may have held for less than a full year.

The assets included within our 2017 Sustainability Report and their relevant data sets are set out in Table 8.1. The data for our energy and carbon reporting includes all landlord purchased or generated energy for the operational portfolios and all carbon emissions from our purchased fossil fuels.

**Data coverage includes 47 assets broken down across the portfolios as follows:**

- 28 Shopping centres: 15 UK, 10 France, 3 Ireland

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- 19 Retail Parks – all UK

## Carbon emissions by Group and Operating Region

**GRI Indicator 305-1, 305-2, 305-3, 305-5**

### HAMMERSON GROUP

Scope 1

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Scope 2 (Market Based) <sup>a</sup>

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Scope 2 (Location Based)

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Scope 3 (Market Based) <sup>b</sup>

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Scope 3 (Location Based)

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Total (Market Based)

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Total (Location Based)

### HAMMERSON UK

Scope 1

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Scope 2 (Market Based)

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Scope 2 (Location Based)

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Scope 3 (Market Based)

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Scope 3 (Location Based)

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Total (Market Based)

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Total (Location Based)

### HAMMERSON FRANCE

Scope 1

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Scope 2 (Market Based)

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Scope 2 (Location Based)

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Scope 3 (Market Based)

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Scope 3 (Location Based)

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Total (Market Based)

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Total (Location Based)

### HAMMERSON IRELAND

Scope 1

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Scope 2 (Market Based)

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Scope 2 (Location Based)

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Scope 3 (Market Based)

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Scope 3 (Location Based)

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Total (Market Based)

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Total (Location Based)

<sup>a</sup> Market based calculations reflect certified emissions factors of our clean electricity contracts where applicable.

<sup>b</sup> Scope 3 includes gas and electricity sub-metered to tenants for use in tenanted areas.

All carbon emissions calculations are using DEFRA carbon emission factors 2017, IEA factors and local factors for district heating and cooling systems.



**Table 2.2**

<b>UNIT</b>	<b>EPRA CODE</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>% CH V.2015</b>
mtCO <sub>2</sub> e	GHG-Dir-Abs	6,171	5,970	4,323	-30%
mtCO <sub>2</sub> e	GHG-Indir-Abs	28,762	9,108	7,632	-73%
mtCO <sub>2</sub> e	GHG-Indir-Abs	28,762	27,475	26,005	-10%
mtCO <sub>2</sub> e	GHG-Indir-Abs	-	1,475	210	
mtCO <sub>2</sub> e	GHG-Indir-Abs	1,858	1,475	2,010	8%
mtCO <sub>2</sub> e		34,932	15,078	11,954	-66%
mtCO <sub>2</sub> e		34,932	33,446	30,328	-13%
mtCO <sub>2</sub> e	GHG-Dir-Abs	3,345	3,087	1,787	-47%
mtCO <sub>2</sub> e	GHG-Indir-Abs	24,417	5,246	3,413	-86%
mtCO <sub>2</sub> e	GHG-Indir-Abs	24,417	21,595	17,513	-28%
mtCO <sub>2</sub> e	GHG-Indir-Abs	-	1,371	0	
mtCO <sub>2</sub> e	GHG-Indir-Abs	1,723	1,371	1,770	3%
mtCO <sub>2</sub> e		27,762	8,333	5,200	-81%
mtCO <sub>2</sub> e		27,762	24,682	19,300	-30%
mtCO <sub>2</sub> e	GHG-Dir-Abs	2,825	2,791	2,195	-22%
mtCO <sub>2</sub> e	GHG-Indir-Abs	4,345	3,117	3,057	-30%
mtCO <sub>2</sub> e	GHG-Indir-Abs	4,345	3,117	3,057	-30%
mtCO <sub>2</sub> e	GHG-Indir-Abs	148	104	210	42%
mtCO <sub>2</sub> e	GHG-Indir-Abs	135	104	210	55%
mtCO <sub>2</sub> e		7,170	5,908	5,252	-27%
mtCO <sub>2</sub> e		7,170	5,908	5,252	-27%
mtCO <sub>2</sub> e	GHG-Dir-Abs	n/a	92	341	
mtCO <sub>2</sub> e	GHG-Indir-Abs	n/a	745	1,162	
mtCO <sub>2</sub> e	GHG-Indir-Abs	n/a	2,763	5,436	
mtCO <sub>2</sub> e	GHG-Indir-Abs	n/a	0	0	
mtCO <sub>2</sub> e	GHG-Indir-Abs	n/a	0	29	
mtCO <sub>2</sub> e		n/a	837	1,503	
mtCO <sub>2</sub> e		n/a	2,856	5,777	

## 2.3 DRIVING CARBON EMISSIONS REDUCTIONS

The driver behind our carbon emissions reductions is reduced energy demand. This has been achieved through a continued focus on vigilant on-site management, effective use of programmed maintenance and prudent investment in new technology.

### SPECIFIC PROJECTS INCLUDE:

#### Continued role out of LED lighting

We continued the rollout of LEDs with refurbishment programmes at Centrale, Silverburn, Union Square and Highcross, and continued our 'replace at failure' strategy across the rest of the portfolio. We have seen an estimated saving of over 200mWh at Silverburn where we replaced lamps in stairwells, service yard and the malls. At Centrale, where we replaced car park lighting, electricity demand has fallen 40% year on year.

We have also installed LEDs in our retail parks, and are starting to see electricity demand savings. We plan to continue this rollout at further retail parks in 2018.

#### Installation of PV

Generation of on site renewables has a number of benefits including reduction in carbon emissions, reducing pressure on the national grid, improving our security of electricity supply and generating income. In 2017 we installed two new PV arrays; a 190kWp array on Westquay South in Southampton which started generating in August, and a 50kWp array on Cabot Circus, Bristol started generating in January 2018. The combined arrays at Westquay are on track to produce over 300mWh clean electricity every year, approximately 6% of on-site common parts electricity demand.

## Carbon emissions by whole portfolio

### GRI Indicator 305-5

#### HAMMERSON UK SHOPPING CENTRE (COVERAGE 13/13 ASSETS)

Scope 1
Scope 2 (Market Based)
Scope 2 (Location Based)
Scope 3 Market Based <sup>a</sup>
Scope 3 Location Based <sup>a</sup>
Total (Market Based)
Total (Location Based)
Common Parts Area (CPA)
Carbon intensity (location based)

#### HAMMERSON UK RETAIL PARK (COVERAGE 21/21 ASSETS)

Scope 1
Scope 2 (Market Based)
Scope 2 (Location Based)
Scope 3 Market Based <sup>a</sup>
Scope 3 Location Based <sup>a</sup>
Total (Market Based)
Total (Location Based)
Car park spaces (CPS)
Carbon intensity (location based)

#### HAMMERSON FRANCE SHOPPING CENTRE (COVERAGE 10/10 ASSETS)

Scope 1
Scope 2 (Market Based)
Scope 2 (Location Based)
Scope 3 Market Based <sup>a</sup>
Scope 3 Location Based <sup>a</sup>
Total (Market Based)
Total (Location Based)
Common Parts Area (CPA)
Carbon intensity (location based)

#### HAMMERSON IRELAND SHOPPING CENTRE (COVERAGE 3/3 ASSETS)

Scope 1
Scope 2 (Market Based)
Scope 2 (Location Based)
Scope 3 (Market Based) <sup>a</sup>
Scope 3 (Location Based) <sup>a</sup>
Total (Market Based)
Total (Location Based)
Common Parts Area (CPA)
Carbon intensity (location based)

<sup>a</sup>Scope 3 is from tenant submetered energy supplies only and is excluded from Total

<sup>b</sup>Common parts figure has been corrected from 301889m2



Table 2.3

UNIT	EPRA CODE	2015	2016	2017	% CH V.2015
mtCO <sub>2</sub> e	GHG-Dir-Abs	3,111	2,912	1,769	-43%
mtCO <sub>2</sub> e	GHG-Indir-Abs	4,132	3,122	1,977	-52%
mtCO <sub>2</sub> e	CRE3	21,693	19,665	16,077	-26%
mtCO <sub>2</sub> e	GHG-Indir-Abs	n/a	n/a	0	
mtCO <sub>2</sub> e	GHG-Indir-Abs	1,700	707	1,770	4%
mtCO <sub>2</sub> e	GHG-Dir-Abs	7,243	6,035	3,746	-48%
mtCO <sub>2</sub> e	GHG-Dir-Abs	24,804	22,577	17,846	-28%
M <sup>2</sup>		294,547	273,119 <sup>b</sup>	273,119	-7%
kgCO <sub>2</sub> e/CPA		84	83	65	-22%
mtCO <sub>2</sub> e	GHG-Dir-Abs	4	3	3	-17%
mtCO <sub>2</sub> e	GHG-Indir-Abs	1,830	1,342	1,240	-32%
mtCO <sub>2</sub> e	CRE3	1,830	1,342	1,240	-32%
mtCO <sub>2</sub> e	Indir-Abs	n/a	n/a	0	
mtCO <sub>2</sub> e	Indir-Abs		21	0	
mtCO <sub>2</sub> e		-	1,345	1,244	
mtCO <sub>2</sub> e		1,834	1,345	1,244	-32%
Number		22,714	19,766	17,245	-24%
kgCO <sub>2</sub> e/CPS		81	68	72	-11%
mtCO <sub>2</sub> e	GHG-Dir-Abs	2,737	2,407	2,195	-20%
mtCO <sub>2</sub> e	GHG-Indir-Abs	4,328	3,107	3,049	-30%
mtCO <sub>2</sub> e	CRE3	4,328	3,107	3,049	-30%
mtCO <sub>2</sub> e	GHG-Indi-Abs	135	104	110	-19%
mtCO <sub>2</sub> e	GHG-Indi-Abs	135	104	110	-19%
mtCO <sub>2</sub> e		7,065	5,514	5,253	
mtCO <sub>2</sub> e		7,065	5,514	5,253	-26%
M <sup>2</sup>		108,215	119,892	103,870	-4%
kgCO <sub>2</sub> e/CPA		65	46	50	-23%
mtCO <sub>2</sub> e	GHG-Dir-Abs	n/a	43	255	
mtCO <sub>2</sub> e	GHG-Indi-Abs	n/a	0	1,156	
mtCO <sub>2</sub> e	CRE3	n/a	2,312	5,120	
mtCO <sub>2</sub> e	GHG-Indir-Abs	n/a	0	0	
mtCO <sub>2</sub> e	GHG-Indir-Abs		0	28	
mtCO <sub>2</sub> e			43	1,411	
mtCO <sub>2</sub> e			2,355	5,347	
M <sup>2</sup>			52,713	65,929	
kgCO <sub>2</sub> e/CPA			45	82	

Our like for like portfolio continues to generate good year on year reductions in energy demand leading to lower carbon emissions. The French portfolio has shown particular progress this year with a strong focus across the teams on good on-site management. We have also benefited from scheduled work on our building management systems and technical plant within the French assets that have both driven efficiencies and enabled closer on site management of demand.

Both the UK and French shopping centre portfolios are showing improvements in their energy intensity. We base this on the common parts areas of the assets as these are the areas served by the reported energy consumption.

Overall, carbon emissions from energy demand at our like for like portfolios have fallen 8% in the last 12 months using location-based emissions factors.

## EPRA Like for Like Portfolio Carbon Emissions

### EPRA L4L (2016-2017) UK SHOPPING CENTRES (COVERAGE 9/9 ASSETS)

% of whole portfolio included by number of assets

Total CO<sub>2</sub>e (location based)

Scope 1 CO<sub>2</sub>e

Scope 2 CO<sub>2</sub>e

Scope 3 CO<sub>2</sub>e<sup>a</sup>

Total CO<sub>2</sub>e (market based)

Scope 1 CO<sub>2</sub>e

Scope 2 CO<sub>2</sub>e

Scope 3 CO<sub>2</sub>e

Common Parts Area (CPA)

Carbon intensity (location based)

### EPRA L4L (2016-2017) UK RETAIL PARKS (COVERAGE 17/17 ASSETS)

% of whole portfolio included by number of assets

Total CO<sub>2</sub>e (location based)

Scope 1 CO<sub>2</sub>e

Scope 2 CO<sub>2</sub>e

Scope 3 CO<sub>2</sub>e

Total CO<sub>2</sub>e (market based)

Scope 1 CO<sub>2</sub>e

Scope 2 CO<sub>2</sub>e

Scope 3 CO<sub>2</sub>e

Number car park spaces (CPS)

Carbon intensity (location based)

### EPRA L4L (2016-2017) FRANCE SHOPPING CENTRES (COVERAGE 9/9 ASSETS)

% of whole portfolio included by number of assets

Total CO<sub>2</sub>e (location based)

Scope 1 CO<sub>2</sub>e

Scope 2 CO<sub>2</sub>e

Scope 3 CO<sub>2</sub>e

Total CO<sub>2</sub>e (market based)

Scope 1 CO<sub>2</sub>e

Scope 2 CO<sub>2</sub>e

Scope 3 CO<sub>2</sub>e

Common Parts Area (CPA)

Carbon intensity (location based)

### TOTAL LIKE FOR LIKE PORTFOLIO CARBON EMISSIONS

Total LFL Portfolio - location based

Total LFL Portfolio - Market based

<sup>a</sup>Scope 3 emissions comprises energy sub-metered to tenants. This is excluded from totals.

Table 2.4

UNIT		2016	2017	% CH Y-O-Y
		75%	60%	
mtCO <sub>2</sub> e		17,106	15,843	-7%
mtCO <sub>2</sub> e	GHG-Dir-LfL	1,379	1,196	-13%
mtCO <sub>2</sub> e	GHG-Indir-LfL	14,512	13,300	-8%
mtCO <sub>2</sub> e	GHG-Indir-LfL	1,216	1,346	11%
mtCO <sub>2</sub> e		3,068	1,373	-55%
mtCO <sub>2</sub> e	GHG-Dir-LfL	1,379	1,196	-13
mtCO <sub>2</sub> e	GHG-Indir-LfL	473	177	-63%
mtCO <sub>2</sub> e	GHG-Indir-LfL	1,216	0	-100%
m <sup>2</sup>		213,263	213,263	
kgCO <sub>2</sub> e/m <sup>2</sup> CPA	GHG-Int	80	74	-7%
		86%	95%	
mtCO <sub>2</sub> e		940	893	-5%
mtCO <sub>2</sub> e	GHG-Dir-LfL	0	3	
mtCO <sub>2</sub> e	GHG-Indir-LfL	940	890	-5%
mtCO <sub>2</sub> e	GHG-Indir-LfL	0	0	
mtCO <sub>2</sub> e		940	893	-5%
mtCO <sub>2</sub> e	GHG-Dir-LfL	0	3	
mtCO <sub>2</sub> e	GHG-Indir-LfL	940	890	-5%
mtCO <sub>2</sub> e	GHG-Indir-LfL	0	0	
number		15,958	15,958	
kgCO <sub>2</sub> e/m <sup>2</sup> CPS	GHG-Int	59	56	-5%
		90%	90%	
mtCO <sub>2</sub> e		5,667	5,162	-9%
mtCO <sub>2</sub> e	GHG-Dir-LfL	2,430	2,197	-10%
mtCO <sub>2</sub> e	GHG-Indir-LfL	3,137	2,755	-12%
mtCO <sub>2</sub> e	GHG-Indir-LfL	103	210	103%
mtCO <sub>2</sub> e		5,667	5,162	-9%
mtCO <sub>2</sub> e	GHG-Dir-LfL	2,430	2,197	-10%
mtCO <sub>2</sub> e	GHG-Indir-LfL	3,134	2,755	-12%
mtCO <sub>2</sub> e	GHG-Indir-LfL	103	210	103%
m <sup>2</sup>		99,965	99,965	
kgCO <sub>2</sub> e/m <sup>2</sup> CPA	GHG-Int	57	52	
mtCO <sub>2</sub> e		23,714	21,897	-8%
mtCO <sub>2</sub> e		9,675	7,428	-23%

## 2.4 CHANGES IN ENERGY DEMAND

In 2017 trading hours increased at Victoria, Leeds with the opening of Victoria Gate. With the increase in leisure offer across the portfolio we are seeing longer car park operating hours and centre trading hours. In particular at Westquay, the opening of Westquay South lead to a 40% increase of car park operating hours which in turn increased the asset's electricity consumption by 3%.

In the UK shopping centres we are seeing a move away from gas consumption, with plans for the removal of boilers at The Oracle and Highcross, in favour of air source heat pumps or point of use heating for water. We do not adjust gas consumption for weather currently but this is something we are looking to do in 2018 with the rollout of a new utility management platform.

Active on-site management is encouraged across the portfolios and has driven further savings in 2017. Gas demand at Bullring has been reduced by approximately 80% largely through a concerted effort to ensure plant is switched off unless it is needed. Reductions have also been achieved at Union Square and Oracle.

In our French assets, a clear focus on active management has driven strong results at Italie Deux and O'Parinor, two of our highest consuming assets within the French portfolio.

An energy performance contract agreed at Les Terrasses du Port, Marseille is driving reductions in energy demand across the site. This two year contract will complete in 2018 and results will be reviewed with a view to using a similar approach elsewhere within the portfolio.

## Direct and indirect energy consumption by Group and Operating Region

GRI Indicators GRI 302-1, 305-1, 305-3

### HAMMERSON GROUP

Total Landlord Obtained Electricity<sup>a, b</sup>

Renewables generated

Electricity Consumption plus Self Generated

Electricity sub-metered to Tenants

Natural Gas Consumption<sup>a</sup>

Natural Gas sub-metered to Tenants

Diesel Consumption

Fuel Oils Consumption

District Heating and Cooling

### HAMMERSON UK

Total Landlord Obtained Electricity

Renewables generated

Electricity Consumption plus Self Generated

Electricity sub-metered to Tenants

Natural Gas Consumption

Natural Gas sub-metered to Tenants

Diesel Consumption

Fuel Oils Consumption

District Heating and Cooling

### HAMMERSON FRANCE

Total Landlord Obtained Electricity

Renewables generated

Electricity Consumption plus Self Generated

Electricity sub-metered to Tenants

Natural Gas Consumption

Natural Gas sub-metered to Tenants

Diesel Consumption

Fuel Oils Consumption

District Heating and Cooling

### HAMMERSON IRELAND

Total Landlord Obtained Electricity

Renewables generated

Electricity Consumption plus Self Generated

Electricity sub-metered to Tenants

Natural Gas Consumption

Natural Gas sub-metered to Tenants

Diesel Consumption

Fuel Oils Consumption

District Heating and Cooling

<sup>a</sup>Includes utilities obtained by landlord but consumed by tenant.

<sup>b</sup>Less than 1% of electricity estimated



Table 2.5

UNIT	EPRA CODE	2015	2016	2017
mWh	Elec-Abs	100,049	104,784	105,333
mWh	Elec-Abs	1	32	150
mWh	Elec-Abs	100,050	104,816	105,483
mWh	Elec-Abs	3,540	3,089	3,296
mWh	Fuels-Abs	32,642	30,056	31,829
mWh	Fuels-Abs	6,859	6,196	20,446
mWh	Fuels-Abs	64	194	130
mWh	Fuels-Abs	0	0	0
mWh	DH&C-Abs	7,019	7,750	6,419
mWh	Elec-Abs	52,656	52,821	50,398
mWh	Elec-Abs	1	32	150
mWh	Elec-Abs	52,656	52,853	50,548
mWh	Elec-Abs	1,224	563	864
mWh	Fuels-Abs	17,801	16,346	17,495
mWh	Fuels-Abs	6,859	6,196	7,964
mWh	Fuels-Abs	64	194	130
mWh	Fuels-Abs	0	n/a	n/a
mWh	DH&C-Abs	540	374	651
mWh	Elec-Abs	47,393	46,079	41,866
mWh	Elec-Abs	0	0	0
mWh	Elec-Abs	47,393	46,079	41,866
mWh	Elec-Abs	2,317	2,526	2,366
mWh	Fuels-Abs	14,841	13,208	12,473
mWh	Fuels-Abs	0	0	545
mWh	Fuels-Abs	0	0	0
mWh	Fuels-Abs	0	0	0
mWh	DH&C-Abs	6,479	7,376	5,768
mWh	Elec-Abs	n/a	5,884	13,069
mWh	Elec-Abs	n/a	0	0
mWh	Elec-Abs	n/a	5,884	13,069
mWh	Elec-Abs	n/a	0	66
mWh	Fuels-Abs	n/a	503	1,861
mWh	Fuels-Abs	n/a	0	9
mWh	Fuels-Abs	n/a	0	0
mWh	Fuels-Abs	n/a	0	0
mWh	DH&C-Abs	n/a	0	0

## 2.5 OUR MANAGEMENT APPROACH

Working closely with our Operations and Asset Management teams to establish a consistent approach across the portfolios has been important in achieving good results. Positive Places Plans are created for each asset, managed as a key part of our ISO14001 accredited environmental management system and embedded within the wider asset business plans. Each asset has individual targets covering all aspects of environmental performance, which cumulatively support our portfolio targets. Monthly data collection and quarterly reporting to internal stakeholders and JV partners ensures a consistent focus on project delivery and performance.

The operational performance of our buildings is largely driven by our electricity demand for lighting and other operational activities. We do not weather adjust our energy data but many of our centres are naturally ventilated and do not have mechanical heating or cooling other than for hot water. Natural gas consumption for landlord services and demand for district heating and cooling is affected by weather and is separated out in the data. It is also affected by good on site management. Our assessment of energy savings from efficiencies and investment on table 5.1 in Section 5 excludes reductions in gas consumption and district heating and cooling.

## LEGISLATIVE AND REGULATORY COMPLIANCE

Our portfolios are subject to national and international environmental legislation, much of which focuses on carbon and energy efficiency.

**In 2017 we responded to the following key pieces of regulation:**

- Mandatory GHG Emissions Reporting (Group)
- Carbon Reduction Commitment Energy Efficiency Scheme (UK only)
- Minimum Energy Efficiency Standards (UK only)
- Grenelle II (France only)

All European developments and operations are subject to EU Energy Performance of Buildings Directive, transposed into UK, French and Irish law. In the UK, this includes reference to the UK Building Regulations in which Part L deals specifically with energy and carbon efficiency of new buildings. In 2017 we commissioned a review of key environmental legislation and regulation as part of our risk management processes.

## Direct and Indirect Energy Consumption by Primary Energy Source

**GRI Indicators 302-1, 302-4, CRE1  
(Building Energy Intensity)**

### HAMMERSON UK SHOPPING CENTRE (COVERAGE 13/13 ASSETS)

Total Landlord Obtained Electricity <sup>a</sup>
Renewables generated
Renewables exported
Electricity Consumption plus Self Generated
Electricity sub-metered to Tenants
Electricity for Landlord Services (89% certified renewable)
Natural Gas Consumption <sup>a</sup>
Natural Gas sub-metered to Tenants
Gas for landlord services only
Diesel Consumption
Fuel Oils Consumption
District Heating and Cooling <sup>c</sup>
Common Parts Area (CPA)
Landlord service energy intensity

### HAMMERSON UK RETAIL PARKS (COVERAGE 21/21 ASSETS)

Total Landlord Obtained Electricity <sup>b</sup>
Renewables generated
Renewables exported
Electricity Consumption plus Self Generated
Electricity sub-metered to Tenants
Electricity for Landlord Services (0% certified renewable)
Natural Gas Consumption
Natural Gas sub-metered to Tenants
Gas for landlord services only
Diesel Consumption
Fuel Oils Consumption
District Heating and Cooling
Car Park Spaces (CPS)
Landlord service energy intensity

<sup>a</sup>Includes utilities obtained by landlord but consumed by tenant.

<sup>b</sup>UK Retail Parks data includes 1% estimated electricity consumption

<sup>c</sup>We do not submeter tenant consumption from district heating and cooling.

<sup>d</sup>2016 common parts figure restated due to reporting error



Table 2.6

UNIT	EPRA CODE	2015	2016	2017	% CH Y-O-Y
mWh	Elec-Abs	49,789	47,114	46,314	-2%
mWh	Elec-Abs	0	32	150	
mWh	Elec-Abs	0	0	0	
mWh	Elec-Abs	49,789	47,146	46,463	-1%
mWh	Elec-Abs	947	513	864	69%
mWh	Elec-Abs	48,843	46,633	45,600	-2%
mWh	Fuels-Abs	16,783	15,475	17,397	12%
mWh	Fuels-Abs	6,846	6,196	7,964	29%
mWh	Fuels-Abs	9,937	9,279	9,433	2%
mWh	Fuels-Abs	64	194	130	-33%
mWh	Fuels-Abs	0	0	0	
mWh	DH&C-Abs	540	374	651	74%
M <sup>2</sup>		228,312	273,119 <sup>d</sup>	273,119	
kWh/m <sup>2</sup> CPA	Energy-Int	260	206	204	
mWh	Elec-Abs	3,960	3,753	2,800	-25%
mWh	Elec-Abs	0	0	0	
mWh	Elec-Abs	1	0	0	
mWh	Elec-Abs	3,961	3,753	2,800	-25%
mWh	Elec-Abs	49	50	0	
mWh	Elec-Abs	3,912	3,702	2,800	-24%
mWh	Fuels-Abs	21	17	18	5%
mWh	Fuels-Abs	0	0	0	
mWh	Fuels-Abs	21	17	18	5%
mWh	Fuels-Abs	0	0	0	
mWh	Fuels-Abs	0	0	0	
mWh	DH&C-Abs	0	0	0	
Number		22,074	22,583	17,245	
kWh/m <sup>2</sup> CPS	Energy-Int	178	165	163	

## 2.6 DATA COLLECTION AND VERIFICATION

Energy and carbon data is captured onsite at our shopping centres, and by a third party management company for our retail parks. Data is collected from metre reads and invoices, and uploaded to our CR360 reporting platform where it is assessed and verified by two further levels within the organisation. Our collection and verification processes for our carbon and energy data are externally assured by Deloitte. Their assurance statement is available on the [Positive Places website](#).

### Continuous improvement of reporting

Manual reporting of utility data, whilst normal across the sector, is resource intensive and prone to error. We are therefore looking to automate our data management in 2018 and 2019 through a portfolio-wide utility metering project across our UK Shopping Centre assets. We are looking to improve data visibility, communication and accuracy.

Building on our experience piloting automatic data feeds with our Retail Parks portfolio, in 2018 we will set up a new utility management platform which works from a comprehensive metering strategy, providing 15-minute interval data for meters and sub-meters for all utilities. In addition to providing more accurate, data, we will be able to more proactively manage our utility consumption and look for further savings. The UK shopping centre metering rollout will start in early 2018, and continue with the Irish shopping centres in 2019.

## Direct and Indirect Energy Consumption by Primary Energy Source

### GRI Indicators 302-1, 302-4, CRE1 (Building Energy Intensity)

(continued)

#### HAMMERSON FRANCE SHOPPING CENTRE (COVERAGE 10/10 ASSETS)

Total Landlord Obtained Electricity <sup>a</sup>
Renewables generated
Renewables exported
Electricity Consumption plus Self Generated
Electricity sub-metered to Tenants
Electricity for Landlord Services (0% certified renewable)
Natural Gas Consumption <sup>a</sup>
Natural Gas sub-metered to Tenants
Gas for landlord services only
Diesel Consumption
Fuel Oils Consumption
District Heating and Cooling <sup>a</sup>
Common Parts Area (CPA)
Landlord service energy intensity

#### HAMMERSON IRELAND SHOPPING CENTRE (CENTRE COVERAGE 3/3 ASSETS)

Total Landlord Obtained Electricity
Renewables generated
Renewables exported
Electricity Consumption plus Self Generated
Electricity sub-metered to Tenants
Electricity for Landlord Services (100% certified renewable)
Natural Gas Consumption
Natural Gas sub-metered to Tenants
Gas for landlord services only
Diesel Consumption
Fuel Oils Consumption
District Heating and Cooling <sup>c</sup>
Common Parts Area (CPA)
Landlord service energy intensity

<sup>a</sup>Hammerson France shopping centre data includes 0.6% estimated energy data. This is for the district heating and cooling only.



Table 2.6

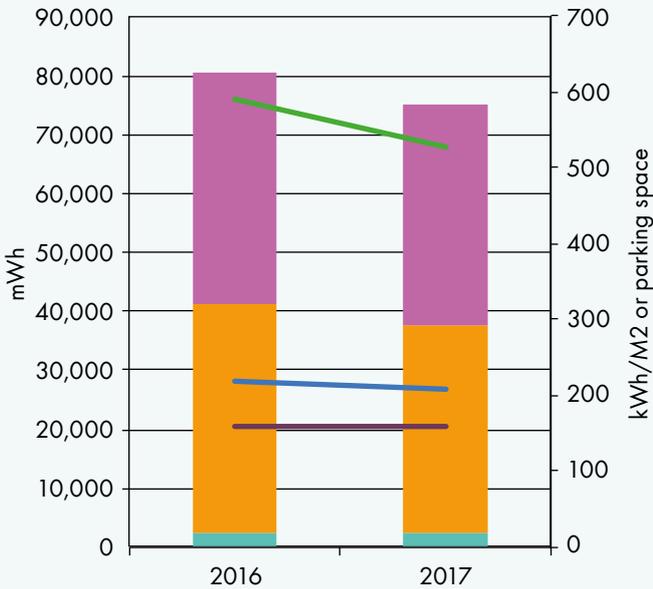
UNIT	EPRA CODE	2015	2016	2017	% CH Y-O-Y
mWh	Elec-Abs	46,974	45,915	41,866	-9%
mWh	Elec-Abs	0	0	0	
mWh	Elec-Abs	0	0	0	
mWh	Elec-Abs	46,974	45,915	41,866	-9%
mWh	Elec-Abs	2,317	2,526	2,366	-6%
mWh	Elec-Abs	44,657	43,388	39,500	-9%
mWh	Fuels-Abs	14,841	13,208	12,473	-6%
mWh	Fuels-Abs	0	0	545	
mWh	Fuels-Abs	14,841	13,208	11,928	-10%
mWh	Fuels-Abs	0	0	0	
mWh	Fuels-Abs	0	0	0	
mWh	DH&C-Abs	6,479	7,376	5,768	-22%
M <sup>2</sup>		92,193	10,387	10,387	
kWh/m <sup>2</sup> CPA	Energy-Int	716	616	551	
mWh	Elec-Abs	n/a	5,437	12,326	
mWh	Elec-Abs	n/a	0	0	
mWh	Elec-Abs	n/a	0	0	
mWh	Elec-Abs	n/a	5,437	12,326	
mWh	Elec-Abs	n/a	0	66	
mWh	Elec-Abs	n/a	5,437	12,260	
mWh	Fuels-Abs	n/a	239	1,392	
mWh	Fuels-Abs	n/a	0	9	
mWh	Fuels-Abs	n/a	239	1,383	
mWh	Fuels-Abs	n/a	0	0	
mWh	Fuels-Abs	n/a	0	0	
mWh	DH&C-Abs	n/a	0	0	
M <sup>2</sup>		n/a	52,713	65,929	
kWh/m <sup>2</sup> CPA	Energy-Int	n/a	108	207	

## 2.7 LIKE FOR LIKE PORTFOLIO PERFORMANCE

We continue to see year on year reductions in energy demand across the like for like assets. This portfolio contains the majority of our managed sites including our biggest energy consumers, so is a good reflection of our achievements. The French assets in particular have made significant steps this year in managing down energy demand and we expect this trend to continue.

Chart 2.3

### LIKE FOR LIKE PORTFOLIO ENERGY PERFORMANCE



**ENERGY DEMAND**

- UK Retail Park
- UK Shopping Centre
- France Shopping Centre

**ENERGY INTENSITY**

- UK Retail Park
- UK Shopping Centre
- France Shopping Centre

## Direct and Indirect Energy Consumption by EPRA like for like portfolio

### GRI Indicator 302-1, 302-4, CRE1

#### EPRA LFL (2016-2017) UK SHOPPING CENTRES (COVERAGE 9/9 ASSETS)

- % of whole portfolio included by number of assets
- Total Electricity incl onsite renewables
- Landlord Supplied Tenants' Electricity Consumption
- Total electricity demand landlord controlled areas (100% certified renewable)
- Total Natural Gas
- Landlord Supplied Tenants' Natural Gas Consumption
- Total gas demand landlord controlled areas
- Diesel Consumption
- Thermal Energy
- Common Parts Area (CPA)
- Building energy intensity

#### EPRA L4L (2016-2017) UK RETAIL PARKS (COVERAGE 17/17 ASSETS)

- % of whole portfolio included by number of assets
- Total Electricity incl onsite renewables (0% certified renewable)
- Landlord Supplied Tenants' Electricity Consumption
- Total Natural Gas
- Landlord Supplied Tenants' Natural Gas Consumption
- Diesel Consumption
- Thermal Energy
- Car Park Spaces (CPS)
- Building energy intensity

#### EPRA L4L (2016-2017) FRANCE SHOPPING CENTRES (COVERAGE 9/9 ASSETS)

- % of whole portfolio included by number of assets
- Total Electricity incl onsite renewables
- Landlord Supplied Tenants' Electricity Consumption
- Total electricity demand landlord controlled areas (0% certified renewable)
- Total Natural Gas
- Landlord Supplied Tenants' Natural Gas Consumption
- Total gas demand landlord controlled areas
- Diesel Consumption
- Thermal Energy
- Common Parts Area (CPA)
- Building energy intensity

#### TOTAL LFL PORTFOLIOS

- Landlord Energy Demand



**Table 2.7**

<b>UNIT</b>	<b>EPRA CODE</b>	<b>2016</b>	<b>2017</b>	<b>% CH Y-O-Y</b>
		75%	60%	
mWh	Elec-lfl	39,705	38,354	-3%
mWh	Elec-lfl	288	679	
mWh	Elec-lfl	39,417	37,675	-4%
mWh	Fuels-lfl	13,267	12,336	-7%
mWh	Fuels-lfl	6,033	6,014	
mWh	Fuels-lfl	7,234	6,322	
mWh	Fuels-lfl	194	130	
mWh	DH&C-lfl	374	651	74%
m <sup>2</sup>		213,263	213,263	
kWh/m <sup>2</sup> CPA	Energy-Int	221	209	-5%
		86%	95%	
mWh	Elec-lfl	2,560	2,531	-1%
mWh	Elec-lfl	0	0	
mWh	Fuels-lfl	0	0	
mWh	Fuels-lfl	0	0	
mWh	Fuels-lfl	0	0	
mWh	DH&C-lfl	0	0	
number		15,958	15,958	
kWh/m <sup>2</sup> CPS	Energy-Int	160	160	0%
		90%	90%	
mWh	Elec-lfl	41,130	37,370	-9%
mWh	Elec-lfl	2,526	2,366	
mWh	Elec-lfl	38,604	35,004	-9%
mWh	Fuels-lfl	13,208	12,473	
mWh	Fuels-lfl	0	545	
mWh	Fuels-lfl	13,208	11,928	-10%
mWh	Fuels-lfl	n/a	n/a	
mWh	DH&C-lfl	7,376	5,768	-22%
m <sup>2</sup>		99,965	99,965	
kwh/m <sup>2</sup> CPA	Energy-Int	592	527	-11%
mWh		108,773	99,881	-8%

## Refrigerant Data - Group

## GRI Indicator 305-6



Table 2.8

F-GAS	UNIT	2011	2012	2013	2014	2015	2016	2017	EMISSION FACTOR	SOURCE
R22	kgCO <sub>2</sub> e	18	5	5	0	0	0	0	n/a	Defra 2017
R134A	kgCO <sub>2</sub> e	387	0	285	0	0	0	862,290	1430	Defra 2017
R143A	kgCO <sub>2</sub> e	0	0	0	0	0	0	0	n/a	Defra 2017
R404A	kgCO <sub>2</sub> e	0	0	2	0	0	0	0	n/a	Defra 2017
R407C	kgCO <sub>2</sub> e	290	166	438	36	23	18	275,325	1774	Defra 2017
R410A	kgCO <sub>2</sub> e	0	0	10	0	0	0	0	n/a	Defra 2017
<b>TOTAL EMISSIONS</b>	kgCO <sub>2</sub> e							1,137,615		

## Other relevant indirect green-house gas emissions

## GRI Indicator 305-3



Table 2.9

		2015	2016	2017	EMISSIONS FACTOR	SOURCE
Business travel by air, rail, personal mileage and taxi <sup>a</sup>	mt CO <sub>2</sub> e	412	1,016	1,509	<b>Air travel</b> Domestic Average 0.26744 Short-haul Business 0.23767 Short-haul Economy 0.15845 Long-haul First 0.60473 Long-haul Business 0.43843 Long-haul Economy 0.15119	Defra 2017
					<b>Rail travel</b> Domestic Average 0.04678 International Average 0.01225	
					<b>Road Travel</b> Average Taxi 0.15617 Estimated rate per mile 6	
Visitor journeys by car to our shopping centres (UK only) <sup>b</sup>	mt CO <sub>2</sub> e	149,772	148,918	169,391	<b>Road Travel</b> Average car 0.18242 Average petrol car 0.29881 Average diesel car 0.28787	

<sup>a</sup>We collected business travel details for our Mandatory GHG Emissions reporting using the period of October 2016-September 2017.

This is representative of CO<sub>2</sub>e emissions from flights, car journeys, train journeys and taxis.

<sup>b</sup>Emissions associated with visitor travel are estimated based on annual footfall, our 2011 UK survey of visitor travel and the 2008 BCSC Report 'Contribution of the Retail Sector to the Economy'. We assume 2.4 people per vehicle, 11.91 mile round trip and use the DEFRA emissions factor for an average car.

## Reductions in Energy Requirements of Products and Services

GRI Indicator 302-5



Table 2.10

INITIATIVE	LOCATION	ANNUAL SAVINGS (KWH)
LEDs in back of house and service yard	Cabot Circus	Not separately metered
LEDs in back of house, service yard and management suite	Centrale	7,200 kWh
LEDs in the multi storey car park	Highcross	Not separately metered
LEDs in the multi storey car park and ramps	Highcross	Estimated 377,538 kWh
LEDs in the mall, back of house stairwells, areas within the multi storey car park and service yards	Silverburn	Estimated 208,841 kWh
Installation of energy efficient boilers	Union Square	Estimated 306,351 kWh
BMS Updating	Les 3 Fontaines	Not separately metered
Setting up a new BMS	ESQ - AFUL	Not separately metered
BMS Updating	ESQ - ASLCC	Not separately metered
Replacement fan coil units	Italie Deux	848 kWh
LEDs and motion sensors in back of house corridors	Italie Deux	600 kWh
BMS Updating	Jeu de Paume	Not separately metered
BMS Updating	Nicétoile	Not separately metered
Replacement fan coil units	Nicétoile	Not separately metered
Replacement escalators with slow start system	Nicétoile	1,100 kWh
Replacement fan	Nicétoile	Not separately metered
Cooling network replacement	O'Parinor	15,000 kWh
Cooling tower upgrades/ replacement	Saint Sebastien	2,748 kWh
Motion detectors for lighting at exit doors	Les Terrasses du Port	200,000 kWh



# WATER DATA AND PERFORMANCE

## SECTION 3

### 3.1 2017 PERFORMANCE

Table 3.1

TARGET	OUTCOME	2017 STATUS
<b>PROTECT AND ENHANCE</b>		
Roll out Waterblades where feasible	Waterblades rolled out where possible in back of house areas, looking at rolling out front of house in 2018	
Improve our metering and monitoring of water demand through new utility management platform project	Metering surveys carried out in all UK shopping centres for all utilities, platform selected and rollout scheduled for 2018	

Water demand across our managed portfolios is relatively high and, as a resource of global importance, a material issue and one of our Net Positive target areas. Tenant demand makes up approximately 52% of our total water demand. This has increased as the proportion of food and beverage operators has grown. Our influence over retailer water consumption is limited so our attention is focused on reducing demand for water used for landlord services including toilets. The key driver behind this is footfall in our assets, which we use as our intensity metric.

We have made significant progress in reducing water demand for landlord services in 2017 and are delighted to have achieved our 2020 target of 10% improvement in water intensity versus our 2015 like for like portfolios, three years early. Although water intensity for the UK has remained level over the 3 years, France has seen some significant reductions and these have been largely due to the removal of high water consuming equipment such as cooling towers since 2016.

A trial of water efficient toilets in 2017 at The Oracle, Reading has brought significant water savings for the asset. The performance of these toilets is being monitored to assess their potential for roll out elsewhere.

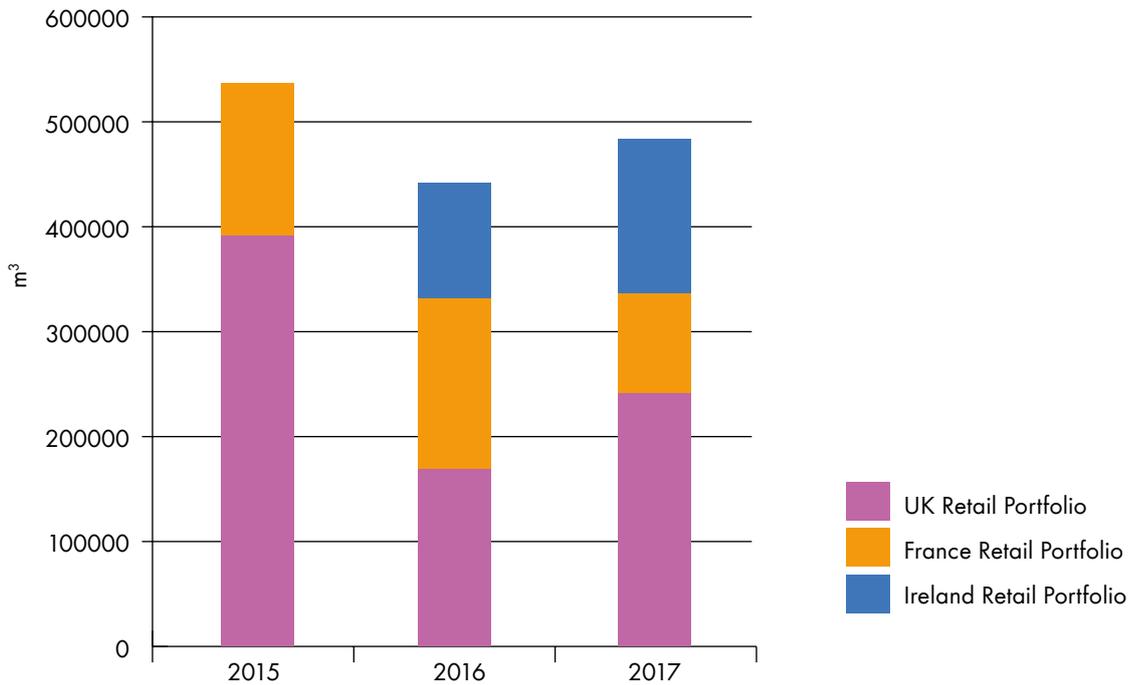
### CHANGES IN THE UK WATER MARKET

Following the England and Wales water market opening in April 2017, we re-tendered our UK centre supplies and will switch supplier for our English shopping centres in England in February 2018. This gives us a great opportunity to improve engagement and work collaboratively with our suppliers, retailers and asset teams to explore new water saving opportunities.

## PERFORMANCE IN PICTURES

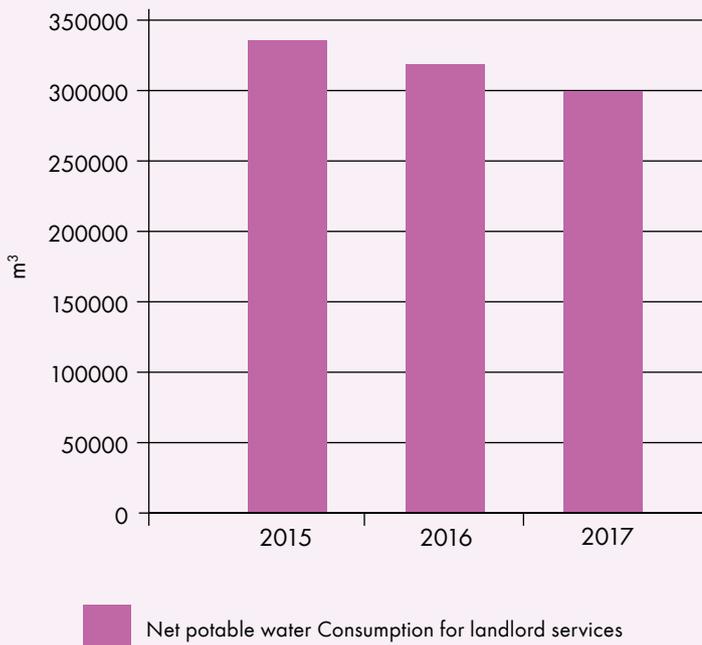
**WATER DEMAND FOR LANDLORD SERVICES  
(WHOLE PORTFOLIO)**

Chart 3.1



### NET POSITIVE PROGRESS - WATER

Chart 3.2



Our net positive water target requires water replenished to exceed mains water consumed. This is a very challenging target. We are addressing it first by reducing water demand for landlord services across the business and have made good progress with this in 2017. Replenishing water through rainwater harvesting has also increased and we plan to extend this in 2018 particularly through our developments.



For more on our Environmental Footprint visit <http://sustainability.hammerson.com/365/our-environmental-footprint.html>

## 3.2 CHANGING WATER DEMAND

Improved metering has enabled us to more accurately monitor landlord consumption and water efficiency projects have been proving successful particularly within our UK portfolio. The UK centres we have had great success installing Waterblades to our back of house areas and customer toilets. These small tap fixings cut water consumption by over 50% compared to a standard aerated tap. Along with waterless urinals, we are including Waterblades in the specification of our new toilet refurbishment programme so expect to see further improvements in consumption over time.

The opening of the esplanade and fountains at Westquay South has contributed to a 16% increase in water consumption at that asset. Balancing our aspiration to provide a best in class experience for our visitors and the place-making aspirations of our local stakeholders with efficient use of valuable natural resources is a perennial challenge for our teams. By working together and using data from our experiences such as Westquay we are able to inform the specification and design decisions of other projects. We are currently working closely with the Brent Cross development team to look at how water consumption can be managed most efficiently with the requirement for extensive indoor and outdoor planting and related irrigation.

The increase in the proportion of food and leisure across the portfolio drives more landlord water use particularly for increased bin washing. This is affecting all our shopping centre assets. We are therefore pleased that the measures we have so far implemented have led to reductions in absolute water demand by 37% for the UK whole portfolio since 2015. Water consumption in the French portfolio, having experienced a slight increase in 2016, has reduced significantly in 2017, bringing the intensity measure down by 38% over the year.

## Water Consumption - Whole Portfolios

### GRI Indicator 303-1 CRE2

#### HAMMERSON GROUP

Total Landlord Obtained Water <sup>a</sup>
Water sub-metered to Tenants
Water for landlord services
Total water withdrawal by source
Rainwater Harvested onsite
Kitchens
Total water consumption
Building Water Intensity (landlord services) <sup>b</sup>

#### HAMMERSON UK SHOPPING CENTRE (COVERAGE 13/13 ASSETS)

Total Landlord Obtained Water
Rainwater Harvested onsite
Water sub-metered to Tenants
Water for landlord services
Building Water Intensity (landlord services) <sup>b</sup>

#### HAMMERSON UK RETAIL PARKS<sup>c</sup> (COVERAGE 21/21 ASSETS)

Total Landlord Obtained Water
Water sub-metered to Tenants
Water for landlord services

#### HAMMERSON FRANCE SHOPPING CENTRE (COVERAGE 10/10 ASSETS)

Total Landlord Obtained Water
Water sub-metered to Tenants
Water for landlord services
Building Water Intensity (landlord services) <sup>b</sup>

#### HAMMERSON IRELAND SHOPPING CENTRE (COVERAGE 3/3 ASSETS)

Total Landlord Obtained Water
Rainwater Harvested onsite
Water sub-metered to Tenants
Water for landlord services
Building Water Intensity (landlord services) <sup>b</sup>

<sup>a</sup>Total landlord obtained water includes any metered supplies to tenants  
<sup>b</sup>Water consumption at centres is largely from toilet facilities so is directly related to visitor footfall.

<sup>c</sup>Manor Walks was the only retail park with material water consumption and it was sold in Q2 2016

<sup>d</sup>Figure restated due to 2016 Bullring consumption data now available.



**Table 3.2**

<b>UNIT</b>	<b>EPRA CODE</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>% CHANGE Y-O-Y</b>	<b>% CHANGE VS. 2015</b>
m <sup>3</sup>	Water-Abs	1,106,371	1,171,378	1,130,153	-4%	2%
m <sup>3</sup>	Water-Abs	567,289	733,508	657,675	-10%	16%
m <sup>3</sup>	Water-Abs	539,082	437,870	484,043	11%	-10%
m <sup>3</sup>		836	5,662	11,565	104%	1283%
m <sup>3</sup>		0	0	0		
m <sup>3</sup>		1,107,207	1,177,040	1,141,718	-3%	3%
litres/visitor	Water-Int	2.1	1.6	1.6	-4%	-26%
m <sup>3</sup>	Water-Abs	713,014	674,355	653,097	-3%	-8%
m <sup>3</sup>		836	5,662	9,886	75%	1083%
m <sup>3</sup>	Water-Abs	328,498	513,728 <sup>d</sup>	421,642	-18%	28%
m <sup>3</sup>	Water-Abs	384,516	166,288	241,341	45%	-37%
litres/visitor	Water-Int	2.4	1.0	1.3	23%	-46%
m <sup>3</sup>	Water-Abs	5,138	2,836	0	-100%	-100%
m <sup>3</sup>	Water-Abs	408	151	0	-100%	-100%
m <sup>3</sup>	Water-Abs	4,730	2,685	0	-100%	-100%
m <sup>3</sup>	Water-Abs	382,893	382,750	330,592	-14%	-14%
m <sup>3</sup>	Water-Abs	238,383	220,046	236,034	7%	-1%
m <sup>3</sup>	Water-Abs	144,510	162,704	94,558	-42%	-35%
litres/visitor	Water-Int	1.6	1.7	1.0	-38%	-36%
m <sup>3</sup>	Water-Abs	n/a	109,654	146,465	34%	
m <sup>3</sup>		n/a	0	1,679		
m <sup>3</sup>	Water-Abs	n/a	0	0		
m <sup>3</sup>	Water-Abs	n/a	109,654	148,144	35%	
litres/visitor	Water-Int		n/a	4.5		



Cabot Circus, Bristol

### 3.4 MANAGING OUR WATER USE

We manage our water consumption under our environmental management system, and our strategy focuses on combining good management within investment in innovation.

#### Key areas of focus are:

- Leak detection
- Improving equipment efficiency, and water reuse and rainwater harvesting wherever possible.

Water has historically been a lower priority for efficiency investment compared to energy due to its relatively low unit cost. This makes the creation of a strong business case difficult. We expect this to change over coming years as the new national water market settles following deregulation. As an early response to this, investment in water metering is included as part of our wider utility metering project to enable us to unlock future cost savings.

To mitigate the increased water use from a growing food and leisure offering within our centres, we are investigating the use of rainwater fed bin washers, which in turn recycle water. We are also looking at new ways of cleaning our centres and in particular our car parks, to ensure we offer the best environment to our customers whilst minimising our water use.

Ilac Shopping Centre in Dublin has a rainwater harvesting system, which since installation in April 2017 has provided 1679m<sup>3</sup> rainwater for use in the public toilets. Together with the rainwater harvesting system at Cabot Circus, fully refurbished during 2017, we have a good platform from which to demonstrate the benefits of rainwater harvesting to the business.

### 3.5 DATA MANAGEMENT AND QUALITY

When the England and Wales water market opened in April 2017 and we started the process of switching suppliers, we experienced a drop on the reliability of invoicing data. For some UK assets we have still not received accurate and timely billing. We expect this to be resolved by our portfolio switch to a new supplier in early 2018.

At Dundrum Town Centre we have had several issues with data accessibility and accuracy following changes with the local water authority. The landlord and tenant split is therefore currently estimated based on previous meter readings.

Our key challenge in managing water consumption is lack of sub-metering which limits visibility of exactly where and how water it is used. To address this we are including all water main meters and sub-meters in our metering renewal programme in 2018. This will also enable us to provide our tenants with detailed water consumption profiles and engage with them in finding opportunities to reduce demand.

### 3.6 DATA COLLECTION AND VERIFICATION

Water data is collected from invoices and manual meter reads and submitted monthly by the shopping centre teams into our data management system, Credit 360.

We currently do not have any landlord water demand in our retail parks portfolio following the closure of Manor Walks Retail Park in 2016. Our water data is assured by Deloitte.

## Water Consumption - Like for like portfolios

GRI Indicators 303-1, CRE2



Table 3.3

EPRA L4L (2016-2017) UK SHOPPING CENTRES (COVERAGE 9/9 ASSETS)	UNIT	EPRA CODE	2016	2017	% CH Y-O-Y
% of whole portfolio included by number of assets			75%	60%	
Total Landlord Obtained Water Total	m <sup>3</sup>	Water-LfL	602,820	536,603	
Landlord Supplied Tenant Water Consumption	m <sup>3</sup>	Water-LfL	434,959	358,068	
Rainwater harvested water	m <sup>3</sup>	Water-LfL	5,662	9,886	75%
Water for landlord services	m <sup>3</sup>	Water-LfL	173,523	188,421	9%
Annual Visitor Numbers	number		152,481,379	150,862,941	
Building Water Intensity (landlord services)	litres/ visitor	Water-Int	1.1	1.2	10%
<b>EPRA L4L (2016-2017) FRANCE SHOPPING CENTRES (COVERAGE 9/9 ASSETS)</b>					
% of whole portfolio included by number of assets			90%	90%	
Total Landlord Obtained Water Total	m <sup>3</sup>	Water-LfL	347,096	299,037	
Landlord Supplied Tenant Water Consumption	m <sup>3</sup>	Water-LfL	193,882	212,637	
Rainwater harvested water	m <sup>3</sup>	Water-LfL	0	0	
Water for landlord services	m <sup>3</sup>	Water-LfL	153,214	86,400	-44%
Annual Visitor Numbers	number		97,000,000	99,000,000	
Building Water Intensity (landlord services)	litres/ visitor	Water-Int	1.6	0.9	-45%
<b>TOTAL LFL PORTFOLIOS</b>					
Total Water Intensity	litres/ visitor	Water-Int	1.3	1.1	-16%

Manor Walks is the only retail park with material water consumption and it was sold in Q2 2016. The Retail Parks portfolio therefore reports zero consumption within the EPRA like for like basis and has not been included here.

# RESOURCE USE DATA AND PERFORMANCE

## SECTION 4

### 4.1 2017 PERFORMANCE

Table 4.1

TARGET	OUTCOME	2017 STATUS
<b>PROTECT AND ENHANCE</b>		
Achieve 85% recycling of operational waste and 100% diversion from landfill	Achieved 73% recycling and 98% diversion from landfill	

Waste is a material sustainability issue for Hammerson. High management costs and significant negative environmental impacts make waste a key sustainability agenda item both corporately and for policy makers. Waste is therefore tackled across our managed assets and developments with targets set for recycling. Waste is included within our Net Positive targets as part of the Resource Use pillar.

The majority of our waste flows from the managed portfolio. Waste management forms a key part of our environmental management system, ensuring we not only meet all relevant legislation but actively look for opportunities to improve processes and reduce environmental impacts using the waste hierarchy.



#### CASE STUDY

Resource Use Data and Performance



### SUPPORTING OUR RETAILERS IN CAMPAIGNS TO CHANGE BEHAVIOURS

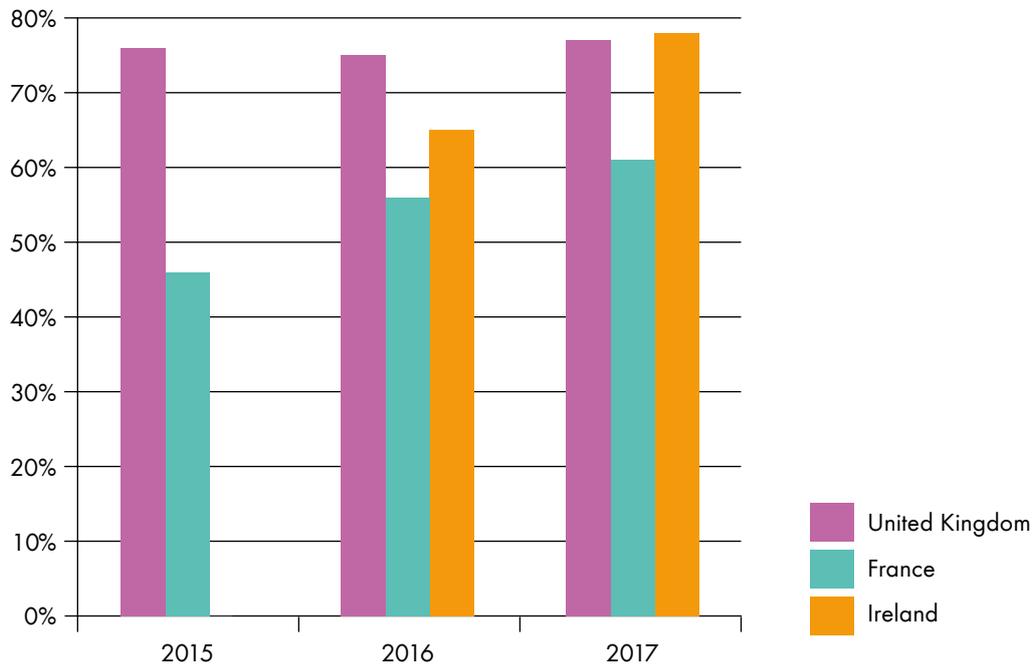
To help reduce the amount of single use plastic bottles, we worked with Selfridges at the Bullring in June 2017 to support World Oceans day and promoting awareness of the impacts of single use plastics. We have also run campaigns with our centre teams, including our contractors, encouraging reduction and reuse of both cups and bottles.

The issue of single use plastics is growing in significance and we are introducing water fountains at assets as a way of providing long term support for behaviour change with the consumer.

## PERFORMANCE IN PICTURES

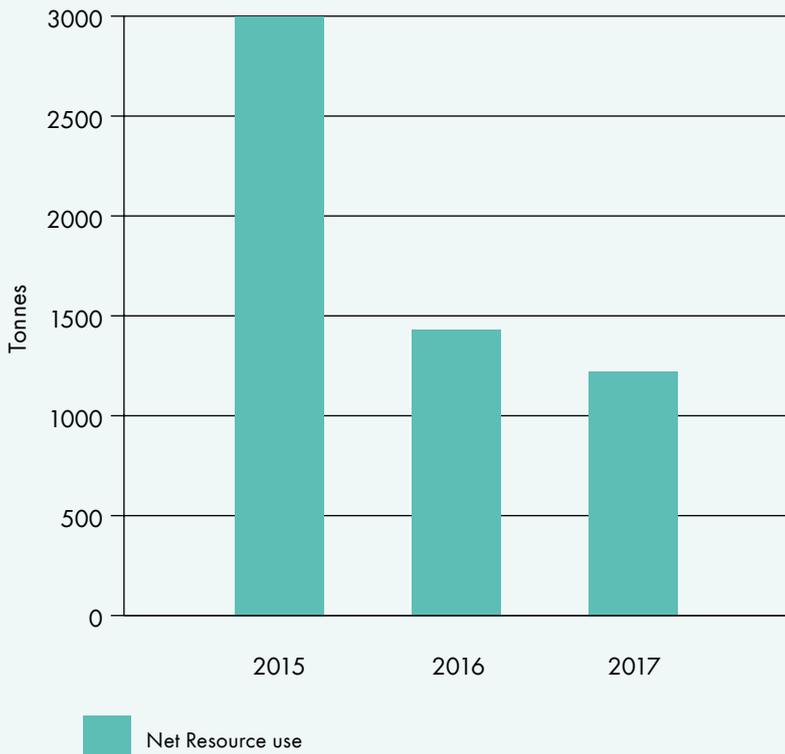
**% OF TOTAL OPERATIONAL WASTE RECYCLED**

Chart 4.1



### NET POSITIVE PROGRESS - RESOURCE USE

Chart 4.2



Progress against our Net Positive Resource Use Target is based on our equity share of the resource use of the assets held as at 31 December of the reporting year. As the portfolio expands resource use in any one year will increase. Our net positive resource use footprint is substantially reduced by the high proportion of operational waste we recycle. Waste from the operational portfolio is the key focus for the first phase of the net positive resource targets.



For more on our Environmental Footprint visit: <http://sustainability.hammerson.com/365/our-environmental-footprint.html>

## 4.2 KEY CHANGES TO THE PORTFOLIOS

Our portfolio expanded in both the UK and Ireland in 2017. This was the first full year of operation for Victoria Leeds and Westquay South and the two additional assets in Dublin have been incorporated within our management control. This expansion has increased our absolute waste figures, particularly around organic waste for Westquay due to the significant food and beverage offering but our recycling rates remain high. The introduction of the BioWhale at Westquay South has created the co-benefit of improved recycling performance as it is encouraging better separation of organic waste. Similarly at Victoria Leeds, the installation of a biodigester is supporting good waste sorting by our food and beverage tenants.

Organic waste management is increasingly expensive so we are very pleased to see these initiatives working well and will be looking at other potential sites for them in 2018.

## 4.3 REGULATORY COMPLIANCE

There are a number of key changes happening that may impact on our waste management.

### These include:

- The changing UN regulations on export of recyclable plastic to China
- The possibility of changes to the current incentive scheme (which favours export and less traceable pathways)
- Rising public awareness leading to high profile campaigns leading potentially to policy.

Our UK waste contractor has confirmed that none of our plastics waste currently goes outside Europe. Our processes will therefore not be directly impacted by these changes but we are expecting waste costs to increase and the income from recyclables to fall.

Waste management outcomes continue to be good on the like for like portfolio with 100% diversion from landfill achieved consistently. Reduction, reuse and recycling are the areas we want to focus on, particularly for plastics.

We have identified plastic clothes hangers and single use plastic bottles as two areas that have resonance with our communities and for the business. We will be extended our work in reducing both these waste streams in 2018.

## Group Waste Data

### GRI Indicator 306-2

#### HAMMERSON GROUP

Total Waste Quantity incl Shopfit	Tonnes
Total tonnes diverted from landfill	Tonnes
Total recycled including Shopfit	Tonnes
Total recycled excluding Tenant Shopfit	Tonnes
Total Reused waste	Tonnes
Food Recycling	Tonnes
Food Disposal	Tonnes
Incinerated waste (use as fuel)	Tonnes
Incinerated waste (not used as fuel)	Tonnes
Total Waste sent to off-site Materials Recovery Facility [MRF]	Tonnes
Landfilled waste [MRF]	Tonnes
Landfilled waste	Tonnes
Hazardous Landfilled waste	Tonnes
Total Hazardous Waste	Tonnes
Other Waste	Tonnes

#### HAMMERSON UK

Total Waste Quantity incl Shopfit	Tonnes
Total tonnes diverted from landfill	Tonnes
Total recycled excluding Tenant Shopfit	Tonnes
Total recycled including Shopfit	Tonnes
Total Reused waste	Tonnes
Food recycling	Tonnes
Food Disposal	Tonnes
Incinerated waste (use as fuel)	Tonnes
Incinerated waste (not used as fuel)	Tonnes
Total Waste sent to off-site Materials Recovery Facility [MRF]	Tonnes
Landfilled waste [MRF]	Tonnes
Landfilled waste	Tonnes
Hazardous Landfilled waste	Tonnes
Total Hazardous Waste	Tonnes
Other Waste	Tonnes



Table 4.2

	2015	% OF TOTAL WASTE	2016	% OF TOTAL WASTE	2017	% OF TOTAL WASTE
Waste-abs	34,574	100%	35,542	100%	42,727	100%
Waste-abs	30,391	88%	33,535	94%	41,807	98%
Waste-abs	23,884	69%	24,825	70%	31,396	73%
Waste-abs	20,596	60%	23,048	65%	26,078	61%
Waste-abs	5	0%	8	0%	28	0%
Waste-abs	4,208	12%	4,732	13%	5,794	14%
Waste-abs	34	0%	n/a		46	0%
Waste-abs	1,979	6%	1,556	4%	1,951	5%
Waste-abs	4	0%	3	0%		0%
Waste-abs	9,157	26%	12,031	34%	12,271	29%
Waste-abs	659	2%	48	0%	5	0%
Waste-abs	3,453	10%	1,859	5%	692	2%
Waste-abs	11	0%	25	0%	19	0%
Waste-abs	39	0%	392	1%	259	1%
Waste-abs	0	0%	0	0%	31	0%
Waste-abs	26,421	100%	25,269	100%	29,172	100%
Waste-abs	26,327	100%	25,149	100%	29,051	100%
Waste-abs	16,848	64%	17,143	68%	17,691	61%
Waste-abs	20,135	76%	18,920	75%	22,347	77%
Waste-abs	5	0%	8	0%	4	0%
Waste-abs	3,653	14%	3,533	14%	3,547	12%
Waste-abs	34	0%	0	0%	46	0%
Waste-abs	1,682	6%	1,359	5%	1,369	5%
Waste-abs	4	0%	3	0%		0%
Waste-abs	8,421	32%	9,540	38%	10,129	35%
Waste-abs	9	0%	15	0%	5	0%
Waste-abs	14	0%	5	0%	3	0%
Waste-abs	11	0%	25	0%	6	0%
Waste-abs	38	0%	390	2%	150	1%
Waste-abs	145	1%	0	0%	31	0%

## 4.3 MANAGING OUR WASTE STREAMS

Our recycling rates can be limited by the capacity of local waste infrastructure. In Ireland for example, limited local recycling facilities means most waste diverted from landfill which is not exported for recycling, goes to refuse derived fuel. We have managed to improve our recycling rate in Dundrum however, through very good management and tenant engagement. Similarly in France, lower landfill tax rates than in the UK discourage investment in recycling infrastructure making it more difficult to achieve the relatively high recycling rates we achieve across our UK portfolio. However, good local management has seen our rates improve.

In 2018 we will be reviewing our waste contracts across the French assets and the ability of suppliers to support our waste targets and wider sustainability strategy will form part of the tender process.

### Group Waste Data

(continued)

<b>HAMMERSON FRANCE</b>	<b>UNIT</b>
Total Waste Quantity incl shopfit	Tonnes
Total tonnes diverted from landfill	Tonnes
Total recycled excluding Tenant Shopfit	Tonnes
Total recycled including Shopfit	Tonnes
Total Reused waste	Tonnes
Food recycling	Tonnes
Food Disposal	Tonnes
Incinerated waste (use as fuel)	Tonnes
Incinerated waste (not used as fuel)	Tonnes
Total Waste sent to off-site Materials Recovery Facility [MRF]	Tonnes
Landfilled waste [MRF]	Tonnes
Landfilled waste	Tonnes
Hazardous Landfilled waste	Tonnes
Total Hazardous Waste	Tonnes
Other Waste	Tonnes

### **HAMMERSON IRELAND**

Total Waste Quantity incl Shopfit	Tonnes
Total tonnes diverted from landfill	Tonnes
Total recycled excluding Tenant Shopfit	Tonnes
Total recycled including Shopfit	Tonnes
Total Reused waste	Tonnes
Food recycling	Tonnes
Food Disposal	Tonnes
Incinerated waste (use as fuel)	Tonnes
Incinerated waste (not used as fuel)	Tonnes
Total Waste sent to off-site Materials Recovery Facility [MRF]	Tonnes
Landfilled waste [MRF]	Tonnes
Landfilled waste	Tonnes
Hazardous Landfilled waste	Tonnes
Total Hazardous Waste	Tonnes
Other Waste	Tonnes



Table 4.2

EPRA CODE	2015	% OF TOTAL WASTE	2016	% OF TOTAL WASTE	2017	% OF TOTAL WASTE
Waste-abs	8,153	100%	8,687	100%	8,791	100%
Waste-abs	4,064	50%	6,800	78%	8,003	91%
Waste-abs	3,748	46%	4,874	56%	5,348	61%
Waste-abs	3,748	46%	4,874	56%	5,348	61%
Waste-abs	0	0%	0	0%	0	0%
Waste-abs	555	7%	868	10%	1,551	18%
Waste-abs	0	0%	0	0%	0	0%
Waste-abs	297	4%	197	2%	583	7%
Waste-abs	0	0%	0	0%		0%
Waste-abs	736	9%	1,936	22%	791	9%
Waste-abs	650	8%	33	0%	98	1%
Waste-abs	3,438	42%	1,854	21%	690	8%
Waste-abs	n/a		0	0%	2	0%
Waste-abs	1	0%	2	0%	3	0%
Waste-abs	0	0%	0	0%	0	0%
Waste-abs	n/a	n/a	1,586	100%	4,764	100%
Waste-abs	n/a	n/a	1,586	100%	4,753	100%
Waste-abs	n/a	n/a	1,031	65%	3,038	64%
Waste-abs	n/a	n/a	1,031	65%	3,700	78%
Waste-abs	n/a	n/a	0	0%	24	0%
Waste-abs	n/a	n/a	331	21%	696	15%
Waste-abs	n/a	n/a	n/a		0	0%
Waste-abs	n/a	n/a	0	0%	0	0%
Waste-abs	n/a	n/a	0	0%		0%
Waste-abs	n/a	n/a	555	35%	1352	28%
Waste-abs	n/a	n/a	0	0%	0	0%
Waste-abs	n/a	n/a	0	0%	11	0%
Waste-abs	n/a	n/a	0	0%	1	0%
Waste-abs	n/a	n/a	0	0%	106	2%
Waste-abs	n/a	n/a	0	0%	0	0%



O'Parinor, France

We have made good progress with waste management and recycling across the managed portfolios during 2017. Our 85% recycling target has been achieved by 5 assets in the UK. Recycling remains more challenging for our French assets but cross-portfolio learning has supported good progress there too. Significant improvements have been seen at Les 3 Fontaines, Cergy in Paris, and at O'Parinor and we are expecting other assets to improve similarly in 2018 as learning is shared.

Two key areas of waste that are difficult to manage and major environmental concerns are food waste and plastics. We have three initiatives focusing on these areas in 2017. We introduced the innovative Biowhale on site anaerobic digester to Westquay, Southampton in 2016. Following our trial of the Biowhale we are pleased to have introduced a second one to Cabot Circus in Bristol. 10% more gas was generated through the anaerobic digestion of food waste at Cabot Circus in 2018 than is used on site. This is an early demonstration of the possibilities for Net Positive across the assets.

In Victoria Gate where food waste levels are much lower, we use an aerobic food digester. This has replenished 30,000 litres of water back into the water cycle.

We have trialled a hanger recycling programme in partnership with Mainetti, one of the UK's largest supplier of clothes hangers. Used hangers which are not good enough quality to be offered directly to customers for reuse are collated, baled and sent to Mainetti for repurposing into new hangers. In 2017 we sent over 68,000 hangers for reuse, refurbishment or recycling, and are looking to extend this in 2018.

We are seeing increasing diversion from landfill in the UK, particularly with hazardous waste, as new technologies enable sanitary and hygiene waste to go to refuse derived fuel rather than landfill. We will continue working with our waste contractors and service partners in 2018 to improve both reuse and recycling rates, as well as diversion from landfill.

**EPRA Like for like Waste Data**  
**GRI Indicator 306-2**



**Table 4.3**

<b>EPRA LFL (2016-2017) UK SHOPPING CENTRES (COVERAGE 9/9 ASSETS)</b>	<b>UNIT</b>	<b>EPRA CODE</b>	<b>2016</b>	<b>% OF TOTAL WASTE</b>	<b>2017</b>	<b>% OF TOTAL WASTE</b>
% of whole portfolio included by number of assets			75%		60%	
Total Waste Quantity incl shopfit	Tonnes	Waste-lfl	21,146	100%	24,901	100%
Total tonnes diverted from landfill	Tonnes	Waste-lfl	21,046	100%	24,797	100%
Total recycled including Tenant Shopfit	Tonnes	Waste-lfl	16,633	79%	20,034	80%
Total recycled excluding Tenant Shopfit	Tonnes	Waste-lfl	14,858	70%	15,458	62%
Total Reused waste	Tonnes	Waste-lfl	0	0%	0	0%
Food recycling	Tonnes	Waste-lfl	3,428	16%	3,309	13%
Food Disposal	Tonnes	Waste-lfl		0%	37	0%
Incinerated waste (use as fuel)	Tonnes	Waste-lfl	773	4%	832	3%
Incinerated waste (not used as fuel)	Tonnes	Waste-lfl	0	0%	n/a	
Total Waste sent to OFFSITE Materials Recovery Facility (MRF)	Tonnes	Waste-lfl	7,337	35%	7,824	31%
Landfilled waste [MRF]	Tonnes	Waste-lfl	0	0%	0	0%
Landfilled waste	Tonnes	Waste-lfl	2	0%	3	0%
Hazardous Landfilled waste	Tonnes	Waste-lfl	22	0%	6	0%
Total Hazardous Waste	Tonnes	Waste-lfl	88	0%	150	1%
Other Waste	Tonnes	Waste-lfl	0	0%	31	0%
<b>EPRA LFL (2016-2017) UK RETAIL PARKS (COVERAGE 17/17 ASSETS)</b>						
% of whole portfolio included by number of assets			86%		95%	
Total Waste Quantity incl shopfit	Tonnes	Waste-lfl	734	100%	456	100%
Total tonnes diverted from landfill	Tonnes	Waste-lfl	730	99%	452	99%
Total recycled excluding Tenant Shopfit	Tonnes	Waste-lfl	524	72%	267	59%
Total recycled including Tenant Shopfit	Tonnes	Waste-lfl	524	72%	267	59%
Total Reused waste	Tonnes	Waste-lfl	5	1%	4	1%
Food recycling	Tonnes	Waste-lfl	n/a		n/a	
Food Disposal	Tonnes	Waste-lfl	n/a		n/a	
Incinerated waste (use as fuel)	Tonnes	Waste-lfl	186	25%	154	34%
Incinerated waste (not used as fuel)	Tonnes	Waste-lfl	n/a		n/a	
Total Waste sent to OFFSITE Materials Recovery Facility (MRF)	Tonnes	Waste-lfl	310	42%	177	39%
Landfilled waste [MRF]	Tonnes	Waste-lfl	4	1%	5	1%
Landfilled waste	Tonnes	Waste-lfl	0	0%	0	0%
Hazardous Landfilled waste	Tonnes	Waste-lfl	n/a		n/a	
Total Hazardous Waste	Tonnes	Waste-lfl	n/a		n/a	
Other Waste	Tonnes	Waste-lfl	0		n/a	

**EPRA LFL Waste Data****GRI Indicator 306-2**

(continued)



Table 4.3

EPRA LFL (2016-2017) FRANCE SHOPPING CENTRES (COVERAGE 9/9 ASSETS)	UNIT	EPRA CODE	2016	% OF TOTAL WASTE	2017	% OF TOTAL WASTE
% of whole portfolio included by number of assets			90%		90%	
Total Waste Quantity incl shopfit	Tonnes	Waste-lfl	7,676	100%	7,878	100%
Total tonnes diverted from landfill	Tonnes	Waste-lfl	5,788	75%	7,091	90%
Total recycled excluding Tenant Shopfit	Tonnes	Waste-lfl	4,309	56%	4,784	61%
Total recycled including Tenant Shopfit	Tonnes	Waste-lfl	4,309	56%	4,784	61%
Total Reused waste	Tonnes	Waste-lfl	n/a		0	0%
Food recycling	Tonnes	Waste-lfl	769	10%	1,215	15%
Food Disposal	Tonnes	Waste-lfl	n/a		0	0%
Incinerated waste (use as fuel)	Tonnes	Waste-lfl	85	1%	234	3%
Incinerated waste (not used as fuel)	Tonnes	Waste-lfl	n/a		n/a	
Total Waste sent to OFFSITE Materials Recovery Facility (MRF)	Tonnes	Waste-lfl	1,602	21%	791	10%
Landfilled waste [MRF]	Tonnes	Waste-lfl	33	0%	97	1%
Landfilled waste	Tonnes	Waste-lfl	1,854	24%	690	9%
Hazardous Landfilled waste	Tonnes	Waste-lfl	0	0%	2	0%
Total Hazardous Waste	Tonnes	Waste-lfl	2	0%	3	0%
Other Waste	Tonnes	Waste-lfl	n/a		0	0%

## 4.5 DATA MANAGEMENT AND QUALITY

Waste data has long been a challenge for the industry. We identified this in our 2016 reporting as an area we wanted to investigate. We have been working with our waste management partners through 2017 to improve the quality and accuracy of our waste data, including audits of our waste carriers and provision of a new interactive dashboard across UK shopping centres. This has produced more robust data and improved engagement from the on site teams. We expected this work to reveal lower recycling and diversion from landfill rates than previous years but this has not in fact been the case. We are clear, however, that there is more work to do on waste data management and our focus on this area will continue through 2018.

We supported the Better Buildings Partnership's report on waste industry and look to implement their recommendations and guidelines in 2018 with the support of our service partners.

## 4.6 DATA COLLECTION AND VERIFICATION

We have seen much greater awareness of waste management as an issue during 2017 as it has risen in the public consciousness. In particular food waste, coffee cup recycling and single use plastic bottles have received significant attention. Going forwards we will increase our focus on reducing waste generated as well as improving segregation to enable better recycling rates. This requires engagement and strong collaboration between our tenants, their product manufacturers, and consumers.

Waste data is collected from waste transfer notes, collection notes and annual waste transfer notes. It is manually entered into our data management system and this year the data processes have been assured by Deloitte.



## CASE STUDY

Protect &  
Enhance



## BBP WASTE INITIATIVE

Working with our suppliers to improve waste data in late 2016 we identified a lack of consistency and clear reporting metrics and processes between our waste carriers and our waste management contractor, which led us to interrogate our data quality and performance statistics. A major challenge identified was a lack of standardisation of industry reporting frameworks; specifically, differing assumptions used to convert waste volumes into weight.

Through 2017 we engaged with our onsite waste management service provider ABM, who teamed up with waste management consultancy Helistrat, to establish a new reporting process for all UK Hammerson managed assets. By centralising our reporting we have identified and resolved site by site inconsistencies, and enabled better engagement with waste carriers to request standardised, verified reporting.

Our improved data quality has not only put us in a stronger position when negotiating with waste carriers, but also provided a deeper understanding of processes at site level and facilitated better engagement with our tenants. We were prepared for this exercise to show reduced recycling rates as the data became more accurate. However the opposite has happened and we have seen our recycling rate at some assets increased by over 10%.

Moving in to 2018 we will maintain this focus on transparent, reliable, traceable data and use it to create site specific resource management strategies, to drive us towards the most sustainable outcome for each site.

Our focus on waste data quality was shared by others within the property industry in 2017. We were pleased to work with the BBP Managing Agents Partnership on their Waste Not Want Not report investigating similar challenges of waste data reporting. The framework that has been produced for improving waste management practices is a major step forward for the industry. We have committed to embedding the BBP's recommendations into our processes and practice through our waste management supply chain, in tandem with our partners ABM and Helistrat.



**More information on the BBP Waste Framework can be found on the BBP website here:**  
<http://www.betterbuildingspartnership.co.uk>

# KEY FINANCIAL METRICS ASSOCIATED WITH ENVIRONMENTAL PERFORMANCE

## SECTION 5

### 5.1 KEY FINANCIAL METRICS

During 2017 we continued to reduce our energy costs despite significant increases in wholesale energy prices, which we believe are set to continue increasing over coming years. We continue to procure 100% clean electricity for the UK and Ireland shopping centres, and successfully retendered our UK supply contracts in October 2017 to maintain good value. We have changed our procurement strategy to ensure we keep focus on the energy market and maximise cost savings where possible, combining fixed and variable contracts.

This, combined with effective energy demand reductions has generated cost savings of over £500,000 for the business and retailers this year.

We expect to see some changes in the cost landscape of waste management in the UK over the coming years, from both the impact of the UK exiting the European Union on waste market labour force, and new UN regulations regarding the export of waste plastics to China. Added to this rising landfill tax in the UK, we expect our waste management costs to increase. We also expect rebates on recyclables to change over the medium term as the need for high quality material is driven by greater focus on recycling, reuse and the circular economy.



#### Energy

During 2017 our expanding portfolio has generated increased absolute energy consumption and related costs across the Group. However, energy efficiencies generated on the like for like portfolio continue to deliver good cost savings for the business and for our retailers despite increases in wholesale energy prices and in regulatory costs, both of which we believe are set to continue to rise over coming years.

We have maintained our procurement of 100% clean electricity for the UK and Ireland shopping centres. We successfully retendered our UK supply contracts in October 2017, maintaining good value. We changed our procurement strategy this time to a combined fixed and variable contract. This combines price certainty which can increase costs, with the potential to benefit from unit price reductions over the course of the contract, giving access to cost savings. This approach requires careful focus on the energy market to maximise cost savings and we will be monitoring its cost effectiveness.



#### Water

We have traditionally struggled with reducing water demand for landlord services but have begun to see reductions across the portfolio. This is largely through greater vigilance from on-site teams and strategic investment in technologies including Waterblades and high water efficiency toilets. Despite the relatively low cost of water compared to other utilities, this has generated meaningful service charge savings for our retailers.

We anticipate considerable change in the water supply market over the next 3 years following introduction of supplier competition into the UK market and expect prices to rise. Our planned utility metering project forms part of our response to these changes and will ensure we are better able to monitor water demand and we expect to see further efficiencies as a result.



#### Waste

Waste is a significant cost for our retailers and one that continues to rise. This is driven by the increase in organic waste within the portfolio and through increased management costs. We continue to keep the increases to a minimum through our focus on high levels of recycling and sale of recycled waste where possible.

Increased focus on waste in our French assets has improved recycling rates and we have expanded the amount of waste going to reuse in 2017, particularly from Ireland.



## CASE STUDY

Key Financial Metrics



## INVESTING IN ON-SITE RENEWABLE ELECTRICITY

Onsite generation of clean electricity ticks a number of boxes in reducing carbon emissions and reducing our reliance on the grid. Our first significant PV array was installed on Westquay Shopping Centre, Southampton in 2016. In 2017 we completed the installation of a second array, this time on Westquay South as the final element of the development. This brings total capacity at Westquay up to 310 kWp. Opportunities exist for onsite generation at our other sites and we have installed arrays at Cabot Circus and of course at Elliott's Field Retail Park, Rugby.

Questions are often asked about the commercial benefits to a landlord of installing PV where electricity costs are service charged to tenants. There are solutions to this and the one we selected in Westquay, with our JV partner GIC, was for the JV to invest in the array and receive a return through the clean electricity being provided directly into the mall areas and service-charged to the retailers. The centre receives clean electricity and reduced exposure to grid

capacity charges, with no additional cost to the retailers. In 2017 the first PV array generated a yield on cost to the JV of 9%. This will of course increase in 2018 with the additional income from the second array. We are currently exploring the potential for a third substantially larger array at Westquay, using a car park canopy system.

There are other challenges to installing PV on existing buildings, particularly older ones, as roof space is often congested with existing plant and machinery and the integrity of the roof itself must be maintained. On our Retail Parks we have no mall areas to serve so any onsite electricity needs to be used by the retailers. These challenges can slow the process of installing PV considerably and, in some instances stop it entirely. However, we are increasingly finding ways to work with partners to resolve issues and are confident we will continue to expand our onsite generation capacity over the next 5 years.

### Financial Metrics

Table 5.1

<b>ENERGY (HAMMERSON GROUP)</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Cost of energy (£)	7,834,870	9,348,926	11,070,819
Estimated energy savings (£)	402,478	665,484	519,226
Energy Efficiency Investment (£)	2,653,893	405,676	2,217,449
Estimated energy savings in kWh since 2016 GRI 302-4			5,405,969
<b>WATER (HAMMERSON GROUP)</b>			
Cost of water for landlord services (£000)	1,683	1,963	2,156
Investment in water management improvements (£000)	2	3	265
Estimated water cost savings (increases) (£000)	(439)	(155)	106
<b>WASTE (HAMMERSON GROUP)</b>			
Operational costs from waste management (£m)	2.7	3.8	4.0
Savings from averted landfill tax (£m)	2.0	2.4	3.0
Income from sale of waste for recycling (£m)	269	599	466

# DEVELOPMENT APPROACH

## SECTION 6

### 6.1 PERFORMANCE

2017 saw two significant sustainability achievements from our development programme - the completion of our BREEAM Outstanding, carbon neutral Retail Park at Elliott's Field Retail Park, Rugby and the opening of the second EcoPod for Costa, this time at Park Tawe in Swansea.

There were no major new shopping centre schemes on site during the year but we secured the post construction

BREEAM Excellent certification for Westquay South in Southampton and completed the installation of the roof top solar PV which is now generating clean electricity that is being used on site.

At Victoria Gate we are well on the way to installing a canopy PV array on the car park roof to add to our on-site renewable generation capacity and securing BREEAM Excellent for the scheme.



Les 3 Fontaines, France

### COMING SOON...

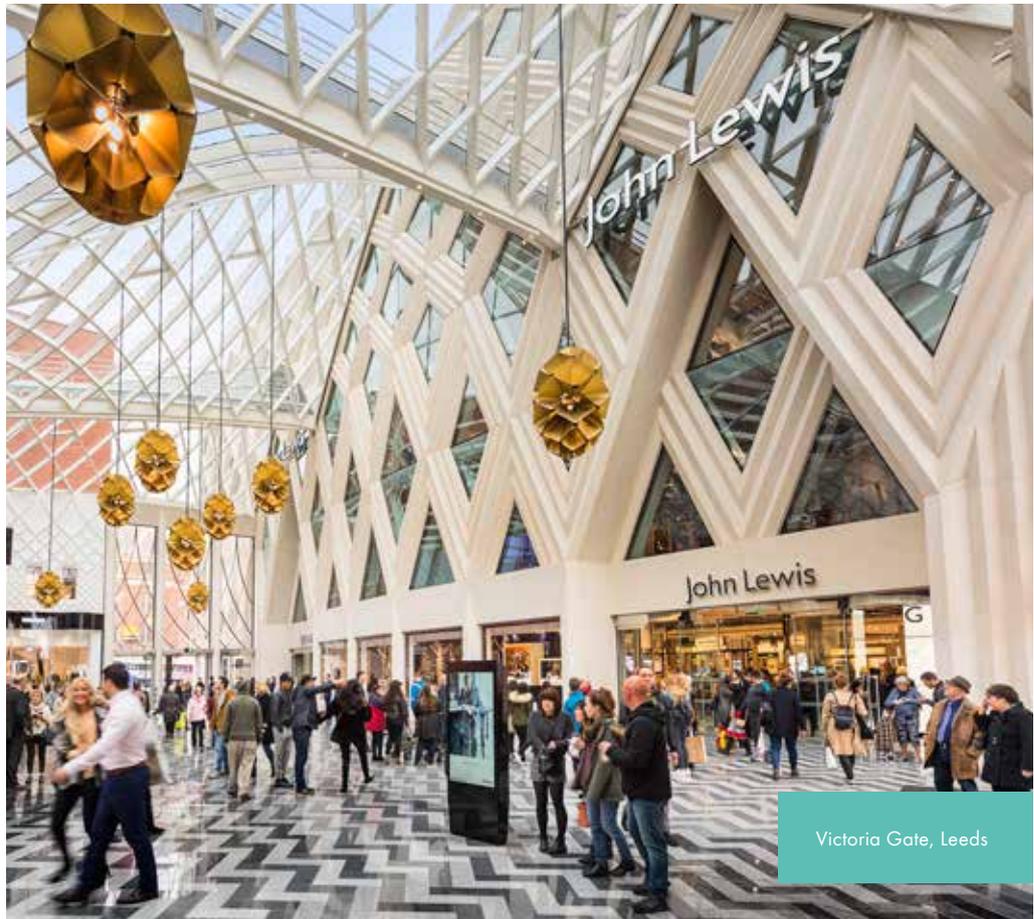
Key developments in the pipeline include Brent Cross, London, the redevelopment of the Whitgift Centre in Croydon and extensions at Les 3 Fontaines, Cergy and Italie Deux in Paris. These schemes are important opportunities for our Net Positive targets so we are working with the design teams and the main contractors to optimise the positive impacts, for example through maximising onsite clean electricity generation, and minimise the negatives through careful specification of materials and developing a forward-thinking energy strategy. An early achievement has been Brent Cross infrastructure phase achieving Hammerson's first CEEQUAL 'Excellent' Interim Client and Outline Design Award. At Les 3 Fontaines we have worked with the contractor to improve the recycled content of the concrete that will be the major construction component in this scheme, significantly reducing embodied carbon.

One of our biggest challenges is enabling scheme designs to be sufficiently fixed for pricing whilst also being sufficiently flexible to incorporate the inevitable changes in technology that will emerge between design and completion. We are very conscious that what we design now and build over the next few years must be fit for purpose for decades to come and respond in particular to the demands of climate change and pressure on natural resources. This is of course a challenge but our achievements at Elliott's Field, Retail Park, Rugby have demonstrated very clearly to the teams that significant change is possible, particularly where close collaboration with designers, contractor and retailers happens.



## CASE STUDY

Development  
Approach



## LESSONS LEARNED

The completion of Victoria Gate in 2016 provided a valuable opportunity to conduct a post completion analysis of how sustainability aspirations and outcomes were delivered on the project, with a view to finding ways to improve. Internal and external stakeholders were consulted including the Hammerson development, asset management and operations teams plus the main contractor and project design team.

The study focused on commissioning and handover, particularly of mechanical and electrical systems, implementation of BREEAM and the Sustainability Implementation Plan, procurement and specification and fit out.

A series of key recommendations for delivering systemic and process improvements were made which will further assist in meeting our Net Positive objectives.

A follow up workshop to disseminate findings and to discuss implementation of the recommendations was then held. The outcomes, actions and responsibilities identified within this workshop will be taken forward and implemented on future projects including the Brent Cross, London scheme.

## Performance Against Hammerson Sustainable Design Standard

**CONSIDERATE  
CONSTRUCTORS  
SCHEME**(2017 av score,  
on site UK  
schemes only)

	<b>STATUS</b>	<b>BREEAM TARGET</b>	<b>BREEAM RATING ACHIEVED</b> (Certification Stage)	
<b>HAMMERSON CORPORATE TARGET &gt;&gt;</b>		Excellent		40
<b>PRE 2017 SCHEMES</b>				
Westquay South, Southampton	Completed 2016	Excellent	Excellent (Construction)	44
Victoria Gate Arcade, Leeds	Completed 2016	Excellent	Excellent (Design)	43.5
Victoria Gate John Lewis, Leeds	Completed 2016	Very Good	Very Good (Design)	43.5
<b>SCHEMES ON SITE IN 2017</b>				
Elliott's Field, Rugby (Phase 2)	Completed 2017	Outstanding	Outstanding (Design)	43
Parc Tawe refurbishment, Swansea	Completed 2017	Excellent (Costa unit only)	Excellent (Pre-assessment)	38
Abbotsinch Phase 4, Paisley	Completed 2017	Very Good	Very Good (Pre-assessment)	43
Fife Retail Park extension, Kirkcaldy	Completed 2017	Very Good	Very Good (Pre-assessment)	38
Orchard Centre extension, Didcot	On site	Very Good	Very Good (Design)	36
House of Fraser refurbishment, Highcross	On site	Not applicable	Not applicable	No site visit undertaken
<b>POST 2017 SCHEMES</b>				
Brent Cross, London extension	Design	Excellent	Excellent (Pre-assessment)	
Whitgift Centre, Croydon	Design	Excellent	Excellent (Pre-assessment)	
Imperial Retail Park extension, Bristol	Design	Excellent	Excellent (Pre-assessment)	
Les 3 Fontaines extension, Cergy	Design	Excellent	Excellent (Pre-assessment)	
Italie Deux	Design	Excellent	Excellent (Pre-assessment)	
Fountain Retail Park extension, Oldbury	Design	Very Good	Very Good (Pre assessment)	

## 6.2 CERTIFICATION

We continued to target BREEAM Excellent for our shopping centre and retail park schemes, having overcome the challenges previously faced on the latter with the 2014 version of the BREEAM scheme. The BREEAM and CEEQUAL systems are increasingly used to support our Net Positive ambition. Whilst they are not sufficient to achieve Net Positive, they provide a widely recognised checklist that the internal project teams and external contractors can use to focus on key areas.

Our French developments at Les 3 Fontaines, Cergy and Italik in Paris are both on track to meet BREEAM Excellent and opportunities are being identified to meet Outstanding if possible. In spite of the exemplar project completed at Elliott's Field, our Retail Park schemes can still struggle to meet BREEAM Excellent largely due to the simple nature of the structures involved.

Table 6.1

CON WASTE GEN (T/100M <sup>2</sup> ) (ON-SITE SCHEMES ONLY)	CONSTRUCTION WASTE DIVERTED FROM LANDFILL (ON-SITE SCHEMES ONLY)	DEMOLITION WASTE DIVERTED FROM LANDFILL (ON-SITE SCHEMES ONLY)	SITE ACTIVITY CO <sub>2</sub> EMISSIONS (TCO <sub>2</sub> /100M <sup>2</sup> ) (ON-SITE SCHEMES ONLY)	POTABLE WATER (M <sup>3</sup> /100M <sup>2</sup> ) (ON-SITE SCHEMES ONLY)	% FSC / PEFC TIMBER (ON-SITE SCHEMES ONLY)	GRI 301-2 PERCENTAGE OF MATERIALS THAT ARE RECYCLED INPUT MATERIALS (ON-SITE SCHEMES ONLY)
-	97%	99%	-	-	100%	n/a
5	97%	99%	1.5	4.3	100%	27%
3.1	95%	No demolition waste	0.5	1.7	100%	2%
3.1	95%	No demolition waste	0.5	1.7	100%	2%
1.2	99%	98%	8.1	3.2	100%	58%
8.3	85%	99%	4.3	10.4	100%	Data not provided by the contractor
3.0	91%	No demolition waste	2.5	4.8	100%	Data not provided by the contractor
2.4	97%	0.7	1.8	9.6	100%	57%
23.3	100%	100%	2.7	7.2	No timber used	Data not provided by the contractor
No construction waste	No construction waste	100%	0.7	0.7	100%	78%

## 6.3 EMBEDDING NET POSITIVE IN THE DEVELOPMENT PROCESS

The primary focus for our development pipeline during 2017 was to embed the principles of Net Positive into the design and construction of projects. Net Positive was made a fundamental part of the sustainability strategy on all projects and design teams, contractors and tenants were all engaged at the earliest possible stage to make a reduction in our carbon, water, resource use and socio economic impacts. This was achieved through the incorporation of Net Positive into our established process for achieving sustainable developments comprising our strategic Sustainability Vision for Developments document plus supporting tools such as the Sustainability Implementation Plan and Sustainability Employer's Requirements.

It was particularly important to influence the design of our Brent Cross, London regeneration scheme so that it makes a notable contribution to our Net Positive target. Significant design development on the project was underway in 2017 and the inclusion of sustainability initiatives was monitored via the SIP and through CEEQUAL and BREEAM certification processes. However the ambitious targets of Net Positive required a greater focus from the project team and a series of monthly workshops was organised to review potential options for the project. A wide range of options were considered using a Net Positive Tracker tool to establish which would achieve

the biggest impact reduction and offer the best value. Options under review include the design of the glazed roof, solar PV, waterless urinals, rainwater harvesting and using timber in lieu of steel for certain elements of the structural design. The same approach will be adopted on the two French developments commencing in 2018, Cergy 3 Fontaines and Italik.

Expected decarbonisation of the UK electricity supply in the next few years means that we need to ensure the proposed energy strategy on long term projects such as Brent Cross London are carbon efficient once complete. Fossil fuel based technologies such as gas fired combined heat and power systems are predicted to be less carbon efficient than the national grid once they are operational if grid decarbonisation forecasts are correct. Ensuring the right technologies and strategies are employed at Brent Cross London and other developments will continue in 2018. One option we are currently exploring is the potential for extensive solar PV arrays at the site to supply clean electricity directly to the asset.

# CORPORATE GOVERNANCE AND DATA

## SECTION 7

Our approach to sustainability across the business is driven by the commitment and leadership evident at the most senior management level and particularly within the Board level leadership team. It is reflected in our corporate approach to risk management and our expectations in relation to our staff and the internal culture within the business, including health and safety responsibilities and risk management.

Hammerson operates according to our well understood corporate culture and values: Responsibility, Respect, Ambition and Collaboration. These are set out for all Hammerson people through our corporate induction process and an assessment of performance against them is included within the formal performance development review process.

We have set out here our internal Health and Safety and sustainability governance structures and how they

are used to drive, monitor and manage our approach to delivering a very ambitious sustainability vision across the business.

Clear responsibilities at the most senior level are expected to lead to implementation of our Positive Places strategy through the business. As reflected in our Upskill and Inspire Commitment, this requires our people to be appropriately trained and supported. We have also set out in this section our approach to employee engagement and sustainability training and the outcomes achieved during 2017.

The final element of our corporate approach relates to what we are doing as a business to make sure our impacts are net positive. Environmental impacts from our corporate offices make a small contribution to our footprint but these activities are powerful in setting the tone and instilling a culture of driving more sustainable outcomes.

Table 7.1

TARGET	OUTCOME	2017 STATUS
<b>PROTECT AND ENHANCE</b>		
Continue to manage at risk EPCs out of the portfolio through active asset management	Over 2000 leases within scope of MEEs regulations. 530 EPCs undertaken, and 311 F&Gs left in portfolio to be managed out through leasing events.	
Upgrade systems to improve efficiency of environmental incident reporting.	Worked with the portfolio incident reporting platform to enable better environmental incident tracking.  In 2017 165 incidents reported, 21% increase on 2016 (due to increased reporting).	
Prepare for transition to ISO 14001 2015 Standard	All policies rewritten and EMS now operating to 2015 standard. Transition audit booked for April 2018	
<b>UPSKILL AND INSPIRE</b>		
Conduct staff survey	Staff survey was conducted in Q4 2017	

## 7.1 MANAGING SUSTAINABILITY RISKS

Risks flowing from sustainability are managed in the same way as other business risks. Our company wide corporate risk framework provides a robust foundation for identifying risks and establishing a clear management response. Our 2017 Annual Report and Accounts sets out our approach to business risk and this includes regulatory and legislative risk relating to the environment as well as climate change and extreme weather events.

Sustainability risks are identified and assessed according to likelihood of occurrence and scale of business impact. This reflects financial and reputational impacts. The process ensures relevant business unit leads are alert to identified risks or potential risks and are able to respond as appropriate.

Key corporate risks and our approach to their management are disclosed within the Annual Report and Accounts (see pages 61-68). Key sustainability risks are monitored by the Corporate Risk Group and managed by the Corporate Responsibility Working Group and CR Board.

## 7.2 IDENTIFIED SUSTAINABILITY RISKS

Management of any potential risks flowing from sustainability are high on the corporate agenda.

### Climate Change

As the effects of climate change become more obvious and legislative and regulatory responses expand we are careful to monitor the potential impacts and opportunities for our portfolio. Whilst sustainability risks increase, our assessment is that there is no immediate major risk to the business that would cause a substantive change in operations, revenue or expenditure.

Key threats posed by climate change include increased risk of flooding events and increased demand for energy to maintain ambient temperatures, particularly during periods of unusually high summer temperatures. Flood risk has been identified as low for the portfolio in the past but extreme rainfall has impacted 3 of our assets or the surrounding areas within the last three years.

Our ability to maintain ambient temperatures through periods of extreme heat are supported by our implementation of passive ventilation systems and the installation of efficient lighting that generates less heat than the technologies it replaces. Designing for future climates is incorporated into our Sustainability Vision for Developments to ensure new developments are less exposed to climate risk. In 2017 we commissioned a new climate risk review of our managed assets in the UK, France and Ireland. This is due to report in Q1 2018 and findings will be shared with the relevant business teams.

The longer term risks posed by climate change including the potential for carbon pricing, rising energy costs and pressure on the electricity supply network across the UK, are acknowledged by the business. A range of strategies are in place to ensure early, cost effective mitigation of the potential impacts of these risks including the reduction of carbon emissions from the portfolio, reduction in energy demand and the implementation of a metering strategy that will support electricity demand management.

### Changing political Landscape

We are conscious that there are always unforeseen risks which are increased where there is political uncertainty and a changing legislative landscape. We therefore apply precautionary principles of ensuring in key areas we go beyond compliance in our reporting and in the standards set for our asset management and developments.

Table 7.2 sets out the highest sustainability risks identified for the business. Details of other identified sustainability risks and our management approach are available on our [Positive Places website](#)



**For more information on our corporate risk framework see pages 61-68 of our 2017 Annual Report and Accounts**

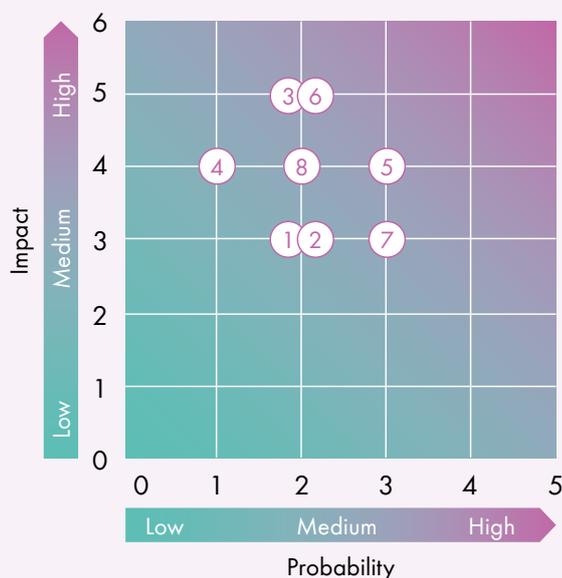


## RISK MANAGEMENT FRAMEWORK

The risk heat map set out below includes the 8 sustainability risks we consider to be most significant for the business. The map is based on the probability of the identified risk occurring and the severity of the impact if it does occur. The analysis demonstrates that the 8 sustainability risks identified as being key are contained within the medium risk area of the map with the exception of risk 4 which is calculated as low. We consider each of the other 7 risk areas as being effectively managed but the business is alert to their importance. The approach to risk management set out here mirrors the corporate risk strategy as set out in our Annual Report and Accounts. Sustainability risks are communicated through the business via our Corporate Responsibility Governance structure. A description of each risk and our management approach is set out in table 7.2

Chart 7.1

### RISK HEAT MAP



## Risk Framework

### RISK REFERENCE NUMBER

### RISK

- |   |  |
|---|--|
| 1 | Failure to properly manage environmental issues leading to potential financial loss and/or penalties, reputational damage  |
| 2 | Non-compliance with good governance standards within the business and within the supply chain leading to potential financial loss and/or penalties, reputational damage  |
| 3 | Failure to address sustainability within our development programme and deliver successful outcomes leading to potential delay to planning and or development process, reputational damage, financial penalties and/or loss                           |
| 4 | Failure to remain relevant to and engaged with local community leading to potential reputational damage with local community stakeholders  |
| 5 | Rising energy cost including regulatory/fiscal charges leading to potential financial loss   |
| 6 | Non-compliance with UK and French Environmental regulation and legislation leading to potential financial loss and/or penalties, reputational damage   |
| 7 | Acquisition of properties or investment interests that negatively impact portfolio sustainability performance leading to potential reputational damage through failure to meet targets and/or financial loss through inefficient operation of assets |
| 8 | Impact of climate change on our portfolios leading to potential financial loss through additional operational and insurance costs, financial and reputation loss through inability of assets to function effectively                                 |

Table 7.2

MANAGEMENT APPROACH	RESIDUAL RISK	CR BOARD RESPONSIBILITY
<ul style="list-style-type: none"> <li>• ISO 14001 accreditation in place at eight UK shopping centres and two offices and being extended</li> <li>• BREEAM-In Use is being implemented in a phased approach as an EMS for our assets in France and will be implemented in Dundrum in 2017</li> <li>• Workman manage all retail park assets and are ISO14001 accredited</li> <li>• Group Environmental Policy subject to annual audit and compliance reviews</li> <li>• Onsite responsibility for environmental risks allocated to specific individuals within the Hammerson operations model</li> </ul>	Medium	Operations Director
<ul style="list-style-type: none"> <li>• Internal Governance controls and code of conduct in place</li> <li>• Suppliers alerted to code of conduct standards and requirements through Supply Chain Survey</li> </ul>	Medium	Chief Executive
<ul style="list-style-type: none"> <li>• BREEAM Excellent established as corporate targets</li> <li>• Sustainability Design Standard and Implementation Plan used to ensure all new-build, refurb and value add projects support progress towards our sustainability targets</li> <li>• Sustainability design workshops are held at the start of new projects to set the sustainability parameters for the project</li> <li>• Sustainability criteria included within Pre-Qualification Questionnaires</li> <li>• Environmental and Social targets and reporting included within Employer's Requirements.</li> <li>• Budgeted community engagement plans are produced for each development</li> </ul>	Medium	Director, Retail Development Direct, UK Retail Parks
<ul style="list-style-type: none"> <li>• Three year Community Engagement Plans established for each asset</li> <li>• Community Engagement actions included in asset business plans</li> <li>• Delivery of Community Engagement as part of Environmental and Community Co-ordinator function in the UK and Ireland assets and included in local team objectives in both UK and France.</li> </ul>	Low	Group Head of Sustainability
<ul style="list-style-type: none"> <li>• Asset and Corporate targets set to reduce energy consumption</li> <li>• Regular monitoring and reporting of energy consumption</li> <li>• Energy consultant incentivised to identify energy savings across UK portfolio</li> <li>• Engagement with tenants to support energy reduction in tenant controlled space</li> <li>• Review and update of fit out standards to reflect energy efficiency best practice</li> </ul>	Medium	Group Head of Sustainability
<ul style="list-style-type: none"> <li>• Routine monitoring of environmental regulation at corporate and asset level</li> <li>• Use of external legal register for regulation and legal alerts</li> <li>• Review of UK, French, Irish and European environmental legislation and regulation carried out in 2017</li> <li>• Ongoing cross industry engagement on sustainability policy"</li> </ul>	Medium	Group Head of Sustainability
<ul style="list-style-type: none"> <li>• Sustainability team engaged in due diligence process to understand sustainability implications and compliance of incoming assets</li> <li>• Environmental data collected as part of due diligence process</li> <li>• New, directly managed assets incorporated into data management system quickly on acquisition</li> <li>• New assets excluded from like-for-like reporting targets until 1 consistent reporting year of data is held</li> <li>• On-site sustainability training provided to operational teams</li> </ul>	Medium	Group Head of Sustainability
<ul style="list-style-type: none"> <li>• Design standard requires all new developments to be designed to withstand predicted climate change</li> <li>• Climate Risk assessment of potential climate change impacts on the business commissioned in 2017</li> <li>• Potential climate risk included in due diligence process for new acquisitions</li> </ul>	Medium	Group Head of Sustainability

## 7.3 OCCUPATIONAL, CUSTOMER HEALTH AND SAFETY AND OUR ENVIRONMENTAL MANAGEMENT SYSTEM

### Data and Governance

The health, safety and security of all our employees, supply chain and customers are of the utmost importance to us. Hammerson Plc, together with all its associated and subsidiary companies, is fully committed to achieving consistently high standards of health and safety management and safety performance in order to safeguard our employees, customers and contractors, and anyone else who may be affected by our actions or activities from the design stage, to construction and operation.

To attain these high standards, we monitor our performance and success to ensure we implement the processes needed to prevent incidents to people, property and the environment through health and safety audits, key performance indicators and objectives and an improving governance programme. All operational policies are derived from our risk management process to ensure that the right solution is implemented across all life cycle stages.

All our safety data is captured using an online management tool which allows us to identify incident trends and implement control measures to mitigate the risk, manage non-conformities identified from all aspects of audits, and ensure learnings and best practise across the portfolio are shared.

In the current complex political environment we are conscious that our assets are at risk and have implemented enhanced policies, practices and training in response to the increased security risk. These include the formation of a Core Crisis Group and the organisation of externally facilitated simulation exercises. This is to enhance our standard health and safety regimes already in place.

We continue to maintain our OHSAS 18001 certification which confirms that we have a compliant health and safety management system in place. The annual statement of intent, signed by the Director responsible for H&S, outlines aims and objectives to maintain safety and health for all employees and others who may be impacted by Hammerson business operations.

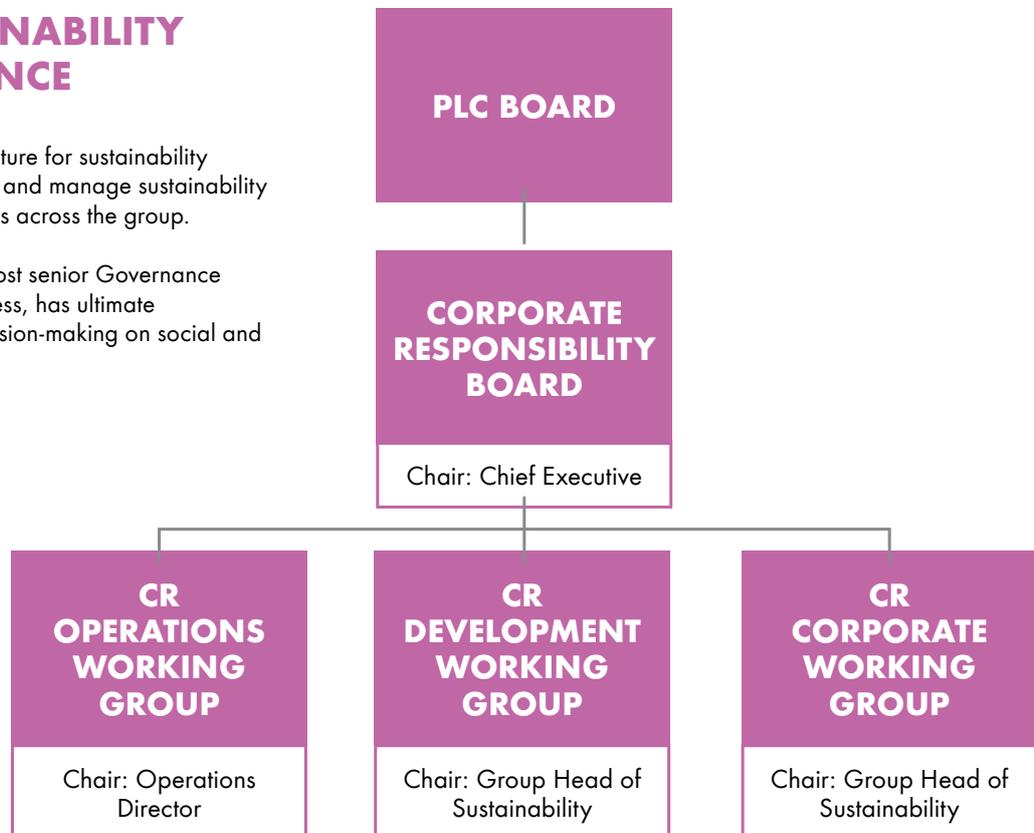


This is available to view on our website here: <http://sustainability.hammerson.com/policies/health-and-safety-policy.html>

## 7.4 SUSTAINABILITY GOVERNANCE

This governance structure for sustainability enables us to identify and manage sustainability risks and opportunities across the group.

The Plc Board, our most senior Governance level within the business, has ultimate responsibility for decision-making on social and environmental issues.



## Sustainability Certification

### Indicator 471-1 Cert-Tot

Table 7.3

CERTIFICATION	UK RETAIL PORTFOLIO	FRANCE RETAIL PORTFOLIO	IRISH RETAIL PORTFOLIO
BREEAM - NEW CONSTRUCTION	11	4	0
BREEAM - In use	0	3	0
BREEAM - % portfolio covered by GIA	49%	66%	0%
BREEAM - % portfolio covered by number of assets	27%	30%	0%
ISO 14001	8	0	0
Energy Performance Certificates	1,441	10	31
Energy Performance Certificate - % portfolio covered by GIA	70%	100%	8%
Energy Performance Certificate - % portfolio requiring EPC	100%	100%	100%

## CORPORATE PROPERTY DATA

Our direct corporate sustainability impacts are relatively limited. We occupy offices in London, Reading, Paris and Dublin, having opened a new office in Dundrum in 2017. The footprint of our offices is small relative to that of the managed assets and developments. However, we endeavour to use our offices as representative of our approach to sustainability through both sustainable fit out commitments and investing in company wide campaigns in our offices to promote sustainable behaviours.

### Hammerson Corporate Office Environmental Data 2017

Table 7.4

	UNIT	EPRA/GRI CODE	KINGS PLACE, LONDON	AQUIS HOUSE, READING	RUE CAMBON, PARIS	HARCOURT CENTRE, DUBLIN <sup>a</sup>	DUNDRUM TOWN CENTRE <sup>b</sup>
Total CO <sub>2</sub> e Emissions scope 2	mtCO <sub>2</sub> e		151	45	62	0	5
Hammerson Electricity Consumption	kWh	GRI 302-1	428,243	128,358	175,651	128	13,421
Hammerson Water Consumption	kWh	GRI 303-1		618		1	
Net internal area	m <sup>3</sup>		3,579	897	1,721		
Energy intensity/m <sup>2</sup> occupied area	kWh/m <sup>2</sup>		120	143	102		
Total waste quantity	tonnes	GRI 306-2	6				
Diverted from landfill	tonnes	GRI 306-2	6				
Total recycled excluding Tenant Shopfit	tonnes	n/a	2				
Total incineration (used for fuel)	tonnes	n/a	1				
Total Hazardous Waste	tonnes	n/a	n/a				
Food Disposal [Direct]	tonnes	n/a	2				
Total incineration (not used for fuel)	tonnes	n/a	0				

### Hammerson Owned Transport

	UNIT	EPRA INDICATOR	2017	SOURCE
Petroleum Consumption	mtCO <sub>2</sub> e	GHG-Dir-Abs	0	DEFRA 2017
Diesel Consumption	mtCO <sub>2</sub> e	GHG-Dir-Abs	32	DEFRA 2017

<sup>a</sup>Harcourt Centre occupied from January to June 2017 only. Consumption estimated due to limited information from building agents

<sup>b</sup>Dundrum Town Centre office occupied from July to December 2017.

Increased accuracy of Kings Place reporting data due to daily waste data collection.

## Product Responsibility – Customer Health and Safety

Table 7.5

GRI 416-1, EPRA H&S-Asset	% Significant product and service categories for which health and safety impacts are assessed for improvement	100%
GRI 416-2, EPRA H&S-Asset	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcome	0
GRI 416-2	Non-compliance with regulations resulting in a fine or penalty	0
GRI 416-2	Non-compliance with regulations resulting in a warning	0
GRI 416-2	Non-compliance with voluntary codes	0
GRI 416-2, EPRA H&S-Comp	RIDDOR reportable injuries across the managed portfolio	11 - UK 33 - France
GRI 416-2	Total number of dangerous occurrences, reportable injuries and fatalities to non-workers on or off a site or assets as a result of non-compliance with regulations and voluntary codes	0
GRI 417-2	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes	0
GRI 306-3	Total number and volume of significant spills	0 59/11% UK
CRE	% of the organisation operation operating in verified compliance with an internationally recognized health and safety management system	100%



## Employees by Employment Type, Contract and Region

### GRI 401-1

Table 7.6

% EMPLOYEES BY AGE BY COUNTRY	UK	FRANCE	IRELAND
21-25	6%	9%	19%
26-34	33%	33%	19%
35-44	24%	28%	23%
45-54	26%	23%	10%
55-64	10%	6%	10%
65+	1%	1%	1%
Less than 21	1%	0%	16%
TOTAL WORKFORCE BY CONTRACT, COUNTRY AND GENDER	UK	FRANCE	IRELAND
Total number of direct employees	372	138	77
Total number of supervised workers	1,192	15	105
Number of employees under indefinite or permanent contract	353	127	67
Number of employees under temporary/fixed term contract	19	11	10
Number of employees on a full time contract	354	133	41
Number of Hammerson's direct employees under part time contract	18	5	36
Number of female employees on a full time contract	187	65	13
Number of Hammerson's direct females employees under part time contract	18	5	10



## Employees by Employment Type, Contract and Region (continued)

GRI 401-1

Table 7.6

<b>EMPLOYEE BY CATEGORY</b>	<b>UK</b>	<b>FRANCE</b>	<b>IRELAND</b>
Number of employees in Category 1 (Senior Management)	32	12	1
Number of employees in Category 2 (other Hammerson staff apart from Senior Management)	207	97	18
Number of employees in Category 3 (Support Employees)	133	29	58
<b>FLEXIBLE WORKING</b>	<b>UK</b>	<b>FRANCE</b>	<b>IRELAND</b>
Number of Hammerson's direct employees working flexible hours	31	4	n/a
Number of total requests for flexible working for the reporting year	12	4	0
Number of requests for flexible working that have been accepted	12	4	0

## Employee Turnover

GRI 401-1, EPRA EMP-TURNOVER

<b>EMPLOYEE TURNOVER BY AGE AND GENDER</b>	<b>UK</b>	<b>FRANCE</b>	<b>IRELAND</b>
Number of permanent employees 21-25 who left Hammerson during reporting year	3	1	0
Number of permanent employees 26-34 who left Hammerson during reporting year	29	10	0
Number of permanent employees 35-44 who left Hammerson during reporting year	13	6	0
Number of permanent employees 45-54 who left Hammerson during reporting year	10	1	0
Number of permanent employees 55-64 who left Hammerson during reporting year	6	0	1
Number of permanent employees under 21 who left Hammerson during reporting year	1	0	0
Number of permanent employees+65 who left Hammerson during reporting year	1	0	0
<b>TURNOVER TOTAL BY GENDER AND COUNTRY</b> (Hammerson's permanent employees only)	<b>UK</b>	<b>FRANCE</b>	<b>IRELAND</b>
Number of female leavers during the reporting year	37	5	0
Number of male leavers during the reporting year	26	13	1

## Women in the Workforce

GRI 401-1, EPRA DIVERSITY-EMP

<b>NUMBER OF EMPLOYEES BY GENDER</b>	<b>UK</b>	<b>FRANCE</b>	<b>IRELAND</b>
Hammerson's female direct employees (includes contractors)	205	69	23
Hammerson's male direct employees (includes contractors)	167	69	54
Female Employees	55%	50%	29.87%
Females on the Board of Directors	20%	20%	n/a
Number of employees given diversity training	110	0	0
Total number of incidents of discrimination	0	0	0
<b>EMPLOYEES BY CATEGORY BY GENDER</b>			
Females working full time	91.22%	94.20%	56.52%
Females working part time	8.78%	7.25%	43.48%

## Investor Engagement

Table 7.7

### GRI 201-1

INDICATOR	2013	2014	2015	2016	2017
Number of SRI investors with whom individual and collective meetings have been held in calendar year	1	12	67	10	17
Individual meetings and/or group presentations with investors representing % of issued share capital	27%	24%	60%	60%	18%

## Direct Economic Value Generated and Distributed

### Direct Economic Value Generated

#### G4 EC1

##### REVENUES

Gross rental income	328.6	344.1	366.4	398.7	421.9
Service charge income	59.0	59.7	63.1	68.6	101.9
Management fee income (net)	6.9	5.6	6.0	8.5	12.1
Interest receivable	6.5	9.1	20.3	29.8	20.8
Share of results from VR & VIA/Other income	12.9	16.9	20.9	29.5	35.8
Proceeds from disposals	261.1	123.0	185.1	635.5	491.0
Sub total	675.0	558.4	661.8	1170.6	1083.5

### Direct Economic Value Distributed

##### OPERATING COSTS

Other property outgoings	28.5	28.1	34.5	37.7	36.2
Service charge expenses	68.9	70.1	76.4	83.1	93.1
Other administration costs (excl. staff costs)	17.3	20.5	18.0	22.7	28.4
F&F expenditure	0.9	1.8	3.8	0.2	0.4
Capital expenditure	388.0	566.3	313.0	1532.8	409.1
Operating costs	307.6	118.7	128.9	143.5	157.7
Total staff costs (incl. social security)	44.0	44.7	48.8	53.6	56.4
Interest	115.9	126.7	123.6	128.8	170.7
Dividends	130.1	139.5	165.2	180.1	193.6
Sub total	246.0	266.2	288.8	308.9	364.3
Tax paid - current	0.8	0.9	1.6	2.7	1.8
Total costs	598.4	430.5	468.1	508.7	580.2
Direct economic value retained	76.6	127.9	193.7	661.9	503.3

##### COMMUNITY INVESTMENTS

CI1 Hammerson's direct contributions	0.43	1.66	2.15	2.2	2.20
GRI 201-4 Significant financial assistance received from government	0	0	0	0	0
GRI 415-1 Total value of financial and in kind contributions to political parties, politicians and related institutions by country	0	0	0	0	0
GRI 419-1 Monetary value of significant fines and total number of non monetary sanctions for non compliance with laws and regulations	0	0	0	0	0

## 7.5 EMPLOYEE DEVELOPMENT

We have developed a training programme that nurtures talent at each level of the business.

### Some examples of key areas in which we train:

- **Diversity training**

We are committed to developing a truly inclusive environment where colleagues can bring their 'whole self' to work and maximise their contribution. In support of this objective, in 2017 we delivered training including 'Unconscious Bias' sessions, and we developed the next phase of our Diversity and Inclusion strategy that will inform our activities through to the end of 2019. Our commitment to drive meaningful and sustainable change in this area was also evidenced by our actions during the course of the year with particular highlights being our recognition of National Inclusion Week and World Day for Cultural Diversity.

- **Employee induction**

We set ourselves a target to provide sustainability training to 100% of employees who had been with Hammerson for more than a year. We hit this target at the very beginning of 2018.

- **Operational training on environmental management**

We have developed a new operational environmental management training course, aimed at those with operational control of our centres. The 2 day course

aims to provide delegates with a good understanding of environmental legal compliance, how to assess performance, incident management, development of a business case and how to positively influence and engage colleagues in sustainability. The course is framed around our environmental management system and therefore enables deep engagement with our aspects and impacts identification and management. The course ran a trial in October 2017 with 8 attendees. 2 courses are scheduled for 2018 (with 8 attendees per course) and more are planned.

- **Sustainability leadership course**

Since 2016 we have been committed to sending senior managers on the Cambridge Leadership in Sustainability course. Five of our senior leaders took on the course in 2017, adding to the six who completed in 2016.

- **Our new e-learning platform**

In the summer we launched the Hammerson Learning Management System (LMS) to our UK and Ireland business. This platform enables us to host a broad suite of e-learning materials which colleagues are encouraged to use for professional and personal development.

### Employee Development and Satisfaction

#### GRI 401-1 404-3, EPRA EMP-TRAINING, EMP-DEV



Table 7.8

EMPLOYEE TRAINING	UK	FRANCE	IRELAND
Total expenditure on employee training and total hours of training per year	211,600	165,661	n/a
Total hours of training per year per employee	10	28	n/a
Permanent employees receiving regular performance and career development reviews	100.00%	100.00%	100.00%
EMPLOYEE SATISFACTION	UK	FRANCE	IRELAND
Number of employees receiving regular performance and career development reviews	353	127	67
Number of employees to whom the "Great Place to Work" survey was sent	393	131	n/a
Number of employees who responded to the "Great Place to Work" survey	314	118	n/a
Employees who indicated a positive level of satisfaction at Hammerson (Engagement Score)	71	72	n/a

## 7.6 COMMUNITY INVESTMENT

As demonstrated in our socio-economic foot print and related analysis, the development and operation of large retail assets presents opportunities for significant community investment. Table 7.9 sets out in some detail the total value of community investment made by Hammerson over the last three years. This is calculated using the industry standards established by the London Benchmarking Group of which we are a member.

## 7.6 Community Investment

### GRI 203-2, EPRA COMTY-ENG

#### TOTAL VOLUNTARY INVESTMENT

Total value of direct contributions to the community broken down by type of contribution and country

Cash contributions

Value of staff time

In-kind donations

Total in kind - Corporate

Total in kind - Developments

Total value of indirect contributions to the community generated from other sources than Hammerson

#### RETAIL PORTFOLIO (SHOPPING CENTRES AND RETAIL PARKS)

Charity collections and money raised from sales

Value of HOL and non Hammerson staff time dedicated to community activities

Other leverage (e.g. other external partners, employees' contributions and service charge)

#### CORPORATE

Charity collections and money raised from sales

Value of HOL and non Hammerson staff time dedicated to community activities

Other leverage (e.g. other external partners, employees' contributions and service charge)

#### DEVELOPMENTS

Charity collections and money raised from sales

Value of HOL and non Hammerson staff time dedicated to community activities

Other leverage (e.g. other external partners, employees' contributions and service charge)

#### Mandatory Investments - Developments

Community investment through planning agreements

#### Other Indicators

Number of organisations that benefited from Hammerson direct and indirect contributions

Full time equivalents on direct CR activities

% Volunteering day entitlements taken up by employees

Jobs created from developments

% Previously unemployed

Number of persons voluntarily or involuntarily displaced and/or resettled by development, broken down by project

Table 7.9

2015	2016	2017	COMMENTARY ON TREND
£2,541,913	£3,067,660	£3,038,255	Slight reduction as a result of fewer active development schemes
£2,158,656	£2,438,660	£2,614,917	Improved reporting from centres as a result of dedicated community individuals and improved reporting from centres as a result of dedicated community staff
£792,277	£777,481	£863,372	Increase due to incorporation of Irish portfolio
£227,860	£328,498	£551,545	Increase due to incorporation of Irish portfolio
£1,276,374	£1,332,681	£1,200,000	Reduction as a result of fewer community and charitable lets occupying units at Whitgift Centre and Centrale Shopping Centre pre-development start
£1,653	£0	£997,16	Small increase as result of Kings Place donation of office space
£0	£0	£0	No direct in kind donations via developments
£383,257	£629,000	£423,338	Improved reporting via centre teams and dedicated resource at centre teams
£118,227	£309,084	£177,138	Fewer developments / less engagement of suppliers
£77,592	£150,000	£207,217	Dedicated staff at each centre now in place and expansion of team in UK and France
£51,441	£20,194	£72,701	New suppliers in place and greater emphasis on reporting
0	0	£27,021	No corporate sales / charity collections in office (employees contribution included other leverage)
£80,000	£100,000	£183,383	Increase in staffing
£13,065	£36,945	£28,860	Slight decrease - reporting to be reviewed
£0	£0	£235	Charity collection on development schemes
£47,096	£47,096	£60,969	Additional member of staff to support with developments
£3,250	£41,590	£25,700	Reduction a result of less developments
£8,956	£110,000	£355,940	From developments on retails parks
276	434	476	Improved reporting via centre teams and dedicated resource at centres
13	18	20	Each centre now has a dedicated CR individual
17	27		Introduction of staff volunteering system has increased volunteering and improved reporting
4527	6687	390	Elliott's Field Retail Park Phase 2 and Fife Central Retail Park
8%	23%	5%	Data average from True Value report
0	0	0	None of our development projects have required displacement of persons in the three years to the reporting date.

## 7.7 COMMUNITY PROJECTS

We work in partnership with both local and national partners to create and deliver community projects that meet the needs of those located close to our assets. Table 7.10 outlines some of the projects delivered in 2017.

### Key Local Community Engagement Projects and Initiatives

Table 7.10

ASSET	PROJECT/INITIATIVE	THEME	INPUT/OUTCOME
Brent Cross	Silverweek	Accessible Places	625 people engaged
Brent Cross	Enterprise Barnet	Enterprise	34 people engaged
Brent Cross	Retail EBP	Employment & Skills	245 students engaged
Cabot	Destination Bristol	Enterprise	£85,000 invested
Cabot	Charitable partnerships	Health & Wellbeing	£7800 raised, 200 people engaged
Bullring	Pre-employment training	Employment & Skills	55 participants, 23 gained employment
Bullring	Young Enterprise Trade Fair	Young People/Entrepreneurship	5 schools engaged, 30 young people Participating
Bullring	National Citizens Service Dragons' Den	Young People/Entrepreneurship	70 young people engaged and supported
Centrale/Whitgift	Youth & Enterprise Opportunity Grant Fund	Young People/Enterprise	£6K grants awarded, 7 local charities organisations/groups benefitted
Centrale/Whitgift	Coast to Capital Enterprise Advisor Network	Young People/Employment & skills	Dedicated Centre Team volunteer, 56 young people supported
Centrale/Whitgift	Demolition training	Employment & Skills	6 local people supported by CRISIS (national homeless charity) gained qualification
Dundrum	World Diabetes Day	Health & Wellbeing	503 people assessed
Elliott's Field	Community Grants Fund	Health & Wellbeing	6 local community groups/organisations received grant funding
Highcross	National Citizens Service Business Challenge	Young People	300 young people engaged
Highcross	World Mental Health Day Pop Up Shop	Health & Wellbeing	Over 400 people engaged and supported
Highcross	Speed Networking & Careers Day	Young People/Employment & skills	30 students engaged and supported
Italie Deux	Paris Initiative Enterprise	Enterprise	14 entrepreneurs supported
ILAC	Inner City Homeless	Health & Wellbeing	Supporting roughsleepers in Dublin
Kircaldy Fife Retail Park	Development	Employment & Skills	6 apprentices employed, 40% local employment
Les 3 Fontaines	La Boutique des créateurs	Enterprise	57 entrepreneurs supported
Oracle	School Careers Fair	Young People	50 young people engaged
Oracle	Mentoring Programme	Young People	2 students engaged
Place Des Halles	Enterprise Competition	Enterprise	13 teams engaged and supported
Silverburn	Braveheart Challenge	Young People	200 school pupils engaged
Silverburn	Christmas Food Bank appeal	Health & Wellbeing	£2,000 food donated from over 30 centre retailers and contractors

## Key Local Community Engagement Projects and Initiatives (continued)

Table 7.10

ASSET	PROJECT/INITIATIVE	THEME	INPUT/OUTCOME
Silverburn	Retailer Jobs Fair & Customer Service training	Employment & Skills	18 centre retailers engaged, over 120 local people recruited
Union Square	Aberdeen Foyer mock interviews	Young People/Employment & Skills	19 young people engaged and supported
Union Square	Food Poverty Action Aberdeen	Health & Wellbeing	Dedicated space within centre for Food Bank donations
Victoria Leeds	Teenage Market	Young People/Entrepreneurship	4 events, 113 young traders supported
Victoria Leeds	Leeds Poverty Truth	Health & Wellbeing	2 dedicated Hammerson/Centre Team Volunteers over twelve month period
Victoria Leeds	Into University Regeneration Challenge	Young People	60 young people engaged
Westquay	Teenage Market	Young People/Entrepreneurship	2 events, 34 young traders supported
Westquay	Refurbishment of medieval Cargo ship	Employment & Skills	8 apprentices and students up-skilled
Westquay	Cooking classes for Disadvantaged residents	Health & Wellbeing	28 people engaged



# REPORTING APPROACH AND DATA MANAGEMENT

## SECTION 8

Hammerson have published comprehensive data on our material sustainability issues for all assets since 2010 including carbon emissions, energy and water consumption, waste and community engagement.

This report covers the period 1 January - 31 December 2017. In 2017 we launched Net Positive targets for our carbon emissions, water, resource use and socio-economic impacts for the business. These are extremely challenging and extend our five-year targets in each of these four areas. As they cover the whole business, extending beyond our usual reporting boundaries, we

have established an additional element within our basis of reporting to make sure they are clear. This chapter of our report sets out our reporting approach for all areas of our sustainability reporting.



**Key elements are available to download from our website at:**

**<http://sustainability.hammerson.com/stakeholder-goals/monitor-and-evolve.html>**

### VOLUNTARY DISCLOSURE

What is covered in this reporting?

**Includes energy demand and related Scope 1 and 2 emissions from:**

- Landlord procured utilities

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- Waste and recycling

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- Refrigerants

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- Social and Governance indicators

Reported at Group level and disaggregated by operating region and portfolio on a whole portfolio and like for like portfolio basis. The like for like portfolio includes all managed assets held consistently in our UK Shopping Centre and Retail Parks portfolios and the French and Irish portfolios, since 2015. Our EPRA reporting includes assets held consistently for the previous 24 months that have been in operation and not under development.

#### **Standards and assurance**

Produced in accordance with the EPRA Sustainability Best Practice Reporting standards and Global Reporting Initiative recommendations  
Third party assured

#### **Intensity Data**

Intensity data is based on common parts areas, car park spaces and visitor numbers

#### **Reporting Timeframe**

1 January – 31 December reporting year

#### **Baseline**

2015 Baseline year

### MANDATORY GHG REPORTING

What is included in this reporting?

**Group level GHG emissions in tonnes CO<sub>2</sub>e including:**

Scope 1 and 2 emissions from assets we have operational control over plus scope 3 emissions from waste and water

Corporate emissions including Scope 3 corporate business travel.

#### **Intensity data**

Intensity data based on adjusted profit before tax

#### **Reporting time frame**

1 Oct – 20 Sept of the reporting year

#### **Assurance**

Data collection procedures and data quality are assured by a third party.

# REPORTING BOUNDARIES

Hammerson's operations include development, asset management and investment. The assets included in this report are set out in Table 8.1.

## This includes:

- All assets over which we have managerial control, either directly or through a directly contracted third party including strategic assets where we are responsible for supplies.
- Properties where we directly control or manage the provision of shared utility services and where we have data for a minimum period of two years over which time the asset has not undergone development activity that would have significantly affected performance.
- Assets 100% owned by Hammerson and those where we have a stake in a joint venture or investment fund.
- As a landlord we have direct control over a relatively limited proportion of space within our assets. For our major environmental impacts we report only on those areas that we control therefore tenant usage data is excluded.

## Not included in the report:

- Assets where we have only an investment interest or in which we hold only debt or other financial instruments.
- We do not report on impacts from construction activities at our developments as these are under the control of a third party contractor. These will be reported under our Net Positive targets from 2021 reporting year onwards.

## NET POSITIVE REPORTING

What is covered in this reporting?

**Phase 1 2016 – 2020 reporting includes Hammerson's equity share of emissions from:**

- Landlord procured energy, water, waste & refrigerants
- Tenant sub-metered energy, water, waste & refrigerants
- Vacant unit energy consumption
- Corporate travel

Includes emissions from whole portfolio with assets included/excluded from date of purchase/sale. Reported as 3-year rolling average.

### The Basis of Reporting

The basis of reporting for our net positive targets differs from our standard environmental reporting protocols.

1. We have taken an equity share approach to the setting of the targets and their reporting for Net Positive. Whilst we have operational control of those assets we manage, key decisions are made jointly with our joint venture (JV) partners. Taking an equity share approach restricts us from benefiting from impact reductions flowing from the investment of those JV partners. It also reduces the overall impacts we are addressing to those from which Hammerson accrues financial benefits, reinforcing the concept of de-coupling business growth from negative environmental and social impacts.
2. Our net positive targets include all jurisdictions in which the business has commercial interests.

3. Given that it is not possible for a property company to operate without environmental impacts, an offsetting mechanism has been established as part of the development of our Net Positive targets. Projects will be identified that will equate to the remaining impacts we are unable to avoid, calculated at the end of each five year target phase. A series of rules has been established to define what projects are considered legitimate offsetting for this purpose. These are available on our website here: <http://sustainability.hammerson.com/347/our-net-positive-objective.html>
4. The baseline year for our Net Positive targets is 2015. However, Net Positive is calculated on a whole portfolio basis, not on a like for like basis. We therefore include the impact of assets purchased during the reporting period from the date of ownership, and exclude assets sold, from the date of sale. To accommodate this whole portfolio approach outcomes will be reported on the basis of a three year rolling average.

### Intensity Data

Intensity data is based on common parts areas, car park spaces and visitor numbers

### Reporting time frame

Data reported using a three year rolling average based on a 1 January – 31 December reporting year

### Baseline

2015 baseline year

### Assurance

Environmental data within our Net Positive reporting calculations has been assured by a third party for robustness and the reliability of our data collection and management procedures.

## 8.1 KEY CHANGES TO THE PORTFOLIOS

In 2017 we celebrated the first birthdays of Victoria Gate, Leeds and Westquay South, Southampton, and so have the first full year of data for these assets. Two additional centres in Dublin – Ilac and Swords Pavilions, were integrated into our management control during 2017 and we opened Phase 2 of Elliott’s Field Retail Park in Rugby.

In 2017 we sold two French assets – St Sebastien in Nancy and Place des Halles in Strasbourg. We also sold Thanet Retail Park in the UK.

The environmental performance of these assets is excluded from our like for like portfolio analysis but included in our whole portfolio, regional and Group data and for our Net Positive targets.





Italie Deux, France

## 8.2 CORPORATE TRAVEL DATA

Emissions from our corporate travel are calculated for the period 1 October to 30 September. The 2017 in line with our reporting period for our GHG emissions as reported in the annual report. This is the only data that is not reported on a calendar year basis in this report. Rail and air mileage is calculated using online mileage calculators.

### The data included for business travel includes;

- Fleet transport for the global business

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- Air travel for the global business

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- Domestic and international train journeys for the global business

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- Taxis and public transport journeys for the UK business only

Emissions associated with visitor travel to our shopping centres are based on 2017 surveys conducted in each of our assets indicating visitor travel modes and using annual footfall to our centres. For car journeys we assumed 2.4 heads per vehicle and an average of 11.91 miles per round trip, based on the BCSC 2008 report 'Contribution of the Retail Sector to the Economy'.

## DATA PROVISION

Our reporting separates out our whole portfolios from our like-for-like portfolios – those assets we have held consistently over the past 2 years as per EPRA guidelines. Coverage within our whole portfolio reporting includes all assets which have been under our asset management control for all or part of the previous 12 months.



Elliott's Field, Rugby

## 8.3 DATA COLLECTION AND VERIFICATION

We have comprehensive, robust environmental data collection systems in place across our portfolios.

Utility and waste data is entered into our data management system, Credit 360, on a monthly basis for our managed assets. This includes Retail Park assets in the UK and our Shopping Centres in the UK, Ireland and France.

This data is drawn from manual meter readings, automated meter uploads, invoices and data provided by our energy bureau service. The data is internally verified at three levels internally by the Sustainability Data Manager, Energy and Environmental Manager and Group Head of Sustainability or by the Head of Corporate Responsibility France for the French Assets. It is then externally assured by Deloitte and JLL Upstream.

Our collection and verification processes undergo third party assurance each year, and are subject to internal audit procedures and are part of our ISO14001 compliant EMS.



**The Deloitte Assurance Statement is on our website here: <http://sustainability.hammerson.com/monitor-and-evolve/gri-disclosures.html>**

In Q2 of 2016, we automated input of half-hourly energy consumption data for the Retail Parks portfolio. This is now automatically uploaded once a month into Credit 360 for the majority of the Retail Parks portfolio, reducing the opportunity for error and streamlining our data gathering process.

- Data is entered on a monthly basis for all of our UK, Ireland and France shopping centres
- Data is provided on a monthly and quarterly basis by our external property managers, Workman, for our Retail Parks
- Data management processes form part of our environmental management system and are audited regularly to ISO14001 standards.

Some data is collected and maintained outside of the Credit 360 system:

- Data for transport emissions is collected direct from employees
- Data for office energy consumption is gathered direct from our external property managers

## 8.4 DATA QUALITY

We are focused on continuous improvement of our data.



### A comprehensive data management system

We implemented our comprehensive environmental data management system, Credit 360, in 2011 which continues to improve the level of accuracy in our data and the efficiency of the reporting process. We have a high level of confidence in the accuracy of the data we are reporting. This is supported by the independent assurance process undertaken annually for our GHG emissions reporting through Deloitte and JLL.

Whilst we make every effort to ensure our reporting is based on actual data there are inevitably instances where estimations are necessary. These are calculated in one of two ways: i) Based on actual data for the same month in the previous year ii) Based on invoices from utility providers.

Less than 1% of utility data is estimated in our 2017 Sustainability Report and this is indicated in the relevant charts in Section 2 of the report.

A small amount of data has been estimated in this year's reporting – specifically <1% of corporate energy demand, 1% of retail parks landlord energy demand, 0.6% of Hammerson France landlord energy demand. This is due to data availability at the time of reporting. Verified data will be included as soon as it is available.



### Training

In order to ensure our data management systems remain robust within a growing portfolio, we focused attention during 2017 on process improvements for on boarding and training of teams at new assets. This has been especially crucial in our asset acquisitions within Ireland. Our French assets have also undergone management restructures that have increased focus on sustainability and additional training has been provided to support this.

Support and regular training are provided to the Centre Teams and third party property managers, to ensure they are using the data management system correctly. They all have access to the system and are able to monitor performance to identify anomalies. The majority of data is taken from manual meter readings carried out monthly or supplier invoicing. We require evidence to be provided where there are variances larger than 10% compared to the same month in the previous year, this data married with comments and evidence are approved through the internal approval tree.



### Continued improvements

Manual reporting of utility data, whilst normal across the sector, is resource intensive and prone to error. During 2018 we will be continuing to streamline the process for environmental data collection.

We are currently looking to automate our data management through a portfolio-wide utility metering project across our UK Shopping Centre assets. This is expected to improve data visibility, communication and accuracy.

We have been especially pleased by the introduction of automated data feeds for half hourly data on the Retail Parks portfolio in 2016. Building on our experience we will set up a new utility management platform which works from a comprehensive metering strategy, providing 15-minute interval data for all meters and sub-meters for all utilities. In addition to providing more accurate, auditable data, we will be able to more proactively manage our utility consumption and look for further savings. The UK shopping centre metering rollout will start in early 2018, and continue with the Irish shopping centres in 2019

## 8.4.2 DATA QUALITY ISSUES BY PORTFOLIO



### UK Shopping Centres

Following the England and Wales water market opening in April 2017, we faced some delays in receiving invoices and supplier data. In some cases such as the Whitgift Centre and Victoria Leeds, we have continued to face water billing issues and delays since April.



### UK Retail Parks

The automated metering uploads for management of the Retail Parks Portfolio is carried out for Hammerson by Workman, a third party contractor. Despite early configuration difficulties, this is working very smoothly for processing meter reading data. We are confident that the utilities data reported for the retail parks for 2017 is accurate.

## 8.5 DATA COVERAGE

Table 8.1 sets out the assets included within our sustainability data for the reporting year 2017.

### Data Coverage

Table 8.1

<b>ASSETS INCLUDED IN THE WHOLE PORTFOLIO, LIKE-FOR-LIKE AND EPRA DATA SETS FOR 2017</b>	<b>WHOLE PORTFOLIO</b>	<b>LFL DATA (VS. 2015 BASELINE)</b>	<b>EPRA</b>
<b>HAMMERSON UK SHOPPING CENTRE PORTFOLIO</b>	<b>2017</b>	<b>2017</b>	<b>2017</b>
Brent Cross, London	Y	Y	Y
Bullring, Birmingham	Y	Y	Y
Cabot Circus, Bristol	Y	Y	Y
Centrale, Croydon	Y	Y	Y
Highcross, Leicester	Y	Y	Y
Monument Mall, Newcastle	N Sold 2015	N	N
Silverburn, Glasgow	Y	N	Y
The Oracle, Reading	Y	Y	Y
Union Square, Aberdeen	Y	Y	Y
Victoria Quarter, Leeds	Y	Y	N
Victoria Gate, Leeds	Y Opened 2016	N	N
Westquay, Southampton	Y	Y	Y
Westquay South, Southampton	Y Opened 2016	N	N
Whitgift, Croydon	Y	N	N
<b>HAMMERSON IRELAND SHOPPING CENTRE PORTFOLIO</b>			
Dundrum Town Centre, Dublin	Y Acquired 2016	N	N
Ilac, Dublin	Y Acquired 2017	N	N
Swords Pavilions, Dublin	Y Acquired 2017	N	N
<b>HAMMERSON FRANCE SHOPPING CENTRE PORTFOLIO</b>			
Bercy 2	N Sold 2015	N	N
Espace, Saint Quentin	Y	Y	Y
Italie Deux, Paris	Y	Y	Y
Jeu de Paume, Bauvais	Y Opened 2015	N	Y
Les 3 Fontaines, Cergy-Pontoise	Y	Y	Y
Les Terrasses du Port, Marseille	Y	Y	Y
Nicetoile, Nice	Y Acquired Feb 2015	N	Y
O'Parinor Shopping Centre, Aulnay-sous-Bois	Y	Y	Y
Place des Halles, Strasbourg	Y	Y	Y
Saint Sebastien, Nancy	Y	Y	Y
SQYOuest, Saint Quentin	Y	N	N

## Data Coverage (continued)

Table 8.1

ASSETS INCLUDED IN THE WHOLE PORTFOLIO, LIKE-FOR-LIKE AND EPRA DATA SETS FOR 2017	WHOLE PORTFOLIO	LFL DATA (VS. 2015 BASELINE)	EPRA
<b>HAMMERSON UK RETAIL PARKS PORTFOLIO</b>			
Abbey Retail Park, Belfast	Y	Y	Y
Abbotsinch Retail Park, Glasgow	Y	Y	Y
Battery Retail Park, Birmingham	Y	Y	Y
Brent South Shopping Park, Brent Cross	Y	Y	Y
Central Retail Park ( 1 & 2), Falkirk	Y	Y	Y
Cleveland Retail Park, Middlesbrough	Y	Y	Y
Cyfarthfa Retail Park, Merthyr Tydfil	Y	Y	Y
Dallow Road, Luton Warehouse	Y	Y	Y
East Kent Retail Park, Thanet	Sold in 2017	N	N
Elliott's Field, Rugby	Opened 2015	N	N
Fife Central Retail Park, Kirkcaldy	Y	Y	Y
Imperial Retail Park, Bristol	Y	Y	Y
Lakeside Leisure Park, Thurrock	Y	Y	Y
Lakeside Extra Retail Park, Thurrock	Sold in 2016	N	N
Lakeside Tunnel Retail Park, Thurrock	Sold in 2016	N	N
Manor Walks Shopping Centre, Cramlington	Sold Q2 2016	N	N
Parc Tawe Retail Park, Swansea	Y	Y	Y
Ravenhead Retail Park, St Helens	Y	Y	Y
St Oswalds Retail Park, Gloucester	Y	Y	Y
Telford Forge Retail Park	Y	Y	Y
The Broadway, Didcot	Y	Y	Y
The Orchard Centre, Didcot	Y	Y	Y
Westmorland Retail Park, Cramlington	Sold Q2 2016	N	N
Westwood Gateway Retail Park, Thanet	Sold in 2017	N	N
Westwood Retail Park, Thanet	Sold in 2017	N	N
Wrekin Retail Park, Telford	Y	Y	Y
Wrekin Retail Park, Telford	Y	Y	Y
<b>HAMMERSON CORPORATE PORTFOLIO</b>			
Aquis House, Reading	Y	N	N
Dundrum Offices, Dublin	Acquired 2017	N	N
Kings Place, London	Y	N	N
Rue Cambon, Paris	Y	N	N
Hammerson Strategic Portfolio	Y	N	N
Hammerson Strategic Portfolio	Y	N	N

## GRI Index

Table 8.2

GENERAL STANDARD DISCLOSURES	PAGE NUMBER (OR LINK)	IDENTIFIED OMISSIONS	EXTERNAL ASSURANCE
<b>STRATEGY AND ANALYSIS</b>			
102-14	Chief Executive statement p. 4		
<b>ORGANIZATIONAL PROFILE</b>			
102-1	Hammerson Plc. p. 8-9		
102-2	Annual Report and Accounts p. 2-3		
102-3	Annual Report and Accounts p. 192		
102-4	Annual Report and Accounts p. 3, 188-189		
102-5	Annual Report and Accounts p. 192-193		
102-6	Annual Report and Accounts p. 2, 192-193		
102-7	Annual Report and Accounts p. 2, 192-193		
102-8	HR and Employee data tables p. 89-91		
102-41	HR and Employee data tables p. 89-91		
102-9	Stakeholder engagement section, p.38		
102-10	Annual Report and Accounts p. 11-12		
102-11	p.85		
102-12	Chief Executive statement P. 4		
102-13	Industry Presence, p. 41		
EPRA Gov-Board	Annual Report and Accounts pp.72-73		
EPRA Gov-Selection	Annual Report and Accounts p. 71		
EPRA Gov-Col	Annual Report and Accounts pp. 84, 114-118		
<b>IDENTIFIED MATERIAL TOPICS AND BOUNDARIES</b>			
102-45	Annual Report and Accounts, entities and assets included p. 188		
102-46	p. 12, 13, 97		
102-47	p.13		
102-48	Restatements specified in relevant data sections		
102-49	p. 100		
<b>STAKEHOLDER ENGAGEMENT</b>			
102-40	p. 40-43		
102-42	p. 40-43		
102-43	p. 40-43		
102-44	p. 40-41		

GENERAL STANDARD DISCLOSURES	PAGE NUMBER (OR LINK)	IDENTIFIED OMISSIONS	EXTERNAL ASSURANCE
<b>REPORT PROFILE</b>			
102-50	p. 96, 98		
102-51	2017, May		
102-52	Annual		
102-53	Back cover		
102-54	This report has been prepared in accordance with the GRI Standards: Core option		
102-55	p. 106-9		
102-56	p. 102		
<b>GOVERNANCE</b>			
102-18	p. 86-90		
<b>ETHICS AND INTEGRITY</b>			
102-16	p. 84- 85  Annual Report and Accounts p. 135 "Statement of compliance", p. 114-118		
<b>SPECIFIC STANDARD DISCLOSURES</b>			
<b>DMA and Indicators</b>			
<b>CATEGORY: ECONOMIC</b>			
<b>MATERIAL TOPIC: INDIRECT ECONOMIC IMPACTS</b>			
103	p. 15-16, 26-27		
203-2	p. 18, 29, 94-95		
<b>CATEGORY: ENVIRONMENTAL</b>			
<b>MATERIAL TOPIC: MATERIALS</b>			
103-1	p. 15-16, 22-23		
301-2		We do not record the % of recycled and re-used input materials by category as we do not directly procure materials	
<b>MATERIAL TOPIC: ENERGY</b>			
103	p. 15-16, 18-21		Data assured by Deloitte LLP
302-1	p. 54-61		Performance against targets assured by JLL Upstream
302-4	p. 18, 20, 64-61		
302-5	p. 63	Reductions related specifically to energy efficiency initiatives can not be reported as they related to integrated mechanical and electronic equipment which is not separately submetered.	
CRE1	p. 56-61		

## GRI Index (continued)

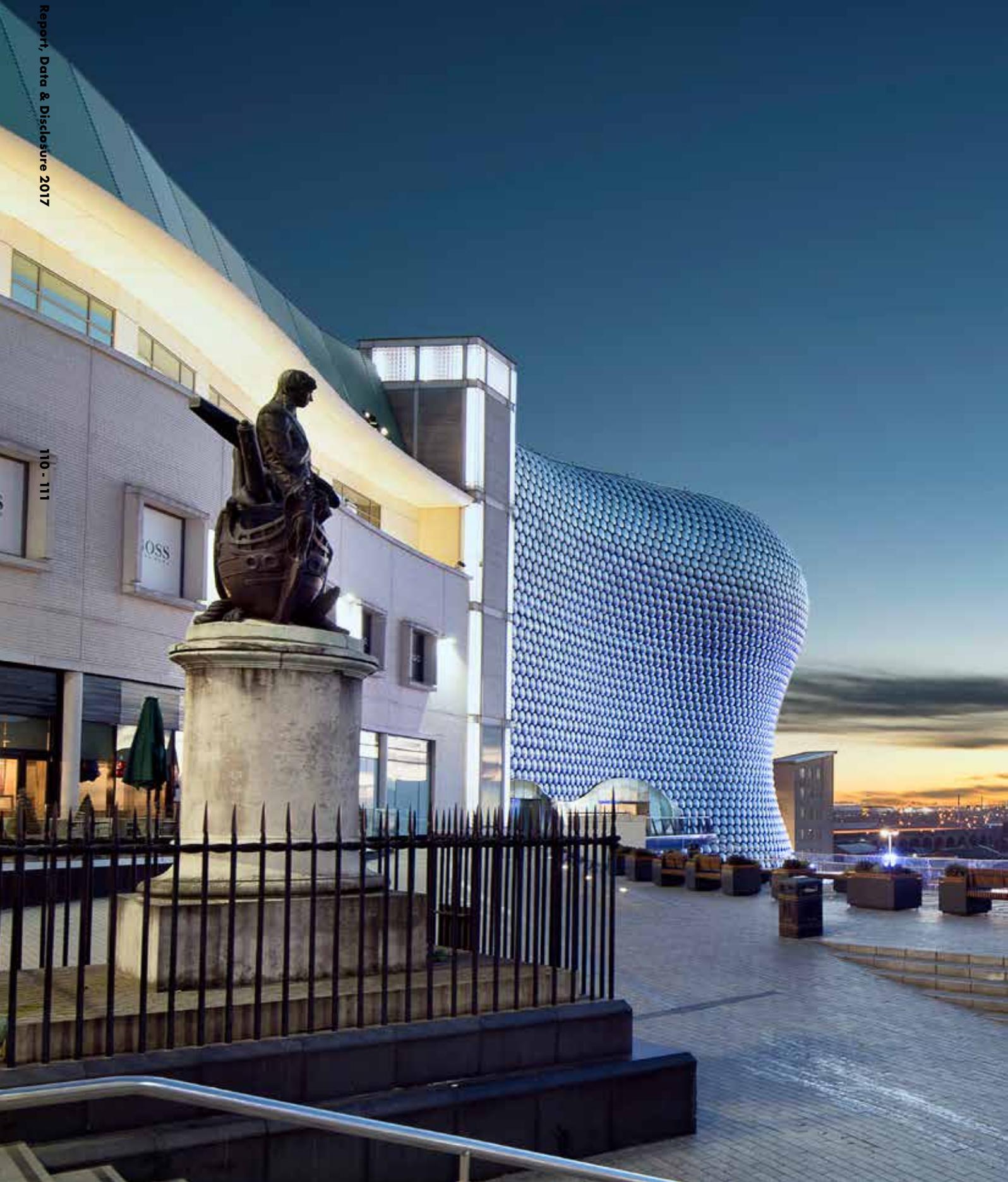
Table 8.2

GENERAL STANDARD DISCLOSURES	PAGE NUMBER (OR LINK)	IDENTIFIED OMISSIONS	EXTERNAL ASSURANCE
<b>MATERIAL TOPIC: WATER</b>			
103			Data assured by Deloitte LLP
303-1	Tables 3.2-3.3, p. 64-69		
CRE2	p. 66-69	We do not report a water intensity metric for Retail Parks as we use car park spaces to normalise data for this portfolio and this has no relationship to water consumption. Our water consumption in Retail Parks relates to irrigation and landscaping	Performance against targets assured by JLL Upstream
<b>MATERIAL TOPIC: EMISSIONS</b>			
103	p. 15-21		Performance against targets assured by JLL Upstream
305-1	p. 48-53		
305-2	p. 50-53		
305-3	p. 48-53		
305-5	p. 47-52	Reductions related specifically to initiatives can not be reported as they related to integrated mechanical and electronic equipment for which impacts can not be separated.	
305-6	p. 60		
CRE3	p. 47-52		Data assured by Deloitte LLP
<b>MATERIAL TOPIC: EFFLUENTS AND WASTE</b>			
103	p. 16-18, 22		Data assured by Deloitte LLP
306-2	p. 72-79		
GRI 306-3	p. 92		
<b>MATERIAL TOPIC: LOCAL COMMUNITIES</b>			
103	p. 26-29		Performance against targets assured by JLL Upstream
413-1	p. 28, 96-97		
CRE7	p. 94-95		
<b>SUB-CATEGORY: PRODUCT RESPONSIBILITY</b>			
<b>MATERIAL TOPIC: CUSTOMER HEALTH AND SAFETY</b>			
103	p. 90		
416-1	p. 86, p. 88 Table 7.4		
416-2	p.92		
<b>MATERIAL TOPIC: MARKETING AND LABELLING</b>			
103	p. 84-85		
417-1	P. 91		
CRE8	p. 91	Data for % coverage by GIA for the French portfolio is currently unavailable. We are looking to ensure this is available for our next reporting cycle.	

## Methodology for Calculating our Financial metrics associated with Environmental Performance

Table 8.3

INDICATOR	DEFINITION	DATA COVERAGE	DATA QUALIFYING NOTE AND PRINCIPLES APPLIED
<b>Energy cost</b>	Charges for building energy consumption (excluding transport), including standing charges and environmental taxes (e.g. Climate Change Levy). Includes electricity, gas and thermal	Whole portfolios, three years to the end of the reporting period.	Source of cost data used, in order of priority:
		For all energy types with kWh consumption, we include corresponding energy cost	Cost information from bills uploaded monthly by the centres into Credit 360.
		All Hammerson obtained energy (including sub metered tenant consumption)	Unit cost data from assets, then multiplied by consumption  Where neither of the above has been provided by the assets, the average unit cost in that year for that property type (preferably from the same country) is multiplied by the consumption
<b>Water cost</b>	Charges for both water and wastewater along with standing charges and any water/environmental taxes	All UK and French managed properties included	
<b>Waste cost</b>	Standing charges, landfill/environmental taxes (e.g. Landfill Tax in the UK), labour costs, and equipment rental	Inclusion of all managed properties where data is available	Cost information provided by the assets
<b>Climate change levy expenditure (UK only)</b>	Amount of electricity and gas upon which Climate change Levy is due and the appropriate Levy	Climate Change Levy is paid across our UK assets. Following policy changes made in 2015 it is now payable on clean electricity contracts which were previously exempt.	0.568p per kWh for electricity and 0.198p for natural gas
<b>Energy efficiency investments</b>	Examples of energy efficiency investments include the replacement of lighting systems, voltage optimisation, natural ventilation, upgrade of Building Management systems, any work related to the insulation of buildings. Includes items recharged through service charge as well as items funded by the asset owner.	Across all portfolios where applicable.	Information from annual forms supplied by the centres
<b>Investments in waste management improvements</b>	Includes: Low capital investment rechargeable through the service charge and capital investment	Across all portfolios where applicable.	Information from annual forms supplied by the centres
	Examples: acquisition of composter and bailers, improvement of on-site facilities for the segregation of waste	Across all portfolios where applicable.	Information from annual forms supplied by the centres
<b>Investments in water management improvements</b>	Examples of water management improvements can include water saving devices at fit out, change to the chilling systems under landlord control and a standardised water efficient brief for centre toilet refurbishments		Information from annual forms supplied by the centres





EVERYTHING HAPPENS HERE AND AROUND  
THE CHURCH AND BULLING  
THESE

Bulling, Birmingham

# Hammerson Positive Places

Our sustainability vision is to create retail destinations that deliver net positive impacts economically, socially and environmentally.

Positive Places is our strategy for making that happen.

If you have any questions about our sustainability strategy or the information contained within this document please contact the Hammerson Sustainability Team at:

[sustainability@hammerson.com](mailto:sustainability@hammerson.com)



Positive  
Places