Hammerson

2018 Sustainability Report

Positive Places

Cover picture: detail of roof at Victoria Quarter, Leeds.

This page: Restaurant terrace at Terrasses du Port, Marseille.

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Section 1

Executive Summary and Key Messages

Chief Executive Statement

19%

improvement in the carbon intensity of the business

2018 has been another busy year for Hammerson and our focus on excellence has continued to deliver strong sustainability outcomes.

Our sustainability achievements in 2018 have been significant across each of our three key operating countries. Having recognised early the significance sustainability would have for our business, Positive Places has become one of the most successfully embedded sustainability strategies within our sector, a view supported by discussions with key stakeholders during our 2018 materiality review. Our approach has enabled us to deliver a consistently strong performance against our sustainability targets and I am pleased to be able to share similarly successful outcomes for 2018. A further 19% improvement in the carbon intensity of the business, one of our five corporate KPIs, shows the progress we are making in decoupling business output from rising carbon emissions.

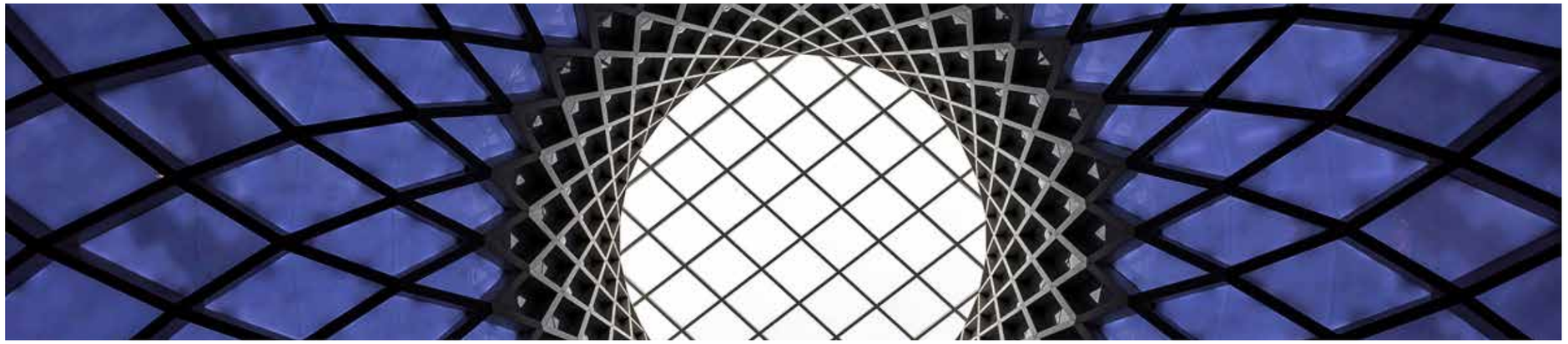
Positive Places includes both our environmental and social impacts; and I was delighted to start the year with an event in the House of Commons to celebrate the positive social impacts that our retail portfolio brings to our local communities. It was enormously encouraging to be able to share this positive message with so many and to hear first hand how local people are benefiting from our employment and skills brokerages and community partnerships.

MORE

More on our external engagement on pages 36–43

Our environmental focus remains clearly on minimising demand for grid energy, reducing both cost and carbon emissions whilst also mitigating our energy supply risk. This strategy has generated some 11% reduction in absolute carbon emissions in 2018, bringing the total reduction across our portfolios to 22% since 2015 even though the portfolio has grown. Our investment in renewables is contributing to this reduction whilst producing income for the business. This consistent approach has enabled us to achieve our short term carbon emissions reduction targets ahead of schedule.

Our targets to be Net Positive for carbon emissions, water, resource use and socio-economic impacts by 2030, remain as challenging as we expected. Our current projections anticipate a requirement for approximately 12,000 tonnes of carbon offset in 2020 and we are developing a number of initiatives to deliver this.



Our strategy has generated

11%

reduction in absolute carbon emissions in 2018 across the retail portfolios, bringing the total reduction to

22%

since 2015

"I am hugely encouraged by the way all my colleagues have been inspired to step up to the Net Positive targets that the business has set and the progress we have made as a result."

Our work with retailers on improving the energy efficiency of store fit out has already generated significant savings and we see the reduction of these scope 3 emissions as a priority for offsetting our remaining scope 1 and 2 emissions over the next two years.

Making a commitment to find ways to offset our remaining environmental impacts in this way is bold but this is the scale of response needed to tackle climate change, as made clear by the recent reduction of the global warming target agreed within the 2015 Paris Accord from 2°C to 1.5 °C. Businesses will be expected to be at the forefront of this challenge.

Responding to climate risk

Climate change remains our overriding sustainability concern and energy demand is our direct link with it. Our climate risk exposure to extreme weather events was confirmed as limited by the portfolio climate risk analysis completed this year. We are responding to the risks identified by building resilience into new assets and into asset management plans. We are also developing our understanding of how our existing buildings perform under climate stress. For example, our artificial intelligence project with tech start-up Grid Edge at Bullring in Birmingham is using machine learning to link building thermal performance data to forecast weather conditions and footfall to enable us to optimise building operation.

What does the future hold?

Looking forward, Positive Places is at the heart of our City Quarters strategy, announced in July. The development of our land holdings around our assets is a unique opportunity to reinforce the link between those assets and the community they serve, by providing new facilities, public realm, infrastructure and opportunities that speak to the needs of future generations.
As we reach a potential technological watershed affecting where and how we work, travel and spend our leisure time, our Hammerson assets will be positioned to respond and to do so in a fundamentally positive way. The knowledge our teams have already developed in delivering sustainable projects will underpin our City Quarters strategy and the delivery of long term value for the business.

Delivering our Net Positive targets

I am hugely encouraged by the way all my colleagues have been inspired to step up to the Net Positive targets the business has set, and the progress we have made as a result.We need to do more and, as the more straight forward savings are made, achieving further reductions will become more challenging. We are also working within a more capital constrained operating environment as we anticipate heading into an increasingly challenging phase for the economy. This certainly won't change our commitment to our Positive Places strategy or our Net Positive targets, particularly as the financial benefits from our key projects are clear – both for us and our tenants. However I will continue challenging each business area to find low cost and new ways of reducing our impacts and work with the Positive Places team, to make the business case for any initiatives as strong as possible as they compete with all other business streams for capital allocations. The same challenge goes out to our major suppliers – we expect their expertise to support the delivery of these targets.

MORE

Our headline financial savings from environmental initiatives can be seen on pages 18

In interesting times

Delivering one of the most ambitious sustainability programmes in the sector is certainly not easy. We have not been able to deploy as much PV as we wanted to in 2018 for a variety of reasons including challenges with local network operators and tenants. The extreme cold at the beginning of the year and extreme heat in the summer impacted our energy demand, particularly in our most northerly assets. Plus, the split incentive issue remains, where investments that we make deliver direct business benefits to our retailers through reduced service charge. But these are all issues we are experienced in addressing and will continue to overcome. The UK's changing political landscape presents challenges for all areas of the business as uncertainty impedes decision-making and slows activity. For sustainability, however, the agenda is effectively a global one so we remain clear in our purpose.

As we look back on 2018 it may turn out to have been something of a watershed year for sustainability. The 2015 Paris Accord seems to have energised many business leaders to address climate change, even with limited political leadership on policy. This lack of political clarity makes it even more important for business to step up and help shape our sector's response to this increasingly pressing issue, and drive initiatives that we are confident will work.
Seen in this context our decision to set challenging Net Positive targets for the business in 2017 was clearly the right one.

The lack of political clarity regarding climate change policy makes it even more important for business to step up and help shape our sector's response to this increasingly pressing issue, and drive initiatives that we are confident will work.

Our discussions with stakeholders for our materiality review this year revealed a sharp increase in focus on sustainability governance and reporting as investors, in particular, want to understand how different companies compare. This report is designed to provide exactly that level of transparency. I am sure you will find it interesting and useful and as always, if you have any suggestions or questions, we welcome your feedback.

MORE

Our Positive Places website provides further information on our performance and initiatives: sustainability.hammerson.com

David Atkins
Chief Executive

Group Head of Sustainability Statement

Our Positive Places sustainability strategy has continued to make strong progress in 2018, reducing our environmental impacts and extending our positive social impacts across our assets.

With just two years to go before we reach the first of our three Net Positive target milestones, our attention has been heavily focused on reducing our carbon emissions and identifying opportunities to reduce scope 3 emissions. We are making steady progress and I am hugely encouraged by the collaboration and innovation that setting such ambitious targets has drawn from colleagues, suppliers and the wider stakeholder group.

Our 2018 materiality review

Our Positive Places strategy is designed specifically to address our most material issues, as the sustainability agenda is constantly evolving this year we carried out a materiality review with stakeholders to ensure we remain focused on the right areas. This was enormously useful and the insight we gained has influenced this report and will continue to be reflected in our over-arching strategy.

MORE

Find out more about our materiality review on pages 24–25

A key change we noted over the four years since our last review was the significant increase in importance attributed to climate change risk. We have a comprehensive strategy embedded across the business supporting a consistent and managed approach to the monitoring of our exposure to climate risk alongside other corporate risks, as recommended by the Financial Stability Board's Task Force on Climate Related Financial Disclosures (TCFD).

MORE

Key findings of our climate risk study and our approach to managing our sustainability risks are provided on pages 26–27

Our latest materiality review confirmed that our key environmental target area remains reducing energy demand across the operational portfolio. This is still the major driver of our carbon emissions and an impact over which we either have control, within common areas, or can influence through our relationships with retailers. I am very pleased to be able to report that we have made a further 6% reduction in energy demand across the landlord controlled areas in 2018 bringing our total efficiency gains to 17% since 2015. This has delivered £790k in savings to the business and our tenants in 2018. We have provided a brief overview of the findings of our materiality review on page 24–25 with a summary report available on the Positive Places website.

Responding to international goals

Our Positive Places strategy and targets align with the four United Nations Sustainable Development Goals identified as most relevant to our business. They exceed the current carbon efficiency trajectory required for achieving 1.5°C scenario and respond to the risk management expectations of the TCFD reporting requirements.

17%

reduction in energy demand since 2015

£790k

in energy cost savings to the business and our retailers in 2018

The science behind our targets is sound – we have calculated our environmental and socio-economic footprints using data from the business and from our tenants and visitors, so we know what our significant impacts are, including those from our tenanted space and our visitors. Whilst this report is focused most specifically on our 2018 performance and short term targets, our performance against our Net Positive targets is also provided. Our targets to 2020 are designed to support the delivery of our target to be Net Positive for scope 1 and 2 emissions by that date.

Addressing scope 3 emissions

Through our work with retailers we are beginning to be able to influence carbon reductions in the let space within our assets. This is a key focus area for the business as it presents a significant opportunity to reduce overall emissions from our portfolios whilst also saving our retailers money. Our work with retailers at Elliott's Field Retail Park, Rugby, has enabled them to reduce the energy demand in their stores on that site by up to 30% compared with their other stores. This has potential benefits that go way beyond our portfolio but is exactly the sort of outcome that is needed to bring about meaningful change.

Tackling waste

Waste management remains a key focus area for us as management costs rise and the organic waste streams from our assets increase. Many of our assets are achieving impressive recycling rates leading to rising income from waste being returned to our tenants through service charge. Organic waste has been a focus this year with great results from the Biowhale at Cabot Circus in Bristol and Westquay in Southampton and our new coffee waste recycling scheme at Victoria, Leeds.

We confirmed through our supply chain that our recycling does not go beyond Europe so the only impacts we have experienced from the policy changes in international recycling have been cost increases. We are expecting costs to rise further once the UK leaves the EU due to labour shortages.

Since the operation of our French assets has been brought in-house, mirroring our approach in the UK, the management teams have achieved significant improvements in environmental performance. Improvements in building management systems, investment in LED lighting and greater vigilance of performance have enabled the French portfolio to achieve an impressive 27% reduction in energy demand since 2015, 15% in 2018 alone.

We reported last year that we expected our development at Les 3 Fontaines Cergy to bring opportunities for carbon and materials savings and this has been the case. Working closely with our contractor, Bouygues, we have achieved a significant reduction in virgin materials and a saving of over 274 tonnes in embodied carbon emissions through the specification of recycled content within the concrete and steel used for the build.

As public expectations of businesses to take clear responsibility for their environmental and social impacts increases we are pleased to see Hammerson's foresight in developing a comprehensive sustainability strategy place us at the forefront of our sector. It is clear from our conversations with investors and other stakeholders that sustainability is no longer optional but an imperative within a responsible, forward thinking business strategy. As we face an uncertain business outlook, increasing climate change is one of the few certainties on the horizon. Our full Sustainability Report contains extensive data on our 2018 performance and is designed to be as transparent and useful as possible. I hope you find the report interesting and if you have any comments, questions or feedback please do let us know.

Louise Ellison

Group Head of Sustainability

Our sustainability reporting also includes our Annual Report and accounts and reflects the compliance requirements of GRI and the EPRA Sustainability Best Practice Reporting Standards.

About Hammerson

We own, operate, curate and develop winning European destinations. Bringing together the very best retail, leisure and entertainment brands, we seek to deliver value for all our stakeholders, creating a positive and sustainable impact for generations to come.

Our 2018 portfolio includes investments in:

21

prime shopping centres in the UK, Ireland and France

13

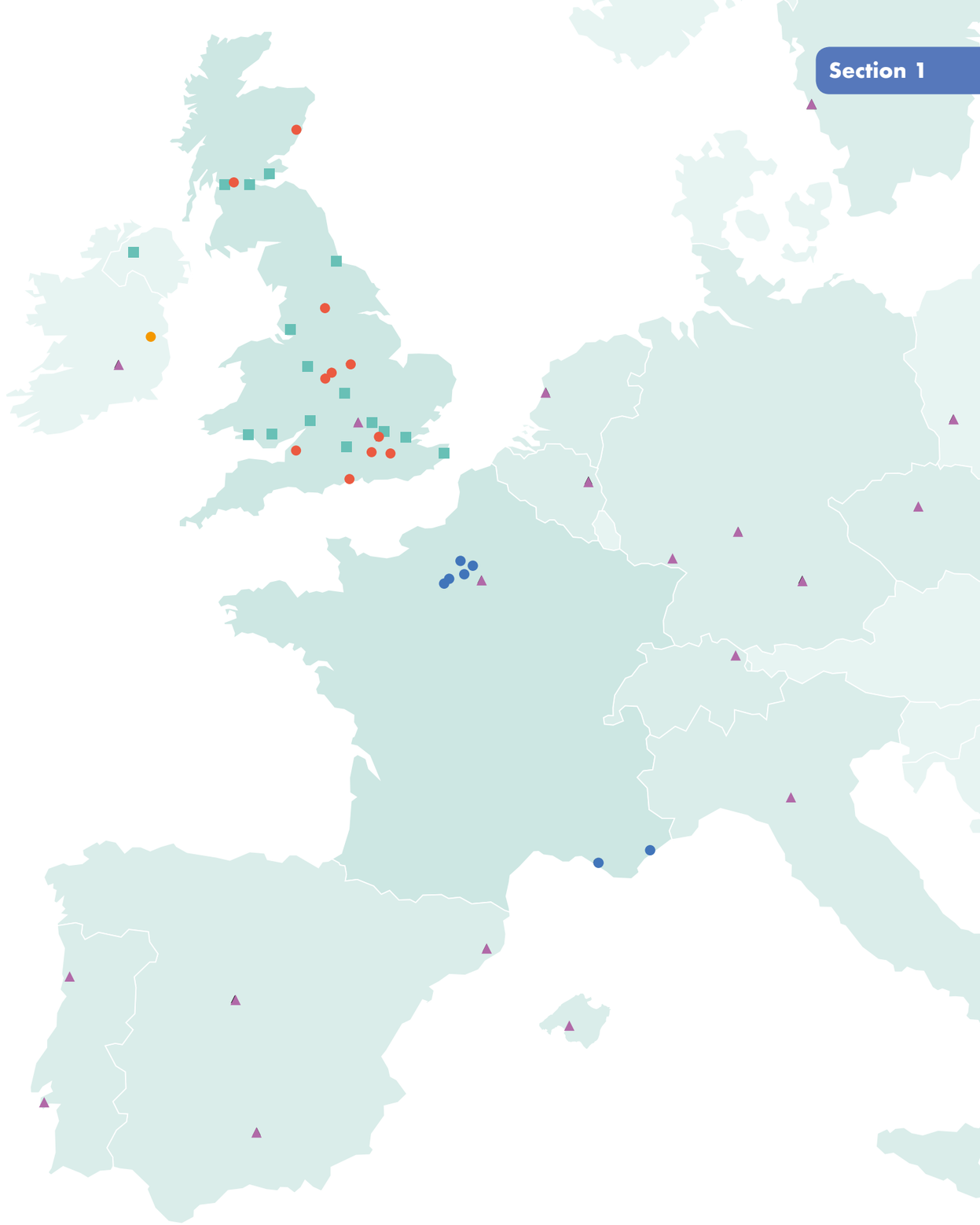
convenient retail parks in the UK

20

premium outlets across Europe

MORE

A full list of properties is included in our sustainability reporting shown on pages 142–145



A resilient model for long term value

Our purpose

We create vibrant, continually evolving spaces, in and around thriving cities, where people and brands want to be. We seek to deliver value for all our stakeholders and to create a positive and sustainable impact for generations to come.

What we have

High-quality property in the right places

We own and operate high-quality, flagship destinations and premium outlets. Our City Quarters concept will enable us to leverage our existing land bank around these flagship assets, supporting their continued growth and success.

A dynamic and diverse team

We go to great lengths to attract, develop and retain the best people. By the end of 2018 Hammerson directly employed 533 people across the UK, France and Ireland.

Insight led

We use property and consumer trends to shape our strategy and inform our decisions around capital allocation, project priorities and resource deployment. Our dedicated Insight team monitors the latest consumer habits and retail trends to better understand and respond to markets.

Effective capital management

Effective capital management ensures balance sheet resilience. We monitor against internal guidelines to maintain the Group's robust financial position. Our preferred source of debt is Group-level, unsecured funding and we have a platform of successful joint venture partners.

What we do

Product experience framework

We create desirable spaces where people and brands want to be, by developing iconic destinations which at their core have the very best brands and experiences. We put the customer at the heart of everything we do, delivering a journey that is truly frictionless and supported.

The four key pillars of our framework are:

- Iconic destinations
- Retail specialism
- Experience led
- Customer first

Positive places

We create destinations that deliver net positive impacts economically, socially and environmentally through the Group's Positive Places strategy.

Our target is to be net positive for carbon, resource use, water and socio economic impacts by 2030.

Who we deliver for

Shareholders

We have a broad range of institutional investors and private shareholders. We actively engage with them throughout the year and undertake regular communication to ensure they understand the performance of the business.

Brands

Our business strategy and future success is aligned with that of all of the brands which fill our destinations – retailers, food and beverage and leisure tenants, as well as direct to consumer brands.

Consumers

We create vibrant destinations that meet the needs of the wide range of consumers that engage with them. In a modern omnichannel environment, we need to provide more than just a place to shop.

Partners

We work with a wide range of partners including joint venture partners, suppliers and capital partners over the long term, making our business stronger and delivering a competitive edge.

Communities

Our assets rely on a strong, positive connection with thriving local communities. This is where we draw our customers from, and over 80% of the employees in our flagship destinations.

Our people

Talented, motivated colleagues are critical to the success of the business. We have built a winning team to support our delivery of the best destinations.

At a Glance – Our key Numbers for 2018

Scope 1 & 2 Carbon Emissions ($mtCO_2e$)

Table 1.1

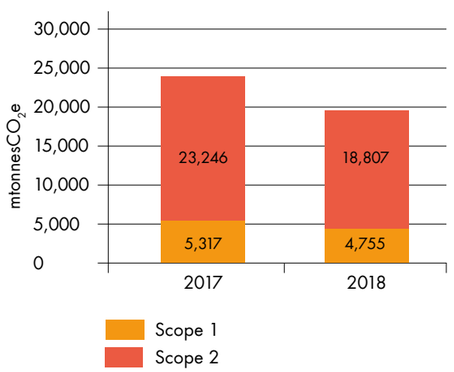
	2015	2016	2017	2018	% Change YOY	% Change vs. 2015
UK	26,638	23,922	19,089	16,111	-16%	-40%
France	7,065	5,514	5,243	4,541	-13%	-36%
Ireland	n/a	2,355	5,374	5,714	6%	n/a
Group	33,703	31,790	29,707	26,366	-11%	-22%
EPRA LFL Portfolio			28,563	23,562	-18%	

Carbon emissions

Our consistent focus on good management of energy at our key assets continues to drive carbon emissions down. These reductions come in spite of the addition of four shopping centre assets since 2015. Our EPRA like-for-like portfolio has achieved a year-on-year carbon emissions reduction of 18%. Whilst this has been supported by grid factors in the UK, the French grid factor has worsened and in Ireland has not changed.

Chart 1.1

Carbon Emissions
EPRA like-for-like Portfolio



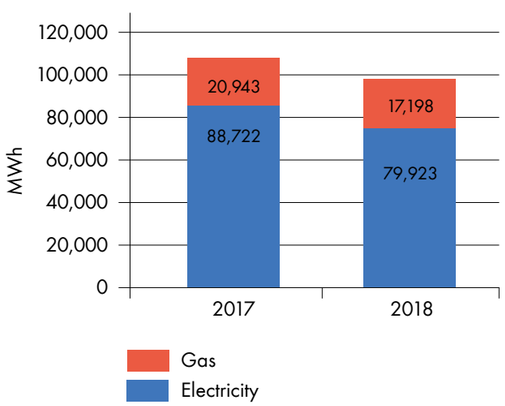
Energy demand

Reducing grid energy demand is a key focus for our sustainability strategy. Investment in technology and a clear focus on continuous improvement in management has achieved an 11% saving across the EPRA like-for-like portfolio in 2018.

Extreme weather events presented challenges with an average of 131 additional cooling degree days per asset during the summer highs. In the first half of 2018, each asset experienced on average 155 additional heating degree days compared to 2017 however this was balanced out in Q4 by the mild winter. The net weather effect on our assets was higher electricity demand due to increased summer cooling loads. We are pleased that in spite of this, we are continuing to drive our energy consumption down year-on-year.

Chart 1.2

Energy Consumption
EPRA like-for-like Portfolio



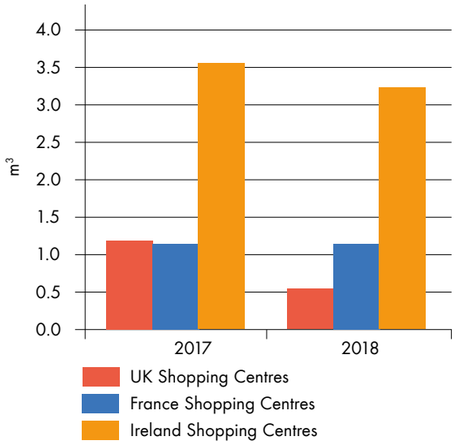
Water demand for landlord services

Landlord water demand has decreased in 2018, with our intensity metric of M3/visitor dropping by 33% across our like-for-like portfolios. Our Irish water intensity is considerably higher than the UK because we are currently unable to split landlord from tenant consumption. This issue will be resolved in 2019 with the installation of new submetering.

We are working closely with our suppliers to identify potential areas for savings, and with regional water companies to carry out water audits to identify leaks. We are confident that these projects, combined with our investment in metering will enable closer management of water usage bringing additional reductions in 2019.

Chart 1.3

Water Consumption
EPRA like-for-like Portfolio



Waste management

In 2018 we continued our focus on recycling and diversion from landfill, achieving a recycling rate of 75% and diverting 99.8% of waste from landfill across all three geographies.

We have had good success with food waste disposal on site, reducing carbon emissions through anaerobic digestion and reduced transportation. We have continued to focus on reuse as well as recycling, in particular for plastics. Through our relationship with Mainnetti we sent an estimated 92,000 plastic coat hangers for reuse or re-purposing in the last two years.

Positive social impacts

Retaining strong, positive relationships with the communities surrounding our assets is central to our business model. We work hard to ensure the whole community benefits from our presence in the area through our contribution to local social capital as well as the economy. Over the course of 2018 we worked with more than 450 organisations bringing opportunities, connections, facilities and more, to thousands of local people

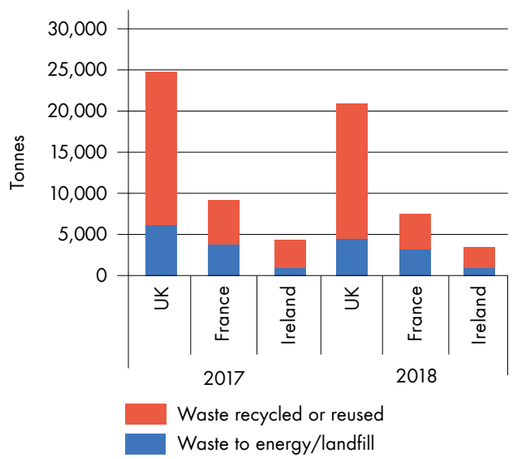
- Over 100 previously unemployed people employed at our assets through jobs brokerages and skills training
- 550+ entrepreneurs given business skills training
- 1600 young people provided with confidence-building training and enterprise opportunities
- £1.7m of support provided to local charities and organisations

£1.7m

in direct contributions to charities through cash and in kind support

Chart 1.4

Waste Management
EPRA like-for-like Portfolio



Progress Against Targets

Table 1.2

Target	Annual performance					Progress in 2018	Commentary
	2016	2017	2018	2019	2020		
Reduce carbon intensity of the business by 20% against 2015 baseline	-9%	-3%	-19%			**A further 19% year-on-year improvement in carbon intensity.**	Further reductions in grid energy demand coupled with grid decarbonisation in the UK have helped significantly reduce carbon intensity of the business in spite of a challenging financial year. This is evidence of our growing success in decoupling business growth from growth in carbon emissions.
Reduce absolute operational carbon emissions by 18% by 2020 against a 2015 baseline for the like-for-like UK and France shopping centre portfolio	-14%	-9%	-11%			**Achieved our 2020 absolute carbon emissions reduction two years early.**	Absolute operational carbon emissions have fallen by 34% since 2015 across the like-for-like assets. We are targeting a further 25% reduction in our scope 1 and 2 emissions by 2020, allowing for predicted grid factor improvements. This equates to annual reductions of approximately 11% per annum against our 2015 baseline, significantly ahead of sector requirements for achieving a less than 2°C climate change scenario. This will be combined with offset projects to achieve our Net Positive scope 1 and 2 carbon emissions target by 2020. Our long term target remains to be Net Positive, for scope 1,2 and 3 carbon emissions by 2030.
Reduce operational energy use 15% by 2018 across the like-for-like shopping centre and retail parks portfolio against a 2015 baseline	-3%	-8%	-6%			**Achieved -6% energy demand for the 2015 like-for-like assets.**	Energy demand for our 2015 like-for-like portfolio is 7% lower than it was in 2015. Our targets for 2019 and 2020 are further reductions of 6% and 4% taking us to a total 27% against 2015. Our focus remains on effective on-site management and investment in technologies. Our 2018 investment in smart metering is expected to drive further efficiency gains in 2019 and beyond.
Achieve 85% waste recycling for the like-for-like shopping centre portfolio	70%	73%	75%			**Recycling rates are high for the sector and continue to improve. 7 assets achieved in excess of 85% recycling rate for 2018.**	Performance varies across geographies and is affected by local infrastructure. Our French assets are showing improved performance but our Irish assets fallen back a little this year.
Reduce landlord water intensity litres/visitor by 10% by 2020 against a 2015 baseline for like-for-like shopping centre portfolio	10%	-14%	1%			**Landlord water intensity has worsened marginally in 2018 but is still significantly ahead of the 2015 baseline.**	Reducing water demand is challenging. Better metering is expected to bring efficiencies in 2019 and we are working with regional water companies to carry out water audits to identify saving opportunities.
Build 2 MWh renewable capacity into our existing assets and new developments by 2020	130kWp	1.1MWp	1.4MWp			**Additional 300kWp installed.**	We now have 1.4MWp of installed PV and have a further 1.7MWp planned for 2019. We have therefore extended the target to 3MWp by 2020.

Key Environmental Financial Metrics

Our consistent focus on environmental efficiency continues to reap financial rewards for the business and for our retailers.

Enviromental Financial Metrics **Table 1.3**

Energy (Hammerson Group)	**Unit**	**2018**
Cost of energy	£000	12,463
Estimated energy savings	MWh	792
Energy Efficiency investment	£000	2,625
Estimated energy savings GRI 302-4	MWh	1,440
Carbon costs		
CRC Energy Efficiency Scheme	£000	211
Climate Change Levy	£000	234
Water		**2018**
Cost of water for Landlord services	£000	2,093
Investment in water management improvements	£000	30
Estimated water cost savings (increases)	£000	70
Waste		**2018**
Operational costs from waste management	£000	3,911
Savings from averted landfill tax	£000	2,104
Income from sale of waste for recycling	£000	321

Energy costs are a key focus within this strategy but the management of waste and water are also important. Over the course of 2018 we have seen energy demand continue to fall, our water efficiency improve and a significant improvement in our waste recycling and reuse figures, particularly in the UK.

As the water market in the UK is changing we have switched suppliers and are expecting to see improvements in data management. Water management infrastructure has traditionally been under-invested and this is beginning to change. As part of our automatic metering project we have upgraded water metering at our assets and are now able to better understand consumption. This has already enabled us to identify opportunities for reducing consumption.

In our 2017 report we anticipated a challenging environment for waste management. This has been seen in a reduction in income from waste as the value of recyclables has fallen. However, it has not impacted our overall waste management costs. Increased recycling rates achieved this year have compensated to some extent for this loss in income. Recycling in France remains lower than the UK and Ireland is still challenging. We have a new waste management supplier in France and have started to see some improvement in performance. However, the French waste management infrastructure remains limited, relative to the UK, as a result of significantly lower landfill tax rates.

Minimum Energy Efficiency Standards

We have continued to remove F and G rated EPCs from the portfolio. As the table shows, there is limited MEES risk across our portfolios. What there is, is being systematically managed out.

Our corporate target is for all retail units to achieve a D rating. This is beyond compliance but more cost effective for our retailers through energy savings.

MEES Risk in England and Wales (Cert-Tot) **Table 1.4**

Energy Performance Certificates	**2017**	**2018**
EPCs across retail portfolio	1,272	1,291
Number new EPCs registered	110	128
Number EPCs for England and Wales assets	1,061	1,073
Number F & G rated in England and Wales assets	142	94

Case Study

Financial Returns on LED Installation

LED installation continues across our portfolio. We have already seen significant savings, and these have continued in 2018.

In October 2018 installation of LED lamps started on each of the seven levels of multi storey car park at Cabot Circus. We forecast that the LEDs will reduce energy consumption of the car park by over 60%, a saving of 896 MWh/year and 315 tonnes of carbon. The project completed in early 2019 and delivers a payback period estimated at 5.8 years.

Telford Forge Retail Park has seen similarly significant benefits from LED. A lighting upgrade of 166 lamps in external areas (3 car parks, service yard, walkways and canopy lighting), costing £40,000, was completed in October 2017. The lighting has seen total annual electricity fall from 168MWh in 2017 to 69 MWh in 2018, a reduction of 59%.

At Ravenhead Retail Park a £90,000 investment in lighting upgrades to 225 lamps in external areas was completed in December 2017. The upgrade has reduced total annual consumption from 289 MWh in 2017 to 86 MWh in 2018, a total saving of 70%. These savings accrue directly to the tenants so are forward-funded through service charge.

The Journey Towards Net Positive

By 2030 we will be Net Positive for:

Carbon | Water | Resource Use | Socio-economic impacts

Our Net Positive targets are divided into three phases, the first of which completes in 2020.

Taking a phased approach

2016–2020
Phase one
Landlord controlled impacts

2021–2025
Phase two
Landlord controlled and development impacts

2026–2030
Phase three
Landlord controlled and development and on-site tenant impacts

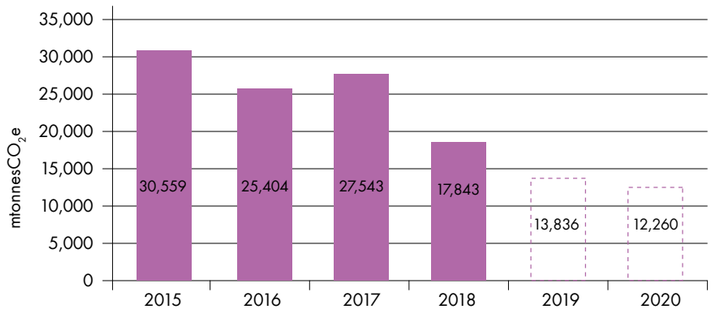
Carbon

Net Positive for carbon means carbon emissions avoided exceed emissions generated. For 2020 the target includes our Scope 1 and 2 emissions. We are currently expecting to achieve 43% of this target through energy efficiencies across the portfolio, supported by improvements in grid carbon factors. The remaining 57% of our 2020 target will come from offsets. These are reductions in carbon emissions from areas outside our phase one target boundary. Careful rules for understanding what can and what can not be counted as part of our targets have been established by JLL Upstream.

For example, green electricity contracts are not considered eligible. However, establishing a power purchase agreement that enables new renewable supply to come into the market would be considered an offset. Scope 3 carbon emissions reductions, for example through reductions we support our tenants in achieving as we have at Elliott's Field in Rugby, are considered as offset for our 2020 and 2025 Net Positive targets.

The chart below shows our current trajectory towards our 2020 Net Positive carbon target including the contribution that will be made by projects we are already working on.

Chart 1.5
Net Positive Carbon



MORE

The basis of reporting for our Net Positive targets is set out on page 140

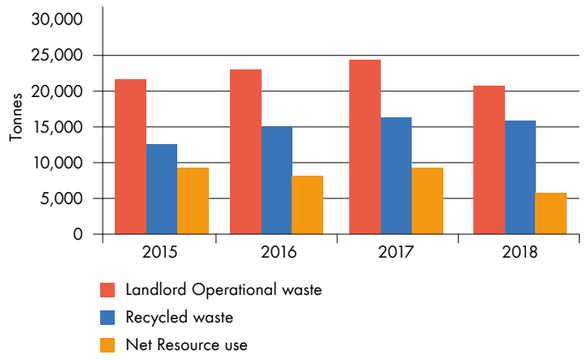
Resource use

Net Positive for resource use means waste avoided, recycled or re-used exceeds materials used that are neither recycled or reused or are sent to landfill.

Our 2020 Net Positive targets focus on resource use within our operational portfolio which is dominated by waste from the shopping centres. We already achieve consistently high recycling rates across the portfolio which is supporting our delivery of this target. A number of initiatives have helped improve our recycling including our work with OWL using their Biowhale, Helistrat on data management and with Paprec, our waste provider in France. We have also looked at ways to reduce waste, such as promoting drinking water fountains, and to reuse waste, for example through a coffee grounds reuse scheme in Leeds.

We perceive there to be a clear opportunity to reduce further materials entering the waste stream by identifying re-use opportunities. Our relationship with Mainetti has enabled over 90,000 plastic clothes hangers from our centres to enter the reuse stream over the last two years. We also have relationships with a number of local charities who are offered surplus store refurbishment items and materials. We are exploring how we might work more closely with our retailers to support their materials recycling programmes, particularly the fashion retailers. Waste has become a very public issue during 2018 and we expect this to continue to be the case. Major fashion retailers are particularly vulnerable within this area and, as one of our major tenant groups, we are looking to work more closely with them to understand how we can support them in responding to demands for more responsible use of resources.

Chart 1.6
Net Positive Resource Use



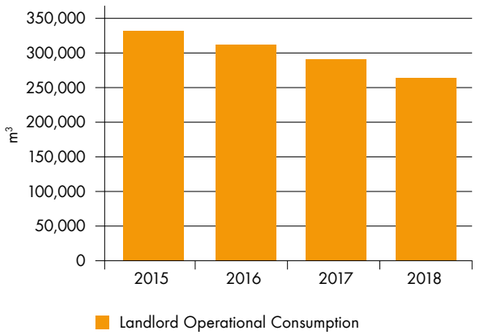
Water

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

Achieving Net Positive for water is potentially our hardest target. The water market is less developed than the energy and waste markets and carries less value, making investment more difficult to justify. We are working with regional water companies to carry out water audits within our assets to identify and reduce leaks. We have completed one at Cabot Circus and are targeting further audits across the portfolio.

Once we have completed audits and started rectifying leaks at our assets we will explore how to support the water companies in auditing third party assets within our local communities. Many organisations, particularly third sector organisations and small businesses, struggle to apply sufficient resource to address high water demand. This programme would be considered a form of offset for our water targets.

Chart 1.7
Net Positive Water



Highlight Projects

Reducing embodied carbon at our Les 3 Fontaines, Cergy development outside Paris

Through our revisions to the specification of concrete for the extension at Les 3 Fontaines, Cergy, embodied carbon emissions will be reduced by an estimated 274 tonnes in 2018. This has reduced our overall Net Positive carbon emissions in 2018. A embodied carbon saving only contributes to Net Positive in the year of construction.

Estimated total embodied carbon saving of

274 tonnes CO_2

in 2018

Energy performance contract at Les Terrasses du Port, Marseille

Following an audit led by Dalkia in 2016, energy savings targets and an energy savings action plan has been set out in a contract between Dalkia and the team at Les Terasses du Port. Dalkia takes charge of Hammerson's gas and electrical bills in an energy performance contract. The agreement guarantees Hammerson energy and associated financial savings. Already, two major changes have occurred:

- Optimisation of systems' performance (mainly HVAC) for a total of 1039 MWh saved vs 2015 on electricity and 1152 MWh saved vs 2015 on natural gas
- Adaptation of the operating systems (mainly lighting) to the opening hours and occupation of the centre giving a total of 247 MWh saved on electricity

2438 MWh
energy saved vs. 2015

In 2019, we will focus on our weather station and air quality management with the installation of variable frequency drives on all air handling units. This is expected to bring an estimated gain of 615 MWh in 2019 vs 2018 on electricity and 281 MWh in natural gas by 2021 vs 2018. These are significant savings at an asset with a current energy demand of approximately 9,000 MWh per annum.

Proactive energy management at Bullring, Birmingham

In late 2016, we started working with Grid Edge, an entrepreneurial start up from Aston University, on a project at Bullring in Birmingham. The software combines footfall, temperature and energy consumption data to enable proactive energy management through artificial intelligence (AI) and machine learning.

The AI system also allows us to see the impact on comfort, carbon, cost of dispatching HVAC assets to release flexibility to the grid, and quantifies the financial benefit of doing so.

In a really exciting development Grid Edge are using predictive learning algorithms to model and predict the building's future energy profile so energy assets can be controlled optimally in real time.

Hammerson will be continuing to work with Grid Edge to explore further ways we can manage our buildings more effectively using the technology.

Energy saving in collaboration with our retailers

In 2018 we developed a food and beverage (F&B) retailer specific energy efficiency toolkit and worked with a group of forward thinking F&B operators to identify energy saving opportunities in their spaces. Initial results are indicating energy savings of between 5% and 25% for those stores taking part. We are looking to roll this programme out across our estate in 2019 and engage retailers in saving energy and money in an easy, practical way. In the current climate of pressure on retail this programme is offering a real added benefit to our tenants.

Initial results show energy savings for participating stores of up to

25%

Energy saving technologies for F&B operators

Shaping our Strategy

Understanding our material issues

In 2018 we carried out a review of our material sustainability issues. For this process we spoke to shareholders, joint venture partners, non-executive directors and our retailers. We explored what was changing in their sustainability priorities and concerns and the implications they felt this had for our sector and particularly for the business. The discussion distinguished between immediately relevant issues and the direction of travel anticipated for each issue over the five years to the end of 2022. The discussion encompassed both asset management and development and the factors included those affecting our supply chain and our local communities as well as our operations.

Each factor was scored on the basis of its current importance for the shareholders and how they expected it to change over the next five years. These scores were combined with the views of the other stakeholders and an internal score reflecting the significance of the issue to company strategy and the ability of the business to influence of control the issue. This analysis produced our priority order of material issues. Most issues were identified in our 2014 materiality study but the priority order of issues has changed.

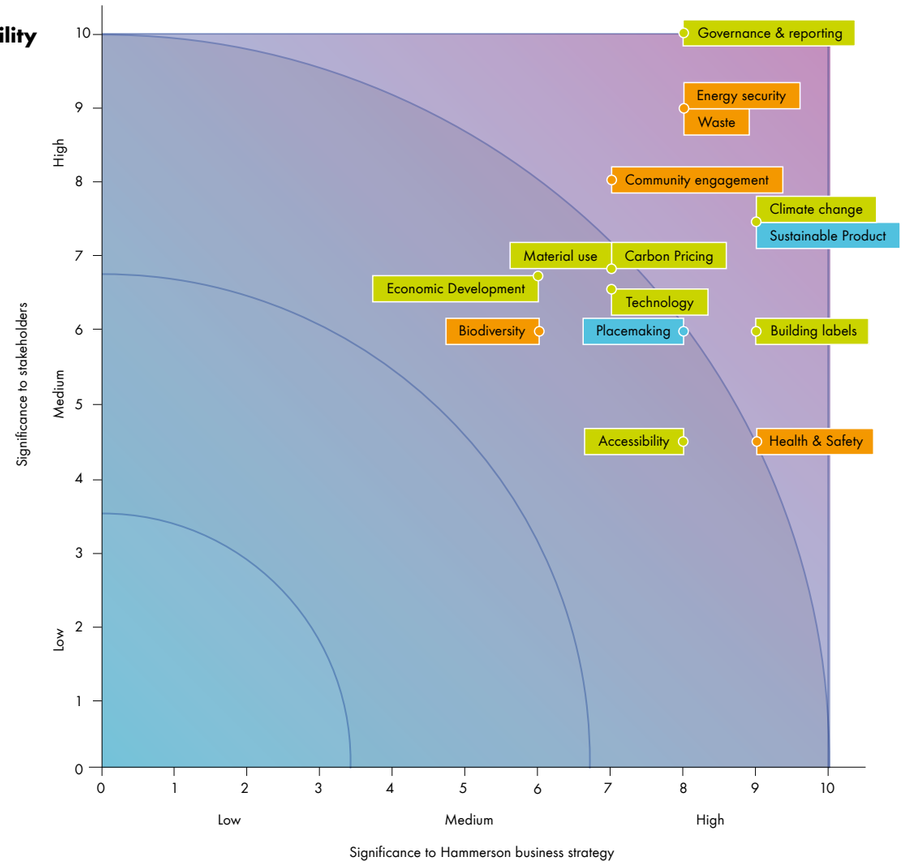
Chart 1.8 Sustainability Risk Matrix

Key

Up from 2014

Same priority as 2014

New to our top 15



Understanding our matrix

Issues are assessed for materiality on two axes – significance to business strategy and stakeholder groups. Their overall material significance for the business is then determined by the scale of risk they present, the relevance to current business strategy and the extent to which we can influence or control them.

We presented a list of 22 issues to investors and 18 of them received a score showing them to be significant in the view of the respondents.

Combining these results with an assessment of the risk each issue presents to the business, the extent of our influence or control over it and our strategic business priorities enables us to place these risks into a priority order, as shown in the matrix above. Our top 15 sustainability issues are plotted. Those considered material sustainability issues to the business are those which are within the top quartile of the matrix.

New to our top 15

New issues that have emerged with at least medium significance include carbon pricing, accessibility and demographic change and sustainable product. This last issue refers to the extent to which our business product – i.e. the assets that we develop and manage – can be defined as sustainable. This suggests a much clearer expectation that sustainability forms an integral part of the operating procedures for our existing centres and any new developments. The expectation for developments is further underlined by the increased importance of buildings labels.

This insight, taken in conjunction with our City Quarters business strategy, has prompted us to review our community engagement focus areas in 2019. The growing focus on social impact investing particularly from the investment and pension fund community, and expectation that companies are using their power and influence to foster positive social outcomes presents potential opportunity for Hammerson given our track record in this area.

Governance and reporting

One of the biggest changes we found was the increased importance placed on governance and reporting. Corporate governance as something that drives transparency and has been an important factor for our investor stakeholders for some time. The real shift noticed here was the expectation of transparency and reporting of environmental factors, particularly relating to climate change, and of social factors too. This has shifted from being a relatively low priority for our stakeholders when we carried out this work in 2014, to being the highest ranked in 2018. There is clearly a much higher expectation of consistent, transparent corporate reporting on a number of issues and sustainability is very much one of them.

Community engagement

Community engagement remains a priority for us and for our stakeholders too. We have seen increases in the importance placed on local economic development and place-making.

We have focused our approach to community engagement on the four key areas of employment and skills, enterprise, young people, and health and wellbeing. We then use these themes to tackle relevant issues at a local level. However, our conversations with stakeholders are suggesting that issues such as community cohesion, in particularly in light of expected future migration, the scaling back of public services and rising numbers of refugees are increasingly important areas of focus.

Carbon pricing and climate change

The emergence of carbon pricing as an issue relates directly to the increased emphasis on climate change. The increasing frequency with which businesses are being affected by extreme weather events, combined with the Paris Climate agreement and the more recent IPCC Report, have increased awareness of transition risk; the risks that flow from policy interventions that are likely to be required to mitigate climate change. Policy interventions focusing on carbon emissions reduction either indirectly through energy pricing or directly through carbon pricing are expected. Our continued focus on carbon emissions reduction through energy efficiency is a direct response to this issue.

UN goals

The UN Sustainable Development Goals UNSDGs were raised by a number of our stakeholders and have clearly gained traction with major corporates and investors as a helpful strategic sustainability framework for businesses. We identified the UNSDGs that are most relevant to the business two years ago and these continue to be supported by our Positive Places strategy and actions.

Managing risk

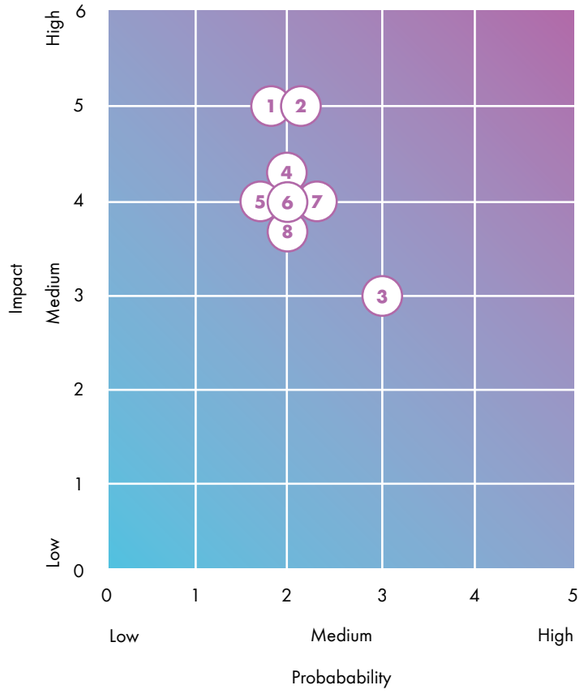
Management of any potential risks flowing from sustainability are high on the corporate agenda.

The risk heat map set out below includes the eight 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 eight key sustainability risks are contained within the medium risk area of the map. We consider each of the 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.

MORE

More detail on our sustainability risk and our management approach is set out in table 8.1, p. 124–125

Chart 1.9 Risk Heat Map



1. Failure to address sustainability within our development programme
2. Non-compliance with UK, Irish, French and EU Environmental regulation and legislation
3. Rising energy cost including regulatory / fiscal charges
4. Poor performance in investor-focused industry benchmarks
5. Impact of climate change on our portfolios
6. Failure to achieve corporate development targets
7. Employees insufficiently equipped with the knowledge and tools to achieve corporate sustainability goals
8. Lack of engagement of JV partners on sustainability matters

Viewpoint

Climate Change and Climate Change Policy

"Assessing against 2030 and 2050 climate scenarios we are confident that our assets are low risk for climate change."

Investors expect businesses to have a systematic and robust process for understanding our exposure to climate risk, and a strategy in place to manage it.

Climate change presents a risk for all businesses and particularly those with infrastructure assets such as ours. Our long-term, consistent approach to sustainability has equipped us to be ahead of the curve in responding. In 2017, ahead of the recommendations of the Task Force for Climate Related Financial Disclosures (TCFD), we commissioned a climate risk analysis of our managed portfolio.

Assessing against 2030 and 2050 climate scenarios we are confident that our assets are low risk for climate change. Where there is risk this relates to extreme weather, in particular heat and rainfall. We have strong flood risk management in place and are looking at opportunities to mitigate overheating including solar shading and dynamic building management strategies. Understanding these risks early allows mitigation measures to be included in our asset management plans in a timely and cost effective way.

As we turn our attention to delivering future projects and in particular for our City Quarters, design teams are clearly briefed to evaluate climate scenarios to ensure our assets are resilient. This includes specification and selection of flexible materials as well as optimising energy strategy and thermal performance. Further details for our Positive Places development strategy is set out on page 98.

Our investments in premium outlets, both VIA and Value Retail, present different climate change risks to our directly managed portfolio as they are largely open air centres in a wide range of different geographies. We are working closely with the VIA and Value Retail asset management and operational teams and our investment partner APG to ensure a proactive approach is being taken to understanding how these venues may be affected by climate change and what strategies need to be implemented to mitigate these risks. BREEAM in Use certification was achieved across the VIA portfolio in 2018 and the findings are being used to inform the sustainability and climate change strategy for these assets.

Timon Drakesmith
Chief Financial Officer, Hammerson

Cabot Circus, Bristol

Engaging our Stakeholders

Engagement with our five key stakeholder groups underpins our Positive Places strategy. The materiality review carried out in 2018 gave us the opportunity to focus specifically on engaging with our investors and to understand how their thinking on sustainability has changed over the last four years. This exercise was extremely useful and is informing updates to our strategy.

We routinely engage with our retailer customers through our retailer forum and through the Hospitality Forum. We have been delighted by the support of some of our key customers in providing data as we continue to monitor scope 3 emissions.

We have an extensive community engagement programme that has developed long standing strong community relationships over a number of years. We focus on local community groups and organisations to make sure our outcomes are clearly relevant to the local community. Our key focus areas remain employment and skills, enterprise, young people and health and wellbeing. However, in light of the findings of our materiality review we are looking at how we reflect concerns regarding long term community cohesion as part of our programme of work.

Homelessness has risen up the agenda locally in the past 12 months and we are working with existing local networks and providers to establish where our efforts will be best targeted to help tackle this problem. We are keen to look at the causes of this type of issue as well as resolving the immediate challenges it presents.

Table 1.4 right and overleaf sets out our five key stakeholder groups and the type of engagement work that we have undertaken during 2018 with each group.

We rely extensively on our supply chain for services ranging from the design and construction of new assets through to the provision of Christmas decorations. 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 Supplier 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 was updated in 2017 and is actively used by the business.

Achieving our Net Positive targets requires our supply chain to work closely with us to realise key business opportunities. We have worked with our key asset and property management suppliers and with our development design teams in 2018 to ensure standards that support the delivery of Net Positive are included in our project management processes and our design team thinking. By establishing key standards in the approach of our suppliers from the outset we find innovations are more likely to emerge.

Key Stakeholder Groups and Engagement Activity

Table 1.5

Stakeholder group	Examples of engagement activity	Project/ corporate level engagement	Frequency of engagement activity	Issues raised/ discussed	Responses
Communities **Local residents, people working at or visiting our assets and local community organisations**	Work experience and apprenticeships	Corporate and Projects	Ongoing	Opportunities for young people	Working with our supply chain and centre teams to ensure apprenticeships are offered in a range of areas in our assets
	Employment and skills brokerage	Projects	Ongoing	Linking local people with centre based employment opportunities training	Linking with the Department of Work and Pensions, local training providers and retailers to form a one stop shop for centre based opportunities. Over 100 local people placed during 2018
	Positions held on key local boards/bodies	Corporate	Ongoing	Homelessness and inner-city challenges	Meeting with the local Business Improvement District (BID) and local organisations to understand how we can help deliver outcomes for vulnerable local people

We continue to establish relationships with locally specific stakeholders around skills and employment, as well as developing stronger relationships and running wider programmes with national partners who we have achieved successes with already. Our asset teams hold multiple roles at a local level that help to influence the local agenda. These local relationships are critical to our ability to deliver relevant, practical outcomes for our communities.

Customers **Businesses operating from our assets**	Retailer forum and one to one meetings		Two meetings a year	Data sharing, environmental lease clauses, energy efficiency projects and fit out	Simplified tenant fit out guides, data sharing, updated lease clauses and more efficient tenant fit out
	Hospitality forum		Three meetings a year	Energy and waste management, environmental regulation, operational performance benchmarking	Food & Beverage energy saving guide developed and adopted by operators at two assets with clear energy savings generated
	Positive Growth Awards		Ongoing	Energy, water, waste and environmental hazard management.	Increased on-site retailer team awareness of key issues
	Asset specific briefings and tenant meetings		Ongoing	Environmental and community initiatives and projects	Support for centre based activities

Our retailer forum enables us to bring together key retailers and Hospitality Forum enables us to focus on bringing together F&B providers. These forums are becoming increasingly important as a means of developing a collaborative approach to tackling key sustainability issues.

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	Corporate	At initial tender of contracts over £100,000	Code of Conduct, treatment of workers, CSR, environmental policies, Health and Safety, training and skills	Regular engagement with suppliers raises awareness of the significance of sustainability as an issues they need to be addressing in their work with us and other clients
	Work experience and apprenticeships	Corporate	As required	Apprenticeship and work experience opportunities for local young people	Our suppliers now offer apprenticeships at each of our assets and work experience is offered within our centre management teams

In 2018, we updated our supplier survey and worked on improving internal awareness of the survey. This has resulted in a broader selection of our suppliers undertaking the survey. As part of our Net Positive work we have also implement a new red flag and escalation system to engage with suppliers scoring poorly in the survey on key sustainability issues.

Key Stakeholder Groups and Engagement Activity

Table 1.5 (continued)

Stakeholder group	Examples of engagement activity	Project/ corporate level engagement	Frequency of engagement activity	Issues raised/ discussed	Responses
Employees **Directly employed Hammerson people working at our head offices or our operational assets**	Great Place to Work	Projects	Annual	Awareness and commitment to corporate approach on sustainability	Sustainability regularly scores very well in this survey. We have increased our internal and external social media communication in 2018. In 2019 we will be developing additional film content to support this
	Corporate Induction	Corporate and Projects	3 times a year	Corporate sustainability strategy, targets and approach	In order to ensure new starters have the opportunity and sufficient time to fully understand the Positive Place strategy an online training module has been developed for our Learning Management System
	Senior Leadership Team workshop on embedding Net Positive in business processes	Corporate	Ad hoc	Embedding additional processes within existing business decision-making and communication structures to support the delivery of Net Positive	Sustainability specific gateways within different decision-making processes.
	Environmental awareness and management training	Corporate	Initial training followed by biennial refresher	Hammerson Positive Places strategy and key environmental issues set in a global and local context	
	Promotion of volunteering and sustainable behaviours through The Butterfly Bank engagement platform	Corporate	Continuous	The role of individuals in driving change, sustainable behaviours to adopt, volunteering opportunities available, impact of activities delivered by employees, reducing disposable cardboard and plastic cups	Engagement via The Butterfly Bank has continued to grow during 2018 and is a key part of enabling employees to participate directly in achieving Net Positive targets. We have removed plastic and paper cups from our London head office.
Investors **Our stakeholders and joint venture partners**	One to one meetings	Corporate	Ad hoc and every four years for materiality review	Material issues, benchmarking, climate risk, carbon emissions, individual asset resilience and risk weighting within the portfolio, performance against targets, integration of Environmental, social and governance into investment processes, costs and financial benefits	Publication of performance data and for 2018 a new materiality matrix, completion of a climate risk review of the portfolio.
	Representation at Investor Conferences	Corporate	Annual	Environmental performance against targets, community engagement, strategy, governance	Discussion on core and topical ESG and sustainability issues
	Participation in industry sustainability benchmarks	Corporate	Annual	Risk management	Participation in GRESB, CDP, REEB, Vigeo; Inclusion in DJSI, FTSE for Good and MSCI
	Quarterly Board reports	Corporate	Annual	Performance against business plan	Maintaining quarterly reporting and disclosure of performance. plus new features for 2018 reporting

In 2018 we developed new training materials for our site management teams to support our management approach to operational impacts. We have continued to develop induction materials based on feedback, and we regularly provide sustainability updates group wide, both via email and with face to face briefings. The Butterfly Bank employee engagement platform continues to drive uptake of sustainable behaviours. In 2018 we committed to going plastic free in our offices, so we have invested in further communications to employees in support of this, and delivered events such as 'Design your own mug' to raise engagement levels.

Our investor engagement in 2018 was strong, having engaged directly with 14 investors, representing 17.5% of our share ownership specifically on Environment Social Governance and Sustainability issues this year. Investor interest in sustainability is rising rapidly as awareness of the business risks presented by climate change increases. During the course of 2018 we presented again at J P Morgan's SRI specialist conference and utilised this opportunity to arrange face to face discussions with ESG focused investors. Our materiality review has resulted in further one-to-one dialogues with investors.

Industry Presence

Whilst we are making strong progress against our sustainability targets we are of course just one business. Hammerson has an important role to play at international, national and local level in influencing sustainability policy, approaches and behaviours.

It requires an entire industry to change for real headway to be made against climate change. Our relationships with local, national and European industry bodies provides an important opportunity to inspire and support change beyond our own portfolios. Our local work with Business Improvement Districts ensures we can help give scale to projects tackling local issues. Our national and European level engagement provides a platform for feeding into policy to ensure it is fit for purpose and driving the best possible outcomes. Our work with the Better Buildings Partnership is particularly important as it co-ordinates the work and power of 30 commercial property owners to drive significant change across the sector.

Industry engagement **Table 1.6**

REVO	Sustainability and Community Engagement Committee Planning Committee Asset Management Committee REVO Scotland (Chair)
EPRA	Sustainability Committee (Chair)
British Property Federation	Sustainability Committee (Chair) Planning Committee
IBEC Retail Ireland	Council member
Better Buildings Partnership	Founder member and Chair
Green Construction Board	Board Member & Buildings Mission Task Group member
Irish Green Building Council	Gold Level Member
Investment Property Forum	Sustainability Interest Group
Business Improvement Districts (BID)	Board Director BID Leicester; Director and Vice Chair of Aberdeen BID; Committee member Leeds BID and Reading BID; Board Director Southampton BID; Chair of business engagement committee Croydon BID; Management Group Bristol BID
City Centre Strategic Management	Barnet Partnership Board:Chair of Strategic Management Board and Chair of Executive Board Leicester; Member Reading Management Group
Chambers of Commerce	Member of Influence and Strategy Group East Midlands; Leeds Chamber Member; Hampshire Chamber member
City specific initiatives	Board Director of Destination Bristol; Enterprise Advisor, Leicester & Leicestershire Enterprise Partnership (LLEP); Chair Brent Cross Resident's Association: Deputy Chair of City Centre Experiences Southampton; Board Member Dundrum college
Civic Trusts	Civic Trust Member Leeds
Charitable Positions	Retail Trust Scottish Ambassador (influencer and promoter of the charity); Chair of Silverburn Forum Community Group

Key Engagement Events in 2018

A long-term supporter of the Better Buildings Partnership

As a founder member of the Better Buildings Partnership Hammerson is a long-standing advocate of the power of cross-industry collaboration to support our sector's response to climate change. After ten years the BBP now has 30 members with a combined £200bn of assets under management. Focusing the resources and experience of this group is driving genuine change across the industry as can be seen in the development of the Real Estate Environmental Benchmark (REEB), the only comprehensive, operational-energy performance benchmark for commercial property within the UK. The BBP Green Lease Toolkit, Management Agents Toolkit and Acquisitions Toolkits have rapidly become standard industry guides and are translated into other languages. The BBP's very exciting work on the Design for Performance project is another excellent example of how this incredibly dynamic organisation is moving the industry forward.

Showcasing the True Value of Retail

In 2018 we continued to showcase our socio-economic impacts with three more True Value of Retail events in Westminster, Edinburgh and Birmingham. Local and national stakeholders were brought together to look at the positive impacts retail can have on a city, from job creation to an increased sense of pride amongst local people. Our Birmingham event coincided with Bullring's 15th birthday. Birmingham City Council leader, Ian Ward, spoke of the impact the Bullring Estate has had on the town."In the 15 years since the Bullring opened its doors, Birmingham has been transformed into one of the UK's foremost retail centres. And that's not just good news for dedicated shoppers – it's absolutely vital to the growing city economy, playing a huge role in the economic wellbeing of our citizens."

EPRA Sustainability Conference 2018

Group Head of Sustainability Louise Ellison took over as Chair of the EPRA Sustainability Committee in November 2018. One of her first tasks was to Chair the annual Sustainability Conference including participating in a panel session discussing how listed real estate companies can contribute to the Paris Agreement target of keeping global warming under 1.5°C. This one day conference was very well attended and had a pan-European, cross-industry audience. This rising demand for industry-led sustainability events is indicative of businesses' increased awareness of the significant of these issues.

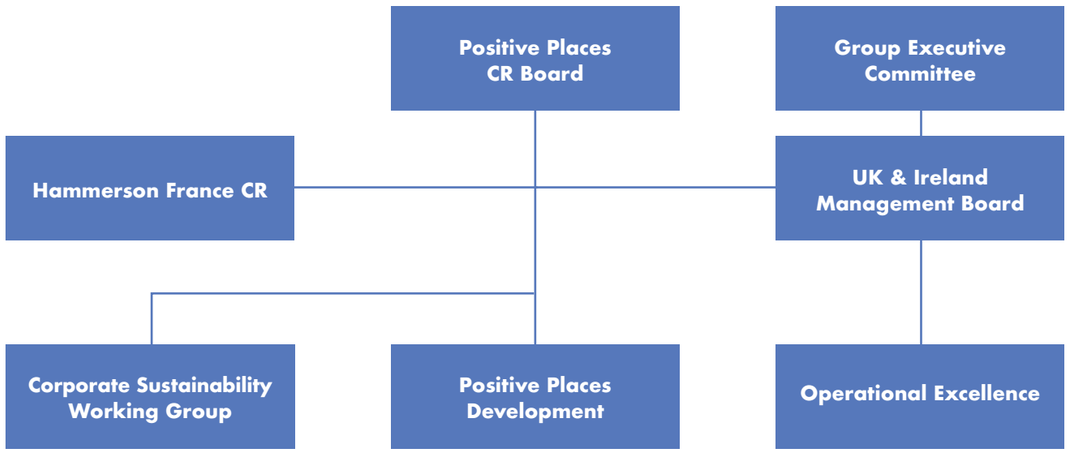
Governance Structure

Introduction

Our sustainability vision requires a strong governance structure that ensures sustainability is embedded into the decision-making process and roles and responsibilities across the Hammerson group. This structure has been reviewed and updated in 2018. Our Positive Places Corporate Responsibility Board, chaired by our Chief Executive, is responsible for overseeing the delivery of our group-wide sustainability performance and reports to the Plc Board. The Positive Places CR Board meets three times a year to review and set strategic priorities and targets, as well as identify and manage sustainability risks, including climate change and legislative compliance.

The Corporate Sustainability and Positive Places Development Working Groups report directly to the Positive Places CR Board on progress in Developments and our Corporate activities. The Operational Excellence Working Group reports directly to our UK and Ireland Management Board on asset level sustainability performance and projects.

This new structure reflects the strong focus on the reporting and delivery of our Positive Places strategy within the business streams. This allows the Positive Places CR Board to focus more actively on strategy and innovation.

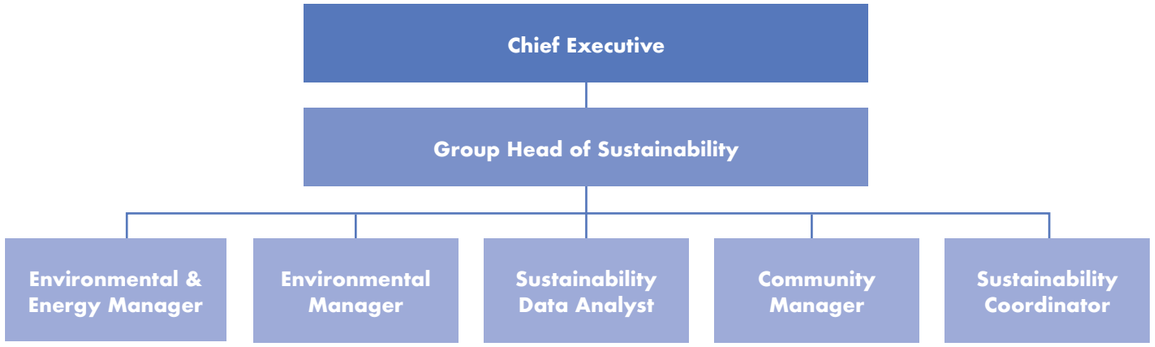


Group Wide Sustainability Roles

Delivery of Hammerson's sustainability vision requires company wide knowledge and commitment.

Corporate team

Our specialist Positive Places team drives the programme but it is delivered at asset level by our Operational and Development teams. Sustainability is included within the roles and responsibilities of business area leads and in annual personal objectives.



Operational roles

Delivery of such an ambitious programme also requires managed on-site presence. Each shopping centre asset in the UK and Ireland has an Environment and Community Coordinator managed by the on-site Operations Manager, to support the on site teams. At our French assets the Technical Manager has responsibility for delivering the sustainability elements of the asset business plans. Delivery of each asset's sustainability objectives is also included within the General Manager's personal objectives. This approach places accountability and responsibility for delivery of asset sustainability at the heart of the our onsite teams.

MORE

Further information on selecting the governance body and managing conflicts of interest is found in the Annual Report and Accounts 2018 page 64–65, 108–112, (EPRA Gov-Selec, Gov-CoI) You can see our full team structure on our Positive Places website: http://sustainability.hammerson.com/vision-and-approach/sustainability-board.html

Section 2

Delivering Positive Social Impacts

Thriving local communities are fundamental to the success of our venues. We work hard to ensure local people benefit from our presence as a business in their community and feel a sense of ownership and pride in their local Hammerson asset.

Purple Tuesday, the UK's Accessible Shopping Day host at the Oracle, Reading, in 2018.

Community Engagement

Community engagement remains a priority for us and our recent materiality review showed this is true for our stakeholders too.

We focus our community engagement activities on the four key areas of employment and skills, enterprise, young people, and health and wellbeing. Many of our initiatives are delivered using local community groups and organisations with strong local networks. We find this local approach delivers strong outcomes, tailored to local areas of need that really resonate with the community.

Cross portfolio community initiatives

At a corporate level, we have developed a small number of strong partnerships that have enabled us to create and deliver cross portfolio initiatives that focus on the areas where we can deliver the most benefit. For example our employment brokerage partnerships and entrepreneurial training and support schemes for local people have been adopted across multiple shopping centres. We also have educational programmes we support that develop business and interpersonal skills.

Table 2.1 shows the key engagement projects developed at corporate level and delivered in 2018

Key Corporate Community Engagement Projects **Table 2.1**

Partner	Focus	Project and outputs
The Brit School	Young People	Over 6,000 engaged through performances and creative art programmes
BraveHeart/LionHeart/ Cuchulainn Heart Challenge	Young People	3 cross-portfolio challenge events engaging 455 young people
Enabling Enterprise	Young People	8 cross-portfolio skills Building events hosted engaging 204 young people
Inspire Education Business Partnership	Young People	Work Week, work-related learning programme engaging 941 young people
Let's Talk Shop	Employment & Skills	Job brokerage service supported 93 people into employment
PopUp Business School	Enterprise	Business start-up workshops at 8 assets engaging people to start their own business
Retail Trust	Employment & Skills	Fashion start up with Glasgow Caledonian University, funding 4 scholarships and seed funding to 4 startup businesses
SKOLA France	Employment & Skills	Initiative upskilling young people to gain a diploma in retail, with 3 securing employment and 12 hired as trainees
The Teenage Market	Enterprise	Platform supporting 55 young people to showcase their creative talent through 7 cross-portfolio events
Initiative France	Enterprise	Organisation supporting start-ups with funding and business support.

Asset community plans

Our asset community plans look to optimise the opportunities we have to deliver positive socio-economic impacts. We use our strategic themes to shape these plans for each of our assets. They ensure our projects and initiatives tackle the most relevant issues at a local level and cover an asset's development life cycle, asset management and corporate activities. Our definition of engagement refers to individuals supported through a project or interacting in a activity, such as an event, workshop of performance.

Core Themes	Number of people engaged	Table 2.2
Employment and Skills	4,363	
Enterprise	839	
Young People	41,398	
Health and Wellbeing	9,850	

MORE

Table 8.8 shows the number of direct beneficiaries of projects delivered under our four key themes

Our Socio-economic Footprint

We know from our footprint research that the presence of our assets delivers positive local community impacts, and that our business activities attract significant additional investment into local economies.

Our cross portfolio research revealed:

£800m
Wages generated

40,000
Full time jobs created

£40m
Invested annually by retailers in skills and training

MORE

http://sustainability.hammerson.com/356/our-socio-economic-footpint

Case Study

Developing enterprise skills with the LionHeart Challenge

The LionHeart Challenge is a business, citizenship and enterprise programme delivered in schools across the UK & Ireland. In addition to providing funding, throughout 2018, Hammerson employees have supported the programme by using their skills and expertise acting as team facilitators, expert mentors and judges in secondary schools local to our Dublin & Glasgow assets.

Over the course of a day, students from a single year group participate in a high impact business challenge; devising practical, effective and targeted community action projects specifically looking at local issues. These have included homelessness, long-term unemployment and anti-social behaviour. Students then select one issue and working collectively as a team, develop a business plan for a project that aims to bring about a positive change. They have to look at a range of real life factors such as local partners, stakeholders and potential sponsors. Finally, presentations are delivered to business and industry expert volunteers who provide constructive feedback to students.

During 2019, The LionHeart Challenge programme will be delivered again at Hammerson assets in the UK and Ireland with local school teams competing for a chance to attend a grand final event hosted by Hammerson in London.

"Students were very aware of local community issues and have a real sense of responsibility and ownership around exploring opportunities to help. The challenge presents opportunities for students to think more about how they can help address local issues, and most importantly, how they can call on others to provide a network, to build a team and deal with issues more effectively"

Don Nugent
Centre Director, Dundrum Town Centre

Local Community Investment

We invest in our local communities both directly through project funding, as illustrated by the case studies shown here and listed in table 8.8 on pages 135, and through our charitable giving.

We provide in-kind support through skills, space and marketing support, and provide indirect funding by enabling organisations to reach and engage our audiences, including both our employees and shoppers.

We give direct cash donations and bursaries, and enhance employee donations through match funding and fundraising activities for both our national and asset specific charity partners.

Table 2.3

Community Investment	Unit	2018
Direct contributions	£000	1,699
Indirect contributions	£000	312
Number of organisations supported	#	472

Table 2.4

Corporate Charity Donations	Unit	2018
Total Donations	£000	200
Match funding for employees	£000	10
Number of charities supported	#	33

THE OUTWARD BOUND TRUST

Employee charity partner 2018 – 2020: The Outward Bound Trust

Every two years we select a UK & Ireland Employee Charity Partner through employee nominations. Following nominations, we invite shortlisted charities to present at a breakfast meeting where employees vote for the charity they feel our support will have the greatest impact. Our Employee Charity Partner for 2018 – 2020 is The Outward Bound Trust, an educational charity that uses the outdoors to help develop young people from all walks of life. In addition to receiving a cash donation, we identify opportunities to maximise our partnership, developing a strong relationship between the charity and employees.

Our plans for 2019 with The Outward Bound Trust include participation in the London Marathon and The Dulux London Revolution, a 300km two day cycle fundraising ride around London.

Six employees from across the business will participate in The Outward Bound Trust's Ambassador Programme, a five day residential experience with up to 30 young people at a remote, rural location in Wales. During the course of the programme, employees will mentor young people, helping the group bond as a team and identify strengths and weaknesses in order to overcome a range of physical and mental challenges.

2019 and beyond

During 2019 and beyond, community engagement activity will continue to focus on our four key areas:

- Employment & Skills – Working in collaboration with the Department for Work & Pensions to provide work experience placements at each UK asset
- Enterprise – Delivering 7 PopUp Business School events across the UK & Ireland and hosting Teenage Market events at 4 assets providing an opportunity for local young people to showcase their creative talents
- Young People – Supporting a cross country LionHeart Challenge engaging students from England, Ireland & Scotland to compete in a London final
- Health & Wellbeing – Partnering with NHS Scotland to deliver a measureable health and wellbeing focused project within Glasgow

These projects will support delivery of our Net Positive socio-economic targets to make a measurable positive impact on socio-economic issues relevant to our local communities, beyond a measured baseline.

Employee volunteering

We are committed to supporting employees making a positive difference to communities through volunteering and charitable fundraising.

In addition to our annual Community Day event, all employees are allocated two paid volunteering days per year to support charitable projects and organisations. We offer volunteering opportunities via The Butterfly Bank our employee engagement platform. Employees can volunteer with charities of their choice where they have a particular interest.

MORE

The Butterfly Bank

We utilise The Butterfly Bank platform from Coriander Cows to support our volunteering programme.
See more on these activities on pages 120–121

In 2018 Hammerson employees invested

4000+

volunteering hours

Case Study

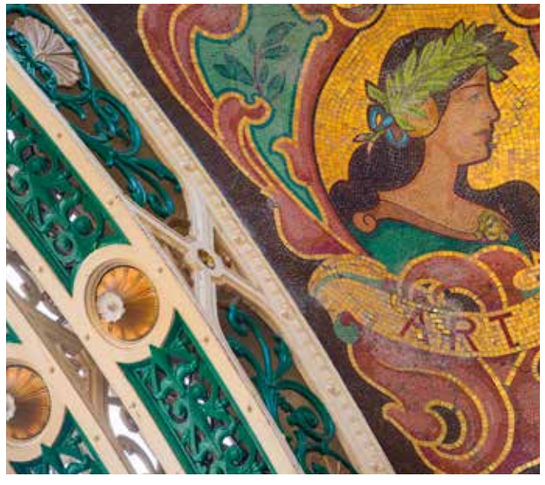
Celebrating local heritage and creativity with Leeds Arts University

Working in collaboration with Leeds Arts University and a local mosaic artist, 16 students designed and created a new decorative mosaic for the historic Victoria Quarter retail arcade. Students researched the history of Victoria Quarter, photographing, sketching and getting a sense of how the new artwork would work within the space. The rich heritage and architectural features of the Victorian arcades have been interpreted in a number of ways through the new mosaic.

This project has been an excellent partnership between Hammerson and Leeds Arts University, and has provided our students with a valuable opportunity to not only gain experience of working for a commercial organisation in a professional capacity, but also to collaborate with an established local mosaic artist

Andrew Jones
Head of Careers, Employability and Enterprise at Leeds Arts University

The final design reflects the arches and curves of the architecture, the stained glass of the ceiling, and the Yorkshire rose. To complete the mosaic, the four central images celebrate the original trades that once flourished in the arcades such as the fruit and vegetable market, dress makers and haberdashery suppliers and the dance hall that was also once in County Arcade. During the course of the project, students learned an enormous amount about the history of the site and how this might be interpreted for a commissioned piece whilst also gaining valuable skills in mosaic design and installation.



Case Study

Making our destinations more inclusive with the Victoria Leeds Dementia Friendly Corner Flag Café

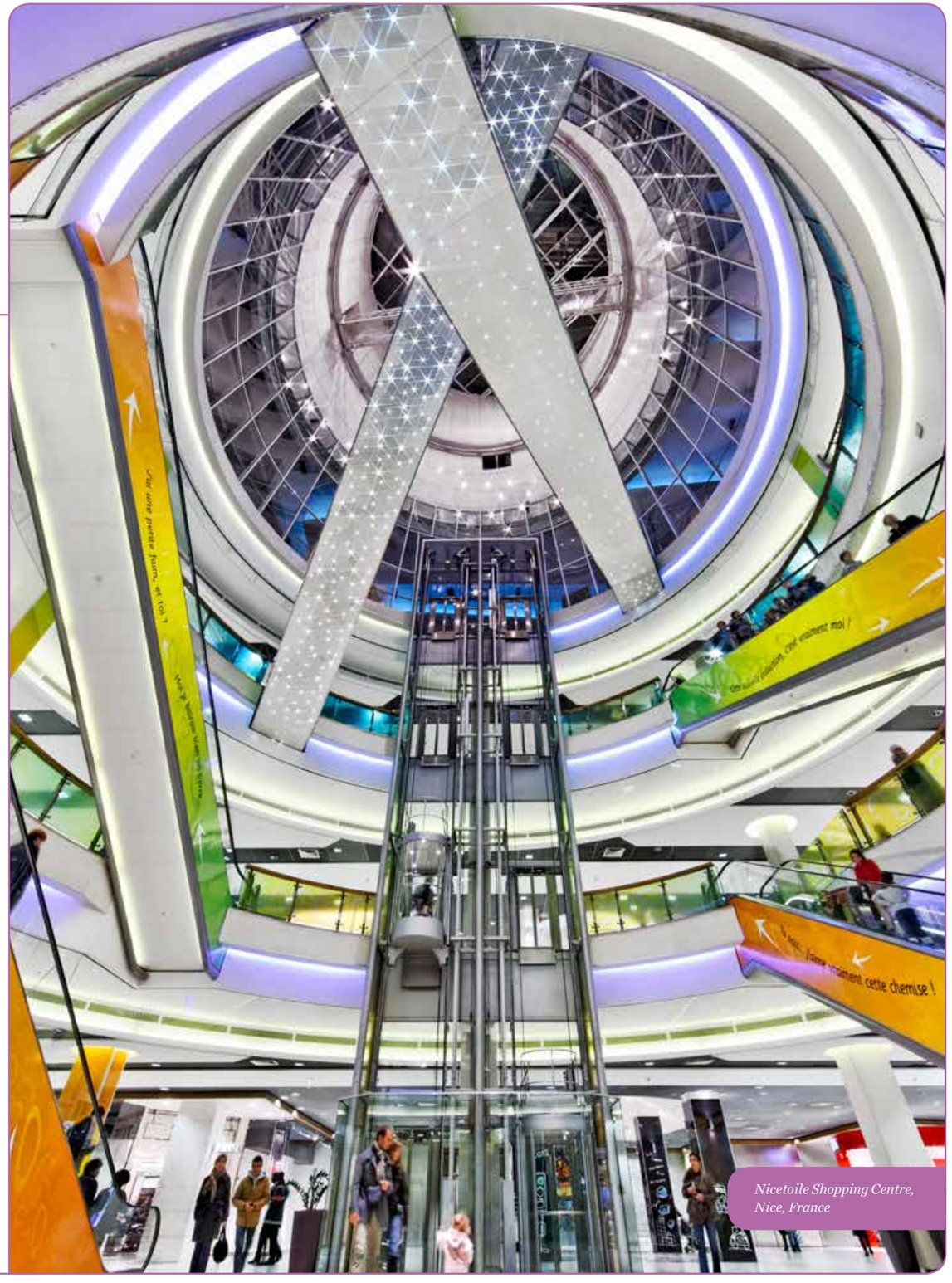
In collaboration with the Leeds United Foundation and Mount Saint Mary's Catholic High School, Victoria Leeds hosted the Pop-Up Corner Flag Café event for local people with dementia. The Corner Flag Café is a monthly initiative led by the Leeds United Foundation that sees people who live with dementia gather together to look through old programmes, footage of old Leeds United games and memorabilia to help stimulate memories and experiences.

Students from Mount Saint Mary's School choir provided entertainment, singing a range of songs, both classic and contemporary, to entertain attendees in a welcoming and cheerful environment. Further inclusivity events are planned at the asset during 2019.

Section 3

Reducing our Carbon Emissions

Carbon emissions are a material sustainability issue, not just for Hammerson but for all businesses and wider society. Achieving business growth whilst reducing carbon emissions is one of our corporate KPIs.



Nicetoile Shopping Centre, Nice, France

Reducing Our Carbon Emissions

Carbon emissions remain a key material issue for the business, and as such carbon emissions reduction is a major focus of our Positive Places strategy. Reducing business carbon intensity is a corporate KPI and we have committed to becoming Net Positive for scope 1,2 and 3 carbon emissions by 2030.

Annual performance against key carbon targets

Table 3.1

Target	2016	2017	2018	2019	2020
Reduce carbon intensity of the business by 20% against the 2015 baseline	-9%	-3%	-19%		
Reduce absolute operational CO_2e of like-for-like retail portfolio by 18% by 2020 v. 2015 baseline	-14%	-9%	-19%		
Reduce operational energy use of the like-for-like retail portfolio 15% by 2018 v. 2015 baseline	-3%	-8%	-6%		
Reduce carbon Scope 1 and 2 carbon emissions to less then zero by 2020 for the Net Positive portfolio	25,404	27,543	17,873		

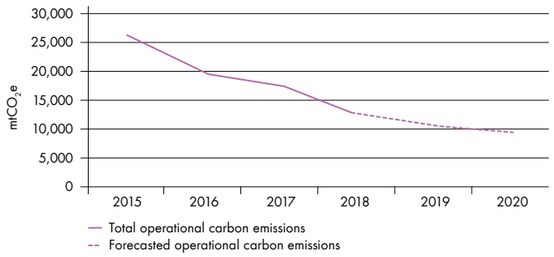
St Peters Square, Highcross Shopping Centre, Leicester

Our performance against targets in 2018

In 2018 we achieved our 2020 target of improving carbon emissions intensity of the business by 20% against a 2015 baseline, two years ahead of schedule. Business carbon intensity, measured as tonnes CO_2e/£m adjusted profit before tax, fell by 19% year-on-year to 122. This brings the reduction versus our 2015 baseline to 29%.

Chart 3.1

Operational carbon emissions across the LFL retail portfolio (2015 baseline)



Operational carbon emissions from our 2015 like-for-like retail portfolio have fallen by a further 19% year-on-year in 2018, bringing the total carbon reduction for this portfolio to 44% since 2015. This has been driven by significant energy savings.

In the UK, our improved carbon emissions were also supported by decarbonisation of the grid. However, grid factors in France have worsened owing to challenges in the nuclear power sector.

Our continued success in reducing carbon emissions was driven in 2018 by further progress in energy efficiency. In a year of extreme weather events the teams delivered a further 8% reduction in operational energy demand year-on-year, bringing total energy reductions for the 2015 like-for-like portfolio to 6%. This ihas helped us achieve our stretched target of 15% reduction against the 2015 baseline we set for the business. This has delivered strong financial savings for our retailers and the business of £619k in electricity costs year-in-year and £173k in gas and district heating year-on-year.

Over 94% of the electricity purchased across our UK and Ireland assets is on clean electricity contracts. Energy for our French assets is less carbon intensive due to the dominance of nuclear power in France.

2019 and beyond

Our focus for 2019 will remain on reducing our demand for energy, particularly electricity, and making full use of our new utility metering platform. We are aware that the level of reduction we have seen in recent years is unlikely to continue however, we have projects in place that we expect to drive further reductions

- **Solar PV array installations**
- **Further LED installations**
- **Controls and improved management using smart metering data**

We are also still expecting our teams to focus on identifying efficiencies through good management, particularly with the metering platform in place, and have set 2019 targets for each asset.

Our 2019 and 2020 targets for energy and carbon are:

Table 3.2

	Annual Target		2020 target vs. 2018
TARGET	**2019**	**2020**	
Reduce operational energy consumption by 15% by 2020 (EPRA LfL portfolio)	-11%	-4%	-15%
Reduce operational carbon emissions by 25% by 2020 (EPRA LfL portfolio)	-18%	-10%	-25%
Net positive carbon emissions targets for energy	-17%	-9%	-24%

Achieving these targets will maximise the contribution our management can make to achieving our 2020 Net Positive targets.

Managing Operational Impacts

Introduction

Proactively managing our environmental impacts across our Shopping Centre and Retail Parks portfolios is fundamental to progressing against our targets and achieving our objectives.

The materiality studies and stakeholder engagement we undertake help shape our Positive Places strategy, which in turn informs our operational objectives. Positive Places Plans are set annually for each managed asset with annual targets, projects and initiatives designed to achieve them. These Plans are monitored through the year with progress reported to the Positive Places CR Board and monitored by the UK and Ireland Management Board. This structured approach, with clear targets and accountabilities, has been fundamental to Hammerson's achievement of such strong and consistent sustainability outcomes over the last 12 years.

Material Sustainability Issues → **Positive Places Strategy** → **Corporate Targets** → **Asset Targets and Business Plans**

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 meter reads and invoices, and uploaded monthly to our CR360 reporting platform by the site team. It is reviewed and verified by two further levels within the organisation and reported through our CR Governance process to the Positive Places CR Board. 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 implementing an automated utility metering project across our UK and Ireland Shopping Centre assets. This is already improving data visibility and we are expecting it to drive further efficiencies.

Environmental management system

In 2018, we successfully transitioned our EMS to ISO14001:2015 standard, and recertified. All of our directly managed UK and Ireland shopping centres are now included within the scope of our ISO14001 EMS along with our UK corporate offices.

Our EMS provides a useful tool for challenging and reviewing our management processes and ensuring colleagues across the business have a clear and robust environmental management structure to implement. In 2019, we will look to extend our EMS to our French shopping centres, and create a formal energy management system to complement the EMS. We expect this to support our focus on energy, a key material sustainability issue, and ensure we see the maximum efficiency benefit from our newly installed smart metering.

Sustainability Certification

GRI Indicator 471-1

EPRA Cert-Tot

Table 3.3

Certification	Unit	Group	UK Shopping Centres	UK Retail Parks	France Retail Portfolio	Irish Retail Portfolio
ISO14001						
Number of assets covered out of total number of assets	#	12/39	11/14	0/14	0/8	1/3
Portfolio covered by ISO 14001	m^2	1,397,862	1,236,274	0	0	161,588
% portfolio covered by GIA	%	48%	83%	0%	0%	77%
Energy Performance Certificates						**BERs**
Total number of certificates	#	1,421	1,179	97	8	137
Area covered by EPC	m^2	1,293,926	659,135	246,430	365,461	22,900
Area requiring EPC	m^2	1,844,631	861,719	323,090	462,985	196,837
% area covered by EPC	%	70%	76%	76%	79%	12%

Our focus on Energy

Energy security and demand

Energy security and demand has been a material sustainability issue since we started reporting in 2006 and remains high on the agenda. Energy supply risk in the UK is enhanced by pressure on the supply infrastructure. Whilst energy demand is a risk in terms of the costs, both commodity and non-commodity, the risk to security of supply has become more acute. We expect this to lead to cost increases as this remains the most commonly adopted regulatory measure to influence demand.

We have a strategy in place to mitigate our exposure to peak energy pricing (TRIADs) in the UK and are exploring further mitigation measures including the potential for agreeing a Power Purchase Agreement with a renewable energy provider and the use of battery storage linked to our PV arrays. Charging batteries either from onsite PV during the day or from the grid during periods of low demand for use during periods of peak demand will reduce grid pressure and has the potential for cost savings.

2018 Energy demand Initiatives

At the Bullring we continued our relationship with Grid Edge who have built a predictive energy modelling platform that enables the on-site team to set a day ahead energy management strategy on a zoned basis. It is incredibly exciting to be applying cutting edge research and machine learning to building performance management and delivering great carbon and cost savings. We are looking to roll this system out to Grand Central in 2019, combine it with our smart metering platform and engage more actively with the energy grid in the city.

Smart metering

A significant project undertaken in 2018 was the installation of smart metering at 8 UK centres covering landlord electricity, gas and water supplies. This extensive sub-metering network is already enabling proactive utility management and identification of improvement opportunities.

Bringing down energy demand with LED lighting

We continued the rollout of LEDs across the portfolio with refurbishment programmes at Cabot Circus, Bullring, Centrale, Dundrum Town Centre, Silverburn, Union Square and Grand Central. The scope of works differs across assets but includes front of house, back of house, emergency lighting and car park installations. On average we have seen a saving of over 30% in power demand for lighting where LED lamp swaps have been done.

In addition we are continuing to see the benefit of LEDs installed in late 2017 at Parc Tawe, Ravenhead and Telford Forge Retail Parks, with electricity savings of over 40%.

Onsite renewable generation

In 2018 we completed the installation of solar photovoltaic panels at Victoria Gate in Leeds. This array together with our other arrays at Elliot's Field Retail Park in Rugby, Westquay Shopping Centre in Southampton and Cabot Circus Shopping Centre in Bristol, generated over 450MWh of clean electricity in 2018. We now have some 1.4MWp of PV capacity across the portfolio and are still aiming to achieve 3MWp by the end of 2020.

Technology

Technology continues to present interesting opportunities for us particularly in relation to power and mobility. Electric vehicles have transitioned relatively quickly, as was predicted, from a likely future to a current reality. This presents us with potential opportunities but also risks. Provision of EV charging points in car parks is expanding and tends to increase dwell time, however there is no certainty that this is a long term or even medium term situation, and it requires investment and technology selection. We are therefore taking a measured approach to any increase in EV charging points and looking to increase take up of what we have before we invest heavily in additional facilities. We are, however, ensuring we have infrastructure in place to be able to provide energy for expanding demand.

The more significant change and potential opportunity in mobility is likely to come from the provision of fleet charging facilities for transport service providers such as Zip Car. This is something we are looking to explore through local partnerships.

By 2030 we will be Net Positive for:

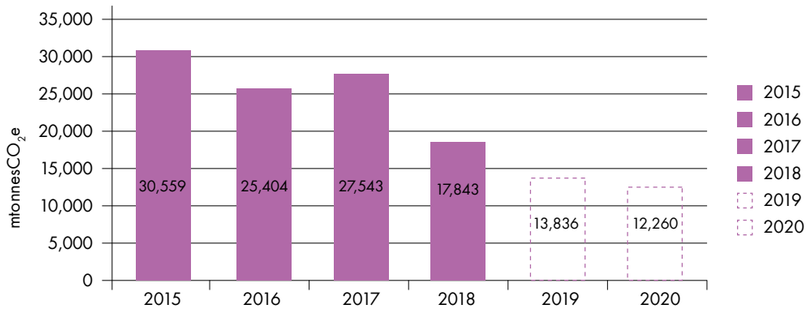
Carbon **Water** **Resource Use** **Socio-economic impacts**

Becoming Net Positive for Carbon Emissions

Our five year carbon emissions target is to be Net Positive for scope 1 and 2 carbon emissions by 2020. This includes all emissions from our owned or controlled sources and from our electricity contracts. Our 2030 Net Positive target includes scopes 1, 2 and 3 carbon emissions, extending the scope to indirect emissions including the retailer controlled spaces within our assets. These targets include carbon emissions from all assets under our ownership during the reporting year, on an equity share basis. They are challenging targets but we are making good progress towards them.

In addition to the efficiency projects that have driven the energy reductions set out above, our Net Positive carbon targets are impacted by our corporate operations, water demand and waste management. By reducing our water demand and improving recycling we also reduce our overall carbon footprint. Progress against this Net Positive target has been good in 2018 with a reduction of 35% to 17,873 tonnes CO_2e, including carbon offset activities.

Chart 3.2



Offsetting projects

Offsetting is an important part of our strategy for achieving our Net Positive targets. This includes reducing carbon emissions from areas outside the target Net Positive carbon footprint. Examples include helping tenants reduce their carbon emissions through our policies and processes and helping visitors to our centres reduce their carbon emissions by providing electric vehicle charging.
Two key initiatives have been put in place in 2018 to help us achieve this:

- Retailers at our carbon neutral retail park at Elliott's Field, Rugby have benefitted from significant reductions in their operating costs through the energy efficient fit out we worked with them to achieve. On average their retail units are 30% more energy efficient than other retail units across our portfolio. This is saving an estimated 123 tonnes of carbon emissions annually. The rooftop PV array contributes to the remaining energy demand for these retail units saving a further 38 tonnes of carbon emissions and making the units carbon neutral for regulated energy.
- We worked with the Hospitality Forum to produce an energy efficiency guide for our food and beverage (F&B) occupiers specifically to support this growing group of our customers to save energy and money. The guide contains tips and advice on saving energy from the way fridges are stacked to not switching equipment on until it is needed. This detailed advice is designed to support the on-site F&B occupiers to make their restaurants more efficient. The guidance has been extremely well received so far and we have estimated that it has saved 160 tonnes of carbon. The guidance will be rolled out across all UK and Ireland shopping centres in 2019.

Viewpoint

Developing our Positive Places strategy at the Bullring Estate, Birmingham

Bullring Estate, Birmingham comprises Bullring, Grand Central and Link Street. Together, the estate represents the biggest environmental footprint within the Hammerson portfolio so it is a particular area of focus for us. The centre teams work closely together to monitor the use of electricity, gas and water to ensure that consumption remains as low as possible whilst balancing the needs of customer comfort. A seasonal heating and cooling strategy is established for each centre. These are informed by the studies carried out for us by Breathing Buildings in 2013 and 2015, but also by the knowledge the team have of the site and the requirement to make sure our visitors are comfortable.

Electricity and gas consumption is driven mainly by the use of mechanical and electrical plant and equipment such as air handling units, responsible for heating and cooling the centres. The Building Management System is used to monitor and adapt the operation of plant and equipment throughout the day. For example, door heaters are important for maintaining mall temperatures during the winter but can be switched off during peak times to avoid peak energy charges. at certain times of the day. Temperature set points maintain consistent space temperatures in our malls but are regularly adjusted to reflect external temperatures.

The Bullring Estate team faces significant challenges in running the assets in an energy efficient way. Bullring was designed before a focus on energy efficiency was commonplace and is a large, energy hungry asset. Grand Central is a modern design but located above Birmingham New Street Rail Station. This means cold air from the platforms is drawn up into the large atrium space. This has presented a major heating challenge for the asset which is currently the most gas intensive on a kWh/m² common parts basis, within our portfolio. The team are looking actively at ways to reduce this whilst ensuring visitor and employee comfort are maintained.

In addition, both Bullring and Grand Central have large glazed roofs subject to significant solar gain in the summer. We will start to look at shading solutions for this as our climate risk analysis shows high summer temperatures are expected to become more extreme and more frequent.

Resolving these challenges will be supported by much more detailed monitoring that will be available across the estate as a result of our investment in smart metering. The Envizi platform means the team can monitor energy on a day plus one basis.

Grid Edge's machine learning platform Edge2X is used to dynamically monitor and manage the energy load within these buildings. This system allows the team to plan the energy strategy for the buildings day by day in response to forecasts of temperature and footfall. This, combined with the Envizi platform will enable the team to start responding to demand management requests from the local grid, effectively using the inertia of the building to help balance grid load.

All employees working in the Bullring estate are kept informed with dashboards of consumption levels, and discussion points about why consumption may have changed. By engaging employees we can ensure they are brought into the management process and kept informed on how operational procedures from cleaning regimes to major marketing events, have a direct impact on energy consumption, and how we can all support the Positive Places targets for the asset.

Rose Playle

Environment and Community Coordinator, Bullring Estate

"The level of efficiency the team achieves there is remarkable and is a testament to real vigilance and creative thinking about how the asset works."

Carbon Emissions

Carbon Emissions by Group and Operating Region

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

Table 3.4

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 alongside our shopping centres and retail parks. Reporting is broken down by geography. This portfolio has reduced for this reporting period, reflecting net disposals completed in 2017. Emissions from assets sold in 2018 are included for the period held them.

Our **portfolio-level** reporting includes our directly managed assets in the three key geographies. We do not report the strategic assets (those held for development purposes) within this data set. We provide like-for-like analysis of our directly 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. We also provide carbon and energy demand data back to 2015 when our current targets were set and combined data for the like-for-like baseline portfolio i.e. those assets contributing to the 2015 baseline that remain within the portfolio as at the end of 2018. This includes data from 26 consistently held assets - 13 shopping centres and 13 retail parks.

Data coverage is set out within each table. We also provide data for the whole portfolios for the past four years. This includes assets that we may have held for less than a full year.

The assets included within our 2018 Sustainability Report and their relevant data sets are set out in tables on pages 143-145. 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. We do not purchase any renewable gas or energy for district heating.

Total data coverage includes 39 assets broken down across the portfolios as follows:

- 25 Shopping centres: 14 UK, 8 France, 3 Ireland
- 14 Retail Parks – all UK

This includes assets within our strategic portfolio and any asset that we have held for part of the reporting year.

We use the GHG Protocol reporting standards for our GHG reporting.

HAMMERSON GROUP	UNIT	EPRA CODE	2015	2016	2017	2018	% CH YOY	% CH V.2015
Total CO_2e (Location Based)	**mtCO_2e**		**34,932**	**33,446**	**30,328**	**27,696**	**-9%**	**-21%**
Scope 1	mtCO_2e	GHG-Dir-Abs	6,171	5,970	4,323	5,635	30%	-9%
Scope 2	mtCO_2e	GHG-Indir-Abs	28,762	27,475	26,005	22,061	-15%	-23%
Scope 3[b]	mtCO_2e	GHG-Indir-Abs	1,858	1,475	2,010	2,165	8%	17%
Total CO_2e (Market Based)[a]	**mtCO_2e**		**34,932**	**15,078**	**11,954**	**12,250**	**2%**	**-65%**
Scope 1	mtCO_2e	GHG-Dir-Abs	6,171	5,970	4,323	5,893	36%	-5%
Scope 2	mtCO_2e	GHG-Indir-Abs	28,762	9,108	7,632	6,358	-17%	-78%
Scope 3[b]	mtCO_2e	GHG-Indir-Abs	-	1,475	1,677	2,165	29%	
HAMMERSON UK TOTAL								
Total CO_2e (Location Based)	**mtCO_2e**		**27,762**	**24,682**	**19,300**	**16,657**	**-14%**	**-40%**
Scope 1	mtCO_2e	GHG-Dir-Abs	3,345	3,087	1,787	3,087	71%	-9%
Scope 2	mtCO_2e	GHG-Indir-Abs	24,417	21,595	17,513	13,609	-22%	-44%
Scope 3[b]	mtCO_2e	GHG-Indir-Abs	1,723	1,371	1,770	1,671	-6%	-3%
Total CO_2e (Market Based)[a]	**mtCO_2e**		**27,762**	**8,333**	**5,200**	**6,012**	**16%**	**-78%**
Scope 1	mtCO_2e	GHG-Dir-Abs	3,345	3,087	1,787	3,048	71%	-9%
Scope 2	mtCO_2e	GHG-Indir-Abs	24,417	5,246	3,413	2,964	-13%	-88%
Scope 3[b]	mtCO_2e	GHG-Indir-Abs	-	1,371	1,467	1,671	14%	
HAMMERSON FRANCE TOTAL								
Total CO_2e (Location Based)	**mtCO_2e**		**7,170**	**5,908**	**5,252**	**4,854**	**-8%**	**-32%**
Scope 1	mtCO_2e	GHG-Dir-Abs	2,825	2,791	2,195	1,905	-13%	-33%
Scope 2	mtCO_2e	GHG-Indir-Abs	4,345	3,117	3,057	2,948	-4%	-32%
Scope 3[b]	mtCO_2e	GHG-Indir-Abs	135	104	210	466	122%	
Total CO_2e (Market Based)[a]	**mtCO_2e**		**7,170**	**5,908**	**5,252**	**4,616**	**-12%**	**-36%**
Scope 1	mtCO_2e	GHG-Dir-Abs	2,825	2,791	2,195	1,905	-13%	-33%
Scope 2	mtCO_2e	GHG-Indir-Abs	4,345	3,117	3,057	2,711	-11%	-38%
Scope 3[b]	mtCO_2e	GHG-Indir-Abs	148	104	210	466	122%	
HAMMERSON IRELAND TOTAL								
Total CO_2e (Location Based)	**mtCO_2e**		**n/a**	**2,856**	**5,777**	**6,185**	**7%**	
Scope 1	mtCO_2e	GHG-Dir-Abs	n/a	92	341	682	100%	
Scope 2	mtCO_2e	GHG-Indir-Abs	n/a	2,763	5,436	5,503	1%	
Scope 3[b]	mtCO_2e	GHG-Indir-Abs	n/a	0	29	28	-3%	
Total CO_2e (Market Based)[a]	**mtCO_2e**		**n/a**	**837**	**1,503**	**1,622**	**8%**	
Scope 1	mtCO_2e	GHG-Dir-Abs	n/a	92	341	940	176%	
Scope 2	mtCO_2e	GHG-Indir-Abs	n/a	745	1,162	682	-41%	
Scope 3[b]	mtCO_2e	GHG-Indir-Abs	n/a	0	2	28		

a Market based calculations reflect emissions factors relevant for clean electricity contracts where applicable

b Scope 3 includes gas and electricity submetered to tenants for use in tenanted areas. Scope 3 is from landlord obtained tenant energy consumption and is excluded from the totals

Since 2015 our UK Shopping centre portfolio has expanded with 2 additional assets having been opened in 2016 in Southampton and Leeds. Even with this expansion, carbon emissions from the portfolio have fallen by 38% since 2015, 13% year-on-year.

Our Retail Parks portfolio is now smaller with 12 assets being sold since 2015 and three assets being extended and/or opened at Elliott's Field, Rugby (phases 1 & 2), Didcot and Parc Tawe, Swansea.

Chart 3.3

UK Shopping Centre Portfolio Total CO_2e (Location based)

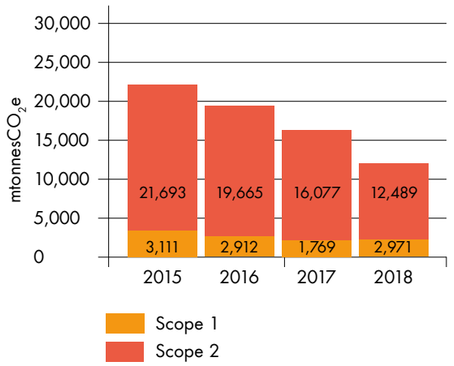
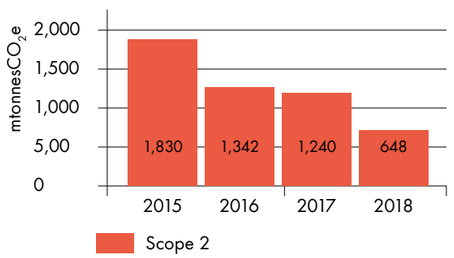


Chart 3.4

Retail Parks Total CO_2e (Location Based)



Carbon Emissions by Portfolio

GRI Indicator 305-1, 305-2,305-3,CRE3

Table 3.5

HAMMERSON UK SHOPPING CENTRE (COVERAGE 14/14 ASSETS)	UNIT	EPRA CODE	2015	2016	2017	2018	% CH YOY	% CH V.2015
Total CO_2e (Location Based)	**mtCO_2e**	**GHG-Dir-Abs**	**24,804**	**22,577**	**17,846**	**15,460**	**-13%**	**-38%**
Scope 1	mtCO_2e	GHG-Dir-Abs	3,111	2,912	1,769	2,971	68%	-4%
Scope 2	mtCO_2e	GHG-Dir-Abs	21,693	19,665	16,077	12,489	-22%	-42%
Scope 3[b]	mtCO_2e	GHG-Dir-Abs	1,700	707	1,770	1,671	-6%	-2%
Total CO_2e (Market Based)[a]	**mtCO_2e**	**GHG-Dir-Abs**	**7,243**	**6,035**	**3,746**	**4,390**	**17%**	**-39%**
Scope 1	mtCO_2e	GHG-Dir-Abs	3,111	2,912	1,769	2,971	68%	-4%
Scope 2	mtCO_2e	GHG-Dir-Abs	4,132	3,122	1,977	1,418	-28%	-66%
Scope 3[b]	mtCO_2e	GHG-Dir-Abs	n/a	n/a	1,467	1,671	14%	
Common Parts Area (CPA)	m^2		294,547	273,119	273,119	257,173		
GHG intensity	kgCO_2e/CPA		84	83	65	60		
HAMMERSON UK RETAIL PARK PORTFOLIO (COVERAGE 19/19)								
Total CO_2e (Location Based)	**mtCO_2e**	**GHG-Dir-Abs**	**1,834**	**1,345**	**1,244**	**651**	**-48%**	**-65%**
Scope 1	mtCO_2e	GHG-Dir-Abs	4	3	3	3	-9%	-24%
Scope 2	mtCO_2e	GHG-Dir-Abs	1,830	1,342	1,240	648	-48%	-65%
Scope 3[b]	mtCO_2e	GHG-Dir-Abs		21	0	0		
Total CO_2e (Market Based)[a]	**mtCO_2e**	**GHG-Dir-Abs**	**-**	**1,345**	**1,244**	**897**	**-28%**	
Scope 1	mtCO_2e	GHG-Dir-Abs	4	3	3	3	-9%	-24%
Scope 2	mtCO_2e	GHG-Dir-Abs	1,830	1,342	1,240	894	-28%	-51%
Scope 3[b]	mtCO_2e	GHG-Dir-Abs	n/a	n/a	0	0		
Car park spaces (CPS)	Number		22,714	19,766	17,245	18,140		
GHG intensity	kgCO_2e/CPS		81	68	72	36		

a Market based calculations reflect emissions factors relevant for clean electricity contracts where applicable

b Scope 3 includes gas and electricity submetered to tenants for use in tenanted areas. Scope 3 is from landlord obtained tenant energy consumption and is excluded from the totals

Our development, acquisitions and sales programmes have led to a net reduction in our French portfolio of 1 asset. The significant reduction in carbon emissions within this portfolio since 2015 has been through improvements in energy management and investment in LED lighting and upgrades to building management systems.

We have acquired three assets in Ireland since 2015. The significant growth in that portfolio has increased our absolute carbon emissions on a whole portfolio basis. However, we are already making improvements to the energy management of those portfolios which are delivering carbon reductions as can be seen in our EPRA like-for-like carbon and energy reporting tables on page 60. The assets were significantly impacted by cold weather in Q1 2018 leading to a significant increase in gas consumption.

Chart 3.5

Hammerson France Shopping Centres Total CO_2e (Location based)

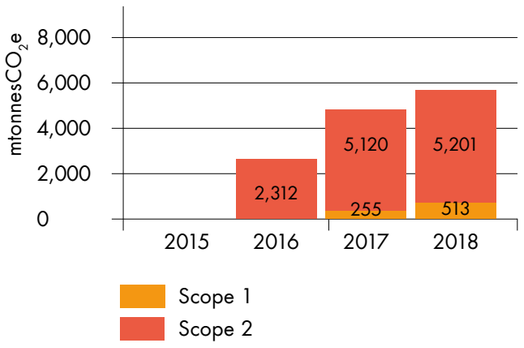
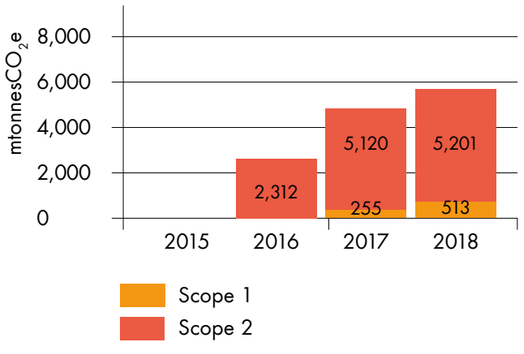


Chart 3.6

Hammerson Ireland Shopping Centres Total CO_2e (Location based)



Carbon Emissions by Portfolio

GRI Indicator 305-1, 305-2,305-3,CRE3

Table 3.5 (continued)

HAMMERSON FRANCE SHOPPING CENTRE PORTFOLIO (COVERAGE 10/10)	UNIT	EPRA CODE	2015	2016	2017	2018	% CH YOY	% CH V.2015
Total CO_2e (Location Based)	**mtCO_2e**	**GHG-Dir-Abs**	**7,065**	**5,514**	**5,243**	**4,541**	**-13%**	**-36%**
Scope 1	mtCO_2e	GHG-Dir-Abs	2,737	2,407	2,195	1,613	-27%	-41%
Scope 2	mtCO_2e	GHG-Dir-Abs	4,328	3,107	3,049	2,928	-4%	-32%
Scope 3[b]	mtCO_2e	GHG-Dir-Abs	135	104	110	197	80%	46%
Total CO_2e (Market Based)[a]	**mtCO_2e**	**GHG-Dir-Abs**	**7,065**	**5,514**	**5,243**	**4,306**	**-18%**	**-39%**
Scope 1	mtCO_2e	GHG-Dir-Abs	2,737	2,407	2,195	1,613	-27%	-41%
Scope 2	mtCO_2e	GHG-Dir-Abs	4,328	3,107	3,049	2,694	-12%	-38%
Scope 3[b]	mtCO_2e	GHG-Dir-Abs	135	104	110	197	80%	46%
Common Parts Area (CPA)	m^2		108,215	119,892	103,870	143,404		
GHG intensity	mtCO_2e/CPA		65	46	50	32		
HAMMERSON IRELAND SHOPPING CENTRE PORTFOLIO (COVERAGE 3/3)								
Total CO_2e (Location Based)	**mtCO_2e**	**GHG-Dir-Abs**		**2,355**	**5,374**	**5,714**	**6%**	
Scope 1	mtCO_2e	GHG-Dir-Abs	n/a	43	255	513	101%	
Scope 2	mtCO_2e	GHG-Dir-Abs	n/a	2,312	5,120	5,201	2%	
Scope 3[b]	mtCO2e	GHG-Dir-Abs		0	28	28	3%	
Total CO_2e (Market Based)[a]	**mtCO_2e**	**GHG-Dir-Abs**		**43**	**1,411**	**562**	**-60%**	
Scope 1	mtCO_2e	GHG-Dir-Abs	n/a	43	255	513	101%	
Scope 2	mtCO_2e	GHG-Dir-Abs	n/a	0	1,156	49	-96%	
Scope 3[b]	mtCO_2e	GHG-Dir-Abs	n/a	0	2	28		
Common Parts Area (CPA)	m^2			52,713	65,929	53,167		
GHG intensity	mtCO_2e/CPA			45	82	107		
TOTAL RETAIL PORTFOLIO CO_2e (LOCATION BASED)	mtCO_2e		**33,703**	**31,790**	**29,707**	**26,366**	**-11%**	**-22%**

a Market based calculations reflect emissions factors relevant for clean electricity contracts where applicable

b Scope 3 includes gas and electricity submetered to tenants for use in tenanted areas. Scope 3 is from landlord obtained tenant energy consumption and is excluded from the totals

Our EPRA like-for-like portfolio has achieved a year-on-year reduction of 18% in carbon emissions in 2018. The UK portfolio achieved 20%. This was partly driven by improvements in UK carbon factors as the grid is de-carbonising, but also by energy savings across the assets.

Our French assets achieved a 12% reduction in emissions in spite of a worsening of grid carbon factors in France.

Chart 3.7

EPRA like-for-like Portfolio Carbon emissions (Location-based)

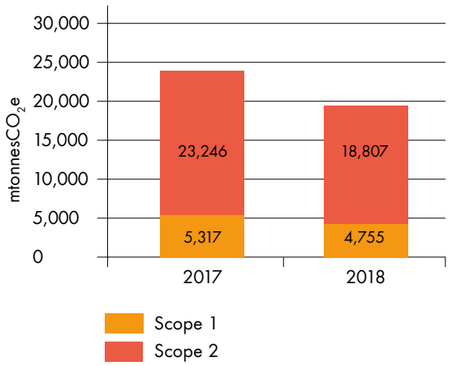


Table 3.6

Portfolio Denominators

COUNTRY	PORTFOLIO	COMMON PARTS AREA	CAR PARKING SPACES
	Unit	**m²**	**Number**
UK	Shopping Centres	257,173	
	EPRA LFL	224,055	
	Retail Parks	n/a	18,140
	EPRA LFL	n/a	12,715
FRANCE	Shopping Centres	143,404	
	EPRA LFL	116,889	
IRELAND	Shopping Centres	53,167	
	EPRA LFL	44,195	

EPRA like-for-like Portfolio Carbon Emissions

GRI Indicator 305-5, 305-2

Table 3.7

EPRA LFL (2017-2018) UK SHOPPING CENTRES	UNIT	EPRA CODE	2017	2018	% CH YOY
% of whole portfolio included by number of assets			86%	86%	
Total CO_2e (location based)	**mtCO_2e**	**GHG-Dir-LfL**	**17,929**	**14,410**	**-20%**
Scope 1	mtCO_2e	GHG-Dir-LfL	3,116	2,971	-5%
Scope 2	mtCO_2e	GHG-Dir-LfL	14,864	11,439	-23%
Scope 3[b]	mtCO_2e	GHG-Dir-LfL	1,620	1,642	1%
Total CO_2e (market based) [a]	**mtCO_2e**	**GHG-Dir-LfL**	**3,910**	**3,162**	**-19%**
Scope 1	mtCO_2e	GHG-Dir-LfL	3,116	2,971	-5%
Scope 2	mtCO_2e	GHG-Dir-LfL	794	190	-76%
Scope 3[b]	mtCO_2e	GHG-Dir-LfL	1,620	1,642	1%
Common Parts Area (CPA)	m^2		224,055	224,055	
Carbon intensity (location based)	mtCO_2e/m^2 CPA	GHG-Int	80	64	-20%
EPRA LFL (2017-2018) UK RETAIL PARKS					
% of whole portfolio included by number of assets			68%	93%	
Total CO_2e (location based)	**mtCO_2e**	**GHG-Dir-LfL**	**723**	**524**	**-28%**
Scope 1	mtCO_2e	GHG-Dir-LfL	3	3	
Scope 2	mtCO_2e	GHG-Dir-LfL	720	521	-28%
Scope 3[b]	mtCO_2e	GHG-Dir-LfL	0	0	
Total CO_2e (market based)[a]	**mtCO_2e**	**GHG-Dir-LfL**	803	721	-10%
Scope 1	mtCO_2e	GHG-Dir-LfL	3	3	
Scope 2	mtCO_2e	GHG-Dir-LfL	800	718	-10%
Scope 3[b]	mtCO_2e	GHG-Dir-LfL	0	0	
Car park spaces (CPS)	#		12,715	12,715	
Carbon intensity (location based)	mtCO_2e/m^2 CPS	GHG-Int	57	41	-28%

a Market based calculations reflect emissions factors relevant for clean electricity contracts where applicable

b Scope 3 includes gas and electricity submetered to tenants for use in tenanted areas. Scope 3 is from landlord obtained tenant energy consumption and is excluded from the totals

Case Study

Post Occupancy Evaluation

at Elliott's Field Retail Park, Rugby

In late 2017, phase 2 of Elliott's Field Retail Park in Rugby opened having been designed and constructed to be carbon neutral for regulated energy i.e. lighting, air conditioning, heating and hot water emissions. The units are highly energy efficient and all remaining power demand is provided by the output from the onsite PV.

Continuing on from the lessons learned project on Victoria Gate in 2017, it was important to understand how Elliott's Field was actually performing compared to its design intent. Energy data was gathered from various tenants throughout the year to compare actual performance with predicted.

Our key findings included:

- 123 tonnes of carbon saved through fit out design compared to similar benchmarked stores
- 38 tonnes of additional carbon saved through PV
- 40-60% lower energy consumption than anticipated
- BREEAM Outstanding Post Construction Rating

EPRA like-for-like Portfolio Carbon Emissions

GRI Indicator 305-5, 305-2

Table 3.7 (continued)

EPRA LFL (2017-2018) FRANCE SHOPPING CENTRES	**UNIT**	**EPRA CODE**	**2017**	**2018**	**% CH YOY**
% of whole portfolio included by number of assets			70%	88%	
Total CO_2e (location based)	**mtCO_2e**	**GHG-Dir-LfL**	**5,093**	**4,418**	**-12%**
Scope 1	mtCO_2e	GHG-Dir-LfL	2,045	1,613	-21%
Scope 2	mtCO_2e	GHG-Dir-LfL	3,048	2,868	-6%
Scope 3[b]	mtCO_2e	GHG-Dir-LfL	166	197	
Total CO_2e (market based)[a]	**mtCO_2e**	**GHG-Dir-LfL**	**5,094**	**4,251**	**-17%**
Scope 1	mtCO_2e	GHG-Dir-LfL	2,045	1,613	-21%
Scope 2	mtCO_2e	GHG-Dir-LfL	3,049	2,638	-13%
Scope 3[b]	mtCO_2e	GHG-Dir-LfL	166	197	
Common Parts Area (CPA)	m^2		116,889	116,889	
Carbon intensity (location based)	mtCO_2e/m^2 CPA	GHG-Int	44	38	-14%
EPRA LFL (2017-2018) IRELAND SHOPPING CENTRES					
% of whole portfolio included by number of assets			67%	67%	
Total CO_2e (location based)	**mtCO_2e**	**GHG-Dir-LfL**	**4,767**	**4,147**	**-13%**
Scope 1	mtCO_2e	GHG-Dir-LfL	154	168	9%
Scope 2	mtCO_2e	GHG-Dir-LfL	4,613	3,979	-14%
Scope 3[b]	mtCO_2e	GHG-Dir-LfL	29	28	-3%
Total CO_2e (market based)[a]	**mtCO_2e**	**GHG-Dir-LfL**	**2,309**	**217**	**-91%**
Scope 1	mtCO_2e	GHG-Dir-LfL	154	168	9%
Scope 2	mtCO_2e	GHG-Dir-LfL	2,156	49	-98%
Scope 3[b]	mtCO_2e	GHG-Dir-LfL	29	28	-3%
Common Parts Area (CPA)	m^2		44,195	44,195	
Carbon intensity (location based)	mtCO_2e/m^2 CPA	GHG-Int	108	94	-13%
TOTAL LIKE FOR LIKE PORTFOLIO CARBON EMISSIONS SCOPE 1 & 2					
Total EPRA LFL Portfolio - Location based	mtCO_2e		28,563	23,562	-18%
Total EPRA LFL Portfolio - Market based	mtCO_2e		12,117	8,532	-31%

a Market based calculations reflect emissions factors relevant for clean electricity contracts where applicable

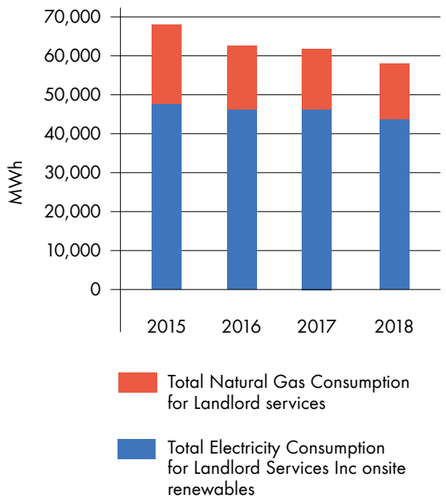
b Scope 3 includes gas and electricity submetered to tenants for use in tenanted areas. Scope 3 is from landlord obtained tenant energy consumption and is excluded from the totals

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 these results. Positive Places Plans are created annually for each asset, in consultation with the asset manager and on site team and embedded within the wider asset business plans. Each asset has individual targets covering all aspects of environmental performance. These are designed to 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.

Chart 3.8

Hammerson UK Shopping Centres Energy



Energy demand across our portfolios continues to fall year-on-year as efficiency measures are put in place.

Energy Demand by Group and Operating Region

GRI Indicators 302-1

Table 3.8

HAMMERSON GROUP	UNIT	EPRA CODE	2015	2016	2017	2018	% CH YOY	% CH V.2015
Total Landlord Obtained Electricity[a, b]	**MWh**	**Elec-Abs**	**100,049**	**104,784**	**105,333**	**98,939**	**-6%**	**-1%**
Renewables generated	MWh	Elec-Abs	1	32	150	311	108%	
Renewables exported	MWh	Elec-Abs	0	0	0	0		
Total Electricity Consumption for Landlord Services[c]	MWh	Elec-Abs	96,509	101,727	102,187	95,577	-6%	-1%
Electricity sub-metered to Tenants	MWh	Elec-Abs	3,540	3,089	3,296	3,362	2%	-5%
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-Abs**	**32,642**	**30,056**	**31,829**	**29,525**	**-7%**	**-10%**
Total Landlord Natural Gas Consumption for landlord services	MWh	Fuels-Abs	25,783	23,861	23,311	20,294	-13%	-21%
Natural Gas sub-metered to Tenants	MWh	Fuels-Abs	6,859	6,196	8,518	9,231	8%	35%
Diesel Consumption	MWh	Fuels-Abs	64	194	130	233	80%	264%
Fuel Oils Consumption	MWh	Fuels-Abs	0	0	0	0		
District Heating and Cooling[d]	MWh	DH&C-Abs	7,019	7,750	6,419	6,408	0%	-9%
HAMMERSON UK TOTAL								
Total Landlord Obtained Electricity[a, b]	**MWh**	**Elec-Abs**	**52,656**	**52,821**	**50,398**	**47,850**	**-5%**	**-9%**
Renewables generated	MWh	Elec-Abs	1	32	150	296	98%	
Total Electricity Consumption for Landlord Services[c]	MWh	Elec-Abs	51,433	52,290	49,684	46,913	-6%	-9%
Electricity sub-metered to Tenants	MWh	Elec-Abs	1,224	563	864	938	9%	-23%
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-Abs**	**17,801**	**16,346**	**17,495**	**15,918**	**-9%**	**-11%**
Total Natural Gas Consumption for Landlord Services	MWh	Fuels-Abs	10,942	10,150	9,532	8,278	-13%	-24%
Natural Gas sub-metered to Tenants	MWh	Fuels-Abs	6,859	6,196	7,964	7,641	-4%	11%
Diesel Consumption	MWh	Fuels-Abs	64	194	130	233	80%	264%
Fuel Oils Consumption	MWh	Fuels-Abs	0	n/a	n/a	n/a		
District Heating and Cooling[d]	MWh	DH&C-Abs	540	374	651	1,014	56%	88%

a Includes utilities obtained by landlord but consumed by tenant.

b Less than 1% of electricity is estimated

c Includes consumed onsite generated renewables

d District heating and cooling is considered landlord consumption and not separately metered for tenant consumption. 7% of total district heating and cooling data is estimated

Chart 3.9

Hammerson France Energy Demand

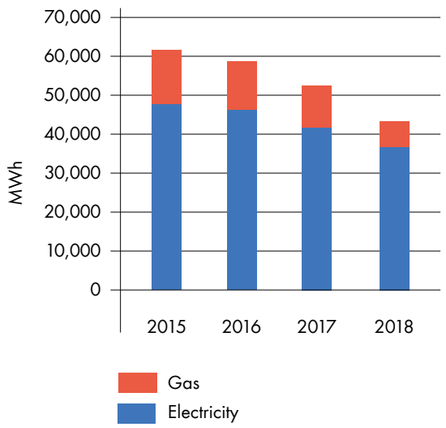
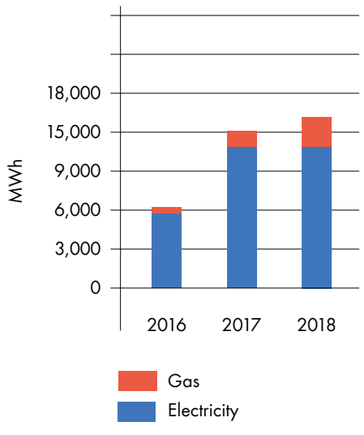


Chart 3.10

Hammerson Ireland Energy Demand



Energy Demand by Group and Operating Region

GRI Indicators 302-1

Table 3.8 (continued)

HAMMERSON FRANCE TOTAL	UNIT	EPRA CODE	2015	2016	2017	2018	% CH YOY	% CH V.2015
Total Landlord Obtained Electricity[a]	**MWh**	**Elec-Abs**	**47,393**	**46,079**	**41,866**	**37,828**	**-10%**	**-20%**
Renewables generated	MWh	Elec-Abs	0	0	0	15		
Total Electricity Consumption for Landlord Services[b]	MWh	Elec-Abs	45,077	43,553	39,500	35,470	-10%	-21%
Electricity sub-metered to Tenants	MWh	Elec-Abs	2,317	2,526	2,366	2,358	0%	2%
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-Abs**	**14,841**	**13,208**	**12,473**	**9,951**	**-20%**	**-33%**
Total Natural Gas Consumption for Landlord Services	MWh	Fuels-Abs	14,841	13,208	11,928	8,368	-30%	-44%
Natural Gas sub-metered to Tenants	MWh	Fuels-Abs	0	0	545	1,583	190%	
Diesel Consumption	MWh	Fuels-Abs	0	0	0	0		
Fuel Oils Consumption	MWh	Fuels-Abs	0	0	0	0		
District Heating and Cooling[c]	MWh	DH&C-Abs	6,479	7,376	5,768	5,394	-6%	-17%
HAMMERSON IRELAND TOTAL								
Total Landlord Obtained Electricity[a]	**MWh**	**Elec-Abs**	**n/a**	**5,884**	**13,069**	**13,260**	**1%**	
Renewables generated	MWh	Elec-Abs	n/a	0	0	0		
Total Electricity Consumption for Landlord Services[b]	MWh	Elec-Abs	n/a	5,884	13,003	13,195	1%	
Electricity sub-metered to Tenants	MWh	Elec-Abs	n/a	0	66	65	-1%	
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-Abs**	**n/a**	**503**	**1,861**	**3,656**	**96%**	
Total Natural Gas Consumption for Landlord Services	MWh	Fuels-Abs	n/a	503	1,851	3,649	97%	
Natural Gas sub-metered to Tenants	MWh	Fuels-Abs	n/a	0	9	7	-24%	
Diesel Consumption	MWh	Fuels-Abs	n/a	0	0	0		
Fuel Oils Consumption	MWh	Fuels-Abs	n/a	0	0	0		
District Heating and Cooling[c]	MWh	DH&C-Abs	n/a	0	0	0		

ABSOLUTE LANDLORD ENERGY CONSUMPTION VS. 2015 BASELINE	UNIT	2015	2016	2017	2018	% CH YOY	% CH V.2015
Operational energy use across the LFL retail portfolios against a 2015 baseline	MWh	85,202	80,550	75,169	70,909	-6%	-17%

a Includes utilities obtained by landlord but consumed by tenant.

b Includes consumed onsite generated renewables

c District heating and cooling is considered landlord consumption and not separately metered for tenant consumption

Energy demand by portfolio

Our portfolio level energy reporting includes all assets held for all or part of the reporting year over which we have operational control. For 2018 this includes 2 additional assets in Ireland and 1 less asset in France. In the UK we have a net reduction in retail parks of 1 asset following three sales in 2017 and the opening of the extensions at Parc Tawe and Didcot. Our UK Shopping Centre portfolio has been stable for the reporting year.

We continue to move away from gas as a heating source in our centres, removing oversized boilers and reducing our gas demand across the portfolio. At Silverburn, effective management of the multi-storey car park lead to a 14.5% reduction in electricity demand. This included refining the opening procedures, and installing timeclocks and photocells to ensure lights are on when needed.

On average we have seen annual savings of over

30% CO_2

in power demand for lighting through LED install and good management

Energy Demand by Primary Energy Source (Whole Portfolio)

GRI Indicators 302-1, 302-4, 302-3 (Building Energy Intensity)

Table 3.9

HAMMERSON UK SHOPPING CENTRE PORTFOLIO (COVERAGE 14/14)	UNIT	EPRA CODE	2015	2016	2017	2018	% CH YOY	% CH vs. 2015
Total Landlord Obtained Electricity[a] (99% certified renewable electricity)	**MWh**	**Elec-Abs**	**49,789**	**47,114**	**46,314**	**43,596**	**-6%**	**-12%**
Renewables generated	MWh	Elec-Abs	0	32	150	296	98%	
Renewables exported	MWh	Elec-Abs	0	0	0	0		
Total Electricity Consumption[a] inc. onsite renewables	MWh	Elec-Abs	49,789	47,146	46,463	43,892	-6%	-12%
Total Electricity Consumption for Landlord Services	MWh	Elec-Abs	48,843	46,633	45,600	42,955	-6%	-12%
Electricity sub-metered to Tenants	MWh	Elec-Abs	947	513	864	938	9%	-1%
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-Abs**	**16,783**	**15,475**	**17,397**	**15,601**	**-10%**	**-7%**
Total Natural Gas Consumption for Landlord Services	MWh	Fuels-Abs	9,937	9,279	9,433	7,960	-16%	-20%
Natural Gas sub-metered to Tenants	MWh	Fuels-Abs	6,846	6,196	7,964	7,641	-4%	12%
Diesel Consumption	MWh	Fuels-Abs	64	194	130	233	80%	
Fuel Oils Consumption	MWh	Fuels-Abs	0	0	0	0		
District Heating and Cooling[b]	MWh	DH&C-Abs	540	374	651	1,014	56%	88%
Common Parts Area (CPA)	m^2		228,312	273,119	312,777	257,173	-15%	37%
Landlord services energy intensity[c]	kWh/m^2 CPA	Energy-Int	260	206	204	163	-20%	-37%

HAMMERSON UK RETAIL PARKS PORTFOLIO (COVERAGE 14/14)								
Total Landlord Obtained Electricity[a]	**MWh**	**Elec-Abs**	**3,960**	**3,753**	**2,800**	**2,289**	**-18%**	**-42%**
Renewables generated	MWh	Elec-Abs	0	0	0	0		
Renewables exported	MWh	Elec-Abs	1	0	0	0		-100%
Total Electricity Consumption[a] inc. onsite renewables	MWh	Elec-Abs	3,961	3,753	2,800	2,289	-18%	-42%
Total Electricity Consumption for Landlord Services	MWh	Elec-Abs	3,912	3,753	2,800	2,289	-18%	-41%
Electricity sub-metered to Tenants	MWh	Elec-Abs	49	50	0	0		-100%
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-Abs**	**21**	**17**	**18**	**16**	**-9%**	**-21%**
Total Natural Gas Consumption for Landlord Services	MWh	Fuels-Abs	21	17	18	16	-9%	-21%
Natural Gas sub-metered to Tenants	MWh	Fuels-Abs	0	0	0	0		
Diesel Consumption	MWh	Fuels-Abs	0	0	0	0		
Fuel Oils Consumption	MWh	Fuels-Abs	0	0	0	0		
District Heating and Cooling[b]	MWh	DH&C-Abs	0	0	0	0		
Car Park Spaces (CPS)	Number		22,074	22,583	17,245	18,140	31%	2%
Landlord services energy intensity[c]	kWh/CPS	Energy-Int	178	165	163	102	-38%	-43%

a Includes utilities obtained by landlord but consumed by tenant.

b District heating and cooling is considered landlord consumption

c Energy intensity is calculated using total landlord electricity and natural gas consumption divided by common parts area (car park spaces for retail parks portfolio only).

Weather impacts on energy demand

Our portfolio experienced two particularly extreme weather periods in 2018 with the very cold spell in March and the long period of high temperatures over the summer. The cold weather in Q1 particularly affected our northerly assets but was ultimately balanced out by milder than average temperatures in Q4 so the impact on heating demand was limited. However, 2018 was considerably hotter than 2017 with an average of 131 additional cooling degree days in 2018 per asset. This has driven higher than expected electricity demand. However, the use of passive cooling methods including night purging and other space conditioning methods to keep our malls at a comfortable temperature has helped mitigate the overall impact. Given these temperatures, the achievement of 11% year on year energy savings for the like-for-like portfolio is a considerable achievement.

Energy Consumption by Primary Energy Source (Whole Portfolio)

GRI Indicators 302-1, 302-4, 302-3 (Building Energy Intensity)

Table 3.9 (continued)

HAMMERSON FRANCE SHOPPING CENTRE PORTFOLIO (COVERAGE 8/8)	UNIT	EPRA CODE	2015	2016	2017	2018	% CH YOY	% CH vs. 2015
Total Landlord Obtained Electricity[a]	**MWh**	**Elec-Abs**	**46,974**	**45,915**	**41,866**	**37,432**	**-11%**	**-20%**
Renewables generated	MWh	Elec-Abs	0	0	0	15		
Renewables exported	MWh	Elec-Abs	0	0	0	0		
Total Electricity Consumption inc. onsite renewables[a]	MWh	Elec-Abs	46,974	45,915	41,866	37,447	-11%	-20%
Total Electricity Consumption for Landlord Services	MWh	Elec-Abs	44,657	43,388	39,500	35,088	-11%	-21%
Electricity sub-metered to Tenants	MWh	Elec-Abs	2,317	2,526	2,366	2,358	0%	2%
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-Abs**	**14,841**	**13,208**	**12,473**	**8,767**	**-30%**	**-41%**
Total Natural Gas Consumption for Landlord Services	MWh	Fuels-Abs	14,841	13,208	11,928	8,368	-30%	-44%
Natural Gas sub-metered to Tenants	MWh	Fuels-Abs	0	0	545	399	-27%	
Diesel Consumption	MWh	Fuels-Abs	0	0	0	0		
Fuel Oils Consumption	MWh	Fuels-Abs	0	0	0	0		
District Heating and Cooling[b]	MWh	DH&C-Abs	6,479	7,376	5,768	5,394	-6%	-17%
Common Parts Area (CPA)	m^2		92,193	10,387	10,387	119,892		+30%
Landlord services energy intensity[c]	kWh/m^2 CPA	Energy-Int	716	616	551	362	-34%	-49%
HAMMERSON IRELAND SHOPPING CENTRE PORTFOLIO (COVERAGE 3/3)								
Total Landlord Obtained Electricity (93% certified renewable electricity)[a]	**MWh**	**Elec-Abs**	**n/a**	**5,437**	**12,326**	**12,533**	**2%**	
Renewables generated	MWh	Elec-Abs	n/a	0	0	0		
Renewables exported	MWh	Elec-Abs	n/a	0	0	0		
Total Electricity Consumption inc. onsite renewables[a]	MWh	Elec-Abs	n/a	5,437	12,326	12,533	2%	
Total Electricity Consumption for Landlord Services	MWh	Elec-Abs	n/a	5,437	12,260	12,467	2%	
Electricity sub-metered to Tenants	MWh	Elec-Abs	n/a	0	66	65	-1%	
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-Abs**	**n/a**	**239**	**1,392**	**2,737**	**97%**	
Total Natural Gas Consumption for Landlord Services	MWh	Fuels-Abs	n/a	239	1,383	2,730	97%	
Natural Gas sub-metered to Tenants	MWh	Fuels-Abs	n/a	0	9	7	-24%	
Diesel Consumption	MWh	Fuels-Abs	n/a	0	0	0		
Fuel Oils Consumption	MWh	Fuels-Abs	n/a	0	0	0		
District Heating and Cooling[b]	MWh	DH&C-Abs	n/a	0	0	0		
Common Parts Area (CPA)	m^2		n/a	52,713	65,929	53,167	-20%	
Landlord services energy intensity[c]	kWh/m^2 CPA	Energy-Int	n/a	108	207	288	39%	

a Includes utilities obtained by landlord but consumed by tenant.

b District heating and cooling is considered landlord consumption

c Energy intensity is calculated using total landlord electricity and natural gas consumption divided by common parts area (car park spaces for retail parks portfolio only).

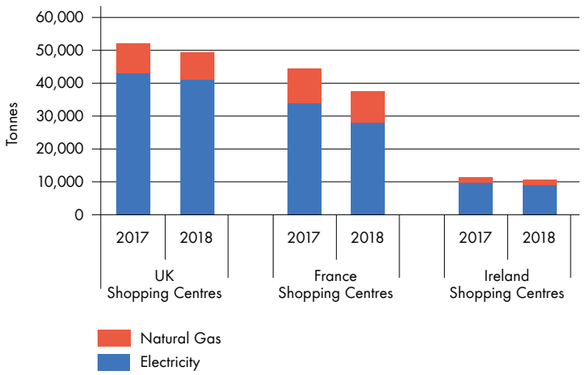
Year-on-year energy demand for our like-for-like portfolios

Year-on-year energy demand has fallen across each of the like-for-like portfolios in 2018 giving a total portfolio reduction of 11%.

The Retail Parks portfolio is benefiting from the installation of LED lighting across car parks and we expect this to show further year-on-year savings in 2019. The UK Shopping centre portfolio is also benefiting from investment in technology along with a consistent focus on good management from the on-site teams.

Chart 3.11

EPRA like-for-like Portfolio Total Energy demand



EPRA like-for-like Portfolio – Energy Demand

GRI Indicator 302-1, 302-4, CRE1

Table 3.10

EPRA LFL UK SHOPPING CENTRES	UNIT	EPRA CODE	2017	2018	% CH YOY
% of whole portfolio included by number of assets			86%	86%	
Total Landlord Obtained Electricity inc. onsite renewables[a]	**MWh**	**Elec-lfl**	**42,149**	**40,184**	**-5%**
Total Electricity Consumption for Landlord Services	MWh	Elec-lfl	41,470	39,350	-5%
Electricity sub-metered to Tenants	MWh	Elec-lfl	679	834	23%
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-lfl**	**16,745**	**15,601**	**-7%**
Total Natural Gas Consumption for Landlord Services	MWh	Fuels-lfl	9,247	7,960	-14%
Natural Gas sub-metered to Tenants	MWh	Fuels-lfl	7,498	7,641	2%
Diesel Consumption	MWh	Fuels-lfl	130	233	80%
District Heating and Cooling[b]	MWh	DH&C-lfl	651	1,014	56%
Common Parts Area (CPA)	m^2		224,055	224,055	
Landlord service intensity[c]	kWh/m^2 CPA	Energy-Int	226	211	-7%
EPRA LFL UK RETAIL PARKS					
% of whole portfolio included by number of assets			68%	93%	
Total Landlord Obtained Electricity inc. onsite renewables[a]	**MWh**	**Elec-lfl**	**2,048**	**1,840**	**-10%**
Total Electricity Consumption for Landlord Services	MWh	Elec-lfl	2,048	1,840	-10%
Electricity sub-metered to Tenants	MWh	Elec-lfl	0	0	
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-lfl**	**18**	**16**	**-9%**
Total Natural Gas Consumption for Landlord Services	MWh	Fuels-lfl	18	16	-9%
Natural Gas sub-metered to Tenants	MWh	Fuels-lfl	0	0	
Diesel Consumption	MWh	Fuels-lfl	0	0	
Disctrict Heating and Cooling[b]	MWh	DH&C-lfl	12,715	12,715	
Common Parts Area (CPA)	car park space	DH&C-lfl	0	0	
Landlord service energy intensity[c]	kWh/m^2 CPA	Energy-Int	163	146	-10%

a Includes utilities obtained by landlord but consumed by tenant.

b District heating and cooling is considered landlord consumption

c Energy intensity is calculated using total landlord electricity and natural gas consumption divided by common parts area (car park spaces for retail parks portfolio only).

Legislative and regulatory compliance

Our portfolios are subject to national and international environmental legislation, much of which focuses on carbon and energy efficiency. In particular all European developments and operations are subject to EU Energy Performance of Buildings Directive, transposed into UK, French and Irish law.

In 2018 we responded to the following key pieces of regulation:

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

Minimum Energy Efficiency Standards (MEES) coming into force in the UK has significantly raised awareness of energy efficiency opportunities (EPC) across the real estate community. We have 1,291 energy performance certificates across our UK portfolio and have been managing EPC risk out of the portfolios for the two years leading up to the regulations coming into force in April last year. This has led to more stringent energy efficiency standards and monitoring processes being adopted within our retail delivery system and greater dialogue with our retailers.

Our corporate target is for all retail units to achieve a minimum of a D rating. This is beyond compliance but more cost effective for our retailers; achieving a D rating typically delivers significantly better operational savings form limited additional outlay on fit out. An E rating is also more at risk of requiring early additional works should the regulation be tightened. In practice we are finding that the vast majority of new fit-outs are achieving well above a D rating. Where there are challenges this is creating a new and welcome opportunity for further dialogue with our retailers.

Regulation we will be responding to in 2019 includes: Energy Savings Opportunity Scheme (UK) Nearly Zero Energy Buildings (Ire) National Energy Efficiency Plan (Fr).

EPRA like-for-like Portfolio – Energy Demand

GRI Indicator 302-1, 302-4, CRE1

Table 3.10 (continued)

EPRA LFL FRANCE SHOPPING CENTRES	UNIT	EPRA CODE	2017	2018	% CH YOY
% of whole portfolio included by number of assets			70%	88%	
Total Landlord Obtained Electricity inc. onsite renewables[a]	**MWh**	**Elec-lfl**	**36,746**	**31,570**	**-14%**
Total Electricity Consumption for Landlord Services	MWh	Elec-lfl	34,373	29,211	-15%
Electricity sub-metered to Tenants	MWh	Elec-lfl	2,373	2,358	-1%
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-lfl**	**11,104**	**8,767**	**-21%**
Total Natural Gas Consumption for Landlord Services	MWh	Fuels-lfl	10,800	8,368	-23%
Natural Gas sub-metered to Tenants	MWh	Fuels-lfl	304	399	31%
Diesel Consumption	MWh	Fuels-lfl	0	0	
District Heating and Cooling[b]	MWh	DH&C-lfl	5,768	5,025	-13%
Common Parts Area (CPA)	m^2		116,889	116,889	
Landlord service energy intensity[c]	kWh/m^2 CPA	Energy-Int	386	321	-17%
EPRA LFL IRELAND SHOPPING CENTRES					
% of whole portfolio included by number of assets			67%	67%	
Total Landlord Obtained Electricity inc. onsite renewables[a]	MWh	Elec-lfl	10,896	9,588	-12%
Total Electricity Consumption for Landlord Services	MWh	Elec-lfl	10,830	9,522	-12%
Electricity sub-metered to Tenants	MWh	Elec-lfl	66	65	-1%
Total Landlord Obtained Natural Gas[a]	**MWh**	**Fuels-lfl**	**887**	**861**	**-3%**
Total Natural Gas Consumption for Landlord Services	MWh	Fuels-lfl	878	854	-3%
Natural Gas sub-metered to Tenants	MWh	Fuels-lfl	9	7	-22%
Diesel Consumption	MWh	Fuels-lfl	0	0	
District Heating and Cooling[b]	MWh	DH&C-lfl	0	0	
Common Parts Area (CPA)	m^2		44,195	44,195	
Landlord service energy intensity[c]	kWh/m^2 CPA	kWh/m^2 CPA	265	235	-11%
Total Landlord Energy Demand – EPRA LFL portfolio	**MWh**	Energy-Int	**109,665**	**97,121**	**-11%**

a Includes utilities obtained by landlord but consumed by tenant.

b District heating and cooling is considered landlord consumption

c Energy intensity is calculated using total landlord electricity and natural gas consumption divided by common parts area (car park spaces for retail parks portfolio only).

Refrigerant Data

GRI Indicator GRI 305-6

Table 3.11

F-GAS	UNIT	2015	2016	2017	2018	EMISSION FACTOR	SOURCE
R22	$kgCO_2e$	0	0	0			Defra 2018
R134A	$kgCO_2e$	0	0	862,290			Defra 2018
R143A	$kgCO_2e$	0	0	0			Defra 2018
R404A	$kgCO_2e$	0	0	0			Defra 2018
R407C	$kgCO_2e$	23	18	275,325			Defra 2018
R410A	$kgCO_2e$	0	0	0	53,348	2,088	Defra 2018
TOTAL EMISSIONS	$kgCO_2e$			1,137,615	53,348	2,088	

Other Relevant Indirect Green-House Gas Emissions

GRI Indicator 305-3

Table 3.12

		2015	2016	2017	2018	EMISSIONS FACTOR	SOURCE
Business travel by air, rail, personal mileage and taxi[a]	mt CO_2e	412	1,016	1,509	716	**Air travel** Domestic Average 0.29832 Short-haul Economy 0.1597 Long-haul First 0.65115 Long-haul Business 0.47208 Long-haul Economy 0.16279 International Economy 0.13996 **Rail travel** Domestic Average 0.04424 International Average 0.01226 London Underground 0.0376 **Road Travel** Average Taxi 0.15344 Estimated rate per mile £6	DEFRA 2018
Visitor journeys by car to our shopping centres (UK only)[b]	mt CO_2e	149,772	148,918	169,391	170,704	**Road Travel** Average car 0.29072 Average petrol car 0.29561 Average diesel car 0.28572	

[a] *We collected business travel details for our Mandatory GHG Emissions reporting using the period of 01 January to 31 December 2018. This is representative of CO_2e emissions from flights, car journeys, train journeys and taxis.*

[b] *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 3.13

INITIATIVES IN 2018^	LOCATION	ANNUAL SAVINGS (kWH)
BMS Updating	Les 3 Fontaines	57,750
LEDs and motion sensors in back of house corridors	Espace St Quentin	14,487
LEDs in the technical corridors	Italie Deux	26,000
LEDs in the car park	Nice Etoile	49,000
BMS Updating	Nice Etoile	
BMS Updating	Terasses du Port	817,000
Equipment updates	O'Parinor	
Smart metering across the UK portfolio	UK Portfolio wide	
Carbon monoxide sensors and variable speed drives	Bullring	
Victoria Gate PV	Victoria Gate	103,793
LEDs in the car park	Cabot Circus	253,468
LEDs back of house	Grand Central	47,450
LEDs in the car park	Highcross	71,267
LEDs in front of house	Cross portfolio	
TOTAL		**1,440,214**

^The table lists the energy efficiency technologies installed in 2018 and their predicted energy savings in 2018 only

Emission Factors used for calculating our Carbon Emissions

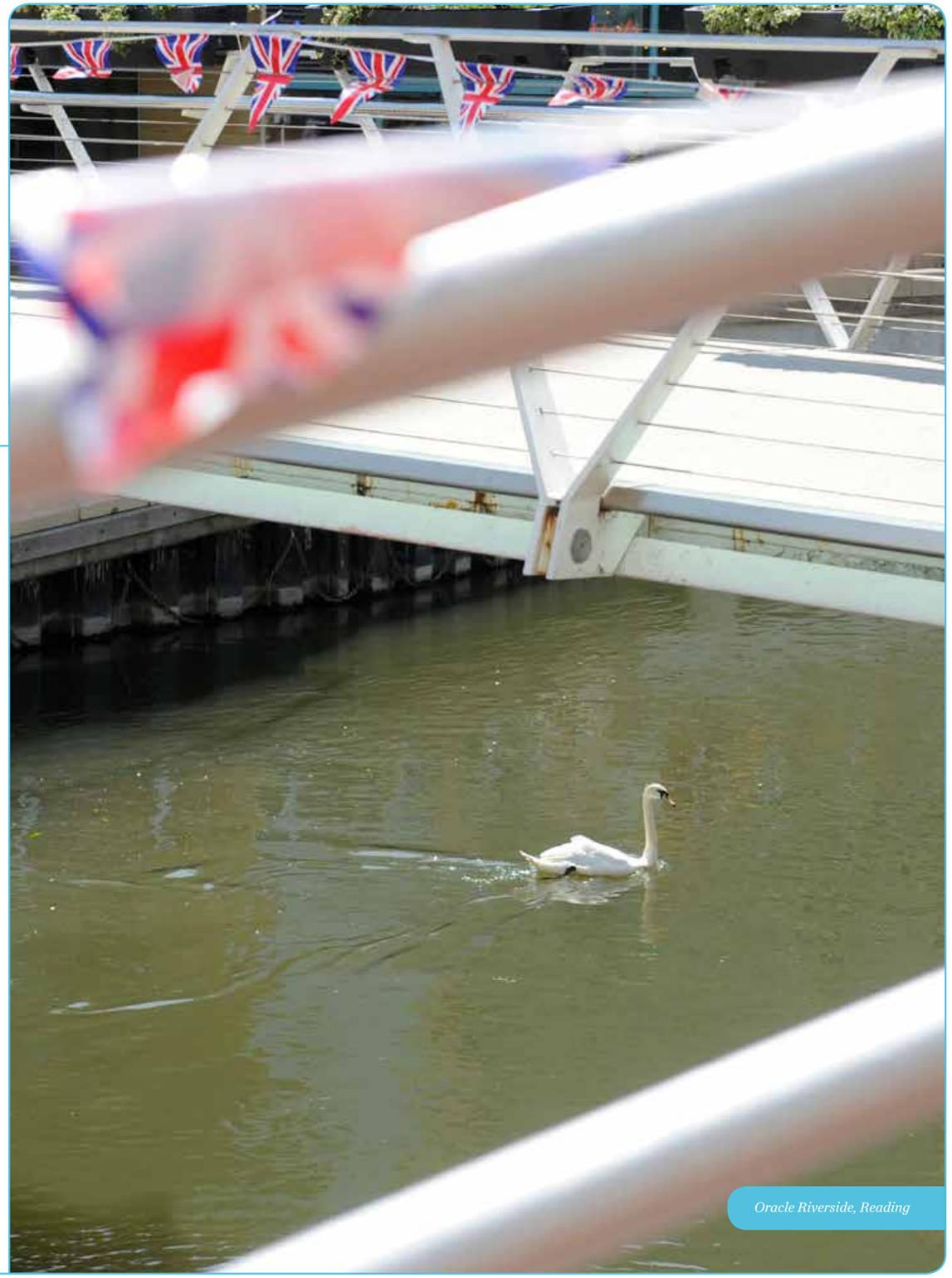
Table 3.14

	ELECTRICITY	RESIDUAL	NATURAL GAS	DIESEL CONSUMPTION	DISTRICT HEATING	DISTRICT COOLING
UK Westquay Shopping Centre	0.28307	0.39053	0.18396	0.24768	0.19	0.078
Source:	*DEFRA GHG Conversion Factors for Company Reporting 2018*				*ENGIE UK & Ireland*	
FRANCE Italie Deux Shopping Centre	0.05260	0.04633	0.18396	0.24768	0.172	
Cergy 3 & Les Trois Fontaines Shopping Centres					0.166	
Source:	*IEA 2018*		*DEFRA GHG Conversion Factors for Company Reporting 2018*		*JOURNAL OFFICIEL DE LA RÉPUBLIQUE FRANÇAISE, 15 April 2018*	
IRELAND	0.41500	0.76108	0.18396	0.24768		
Source:	*IEA 2018*		*DEFRA GHG Conversion Factors for Company Reporting 2018*			

Section 4

Reducing our Water Use

We are fortunate to operate in regions that do not suffer water stress. However, 844 million people lack access to basic drinking water and women and girls spend an estimated 200 million hours hauling water every day. Potable water is a scarce and valuable resource that is expensive to produce and Hammerson is committed to becoming more efficient in our use of it.



Oracle Riverside, Reading

Reducing Our Water Use

Water demand across our managed portfolios is relatively low. However as water management is an issue of global importance and we are seeing increasing water supply risk from climate change induced droughts, is a key area of focus for our Positive Places strategy.

By 2030 we will be Net Positive for:

Carbon | Water | Resource Use | Socio-economic impacts

Performance against water targets in 2018

Table 4.1

Target	Status				
	2016	2017	2018	2019	2020
10% improvement in water intensity against our 2015 baseline by 2020	10%	-14%	+1%		

Our 2018 Performance

We continued to see a reduction in water use across the group in 2018 due to a mix of efficient technologies, and good management, including a proactive approach to identifying leaks across some centres. Our automatic metering project included the installation of smart water meters across 8 of our managed assets in 2018. This is helping us to better understand the split between landlord and tenant water demand.

One of the biggest impacts on water demand is leaks and we continue to work hard to reduce these at our assets. Improvements in metering will support this by enabling us to quickly identify sudden increases in water usage. Overall this delivered a 1% reduction in water demand at Group level. Our building water intensity has increased by 1% in 2018 but this is largely driven by consumption in our Irish assets. We are currently unable to separate landlord and tenant water consumption data in Ireland so figures for these assets includes tenant water consumption. In our UK and French assets where we have better sight of the data we are achieving steady reductions in demand on both the whole portfolio and on the EPRA like-for-like portfolio. We expect these to improve further and to see much better data in Ireland following the smart meter installation project.

Weather impact

The more extreme weather of 2018 brought less rainfall than in previous years – 5% less rain than 2017, and in more concentrated bursts. We saw our mains water use drop over the summer as we avoided irrigation during the regional droughts, and during the extremely cold weather in spring 2018 as we reduced external cleaning schedules to avoid the risk of ice creation. As climate change progresses we will continue to adapt to periods of drought and the need to use less mains water, but also be able to cope with increasing flash flooding.

-1%

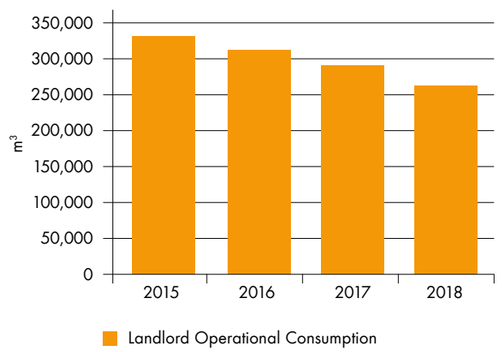
Change in water use in 2018 from our group portfolio

Becoming Net Positive for water

Water demand is one of our Net Positive targets – Net Positive for Water means water replenished by external projects exceeds water consumed from mains supply. We have already reduced landlord water demand and are looking to make further reductions through working with regional water providers to identify opportunities for savings in our assets – both landlord and tenant side – and by identifying offset opportunities within the local community.

Working with the regional water provider Severn Trent, Cabot Circus, in Bristol has identified achievable savings across the asset through simple back of house measures in both landlord and tenant controlled areas.

Chart 4.1



2019 and beyond

Following the progress we made in water efficiency in 2018 and the roll out of our new smart meters we will target a 5% intensity reduction across our managed portfolio.

To achieve this, we will focus on the following projects in 2019:

- **Investigate decoupling of cleanliness standards from water consumption**
- **Using more rainwater for cleaning and toilets**
- **Working with regional water companies and our on-site facilities teams to identify and reduce leaks**

Water Demand – Whole Portfolio
GRI Indicator 303-1, CRE2
Table 4.2

Changing water demand

Visitor numbers are a key driver of landlord water demand and are used as our intensity metric. To reduce our water consumption across our assets we have been working on the following specific projects:

Rainwater harvesting

We have rainwater harvesting tanks at both our Ilac Shopping Centre in Dublin, and Cabot Circus Shopping Centre in Bristol. Between the two centres we have avoided using 4,315 m^3 of mains water in 2018.

Proactive management

Our management of water continues to focus on leak detection and proactive maintenance, and installing water efficient facilities as part of our toilet refurbishment programme. At The Oracle in Reading, after a successful trial of propelair toilets in 2017, we rolled the technology out across the asset and have enabled a water saving of 35%.

Retailer engagement

The majority (57%) of our water demand comes from our tenants, which is growing as we increase our number of more water intensive food and beverage operators. We continue to engage with our retail and food & beverage tenants to support them in reducing water demand. For example, through our recently updated fit out guide, we are engaging with retailer property teams at an early stage in their store fit out to promote water efficient fittings. We have also trialled a tenant water survey programme at Cabot Circus, where we worked with local water company Severn Trent to conduct a water audit of each retailer unit and suggest low/no cost opportunities for improvement. We are planning to extend this programme in 2019.

HAMMERSON RETAIL TOTAL	**UNIT**	**EPRA CODE**	**2015**	**2016**	**2017**	**2018**	**% CH YOY**	**% CH vs. 2015**
Total Landlord Obtained Water[a,b]	**m^3**	Water-Abs	1,106,371	1,171,378	1,130,153	1,101,647	-3%	
Water sub-metered to Tenants	m^3	Water-Abs	567,289	733,508	657,675	626,729	-5%	
Landlord Water Consumption	m^3	Water-Abs	533,756	437,870	484,043	479,233	-1%	-10%
Total water withdrawal by source[d]	**m^3**							
Rainwater Harvested onsite	m^3		836	5,662	11,565	4,315	-63%	
Kitchens	m^3		0	0	0	0		
Total water consumption	m^3		1,107,207	1,177,040	1,141,718	1,105,962	-3%	
Building Water Intensity (landlord services)[b]	**litres/visitor**	**Water-Int**	**2.1**	**1.6**	**1.6**	**1.6**	**1%**	**-24%**
HAMMERSON UK SHOPPING CENTRE (COVERAGE 14/14)								
Total Landlord Obtained Water[a]	**m^3**	**Water-Abs**	**713,014**	**674,355**	**653,097**	**658,859**	**<1%**	
Rainwater Harvested onsite	m^3		836	5,662	9,886	3,243	-67%	
Water sub-metered to Tenants	m^3	Water-Abs	328,498	513,728	421,642	435,966	3%	
Landlord Water Consumption	m^3	Water-Abs	384,516	166,288	241,341	226,136	-6%	-41%
Building Water Intensity (landlord services)[b]	**litres/ visitor**	**Water-Int**	**2.4**	**1.0**	**1.3**	**1.2**	**-7%**	**-50%**
HAMMERSON UK RETAIL PARKS (COVERAGE 14/14)[c]								
Total Landlord Obtained Water[a]	**m^3**	Water-Abs	5,138	2,836	0	0	-100%	
Water sub-metered to Tenants	m^3	Water-Abs	408	151	0	0	-100%	
Landlord Water Consumption	m^3	Water-Abs	4,730	2,685	0	0	-100%	
HAMMERSON FRANCE SHOPPING CENTRE (COVERAGE 8/8)								
Total Landlord Obtained Water	**m^3**	**Water-Abs**	**382,893**	**382,750**	**330,592**	**279,238**	**-16%**	
Water sub-metered to Tenants	m^3	Water-Abs	238,383	220,046	236,034	190,763	-19%	
Landlord Water Consumption	m^3	Water-Abs	144,510	162,704	94,558	88,475	-6%	-39%
Building Water Intensity (landlord services)[b]	**litres/visitor**	**Water-Int**	**1.6**	**1.7**	**1.0**	**1.2**	**15%**	**-26%**
HAMMERSON IRELAND SHOPPING CENTRE (COVERAGE 3/3)								
Total Landlord Obtained Water[a]	m^3	Water-Abs	n/a	109,654	146,465	163,550	12%	
Rainwater Harvested onsite	m^3		n/a	0	1,679	1,072	-36%	
Water sub-metered to Tenants	m^3	Water-Abs	n/a	0	0	0		
Landlord Water Consumption	m^3	Water-Abs	n/a	109,654	148,144	164,622	11%	
Building Water Intensity (landlord services)[b]	**litres/visitor**	**Water-Int**		**6.1**	**4.5**	**3.8**	-17%	

[a] Total landlord obtained water includes metered supplies to tenants
[b] Water consumption at centres is largely from toilet facilities so is directly related to visitor footfall.
[c] Manor Walks was the only retail park with material water consumption and it was sold in Q2 2016 . We cannot report building water intensity for retail parks due to no footfall data.
[d] Unless otherwise stated, water consumption is from municipal supplies

EPRA like-for-like Portfolio – Water Demand

GRI Indicator 303-1 CRE2

Table 4.3

EPRA LFL (2017-2018) UK SHOPPING CENTRES (COVERAGE 12/14)	UNIT	EPRA CODE	2017	2018	% CH YOY
% of whole portfolio included by number of assets			86%	86%	
Total Landlord Obtained Water	m^3	Water-LfL	644,541	647,751	0%
Landlord Water Consumption	m^3	Water-LfL	232,188	215,028	-7%
Landlord Supplied Tenant Water Consumption	m^3	Water-LfL	422,239	435,966	3%
Rainwater harvested water	m^3	Water-LfL	9,886	3,243	-67%
Annual Visitor Numbers	number		187,118,943	188,569,284	1%
Building Water Intensity (landlord services)	litres/visitor	Water-LfL	1.2	1.1	-8%
EPRA LFL (2017-2018) UK RETAIL PARKS (COVERAGE 14/14)[a]					
% of whole portfolio included by number of assets			68%	93%	
Total Landlord Obtained Water	m^3	Water-LfL	0	0	
Landlord Supplied Tenant Water Consumption	m^3	Water-LfL	0	0	
Rainwater harvested water	m^3	Water-LfL	0	0	
Annual Visitor Numbers	number		0	0	
EPRA LFL (2017-2018) FRANCE SHOPPING CENTRES (COVERAGE 6/8)					
% of whole portfolio included by number of assets			70%	88%	
Total Landlord Obtained Water	m^3	Water-LfL	316,877	269,578	-15%
Landlord Water Consumption	m^3	Water-LfL	83,493	86,103	-4%
Landlord Supplied Tenant Water Consumption	m^3	Water-LfL	227,384	183,475	-19%
Rainwater harvested water	m^3	Water-LfL	0	0	
Annual Visitor Numbers	number		77,500,000	76,000,000	-2%
Building Water Intensity (landlord services)	litres/visitor	Water-LfL	1.2	1.1	-2%
EPRA LFL (2017-2018) IRELAND SHOPPING CENTRES (COVERAGE 2/3)					
% of whole portfolio included by number of assets			67%	67%	
Total Landlord Obtained Water	m^3	Water-LfL	117,166	105,721	-10%
Landlord Water Consumption	m^3	Water-LfL	117,166	105,721	-10%
Landlord Supplied Tenant Water Consumption	m^3	Water-LfL	0	0	
Rainwater harvested water	m^3	Water-LfL	553	1,072	94%
Annual Visitor Numbers	number		32,880,049	31,823,423	-3%
Building Water Intensity (landlord services)	litres/visitor	Water-LfL	3.6	3.3	-7%
Total Water Intensity	**litres/ visitor**	**Water-Int**	**1.5**	**1.4**	**-7%**
Total LFL Landlord Water Consumption	**m^3**	**Water-LfL**	**438,847**	**404,852**	**-7%**

[a]Manor Walks was the only retail park with material water consumption and it was sold in Q2 2016. We cannot report building water intensity for retail parks due to no visitor number data.

Our Group EPRA like-for-like portfolio water demand and intensity both improved by 7% since 2017. This has been largely driven by improvements the frequency of water-intense cleaning programmes and reduced visitor numbers in Ireland and France. In Dundrum Town Centre, there have been reduced cleaning requirements on their pond, combined with the slightly reduced visitor numbers, has resulted in an overall 13% reduction in water consumption.

However, due to limited water metering available at our Irish assets, tenant consumption from landlord supply is unknown and is therefore included in landlord consumption.

Data management and quality

Following switching our water supplier in our shopping centres in England in spring 2018, we have seen some slow improvement in the reliability of invoicing data but there is still further improvement in billing accuracy to be achieved in 2019. Likewise in Dundrum Town Centre in Dublin we are still experiencing ongoing issues with data accessibility and accuracy following changes with the local water authority. This requires us to estimate the split between landlord and tenant consumption. This problem should be resolved through investment in increased submetering in 2019.

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.

There is no landlord water provision in our retail parks portfolio. Our water data is assured by Deloitte.

Section 5

Managing Our Resource Use

As a responsible business Hammerson has long considered resource use as one of our material impacts. As awareness of resource scarcity and the devastating impacts of poor waste management rise, our ability to demonstrate sector leading outcomes in this area is increasingly important.

Victoria Leeds Shopping Centre

Managing Resources

Managing our resources involves careful management of waste at our operational assets and on our developments and responsible sourcing of the materials we use through design. It also covers how we minimise negative impacts from the products we buy operationally.

By 2030 we will be Net Positive for:

Carbon **Water** **Resource Use** **Socio-economic impacts**

Performance against key resource targets in 2018

Table 5.1

Target	Status				
	2016	2017	2018	2019	2020
Achieve 85% waste recycling for the like-for-like shopping centre portfolio	70%	73%	75%		
Achieve 100% diversion of operational and construction waste from landfill in the UK by 2020	94%	98%	99.8%		

Our 2018 Performance

2018 saw a significant change in consumer interest and focus on resource management, with Sir David Attenborough's Blue Planet programme engaging millions in the scandal of our plastic-filled oceans. We have had a strong focus on recycling for over 10 years, and, in 2018 we took further steps to reduce the amount of waste produced by our customers and employees across our shopping centres. A number of initiatives designed to help us reduce the use of single use plastics were implemented, including the removal of all straws and disposable cups from our corporate offices, and the provision of water fountains at our centres. So far 3 of our UK centres have installed water fountains which are being promoted to our visitors. This initiative is being supported by the provision of reusable cups and water bottles for refilling across the portfolio. Our food & beverage tenants are supporting this initiative too by promoting their willingness to refill water bottles.

In 2018, we continued our focus on recycling and diversion from landfill, recycling 75% of our waste and diverting 34,463 tonnes of waste from landfill across all three geographies.

We have had good success with food waste disposal on site, reducing carbon emissions through anaerobic digestion and reduced transportation.

We confirmed through our supply chain that our recycling does not go beyond Europe so the only impacts we have experienced from the policy changes in international recycling have been cost increases. We are expecting costs to rise further once the UK leaves the EU due to labour shortages. The reduction in the value of recyclables has had an impact on waste costs in 2018 but through careful work with our waste carriers and partners we have been able to maintain and in some cases improve our recycling rates.

We are limited in what recycling rates we can achieve in different geographies due to varying national infrastructures and constraints. For example in France, the lower landfill tax means local recycling facilities are not as easily accessible as in the UK, and in Ireland limited local recycling facilities means most waste diverted from landfill which is not exported for recycling, goes to refuse derived fuel.

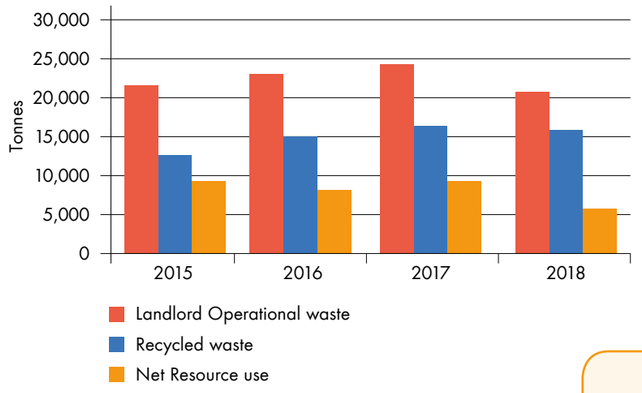
Becoming Net Positive for waste

Resource use is one of our Net Positive targets. To be Net Positive for resource use means materials avoided, recycled or re-used exceeds materials used that are neither recycled, renewable or sent to landfill.

Our clear focus on recycling and reuse in the UK and Ireland has delivered good progress against our Net Positive resource use target so far. Progress across our French assets is slower but our recycling rates are improving and we are working closely with our new waste provider in France to achieve better results.

Our resource use target includes the materials specified within our developments. Specifying recycled content of materials encourages the development of the market for those products which has potentially more impact than the project itself. During 2018 we specified the use of recycled content within the concrete for the extension of Les 3 Fontaines, Cergy, saving an estimated 412 tonnes of new materials. This has significant carbon impacts as well as resource use impacts.

Chart 5.1
Net Positive Resource Use



28%

year-on-year reduction in our Net Positive Resource use footprint

To achieve our 2019 targets we will focus on the following projects:

- **Hot and cold drinks cup recycling.**
- **Improving retailer waste segregation with food waste caddies for non-food retailers**
- **Engaging with charities and other organisations to donate or reuse items rather than recycle or send to incineration**

Specific resource use projects we have worked on in 2018 include:

Proactive management

Engaging with our retailers is our primary tool in improving waste segregation and recycling rates. We visit our retailers regularly, support with training their teams and recommend opportunities to improve processes which might deliver a better recycling rate. In particular, we focus on ensuring all waste food which can't be donated is segregated and recycled through an anaerobic digestion.

Managing organic waste

As the number of restaurants across the portfolio increases, so does our organic waste. We are always looking for innovative ways to manage it more effectively. All organic waste from the UK portfolio goes to anaerobic digestion. In 2018 organic waste from our sites was used to generate 276 MWh of green electricity saving 269 tonnes of carbon emissions.

OWL's BioWhale organic waste processors we have at Westquay and Cabot Circus are driving great recycling rates and carbon savings. Strong and consistent engagement with retailers is key to enabling waste segregation at source and has the co-benefit of improving the quality of waste streams.

In 2018, using BioWhale removed 125 truck journeys from roads in Bristol and 78 in Southampton, reducing local congestion and improving air quality.

At Cabot Circus, the food waste produced by the restaurants produces more biogas through anaerobic digestion than the centre consumes for heating and hot water provision – making Cabot Circus our first centre to be Net Positive for gas.

Cabot Circus were delighted to win a Gold Award for Environmental Best Practice in Waste Management in 2018.

Drinking water fountains

We have also launched "Refill here" stickers in collaboration with retailers at Cabot Circus and The Oracle, driving improved engagement with our retailers and encouraging footfall.

In spring 2018 we launched Kings Place Plastic Free, a project to remove plastic and paper cups in our London head office. We succeeded in reducing the weight of our plastic waste stream by 45% and avoiding the use of 39,000 hot drink cups and 24,000 plastic water cups a year.

With such a significant national attention on plastic waste, in 2019 we are expanding our resources focus to address the issue of hot and cold drinks cups. Together with other landlords, retailers and local authorities we will be collecting disposable cups as a separate waste stream to ensure they get recycled.

At The Oracle, Reading we are aiming to halve the number of bottles entering our waste stream from the mall, which will save an estimated 46 tonnes of carbon emissions[1].

46 tonnes

1 Assumes 130gCO_2e per 500ml bottle creation (http://www-materials.eng.cam.ac.uk/energyforschools/downloads/D-PackagingRecycling.pdf) and the average 500ml bottle weighs 25g, and Oracle will save 9 tonnes of bottles (just under half of total bottles thrown away).

Victoria Leeds Shopping Centre

Re-using coffee grounds

Victoria Gate has introduced a coffee grounds reuse scheme in partnership with Leeds Council and its retailers. The collection scheme diverts used coffee grounds from the waste stream and reuses them as soil enricher across the city. This initiative has supported Victoria Gate in achieving their highest recycling rate so far at just over 88%.

Clothes hanger reuse

Through our relationship with Mainetti, a major clothes hanger provider, we diverted an estimated 98,000 hangers out of the waste stream and into refurbishment and reuse in 2018.

For several years at Cabot Circus we have donated clothes hangers to our customers and the community, and where hangers are broken and cannot be reused we ensure they are recycled. Other centres are following suit and we're pleased to say we are now donating clothes hangers in centres across the UK, Ireland and France.

Group waste data

At a group level we are achieving very close to 100% diversion from landfill of our operational waste. Our waste recycling rate has increased to 75% which is a significant achievement across our whole portfolio. Performance in the UK has been particularly good where we achieved 82% recycling rate across the portfolio.

16% of our total waste is food recycling; tackling food waste at our shopping centres has enabled us to generate 276 mWh of natural gas and a saving of 269 tonnes of CO_2e from sending food waste from our centres to anaerobic digestion in 2018. Cabot Circus won a Gold Award for Environmental Best Practice in Waste Management in 2018 to celebrate their 100% recycling rate for food waste from food retailers onsite.

Waste management at our French assets is always more challenging as there has been less investment in waste management infrastrcuture in France. However our recycling rate is improving as we work closely with our waste service providers. Terrasses du Port has achieved 66% recycling, demonstrating what can be done with dedication.

We are disappointed with the drop in recycling at our Irish assets and are investigating what is driving this issue.

Group and Operating Region
Waste Management

GRI Indicator 306-2

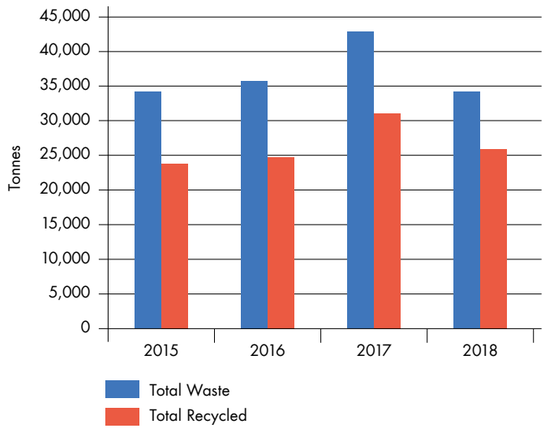
Table 5.2

GROUP	UNIT	EPRA CODE	2015	% OF TOTAL WASTE	2016	% OF TOTAL WASTE	2017	% OF TOTAL WASTE	2018	% OF TOTAL WASTE
Total Waste Quantity including shopfit waste	Tonnes	Waste-abs	34,574	100%	35,542	100%	42,727	100%	34,532	100%
Total tonnes diverted from landfill	Tonnes	Waste-abs	30,391	88%	33,535	94%	41,807	98%	34,463	99.8%
Total recycled including shopfit waste	Tonnes	Waste-abs	23,884	69%	24,825	70%	31,396	73%	26,065	75%
Total recycled excluding tenant shopfit	Tonnes	Waste-abs	20,596	60%	23,048	65%	26,078	61%	25,317	73%
Total reused waste	Tonnes	Waste-abs	5	0%	8	0%	28	0%	0	0%
Food recycling	Tonnes	Waste-abs	4,208	12%	4,732	13%	5,794	14%	5,662	16%
Food disposal	Tonnes	Waste-abs	34	0%	n/a		46	0%	637	2%
Incinerated waste (used as fuel)	Tonnes	Waste-abs	1,979	6%	1,556	4%	1,951	5%	1,053	3%
Incinerated waste (not used as fuel)	Tonnes	Waste-abs	4	0%	3	0%		0%		
Total Waste sent to an offsite Materials Recovery Facility [MRF]	Tonnes	Waste-abs	9,157	26%	12,031	34%	12,271	29%	13,238	38%
Landfilled waste (MRF)	Tonnes	Waste-abs	659	2%	48	0%	5	0%	16	0%
Landfilled waste	Tonnes	Waste-abs	3,453	10%	1,859	5%	692	2%	30	0%
Hazardous Landfilled waste[a]	Tonnes	Waste-abs	11	0%	25	0%	19	0%	14	0%
Total Hazardous Waste	Tonnes	Waste-abs	39	0%	392	1%	259	1%	136	0%
Other Waste	Tonnes	Waste-abs	0	0%	0	0%	31	0%	3	0%
UK										
Total Waste Quantity including shopfit waste	Tonnes	Waste-abs	26,421	100%	25,269	100%	29172	100%	22,417	100%
Total tonnes diverted from landfill	Tonnes	Waste-abs	26,327	100%	25,149	100%	29051	100%	22,367	99.8%
Total recycled including shopfit waste	Tonnes	Waste-abs	16,848	64%	17,143	68%	17,691	61%	18,285	82%
Total recycled excluding tenant shopfit			20,135	76%	18,920	75%	22,347	77%	17,569	78%
Total reused waste	Tonnes	Waste-abs	5	0%	8	0%	4	0%	0	0%
Food recycling	Tonnes	Waste-abs	3,653	14%	3,533	14%	3,547	12%	3,262	15%
Food disposal	Tonnes	Waste-abs	34	0%	0	0%	46	0%	46	0%
Incinerated waste (used as fuel)	Tonnes	Waste-abs	1,682	6%	1,359	5%	1369	5%	62	0%
Incinerated waste (not used as fuel)	Tonnes	Waste-abs	4	0%	3	0%		0%	0	0%
Total Waste sent to an offsite Materials Recovery Facility [MRF]	Tonnes	Waste-abs	8,421	32%	9,540	38%	10,129	35%	11,481	51%
Landfilled waste (MRF)	Tonnes	Waste-abs	9	0%	15	0%	5	0%	16	0%
Landfilled waste	Tonnes	Waste-abs	14	0%	5	0%	3	0%	19	0%
Hazardous Landfilled waste[a]	Tonnes	Waste-abs	11	0%	25	0%	6	0%	2	0%
Total Hazardous Waste	Tonnes	Waste-abs	38	0%	390	2%	150	1%	107	0%
Other Waste	Tonnes	Waste-abs	145	1%	0	0%	31	0%	3	0%

[a] *Hazardous waste has a range of waste streams and the main route if not sent to landfill is incineration or recycling.*

Chart 5.2

Whole Portfolio Total waste & Total recycling



Group and Operating Region
Waste Management

GRI Indicator 306-2

Table 5.2 (continued)

FRANCE	UNIT	EPRA CODE	2015	% OF TOTAL WASTE	2016	% OF TOTAL WASTE	2017	% OF TOTAL WASTE	2018	% OF TOTAL WASTE
Total Waste Quantity including shopfit waste	Tonnes	Waste-abs	8,153	100%	8,687	100%	8,791	100%	7,394	100%
Total tonnes diverted from landfill	Tonnes	Waste-abs	4,064	50%	6,800	78%	8,003	91%	7,394	100%
Total recycled including shopfit waste	Tonnes	Waste-abs	3,748	46%	4,874	56%	5,348	61%	4,495	61%
Total recycled excluding tenant shopfit	Tonnes	Waste-abs	3,748	46%	4,874	56%	5,348	61%	4,495	61%
Total reused waste	Tonnes	Waste-abs	0	0%	0	0%	0	0%	0	0%
Food recycling	Tonnes	Waste-abs	555	7%	868	10%	1,551	18%	1,672	23%
Food disposal	Tonnes	Waste-abs	0	0%	0	0%	0	0%	1.44	0%
Incinerated waste (used as fuel)	Tonnes	Waste-abs	297	4%	197	2%	583	7%	991	13%
Incinerated waste (not used as fuel)	Tonnes	Waste-abs	0	0%	0	0%		0%	0	0%
Total Waste sent to an offsite Materials Recovery Facility [MRF]	Tonnes	Waste-abs	736	9%	1,936	22%	791	9%	53	1%
Landfilled waste (MRF)	Tonnes	Waste-abs	650	8%	33	0%		0%	0	0%
Landfilled waste	Tonnes	Waste-abs	3,438	42%	1,854	21%	690	8%	0	0%
Hazardous Landfilled waste	Tonnes	Waste-abs	n/a		0	0%	2	0%	0	0%
Total Hazardous Waste[a]	Tonnes	Waste-abs	1	0%	2	0%	3	0%	12	0%
Other Waste	Tonnes	Waste-abs	0	0%	0	0%	0	0%	0	0%
IRELAND										
Total Waste Quantity including shopfit waste	Tonnes	Waste-abs	n/a		1,586	100%	4,764	100%	4,721	100%
Total tonnes diverted from landfill	Tonnes	Waste-abs	n/a		1,586	100%	4,753	100%	4,702	99.6%
Total recycled including shopfit waste	Tonnes	Waste-abs	n/a		1,031	65%	3,038	64%	3,285	70%
Total recycled excluding tenant shopfit	Tonnes	Waste-abs	n/a		1,031	65%	3,700	78%	3,253	69%
Total reused waste	Tonnes	Waste-abs	n/a		0	0%	24	0%	0	0%
Food recycling	Tonnes	Waste-abs	n/a		331	21%	696	15%	728	15%
Food disposal	Tonnes	Waste-abs	n/a		n/a		0	0%	0	0%
Incinerated waste (used as fuel)	Tonnes	Waste-abs	n/a		0	0%	0	0%	589	12%
Incinerated waste (not used as fuel)	Tonnes	Waste-abs	n/a		0	0%		0%	0	0%
Total Waste sent to an offsite Materials Recovery Facility [MRF]	Tonnes	Waste-abs	n/a		555	35%	1,352	28%	1,703	36%
Landfilled waste (MRF)	Tonnes	Waste-abs	n/a		0	0%		0%	0	0%
Landfilled waste	Tonnes	Waste-abs	n/a		0	0%	0	0%	12	0%
Hazardous Landfilled waste[a]	Tonnes	Waste-abs	n/a		0	0%	12	0%	12	0%
Total Hazardous Waste	Tonnes	Waste-abs	n/a		0	0%	106	2%	17	0%
Other Waste	Tonnes	Waste-abs	n/a		0	0%	0	0%	0.00	0%

[a] Hazardous waste has a range of waste streams and the main route if not sent to landfill is incineration or recycling.

Our UK EPRA like-for-like portfolio significantly improved its recycling rate in 2018, achieving 83%. 7 of our UK assets achieved or exceeded our target of 85% recycling this year:

- Cabot Circus Shopping Centre
- Centrale Shopping Centre
- Grand Central Shopping Centre
- Highcross Shopping Centre
- Oracle Shopping Centre
- Silverburn Shopping Centre
- Union Square Shopping Centre

This is an impressive achievement and down to the dedication of the on-site teams.

Data management and quality

We have continued to work with our waste management partners through 2018 to improve the quality and accuracy of our waste data, including audits of our waste carriers and access to an interactive dashboard across UK shopping centres.

Waste data is collected from waste transfer notes, collection notes and annual waste transfer notes. It is audited regularly at a site level through our environmental management system audit requirements.

EPRA like-for-like Portfolio – Waste Management

GRI Indicator 306-2

Table 5.3

EPRA LFL (2017-2018) UK SHOPPING CENTRES (COVERAGE 6/8)	UNIT	EPRA CODE	2017	% OF TOTAL WASTE	2018	% OF TOTAL WASTE
% of whole portfolio included by number of assets			86%		86%	
Total Waste Quantity including shopfit waste	Tonnes	Waste-lfl	24,219	100%	21,109	100%
Total tonnes diverted from landfill	Tonnes	Waste-lfl	24,112	100%	21,075	100%
Total recycled including shopfit waste	Tonnes	Waste-lfl	17,753	73%	17,421	83%
Total reused waste	Tonnes	Waste-lfl	0	0%	0	0%
Food recycling	Tonnes	Waste-lfl	3,544	15%	3,259	15%
Food disposal	Tonnes	Waste-lfl	46	0%	46	0%
Incinerated waste (used as fuel)	Tonnes	Waste-lfl	224	1%	1	0%
Incinerated waste (not used as fuel)	Tonnes	Waste-lfl	0	0%	0	
Total Waste sent to an offsite Materials Recovery Facility	Tonnes	Waste-lfl	9,236	38%	10,557	50%
Landfilled waste (Materials Recovery Facility)	Tonnes	Waste-lfl	0	0%	0	0%
Landfilled waste	Tonnes	Waste-lfl	17	0%	1	0%
Hazardous Landfilled waste	Tonnes	Waste-lfl	6	0%	1	0%
Total Hazardous Waste[a]	Tonnes	Waste-lfl	150	1%	105	0%
Other Waste	Tonnes	Waste-lfl	31	0%	2	0%
EPRA LFL (2017-2018) UK RETAIL PARKS (COVERAGE 14/14)						
% of whole portfolio included by number of assets	Tonnes	Waste-lfl	68%		93%	
Total Waste Quantity including shopfit waste	Tonnes	Waste-lfl	403	100%	407	100%
Total tonnes diverted from landfill	Tonnes	Waste-lfl	399	99%	404	99%
Total recycled including shopfit waste	Tonnes	Waste-lfl	232	57%	335	82%
Total reused waste	Tonnes	Waste-lfl	2	1%	0	0%
Food recycling	Tonnes	Waste-lfl	0		0	
Food disposal	Tonnes	Waste-lfl	0		0	
Incinerated waste (used as fuel)	Tonnes	Waste-lfl	144	36%	50	12%
Incinerated waste (not used as fuel)	Tonnes	Waste-lfl	0		0	
Total Waste sent to an offsite Materials Recovery Facility	Tonnes	Waste-lfl	136	34%	235	58%
Landfilled waste (Materials Recovery Facility)	Tonnes	Waste-lfl	0	0%	3	1%
Landfilled waste	Tonnes	Waste-lfl	5	1%	3	1%
Hazardous Landfilled waste	Tonnes	Waste-lfl	0		0	
Total Hazardous Waste[a]	Tonnes	Waste-lfl	0		0	
Other Waste	Tonnes	Waste-lfl	0		0	

[a] *Hazardous waste has a range of waste streams and the main route if not sent to landfill is incineration or recycling.*

EPRA like-for-like Portfolio – Waste Management

GRI Indicator 306-2

Table 5.3 (continued)

EPRA LFL (2017-2018) FRANCE SHOPPING CENTRES (COVERAGE 6/8)	UNIT	EPRA CODE	2017	% OF TOTAL WASTE	2018	% OF TOTAL WASTE
% of whole portfolio included by number of assets			70%		88%	
Total Waste Quantity including shopfit waste	Tonnes	Waste-lfl	8,234	100%	7,141	100%
Total tonnes diverted from landfill	Tonnes	Waste-lfl	7,483	91%	7,141	100%
Total recycled including shopfit waste	Tonnes	Waste-lfl	4,946	60%	4,401	62%
Total reused waste	Tonnes	Waste-lfl	0		0	0%
Food recycling	Tonnes	Waste-lfl	1,426	17%	1,653	23%
Food disposal	Tonnes	Waste-lfl	0		1	0%
Incinerated waste (used as fuel)	Tonnes	Waste-lfl	583	7%	973	14%
Incinerated waste (not used as fuel)	Tonnes	Waste-lfl	0		0	
Total Waste sent to an offsite Materials Recovery Facility	Tonnes	Waste-lfl	791	10%	53	1%
Landfilled waste (Materials Recovery Facility)	Tonnes	Waste-lfl	97	1%	0	0%
Landfilled waste	Tonnes	Waste-lfl	751	9%	0	0%
Hazardous Landfilled waste	Tonnes	Waste-lfl	0	0%	0	0%
Total Hazardous Waste[a]	Tonnes	Waste-lfl	0	0%	9	0%
Other Waste	Tonnes	Waste-lfl	0		0	0%
EPRA LFL (2017-2018) IRELAND SHOPPING CENTRES (COVERAGE 2/3)						
% of whole portfolio included by number of assets	Tonnes	Waste-lfl	67%		67%	
Total Waste Quantity including shopfit waste	Tonnes	Waste-lfl	4,109	100%	3,175	100%
Total tonnes diverted from landfill	Tonnes	Waste-lfl	4,098	100%	3,163	100%
Total recycled including shopfit waste	Tonnes	Waste-lfl	3,215	78%	2,212	70%
Total reused waste	Tonnes	Waste-lfl	65	2%	0	0%
Food recycling	Tonnes	Waste-lfl	599	15%	531	17%
Food disposal	Tonnes	Waste-lfl	0	0%	0	0%
Incinerated waste (used as fuel)	Tonnes	Waste-lfl	164	4%	589	19%
Incinerated waste (not used as fuel)	Tonnes	Waste-lfl	0	0%	0	0%
Total Waste sent to an offsite Materials Recovery Facility	Tonnes	Waste-lfl	1,012	25%	1,039	33%
Landfilled waste (Materials Recovery Facility)	Tonnes	Waste-lfl	0	0%	0	0%
Landfilled waste	Tonnes	Waste-lfl	11	0%	12	0%
Hazardous Landfilled waste	Tonnes	Waste-lfl	11	0%	12	0%
Total Hazardous Waste[a]	Tonnes	Waste-lfl	65	2%	17	1%

[a] *Hazardous waste has a range of waste streams and the main route if not sent to landfill is incineration or recycling.*

Managing Development Impacts

Our development activity, whether it is the construction of new assets, extensions or major refurbishments, creates significant environmental and social impacts and presents a great opportunity to set the highest operational standards for buildings which will be with us for at least the next 50 years.

Our three step process

Our Sustainable Design Standard incorporates a three step process from the outset of a project that enables the team to identify a clear sustainability vision for a project and set out a process for its delivery.

Sustainability Design Standard

Sustainability Vision	Project Sustainability Brief	Sustainability Implementation Plan
Our vision provides a clear set of social, environmental and business aspirations which are then tailored to fit the material impacts of each development scheme. Our starting point is to consider what contribution the project can make to our Net Positive targets - both positive and negative.	The project brief captures specific sustainability objectives for the project, providing the project team and supply chain with a clear set of requirements and opportunities from the outset.	The plan records the sustainability objectives laid down in the brief, alongside delivery targets, actions and decisions made throughout the development. It is regularly reviewed by the project team to ensure outcomes are optimised. Progress is reported through the Positive Places Development Working Group.

Our project teams are very familiar with the BREEAM process. Their aim is to use it as a design tool rather than just a compliance exercise. An example of this was the 2018 installation of a roof mounted PV array and a solar car port PV system on the Victoria Gate, Leeds shopping centre multi storey car park. Not only did this help achieve BREEAM Excellent for the development, it also reduced the centres annual electricity demand and corresponding carbon emissions by approximately 60%.

The solar car port PV array was the first in the portfolio and its success means it is being considered for both existing assets and planned future developments.

PV at Leeds Victoria has reduced asset grid electricity demand by

60%

Case Study

Innovation in Material Specification

as shown during our Les 3 Fontaines Extension, Cergy

Construction of the major extension to Les 3 Fontaines, Cergy commenced in 2018. A Sustainability Implementation Plan (SIP) had been developed for the project and sustainability opportunities are regularly reviewed with the project team. This produced two notable outcomes – the specification of low carbon concrete and a change to the electric vehicle charging facilities.

Low carbon concrete:

The concrete frame and floors for the new extension are responsible for the highest proportion of embodied carbon and resource use compared to other elements of the project. Discussions with the main contractor, Bouygues, identified potential to reduce the environmental impact of the concrete. To do this, the sourcing of the concrete, impact on design and cost implications had to reviewed.

- Bouygues proposed a concrete mix for the floor slabs which comprised 50% cement replacement material (ground granulated blast furnace slag) in lieu of traditional Portland cement resulting in an estimated total embodied carbon saving of 463 tonnes.
- The concrete is being produced locally and will only travel 7km to the site which keeps transport carbon emissions low too.
- The steel reinforcement used in the concrete structure is made from 100% recycled steel reducing its impact still further.

This change in specification did not have any impact on construction cost or programme. The development is on track to meet BREEAM Excellent. The learning from the project will now be adopted for future developments in France, UK and Ireland.

Incorporating electric vehicle facilities:

The ongoing review of the SIP also raised the question of how the completed development should respond to the expected increase in electric vehicles and the potential development of transport as a service. Given rapid technological advances and demand for electric vehicles, there was a focus on increasing the capacity of the electricity supply to potentially accommodate fast EV chargers rather than the slow chargers required for planning and BREEAM. Fundamentally, flexibility is important when designing EV enabled infrastructure. The design was changed to accommodate fast charging on completion and allow for expansion as demand increases.

The extension of the Les 3 Fontaines shopping centre in Cergy, which is currently on site, is on track to meet BREEAM Excellent

Performance Against Hammerson Sustainable Design Standard

Table 5.4

	STATUS	BREEAM TARGET	BREEAM RATING ACHIEVED (Certification Stage)	CONSIDERATE CONSTRUCTORS SCHEME (2017 av score, on site UK schemes only)	CONSTRUCTION WASTE GEN (T/100M²) (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_2 EMISSIONS (TCO_2/100M²) (ON-SITE SCHEMES ONLY)	POTABLE WATER (M3/100M²) (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)
HAMMERSON CORPORATE TARGET >>		**Excellent**		**40**	**-**	**97%**	**99%**	**-**	**-**	**100%**	**n/a**
2018 SCHEMES											
Trois Fontaine extension, Cergy	On site	Excellent	Excellent (Pre-assessment)	Not Applicable	1.0	100%	100%	4.0	10.8	24%	Data not provided by the contractor
Orchard Centre extension, Didcot	Complete	Very Good	Very Good (Construction)	36	3.6	100%	Not applicable	0.7	2.1	No timber used	Data not provided by the contractor
House of Fraser refurbishment, Highcross	Complete	Not applicable	Not applicable	37	2.0	96%	100%	0.6	1.4	100%	18%
FUTURE SCHEMES											
Brent Cross, London extension	Design	Excellent	Excellent (Pre-assessment)								
Whitgift Centre, Croydon	Design	Excellent	Excellent (Pre-assessment)								
Goodsyard	Design	Excellent	Excellent (Pre-assessment)								
Italie Deux	Design	Excellent	Excellent (Pre-assessment)								

Certification

Established industry benchmarks such as BREEAM, HQE and CEEQUAL provide useful practical systems for monitoring project performance and driving standards. Our target of achieving BREEAM Excellent for our development projects remains in place and is an important tool to help deliver our Positive Places strategy and meet our Net Positive targets.

Certification for industry standards

GRI Indicator 471-1

Table 5.5

Certification	Unit	Group	UK Shopping Centres	UK Retail Parks	France Retail Portfolio	Irish Retail Portfolio
BREEAM						
Design & Post Construction	Number of Certificates	16	7	6	3	0
	m² covered	649,122	363,477	149,155	136,490	0
In use	Number of Certificates	6	0	0	5	1
	m² covered	564,420	0	0	402,832	161,588
% portfolio covered by GIA	%	41%	24%	71%	89%	77%

Promoting Biodiversity

Each of our assets has a Biodiversity Action Plan that guides investment into biodiversity projects. Our assets tend to be in city centre locations with limited opportunity for extensive biodiversity projects. However, given the importance of flora and fauna in these locations we work hard to identify potential opportunities to improve the biodiversity of the portfolio. This supports air quality and, where we can provide carbon sinks, our Net Positive targets. 2018 was a big year for biodiversity for our centres across France, Ireland and the UK.

Supporting our pollinators

We now have bee hives in Dundrum Town Centre, Silverburn, Glasgow and Cergy, Paris, with the hives in Dundrum producing their first batch of honey in 2018. Plus, we have two new hives moving into Oracle in the spring – watch out for an international honey taste competition!

To support our local bees and bugs we extended the existing rooftop planting at Union Square and Cabot Circus with insect-friendly planting across the estate and installed insect hotels at Dundrum and Silverburn, with plans for more at Cabot Circus and Victoria Leeds.

Green spaces

Whilst our centres are in urban locations, they incorporate a great array of planting and green spaces. We have a wildflower swale at Westquay, Southampton, a living wall at Oracle, Reading and a polytunnel on the roof for employees to grow vegetables at Highcross Leicester. We also have a community garden at Silverburn, Glasgow.

In 2019, we plan to continue our biodiversity focus by installing living walls at Cabot Circus and Highcross, and creating an employee garden at Centrale.

The benefits

In addition to the obvious carbon sequestration benefits brought by planting, biodiversity has been proven to have a positive impact on the health and wellbeing of both employees and customers who come into contact with it. Swales and other natural formations also provide natural defences for flash flooding, something we are expecting to occur more frequently with climate change, and improve local air quality.

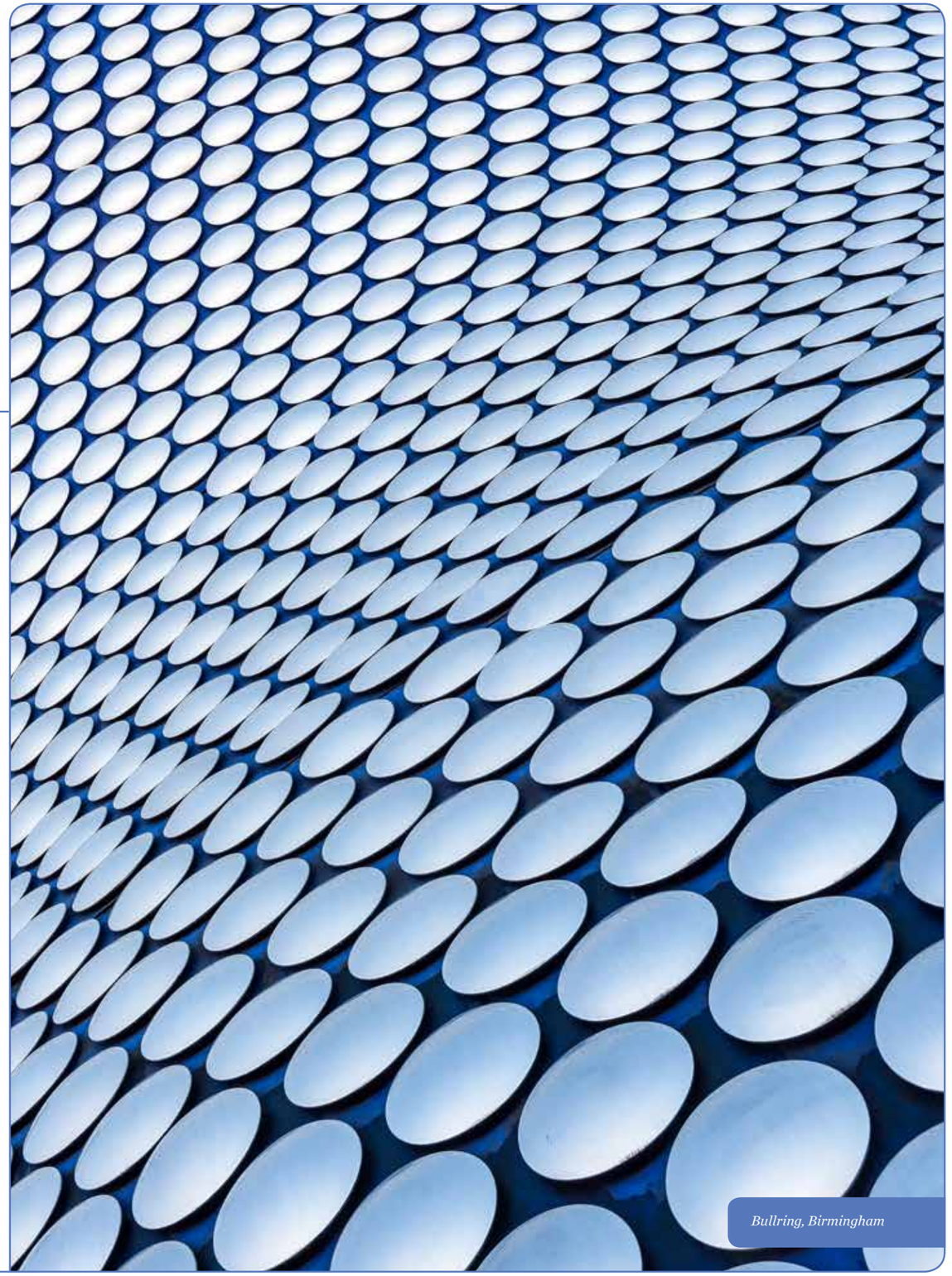
Dundrum Town Centre, Dublin

Our Green Wall at The Oracle Reading, which is complimented by pollinator friendly planting across the site.

Section 6

Managing Health and Safety

The health, safety and security of anyone visiting or working at one of our sites is of paramount importance to us. With over 350 million visits to our assets each year and in excess of 40,000 people working on site; health and safety is an on-going, everyday challenge and absolute priority for the business.



Bullring, Birmingham

Managing Health and Safety

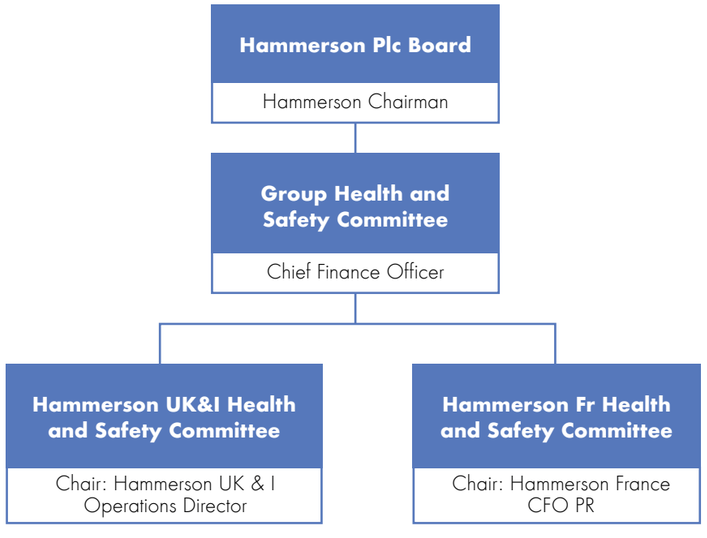
We have comprehensive Health and Safety management systems and processes in place to ensure to the best of our ability and in line with industry best practice, the safety and security of anyone visiting one of our assets. We are fully committed to consistently achieving the highest standards of health and safety management and performance and our record in this area is exemplary.

Our management approach to health and safety

The two key areas of the business with significant health and safety risks and responsibilities are Retail Operations and Development. In addition to this, our corporate operations include over 500 people working in the offices in London, Reading, Dublin and Paris and at our sites across three geographies. These different business streamlines and jurisdictions present different health, safety and security challenges and have separate management systems. However, each management system reports to a single Group Health and Safety Committee ensuring the most senior leadership team have regular, clear oversight of health and safety performance within each area of the business.

Our Corporate governance structures for Health and Safety are shown below.

Board level responsibility for Health and Safety sits with our Chief Finance Officer who chairs the Group Health and Safety committee. The committee meets quarterly and receives performance data from each jurisdiction for both Operations and Development.



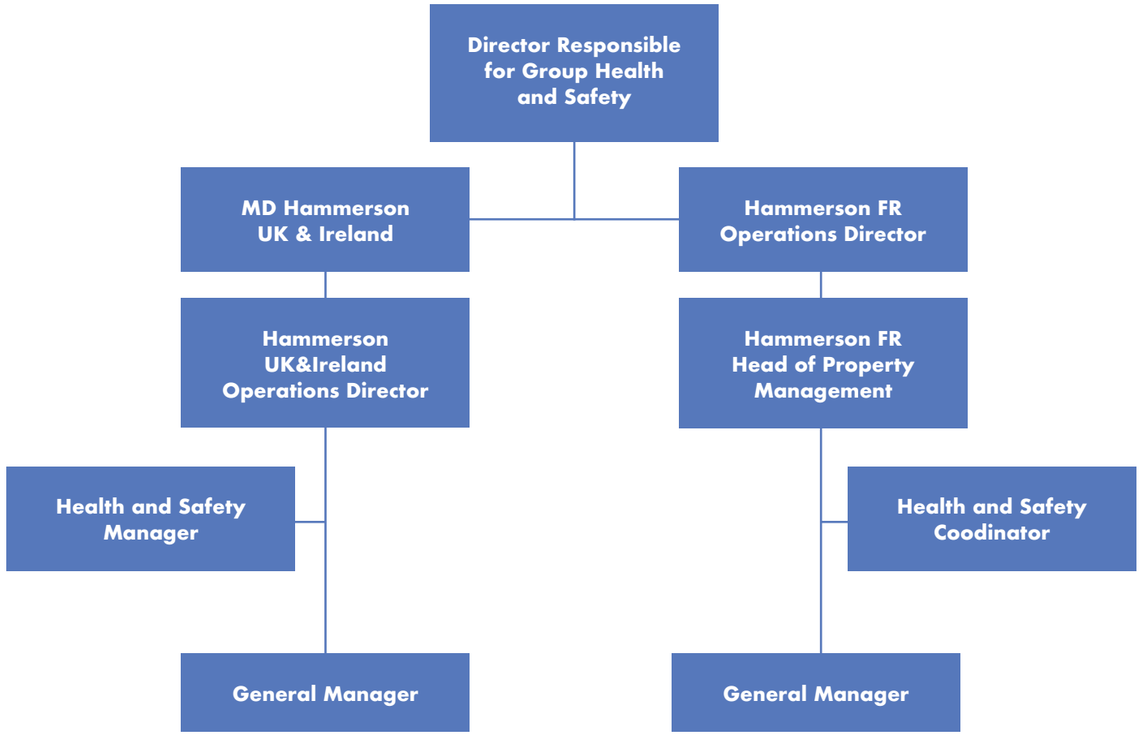
Health and safety in our retail operations

Hammerson publishes a Group level annual Statement of Intent regarding Health and Safety at our sites. The statement sets out our health and safety objectives as a business and the health and safety governance structure put in place to achieve those objectives.

In order to achieve our high standards of health and safety management, the Group H&S Committee sets annual objectives and KPIs as part of the annual H&S Management Review.

These are designed to deliver continuous improvement, and performance against these KPIs is reviewed on a quarterly basis with the relevant key stakeholders throughout the business and reported to the Group H&S Committee.

Our governance structure for Health & Safety into our retail operations is below:



Health and safety governance Hammerson UK and Ireland

Health and Safety is a key part of the monthly UK & Ireland Management Board, Risk and Controls Committee, Operations H&S Committee, Shopping Centre H&S Committees and is reported to the Plc Board on an annual basis.

Our Health & Safety KPIs are transposed into the relevant managers' personal objectives and reviewed as part of the performance appraisal process. Table 6.1 below sets out our 2019 performance against Health and Safety KPIs in the UK.

Health and Safety KPIs and Performance

Table 6.1

Key Performance Indicators (KPI)	Expected level of Compliance	2018 performance
Hammerson Employee Lost Time Incidents	0	0
Hammerson Employee RIDDOR reportable incidents	0	0
Member of the Public RIDDOR reportable incidents	0	27
Enforcement Notices or letters received	0	0
Internal Audit - RPS H&S Audit scores	> 85%	
Internal Audit - Hilson Moran	> 90%	93%
18001 accreditation	No major non-conformities	0
Additional Non Measureable KPI:		
Record number of visits from EHO/Fire Authority etc.	N/A	6

Health and safety data management

During 2014 we moved our UK health and safety data management and reporting to a combined system, Safeguard. The Health and Safety lead is responsible for providing data into the Safeguard system on a monthly basis. This is subject to an internal verification process and is reported to the Group Health and Safety Committee.

Health and safety governance Hammerson France

For our French operations, Hammerson is subject to French Health and Safety regulations. These require the appointment of a Safety Coordinator with responsibility to implement:

- A security coordination plan
- Inspection reports
- Construction site visit reports
- Accident reports
- Inter-company committee quarterly meeting

Responsibility for Health, Safety and Security at country level in France is delegated to the Hammerson France Board and for day to day monitoring, to the Hammerson France Property Executive committee and a Health & Safety Coordinator. A third party consultant, Bureau Veritas, carries out regular site Health and Safety surveys, providing management reports with recommendations to the Property Executive.

The Hammerson France Health & Safety Coordinator monitors and reports performance data to the Property Executive, who undertake a review every two months, alongside the asset General Managers, in order to check progress against actions identified by the Health & Safety Survey.

Performance data including any incidents are submitted to the Group Health & Safety Committee which is attended by the French Retail Management Director and Property Executive.
Our reportable data for 2018 is set out in the table below.

Hammerson France operations has reported the following Health and Safety incidents for 2018:	2018
Body Accidents	714

Developments

Our development activities bring different health and safety risks and management responsibilities. Responsibility for health and safety on any active development site is delegated to our main contractor. Their performance in this regard is an important element within the tender process for contractor selection and best in class management and reporting is including within our standard employer's requirements.

Management and reporting of health and safety performance is through monthly or weekly site progress meetings which the Hammerson Project Manager convenes. The first agenda item within these meetings is health and safety performance with a review of all data, incidents, management processes and any concerns. Data reported on a monthly basis includes:

- RIDDOR accidents
- Day Lost Time incidents (<3 days, 3-7 days)
- Dangerous occurrences
- Near-misses
- Safety improvement notices
- Safety Observations
- HSE visits

We currently have no active development sites in the UK or Ireland. Our active development site in France, Les 3 Fontaines, Cergy has reported the following Health & Safety data for 2018

Hammerson France – Developments	2018
Body Accidents	0

Accreditation to OHSAS 18001

Hammerson are proud of our OHSAS 18001 certification, held since December 2013. The Occupational Health and Safety Management Standard 18001 (OHSAS 18001) is a specification and framework for the management of specific occupational health and safety risks in the workplace. It covers planning for hazard identification, training and communication, emergency preparedness and response, risk assessment and control, occupational health and safety management, and performance measuring and improvement.

Hammerson receives annual independent verification that we are meeting the requirements of the standard. We also conduct regular internal audits and reviews to ensure we are meeting the requirements set out in our documented policies and procedures between external audits.

Over the course of 2019 we will transition from OHSAS 18001 to the new international standard, ISO 45001. This will bring synergies across all other ISO accreditations we hold including our ISO 14001 accredited environmental management system. Hammerson are currently developing the health and safety management system to meet the new set of requirements and have a target to obtain the new certification by the end of 2019.

Dundrum Town Centre and Grand Central, whilst following the OHSAS 18001 processes, will be incorporated within the management system as part of the transition to ISO 45001. France is not yet ISO certified and we have a similar target to include our French operations within the ISO 45001 certification. The implementation process began in 2019.

Health and Safety Management System

GRI Indicator 403-1
CRE EPRA H&S-Asset

Table 6.2

Certification	Unit	Group	UK Shopping Centres	UK Retail Parks	France Retail Portfolio	Irish Retail Portfolio
Health & Safety management system used: OHSAS 18001						
Number of assets covered by an internationally recognised health and safety management system	#	11 (including 1 head office location)	10/14	0/19	0/8	0/3
Portfolio covered by area	m^2	1,188,484	1,186,141	0	0	0
% Portfolio covered by GIA	%	41	79	0	0	0
Percentage of assets for which health and safety impacts are assessed or reviewed for compliance or improvement.	%	100				

Note: the system has been implemented based on recognised risk management and/or management system standards/guidelines

Health and safety training

Hammerson has established procedures for the identification and provision of training for all persons under its control engaged in activities affecting occupational safety and health performance. This seeks to ensure such persons are competent to carry out their duties. Competence is assessed on the basis of skills, knowledge, ability, training and experience. The depth and breadth of training for an individual is determined by their role, a risk assessment, and existing training and expertise.

Health and Safety Training

GRI Indicator 403-5
EPRA H&S-Emp

Table 6.3

		2018	UK	FRANCE	IRELAND
Percentage of employees given health and safety training covering Customer/tenant, Supply chain and Workplace	%	32%	140	27	2

Healthy working environments for our employees

Hammerson works closely with our Facilities Management supply partners to monitor healthy working environments for employees and customers across head office and our shopping centre locations. We ensure through best practises that our workplaces are ergonomic and safe through design and have a healthy working environment through workplace assessments.
We ensure that indoor air quality, humidity and temperatures are kept to the required standards through means of testing and planned preventative maintenance of plant and equipment.

Health and Safety performance: Employees

Table 6.4

HAMMERSON GROUP – CORPORATE OFFICES	2018
RIDDOR	0
Lost Days	0

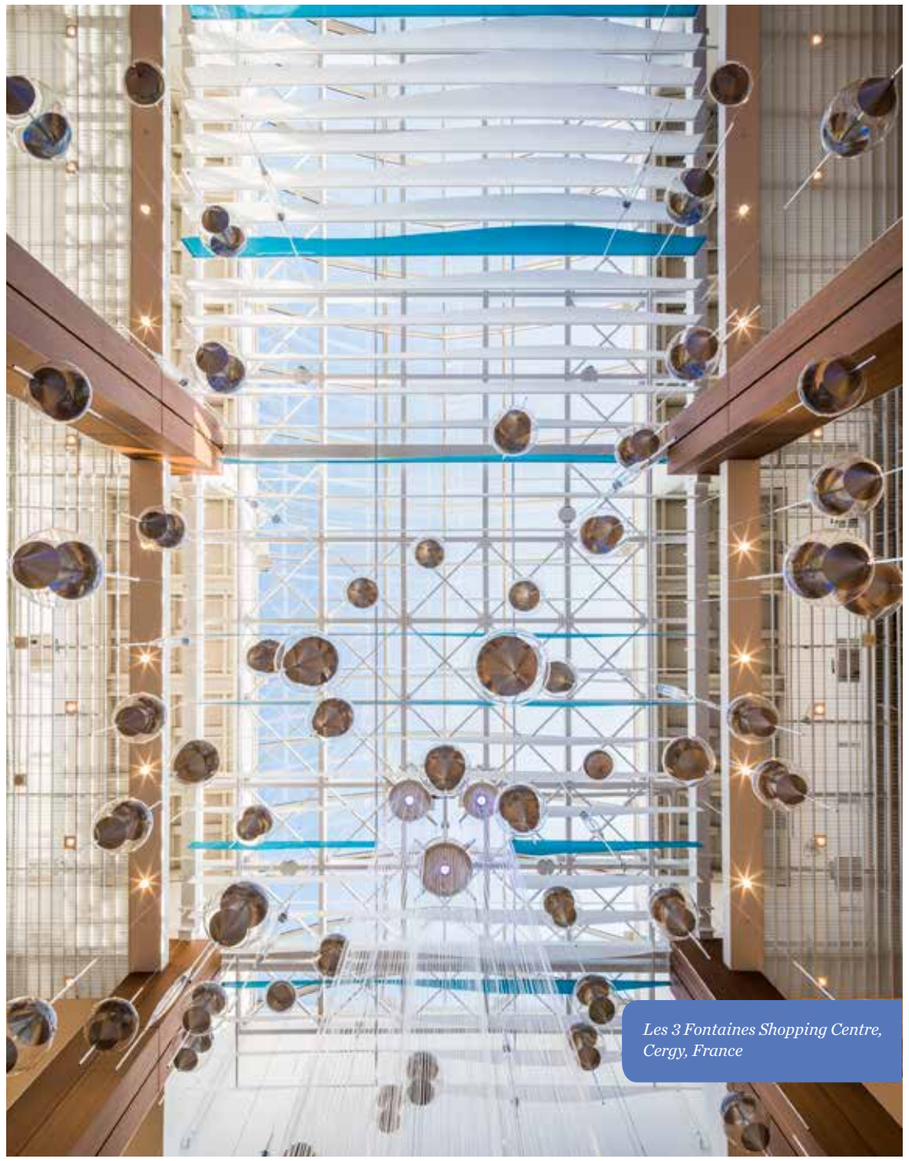
Health and Safety – Customer & Occupational

Table 6.5

	Lost-Time Injury Frequency Rate		**2018**
	Employees	n/million work h	0
	Contractors	n/million work h	0

	Work related injuries		**2018**
GRI 403-9	RIDDOR reportable injuries across the managed portfolio (Hammerson employee & customer)	#	27
GRI 403-9 **EPRA-H&S-Emp**	Total number of dangerous occurrences, reportable injuries and fatalities to **employees**	#	13
GRI 403-9	Total number of dangerous occurrences, reportable injuries and fatalities to **non-employees**	#	166
GRI 416-2	Total number of dangerous occurrences, reportable injuries and fatalities to **customers**	#	27

EPRA-H&S-Comp	**Compliance** - No incidents were reported in any operating region for 2018		**2018**
GRI 416-2	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 416-2	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 306-3	Total number and volume of significant spills	#	0



Les 3 Fontaines Shopping Centre, Cergy, France

Section 7

Upskilling and Inspiring Our People

Hammerson's business strategy relies on teams who are engaged, skilled and passionate about what they do. The business' commitment to sustainability plays an important role in achieving this.

Community Day 2018, Renovations at a community organisation providing activities and experiences for young people

Upskilling and Inspiring Our People

One of our five Positive Places commitments is to Upskill and Inspire our employees. This means investing in our people, as well as recognising and rewarding those delivering change that helps achieve our sustainability ambitions.

Performance against upskill & inspire targets in 2018

Table 7.1

Target	Status 2017	Status 2018
100% of Hammerson employees employed for 12 months or more receive sustainability training on a two year rolling basis	99%	62%

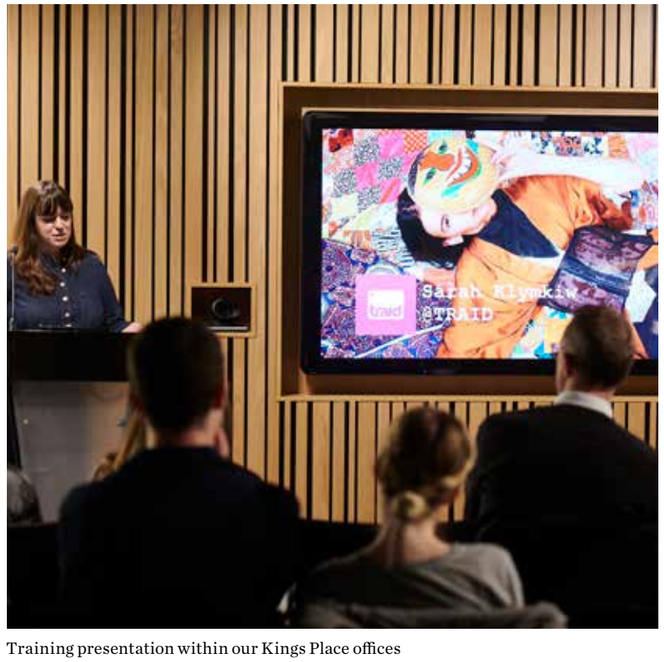
331 employees received sustainability training in 2018

MORE

See details of our employee make up in Section 8 Corporate Data

Upskilling our people

Sustainability is a complex and evolving topic. Delivering an effective sustainability strategy requires a workforce that understands what is required of it and is confident to deliver. This has to happen across all roles from on site cleaning and security through to inspiring the senior leadership team. Hammerson understands this and has a strong commitment to ensuring our teams receive regular, role specific sustainability training.



Training presentation within our Kings Place offices

Sustainability training

Our Upskill and Inspire commitment target is to ensure 100% of Hammerson employees who have been with the business for 12 months or more have received sustainability training over the course of 24 months. That training will take a variety of forms but includes specific on-line modules, corporate inductions, team updates and attendance at seminars. We have performed well against this target in 2018 with 100% of employees having received sustainability training by end of 2017.

Our onsite teams benefit from a rolling programme of environmental training delivered by WSP. Including all on-site employees. Centre-based senior managers also attend a 2 day Operational Manager course which 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. We also provide a refresher course to ensure our teams remain up-to-date on environmental matters.

Sustainability training in 2018

In 2018 the below sustainability training was delivered across our three operating regions:

- EPC/ MEES Transition Sustainability Training
- IEMA Approved Environmental Awareness
- IEMA Approved Operational Environmental Management
- ISO 14001 Internal Auditor Training Course
- Sustainability Overview
- Sustainability introduction for new starters
- Company level Sustainability Update
- Sustainability Update for the Leasing Team
- The Future of the Car and its Impact on Investment and Property

Promoting diversity and inclusion

At Hammerson, we are committed to fostering a company culture of inclusion and diversity. Much of this work is governance related, but it is also driven by a programme of workplace events and specialised training. Recently, we have focused on raising awareness of mental health issues through a series of training programmes. We are now working with the UK Mental Health Awareness Board to develop an e-learning module to be made available to all employees in 2019 via the Hammerson Learning Management System.

MORE

For more on our investment in Our People see pages 41–43 of the Hammerson 2018 Annual Report

Inspiring Our People

We want to inspire our employees to think sustainably, bringing creativity to deliver their roles in a more sustainable way, but also to think sustainably outside of work too.

The Butterfly Bank employee engagement platform

We use The Butterfly Bank employee engagement platform from Coriander Cows to inspire everyday sustainable behaviours, from avoiding single use plastics to opting for a 'staycation'. We have run a Butterfly Banking challenge annually for the past four years and engagement levels continue to grow as employees suggest new ideas and we expand how we use the platform.

We also use the platform to manage our employee volunteering throughout the year and particularly for our annual Community Day. Having a single platform to offer and manage volunteering opportunities has increased our volunteering and activity by making it easier and more rewarding for our employees. In addition to our corporate head office teams, all our UK and Ireland shopping centre teams are active on the platform, including the onsite supplier teams.

In 2018 we launched a new Love Ireland theme for our colleagues in Dublin and a Love Bees theme to celebrate our expanding bee hive collection.

Employee designed actions

Employees are encouraged to shape the content of the platform by suggesting actions that they take in their daily life. This creates a sense of ownership of the platform and ensures content remains relevant. Some of the most popular DIY Actions from 2018 are:

- Pump up those tyres: reducing fuel use and carbon emissions – banked 588 times
- Switch a cleaning product to an ecological cleaning product – banked 338 times
- Donate your unwanted items to charity – banked 217 times

Supporting World Green Building Week

Hammerson increased our support for World Green Building Week (WGBW) im 2018, by engaging colleagues across the business with sustainability issues affecting not only Hammerson but also their daily lives. Through a series of events and campaigns, each day of the week focused on a Net Positive target.

A social media campaign and short videos informed Hammerson Twitter and LinkedIn followers about the day's theme and sustainable actions being taken across the Hammerson portfolio using #sustainabilitytakeover. We even turned the logo green.

525 kg CO_2e

carbon saving from Meat Free Monday

We ran a WGBW campaign on Butterfly Bank promoting 4-8 actions, linked to the day's theme. In just one week, an incredible 1,124 actions were recorded by employees. a 40% increase on the average number of actions recorded over previous weeks.

The most popular new action was 'Calculate Your Carbon Footprint.

King's Place canteen hosted a #MeatFreeMonday in the King's Place canteen. During the week, 84 people banked their Meat Free Monday on The Butterfly Bank, creating a total carbon saving of 525 kg.

Plastic-free office

Following the recent media focus on single-use plastics, King's Place took steps to become a plastic-free office. Since the summer of 2018, all plastic cups have been removed in favour of reusable mugs. To promote the initiative, colleagues were invited to paint their own mug.

Hammerson employee personalising reusable mugs in place of plastic cups at Kings Place, London

40%

increase in the average number of actions recorded over previous weeks

Volunteering at Hammerson

Our Annual Community Day is a highlight in the events calendar, this year it coincided with National Volunteering Week. All Hammerson employees are expected to step out of the office and spend a day volunteering in our local communities.

UK and Ireland

On just one day, 282 colleagues volunteered 1982 hours. Here are just a few of the worthwhile causes our colleagues supported:

- Ambition Achieve Aspire (AAA): The flagship Newham adventure play, sports and youth hub supports local young people with disabilities and their families. Hammerson volunteers helped maintain the hub by gardening, painting and assembling play equipment. In November 2018, the park was sadly vandalised; as part of our on-going relationship, Hammerson provided a grant to help restore the facilities.
- Two Saints, Southampton provide a range of support to those who are homeless, or at risk of becoming homeless. Hammerson volunteers spent the day improving the safety and cleanliness of the Woolston centre's garden to provide a haven for homeless mothers and children to play and relax.
- Hospice Care for Leicester, Leicestershire & Rutland (LOROS) cares for over 2,500 people by providing free, high-quality, compassionate care and support to terminally ill adult patients, their family and carers. Hammerson volunteers ran a number of activities including face painting, a tombola and a treasure trail to raise awareness and funds for LOROS.
- Parents & Children Together Hammerson volunteers welcomed vulnerable women from Alana House to The Oracle. The workshop aimed to boost the confidence of women who have been unemployed for an extended period of time by learning about the variety of jobs in retail, how to write CVs and observed mock interviews. A crèche was provided to ensure it was an inclusive event.
- Ayleston Meadows are an 8.8 hectare local nature reserve in the heart of Leicester, home to a variety of wildlife including otters, swans and badgers. Hammerson volunteers helped prepare the meadows for summer 2018 by undertaking a range of horticultural work.

MORE

Details of our volunteering programme are on page 41 in Section 2

Community Day with Sports Inspire!

Community Day at Didcot Railway Centre

France

On France's Community Day, 110 colleagues supported six community projects. Here are just a few of the projects they worked on and their impacts:

- Emmaüs is a charity that works to combat poverty and homelessness. Hammerson volunteers helped to construct two large sorting tables, a poster board, three nesting boxes and an insect hotel for Shared Gardens in Extramuros, Paris. The constructed furniture was then sold to raise funds for the charity.
- Hammerson volunteers sorted over 1 ton of professional wear for Cravate Solidaire. The charity uses the clothing to promote access to employment by providing outfits and interview skills coaching.
- The Laurette Fugain association works within Trousseau Hospital and seek to increase donations of blood and bone marrow to treat Leukaemia. Hammerson volunteers supported the charity by repainting four lounges and childcare rooms within the hospital.

Delivering Valuable Employee Benefits

Beyond helping worthwhile local organisations, Community Day has multiple benefits for employees, including:

- Supporting team-building across the business
- Enhancing health and wellbeing by providing an opportunity to step away from the day job
- Enhancing communication, and management skills
- Building relationships with a range of community, voluntary and charitable organisations
- Working within and learning about the local communities in which Hammerson operates

We received fantastic feedback following the UK and Ireland Community: 66% of colleagues stated a desire to continue volunteering and 57% felt they had an enhanced awareness of wider social issues.

The strength of Hammerson's commitment to sustainability is reflected in the positive scores this area achieves within the Great Place to Work Survey. In the 2018 survey 86% of Hammerson employees gave the company's approach to CSR a positive rating.

This positive business benefit has also been identified through recruitment where teams are reporting that the businesses approach to sustainability is a factor in applicants wanting to work for the company.

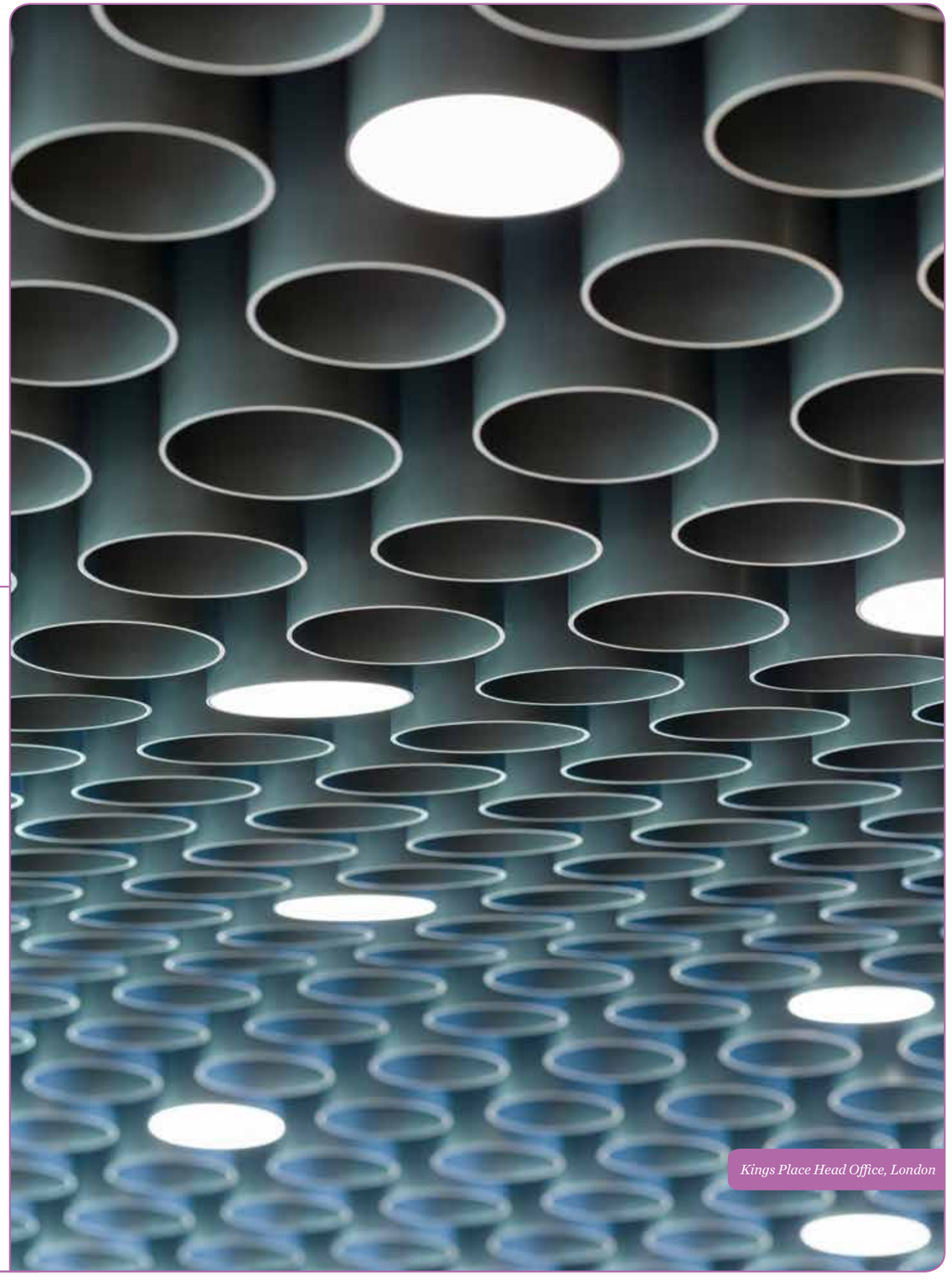
66%

of UK and Ireland employees stated a desire to continue volunteering

Section 8

Corporate Data

As a responsible business, Hammerson has a strong governance structure and corporate values that contribute to an ingrained sustainable culture for employees at all levels – to drive, monitor and manage our approach across the business.



Kings Place Head Office, London

Sustainability Risk Management

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. Key corporate risks and our approach to their management are disclosed within the Annual Report and Accounts.

MORE

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

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 sustainability risks are monitored by the Corporate Risk Group and managed by the Corporate Responsibility Working Group and CR Board. Table 7.2 sets out the highest sustainability risks identified for the business and these are showcased in a risk heat map on page 26.

MORE

See page 26 for our sustainability Heat Risk Map and more on key sustainability risks we have identified

&

Our CFO discusses the risks posed by Climate Change on page 27

Corporate Risk Management Framework – Sustainability Risks

Table 8.1

RISK	MANAGEMENT APPROACH	RESIDUAL RISK ASSESSMENT	POSITIVE PLACES CR BOARD RESPONSIBILITY
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	• BREEAM Excellent established as corporate targets • Sustainability Design Standard and Implementation Plan used to ensure all new-build, refurb and value add projects support progress towards our sustainability targets • Sustainability design workshops are held at the start of new projects to set the sustainability parameters for the project • Sustainability criteria included within Pre Qualification Questionnaires • Environmental and Social targets and reporting included within Employer's Requirements. • Budgeted community engagement plans are produced for each development	Medium	Director, Retail Development Director, UK Retail Parks
Non-compliance with UK, Irish, French and EU Environmental regulation and legislation leading to potential financial loss and/or penalties, reputational damage	• Routine monitoring of environmental regulation at corporate and asset level • Use of external legal register for regulation and legal alerts • Review of UK, French, Irish and European environmental legislation and regulation carried out in 2017 • Ongoing cross industry engagement on sustainability policy	Medium	Group Head of Sustainability
Rising energy cost including regulatory/fiscal charges leading to potential financial loss	• Asset and Corporate targets set to reduce energy consumption • Regular monitoring and reporting of energy consumption • Energy consultant incentivised to identify energy savings across UK portfolio • Engagement with tenants to support energy reduction in tenant controlled space • Review and update of fit out standards to reflect energy efficiency best practice	Medium	Operations Director
Poor performance in investor-focused industry benchmarks leading to potential reputational damage	• Careful programming of response management • Cross team engagement in responding to questionnaires • Comprehensive data management system in place with data input from all sites • Annual third party assurance of data to support robustness and accuracy	Medium	Group Head of Sustainability
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	• Climate risk assessment completed in 2018 • Working with site teams to ensure recommendations are incorporated into maintenance and business plans • Our design standard requires all new developments to be designed to withstand predicted climate change • Assess design team experience in designing for future climates and support where necessary • Update of flood risk and review of potential climate change impacts on the business to be commissioned in 2017	Medium	Group Head of Sustainability
Employees insufficiently equipped with the knowledge and tools to achieve corporate sustainability goals leading to potential Reputational damage through failure to meet targets and/or financial loss through inefficient operation of assets	• Two-day employees induction course includes sustainability • One-hour sustainability specific induction required for all employees • ISO 14001 EMS IOSH accredited training held for employees at Hammerson managed shopping centres. • Senior Management attending 3 day sustainability training programme • Senior management training held on the Grenelle d'Environment in France. • IEMA Skills Matrix used to identify sustainability requirements for different roles • Online training programme being established for all employees for 2017 roll out	Medium	Group Head of Sustainability
Lack of engagement of JV partners on sustainability matters leading to potential reputational damage through failure to meet targets and/or financial loss through inefficient operation of assets	• We work closely with JV partners to develop a clear business case for our sustainability strategy for each asset. • Delivery of investor focused sustainability communications and engagement programme	Medium	Group Head of Sustainability

Corporate Property Performance Data

The direct sustainability impacts of our corporate operations are relatively limited. We occupy offices in London, Reading, Paris and Dublin.

Table 8.2

HAMMERSON CORPORATE OFFICE ENVIRONMENTAL DATA	UNIT	EPRA/ GRI CODE	KINGS PLACE, LONDON	AQUIS HOUSE, READING	RUE CAMBON, PARIS	DUNDRUM TOWN CENTRE, DUBLIN
Net internal area	m^2		2,343	787	1,721	211
Carbon						
Scope 1	$mtCO_2e$		0	28	0	0
Scope 2	$mtCO_2e$		119	82	9	12
Scope 3	$mtCO_2e$		12	0	0	0
Electricity						
Hammerson Electricity Consumption	kWh	GRI 302-1	428,243	289,751	163,965	30,053
Natural Gas						
Hammerson Natural Gas Consumption	kWh	GRI 302-1	0	150,252	0	0
Energy intensity/m^2 occupied area	kWh/m^2		183	559	95	142
Water						
Hammerson Water Consumption	kWh	GRI 303-1	0	1,158	411	0
Waste						
Total waste quantity	tonnes	GRI 306-2	8	11	0	0
Diverted from landfill	tonnes	GRI 306-2	8	11	0	0
Total recycled excluding Tenant Shopfit	tonnes	n/a	4	6	0	0
Total incineration (used for fuel)	tonnes	n/a	1	5	0	0
Total incineration (not used for fuel)	tonnes	n/a	0	0	0	0
Total Hazardous Waste	tonnes	n/a	0	0	0	0
Food Disposal [Direct]	tonnes	n/a	3	0	0	0

Carbon and waste impacts derived from our corporate offices are low. We currently have four corporate offices in London, Reading, Paris and Dublin. Our sustainability strategy and approach is evident in all our offices. In 2018 we worked closely with our catering partners to eliminate single-use plastic cups and bottles in our London office; providing a replacement of ceramic cups together with washing services. This means we have saved using 60,000 hot drinks and plastic cups a year. However, this has led to an increase in our total waste and recycling numbers as we now produce more glass waste.

Our employees restaurant in London, whilst supporting a culture of collaboration and supporting employee health and wellbeing by providing a subsidized healthy lunch every day, also supports employees electing to eat less meat by providing a daily vegetarian or vegan option both at breakfast and lunch. The restaurant went meat free for a day during world green building week.

Our office in Paris provides fresh fruit on a daily basis to our employees to support health and wellbeing and encourages employees to avoid the use of paper and plastic cups. A similar approach is taken at our offices in Dublin and Reading. Our UK offices are fitted out to Ska Gold standard.

Corporate Travel Data

The corporate emissions data provided here includes our corporate fleet emissions, and is included in the Group Reporting figures in Table 8.3. Our ISO14001 accreditation includes our corporate offices. We have focused in particular this year on reducing waste and improving recycling rates at our corporate sites.

Other Relevant Indirect Green-house Gas Emissions

GRI Indicator 305-3

Table 8.3

	UNIT	2015	2016	2017	2018	EMISSIONS FACTOR	SOURCE
Business travel by air, rail, personal mileage and taxi[a]	$mtCO_2e$	412	1,016	1,509	716	**Air travel** Domestic Average 0.29832 Short-haul Economy 0.1597 Long-haul First 0.65115 Long-haul Business 0.47208 Long-haul Economy 0.16279 International Economy 0.13996"	
						Rail travel Domestic Average 0.04424 International Average 0.01226 London Underground 0.0376"	
						Road Travel Average Taxi 0.15344 Estimated rate per mile £6"	
Visitor journeys by car to our shopping centres (UK only)[b]	mt CO_2e	149,772	148,918	169,391	170,704	**Road Travel** Average car 0.29072 Average petrol car 0.29561 Average diesel car 0.28572"	

a We collected busines travel details for our Mandatory GHG Emissions reporting using the period of October 2016-September 2017. This is representative of CO_2e emissions from flights, car journeys, train journeys and taxis.

b 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.

HAMMERSON OWNED TRANSPORT		EPRA/ GRI CODE	2018	SOURCE
Petroleum Consumption	$mtCO_2e$	GHG-Dir-Abs	0	DEFRA 2018
Diesel Consumption	$mtCO_2e$	GHG-Dir-Abs	32	DEFRA 2018

Mobilising our employee base

The footprint of our offices is small relative to that of the managed assets and developments. However, as shown in table 8.4 we have an employee base spread across four countries that we aim to ups kill and inspire around sustainability. As such, 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.

Employee Data by Region

Table 8.4

	GROUP	UNITED KINGDOM	FRANCE	IRELAND
Total Workforce by contract by country by gender, Diversity-Emp				
Total number of direct employees	533	382	124	27
Total number of supervised workers[a]	1,321	1,161	9	151
Number of female employees under indefinite or permanent contract	219	204	n/a	15
Number of male employees under indefinite or permanent contract	172	161	n/a	11
Number of female employees under temporary/fixed term contract	18	10	7	1
Number of male employees under temporary/fixed term contract	11	7	4	0
Number of employees on a full time contract	503	357	120	26
Number of employees under part time contract	30	25	4	1
Number of employees covered by Collective Bargaining Agreements	124	0	124	0
Number of FTE	526	376	123	27
Employees by age by country				
Employees by age by country	6.94%	6.81%	8.06%	3.70%
Percentage of employees aged 26-34	32.46%	31.15%	34.68%	40.74%
Percentage of employees aged 35-44	25.70%	25.65%	25.81%	25.93%
Percentage of employees aged 45-54	24.02%	25.13%	22.58%	14.81%
Percentage of employees aged 55-64	9.94%	9.95%	8.87%	14.81%
Percentage of employees aged 65+	0.56%	0.79%	0.00%	0.00%
Percentage of employees aged less than 21	0.38%	0.52%	0.00%	0.00%
Employee by level, category and region				
Number of employees in Category 1 (Senior Management)	50	37	13	0
Number of employees in Category 2 (other Hammerson staff apart from Senior Management)	305	202	86	17
Number of employees in Category 3 (Support Employees)	178	143	25	10
Flexible Working				
Number of Hammerson 's direct employees working flexible hours due to parental or carer responsibility	44	41	2	1
Number of requests for flexible working that have been accepted.	15	10	5	n/a
Number of total requests for flexible working for the reporting year	16	11	5	0

a Supervised workers are defined as non Hammerson employees that are being closely supervised by Hammerson either at its headquarters (e.g. cleaning a nd reception employees) and on-site at its shopping centres (employees in charge of safety and security). This does not include third party managing agents and subcontractors who perform services for us in an independent capacity.

Table 8.2 (continued)

Employee turnover by age, gender and country EPRA Emp-Turnover	GROUP	UNITED KINGDOM	FRANCE	IRELAND
Number of permanent employees under 21 who left Hammerson during reporting year	1	1	0	0
Number of permanent employees 21-25 who left Hammerson during reporting year	4	3	0	1
Number of permanent employees 26-34 who left Hammerson during reporting year	23	23	16	0
Number of permanent employees 35-44 who left Hammerson during reporting year	17	15	8	2
Number of permanent employees 45-54 who left Hammerson during reporting year	8	8	8	0
Number of permanent employees 55-64 who left Hammerson during reporting year	8	8	7	0
Number of permanent employees +65 who left Hammerson during reporting year	0	0	1	0
Total number of employee turnover (Hammerson's permanent employees only)	77	58	16	3
Voluntary employee turnover as a percentage	14%	15%	13%	11%
Number of male leavers during the reporting year (Hammerson's permanent employees only)	37	20	16	1
Number of female leavers during the reporting year (Hammerson's permanent employees only)	60	38	20	2
Male Turnover (against the number of total employees who have left)	48%	35%	45%	33%
Female Turnover (against the number of total employees who have left)	78%	66%	56%	67%

Women in the workforce GRI 102-8, Diversity-Emp

Table 8.3

Hammerson female direct employees (includes contractors)	293	214	63	16
Hammerson male direct employees (includes contractors)	240	168	61	11
Number of Hammerson female employees on a full time contract	265	190	59	16
Number of Hammerson male employees on a full time contract	238	167	61	10
Number of Hammerson female employees under part time contract	28	24	4	0
Number of Hammerson male employees under part time contract	2	1	0	1
Percentage of Female Employees[a]	55%	56%	51%	59%
Number of Females on the Board of Directors	1	0	1	0
Total number of Directors on the Board EPRA Gov-Board	4	0	4	0
Number of Hammerson female employees in Category 1 (Senior Management)	17	14	3	0
Number of Hammerson female employees in Category 2 (other Hammerson employee apart from Senior Management)	146	95	43	8
Number of Hammerson female employees in Category 3 (Support Employees)	159	104	17	38
Number of employees given diversity training **GRI 405-1 EMP-DEV**	383	360	0	23

*a **Diversity-Emp** Gender pay ratio information is available in our Annual Report and Accounts 2018 page 43.*

Employee Development and Satisfaction

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

Table 8.4

EMPLOYEE TRAINING	UNIT		UNITED KINGDOM	FRANCE	IRELAND
Total expenditure on employee training and total hours of training per year	GBP		211,600	165,661	n/a
Total hours of training per year per employee	Hour		10	28	n/a
Permanent employees receiving regular performance and career development reviews	%		100.00%	100.00%	100.00%
Employee Satisfaction		**GROUP**	**UNITED KINGDOM**	**FRANCE**	**IRELAND**
Number of employees receiving regular performance and career development reviews	#	515	365	124	26
Number of employees to whom the "Great Place to Work" survey was sent	#	531	377	127	27
Number of employees who responded to the "Great Place to Work" survey	#	442	311	112	19
Employees who indicated positive level of satisfaction at Hammerson (Trust Index/Engagement Score)	%	71			
Total number of incidents of discrimination	#	0	0	0	0

Employee Training

EPRA EMP-TRAINING

Table 8.5

	UNIT	GROUP	UNITED KINGDOM	FRANCE	IRELAND
Total expenditure on employee training and total hours of training per year	GBP	361,342	201,528	155,978	3,835
Total hours of training per year	Hour	11,485	7,688	3,179	618
Number of employees who attended training programmes under the following categories:					
Emergency Response	#	124	123	0	1
Environmental Management	#	295	272	1	22
Finance Skills	#	106	22	81	3
Health & Safety	#	170	140	28	2
I.T. Skills	#	87	76	7	4
Management & Leadership	#	72	66	4	2
Onboarding - for new starters	#	137	107	19	11
Personal Development	#	458	392	40	26
Policy & Compliance	#	571	419	124	28
Project Management	#	26	13	11	2
Sustainability in Leadership	#	0	0	0	0
Number of employees who received professional training					
Category 1 (Senior Management)	#		38	11	1
Category 2 (other Hammerson staff apart from Senior Management)	#		223	82	18
Category 3 (Support Employees)	#		174	14	24

Investor engagement

Engaging our investors is a key part of our corporate business. Working to inform our investors of how we identify and manage both sustainability risks and opportunities is important to us. Table 8.6 shows our corporate level investor engagement activity for 2018.

Investor Engagement

Table 8.6

	2017	2018
Number of SRI investors with whom individual and collective meetings have been held in calendar year	17	14
% Share capital represented by investors engaged with on sustainability	18%	18%

True Value of Retail event presentation to a range of stakeholders

Corporate 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 8.7 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.

Community Investment

Indicator EC8

Table 8.7

	2016	2017	2018	COMMENTARY ON TREND
TOTAL INVESTMENT	£3,067,660	£3,038,255	£2,010,703	
Total value of direct contributions to the community	£2,438,660	£2,614,917	£1,699,179	
Cash contributions	£777,481	£863,372	£536,626	
Value of employee time	£328,498	£551,545	£246,005	Improved data collection methodology on employee hourly rates has resulted in a reduction in value on contributions
In-kind donations	£1,332,681	£1,200,000	£916,548	
Total in kind – Corporate	£0	£99,716	£4,207	2017 data was incorrect
Total in kind – Developments	£0	£0	£670,101	2017 data was incorrect. Increased donation of unit space at Whitgift and Centrale Shopping Centres due to reprogramming of development
Total value of indirect contributions to the community generated from other sources than Hammerson	£629,000	£423,338	£311,524	
Shopping Centre and Retail Park Portfolios				
Funds collected through charitable fundraising activities	£309,084	£177,138	£192,230	Increase due to participation in cross-portfolio national fundraising activities; including One Great Day, Autism Hour, Purple Tuesday
Value of Hammerson operations employees and non Hammerson employees' time dedicated to community activities	£150,000	£207,217	£112,445	Improved data collection methodology on employee hourly rates has resulted in a reduction in value on contributions.
Other leverage (e.g. other external partners, employees' contributions and service charge)	£20,194	£72,701	£19,232	Reduced leverage from external partners as a result of development reprogramming
Corporate				
Funds collected through charitable fundraising activities	£0	£27,021	£28,088	Consistent with the previous year
Value of Hammerson employee time dedicated to community activities	£100,000	£183,383	£110,475	Improved data collection methodology on employee hourly rates has resulted in a reduction in value on contributions
Other leverage (e.g. other external partners, employees' contributions and service charge)	£36,945	£28,860	£110,475	

Community Investment

Indicator EC8

Table 8.7 (continued)

	2016	2017	2018	COMMENTARY ON TREND
Developments				
Funds collected through charitable fundraising activities	n/a	£18,584	£9,559	Less development activity in 2018
Value of Hammerson operations employees and non Hammerson employees' time dedicated to community activities	£47,096	£60,969	£5,843	Fewer development schemes and community investment activity
Other leverage (e.g. other external partners, employees' contributions and service charge)	£41,590	£25,700	£13,843	Consistent with the previous year
Mandatory Investments – Developments				
Community investment through planning agreements	£110,000	£355,940	£0	No Section 106 payments in 2018
Other Indicators				
Number of organisations that benefited from Hammerson direct and indirect contributions	434	476	449	Streamlined community activities taking place resulting in fewer organisations benefiting
Full time equivalents on direct sustainability activities	18	20	19	Full time equivalents on community activities only is 14 people. Community Executive role recruitment is currently on hold
Employee Volunteering				
Number of days volunteered by Hammerson employees	312	254	412	Increased awareness of the internal sustainability portal for logging volunteering activity, The Butterfly Bank, and the number of volunteering opportunities made available
Hours volunteered by Hammerson employees	2,498	2,029	3,292	The Orchard Centre Didcot - Construction and end-user (when fully let)
Jobs supported from development schemes	6,687	2,872	1,314	Less development activity in 2018
% Previously unemployed	23%	5%		Data not available
Number of persons voluntarily or involuntarily displaced and/or resettled by development, broken down by project	0	0	0	None of our development projects have required displacement of persons in the three years to the reporting date

Asset Level Community Projects and Initiatives

GRI Indicator GRI 413-1, EPRA COMTY-ENG

Table 8.8

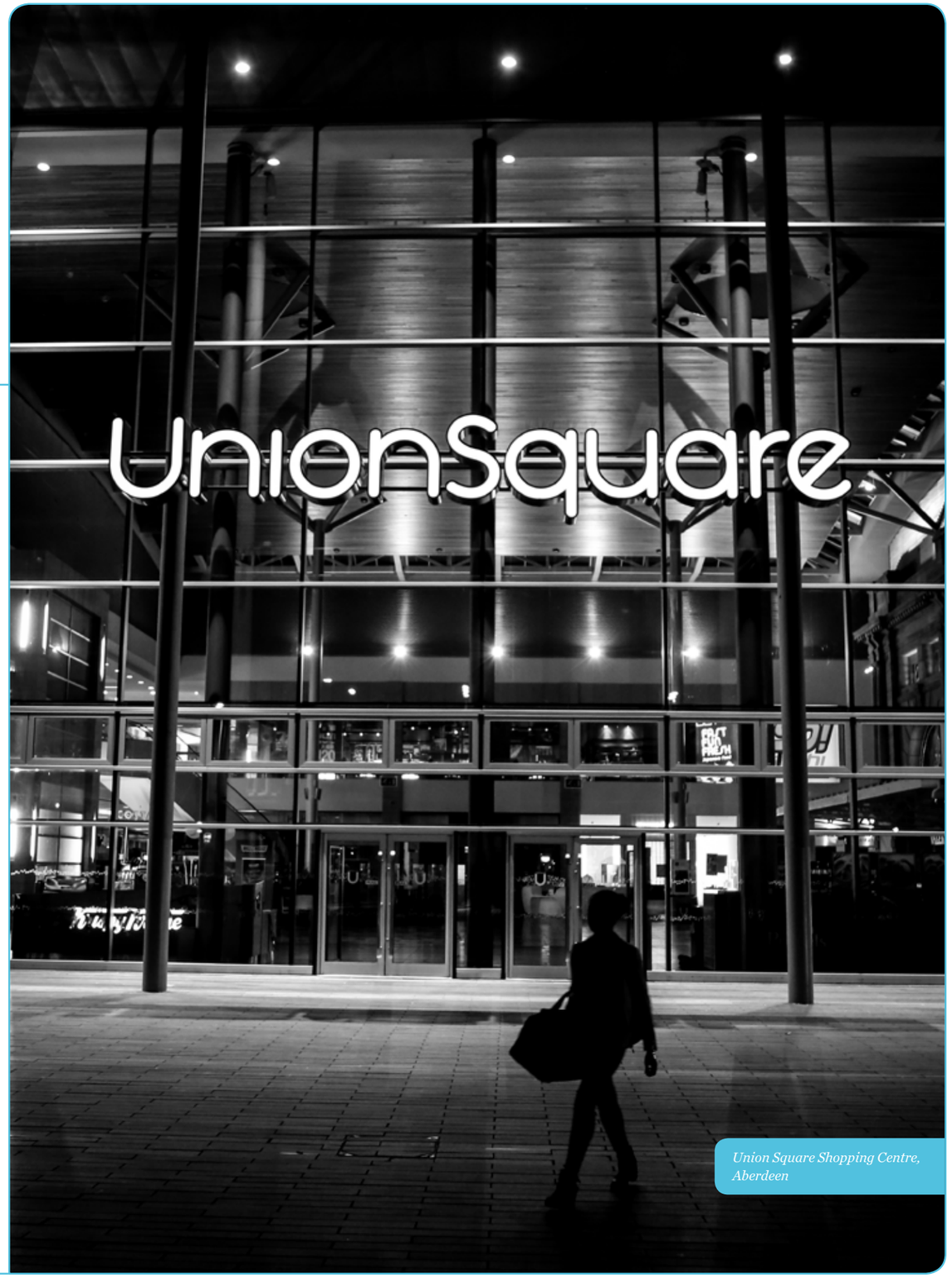
74% of our total operational retail portfolio had community projects and initiatives take place in 2018. Below are some of the projects delivered, along with the level of engagement.

ASSET	PROJECT THEME	INPUT/OUTCOME	
Brent Cross	Young People/ Employment & Skills	135	People engaged
Brent Cross	Employment & Skills	93	People engaged
Brent Cross	Health & Wellbeing	400+	People engaged
Bullring & Grand Central	Employment & Skills	21 participants, 4 gained employment within host shopping centres	People engaged
Bullring & Grand Central	Young People/ Entrepreneurship	20 school pupils	People engaged
Bullring & Grand Central	Young People/ Employment & Skills	400+	People engaged
Cabot Circus	Health & Wellbeing (2 projects)	31, £47,283	People engaged/ fundraised
Cabot Circus	Young People/ Employment & Skills	200+	People engaged
Centrale	Health & Wellbeing/ Employment & Skills	Entrepreneur programme support	People engaged
Centrale	Young People/ Employment & Skills/ Entrepreneurship	80	People engaged
Centrale	Young People/ Employment & Skills	200	People engaged
Dundrum	Employment & Skills	200+	People engaged
Dundrum	Young People/ Employment & Skills	250+	People engaged
Dundrum	Health & Wellbeing	€17,000+	Fundraised
Highcross	Young People/ Employment & Skills (2 projects)	708	People engaged
Highcross	Health & Wellbeing	80	People engaged
Ilac Centre	Health & Wellbeing	€7,500	Donation
Italie Deux	Health & Wellbeing	€109,200	Fundraised
Les Terrasses Du Port	Health & Wellbeing	297	People engaged
O'Parinor	Employment & Skills	40	People engaged
Silverburn	Young People/ Entrepreneurship	6 schools engaged	People engaged
Silverburn	Employment & Skills	800	People engaged
Silverburn	Health & Wellbeing	Over £7,000	Fundraised
The Oracle	Young People (2 projects)	84	People engaged
The Oracle	Young People/ Employment & Skills	30	People engaged
Union Square	Employment & Skills	15	People engaged
Union Square	Young People/ Employment & Skills	20	People engaged
Victoria Leeds	Young People/ Entrepreneurship (2 projects)	73	People engaged
Westquay	Health & Wellbeing (2 projects)	900+	People engaged

Section 9

Reporting Approach and Data Management

To be as transparent as possible for our stakeholders, information on our basis of reporting, methodologies and factors are provided here along with our asset lists and GRI index.



Union Square Shopping Centre, Aberdeen

9.2 About this Report

This report covers the period of 01 January 2018 to 31 December 2018. Our sustainability reporting period is now fully aligned with our financial reporting period.

9.2.1. Reporting Boundaries

Included in the report:

- Hammerson's operations include development, asset management and investment. The assets included for each of these business activities in this report are provided in Table 9.1 on page 142.
- 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) are included within our reporting.
- 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 common parts areas that we have control therefore tenant usage data is excluded
- 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.
- All existing properties that we have owned within the reporting period.
- Assets 100% owned by Hammerson and those where we have a stake in a joint venture or investment fund.

Not included in the report:

- Assets for which we hold 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
- Properties part of or adjacent to new developments that are affected by development works

9.2.2. Key Changes to the Portfolios

In 2018 we sold two French assets – St Sebastien Shopping Centre in Nancy and Jeu de Paume Shopping Centre in Beauvais. We also sold the below properties within the Retail Parks portfolio;

- Battery Retail Park
- Fife Retail Park
- Lakeside Leisure Retail Park
- Imperial Retail Park
- Wrekin Retail Park

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 for the months that the properties remained under our ownership for 2018.

The Westquay South development of 2016 has been reporting for two years without encountering major reporting concerns, we have now combined data for this asset along with the adjacent property Westquay Shopping Centre to form one asset.

Cergy 3, annex to our existing asset Les Trois Fontaines, has been reporting data for the first year since full operational acquisition in 2018.

Within three of our shopping centres, office spaces are included that are leased to tenants. With increased data accuracy and invoicing available at Dundrum Town Centre, Nice Etoile and Cergy 3, we are now able to determine that energy supplies are landlord obtained and tenant consumed. This is a new data set that is included in Group reporting.

9.2.3. 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 over which we have asset management control for all or part of the previous 12 months. Reporting against our 2015 baseline includes all assets which we have held consistently since the 2015 reporting year.

9.2.4 Transport data

The date period for corporate travel reporting runs 01 January 2018 to 31 December 2018 in line with our reporting period for our GHG emissions as reported on page 189 of the Annual Report. Travel data is collected from across the business at all levels through cash and credit card expenses. In April 2018, we introduced a new online expenses system, Concur, which has enabled a new source of travel data logging. Using this information output, an excel distance functionality is used to automate distance look-ups online to which DEFRA carbon factors per travel mode are applied.

This data is externally assured by Deloitte LLP.

The data included for business travel includes;

- Fleet transport for the Group
- Air travel for the Group
- Domestic and international train journeys for the Group
- Taxis and public transport journeys for the UK & Ireland business
- Car travel resulting in mileage reporting for the Group

Emissions associated with visitor travel to our shopping centres are calculated on the below basis:

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'.

9.3 Data Collection and verification

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

Utility and waste data is captured onsite at all our shopping centres, and by a third party management company for our retail parks. Data is collected from manual meter reads, automated meter uploads, invoices and data provided by our energy bureau service. This is then uploaded to our Credit 360 reporting platform on a monthly basis where it is assessed and verified by three levels within the organisation; the Sustainability Data Manager, the Energy and Environmental Manager and the Head of Sustainability or by the Head of CR France for the French Assets

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 the Positive Places website: 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.

1. Data is entered on a monthly basis for all of our UK, Ireland and France shopping centres
2. Data is provided on a monthly and quarterly basis by our external property managers, or through automated upload, 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. In April 2018, we introduced a new online expenses system, Concur, which has enabled a new source of travel data logging and provides the functionality of downloading all expensed travel in order to calculate emissions per journey.
- Data for office energy consumption is gathered direct from our external property managers.

9.4 Data Quality

9.4.1 Continuous Improvement

We are focused on continuous improvement of our data and work closely with internal and external audit teams to improve our systems.

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.

Training

In 2017 and continuing into 2018 we focused on process improvements for on-boarding and training of new assets and recruits to ensure data accuracies are maintained and continual across the portfolio.

Support and regular training are provided to the centre teams and third party property managers, to ensure they are using the data management system, Credit 360 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 required 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 process.

Continued improvements

Manual reporting of utility data, whilst normal across the sector, is resource intensive and prone to error. In 2018 we installed automated utility metering at 8 of our UK shopping centre assets and in Q1 2019 we will start using data from this reporting platform.

This will enable data improvements, visibility, communication and accuracy through providing 15-minute interval data for meters and sub-meters for electricity, gas and water.

In addition to providing more accurate, auditable data, we will be able to more proactively manage our utility consumption and look for further savings.

In 2019 we will continue to extend the automated metering roll out and look to incorporate the data reporting outputs directly to the Credit 360 data management system.

9.5 Estimated Data

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 months ii) Based on invoices from utility providers.

Less than 1% of energy data is estimated. A small amount of data has been estimated in this year's reporting – specifically water consumption for the Irish assets where we are unable to split landlord and tenant consumption. Therefore tenant consumption at Ilac and Dundrum Town Centre is included in landlord figures.

Overall, 21% of water data is estimated which is largely driven by billing issues in France.

7% of total district heating and cooling data is estimated, driven by 8% of our French district energy data being estimated.

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.

Intensity Data

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

Reporting timeframe

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

Baseline

2015 baseline year

Assurance

Third party assured

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 output 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:
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.
5. Corporate travel

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

Voluntary Disclosure

What is covered in this reporting?

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

- Landlord procured utilities
- Waste and recycling
- Refrigerants
- Social and Governance indicators

Reported at Group level and disaggregated by operating region and portfolios on a whole portfolio and like for like portfolio basis.

Standards and assurance

Produced in accordance with the EPRA Sustainability Best Practice Reporting standards and GRI standards that are third party assured

Intensity Data

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

- Carbon intensity is calculated as Scope 1 and 2 divided by common parts area or car park spaces for retail parks portfolio
- Energy intensity is calculated as landlord electricity and landlord natural gas consumption divided by common parts area or car park spaces for retail parks portfolio
- Water intensity is calculated as landlord water consumption divided by portfolio annual 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 carbon emissions (CO_2e) 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.

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

Intensity Data

Intensity data based on adjusted profit before tax

Reporting timeframe

01 January – 31 December reporting year

Assurance

Third party assured

Data Coverage

Table 9.1

ASSETS INCLUDED IN THE WHOLE PORTFOLIO, LIKE-FOR-LIKE AND EPRA DATA SETS FOR 2018	OWNERSHIP	GROUP	WHOLE PORTFOLIO	LFL DATA VS. 2015 BASELINE)	EPRA	NET POSITIVE (BY OWNER SHIP %)
Hammerson UK Shopping Centre Portfolio						
Brent Cross, London	41%	Y	Y	Y	Y	Y
Bullring, Birmingham	50%	Y	Y	Y	Y	Y
Cabot Circus, Bristol[a]	50%	Y	Y	Y	Y	Y
Centrale, Croydon	50%	Y	Y	Y	Y	Y
Grand Central	50%	Y	Y	N (Acquired 2016)	Y	Y
Highcross, Leicester	50%	Y	Y	Y	Y	Y
Martineau Galleries, Birmingham	100%	Y	Y	N	N	Y
Silverburn, Glasgow	50%	Y	Y	N	Y	Y
The Oracle, Reading	50%	Y	Y	Y	Y	Y
Union Square, Aberdeen	100%	Y	Y	Y	Y	Y
Victoria Quarter, Leeds	100%	Y	Y	Y	Y	Y
Victoria Gate, Leeds	100%	Y	Y	N (Opened 2016)	Y	Y
Westquay, Southampton	50%	Y	Y	N	Y	Y
Westquay South, Southampton[a]	50%	Y	Y	N (Opened 2016)	Y	Y
Whitgift, Croydon	50%	Y	Y	N	N	Y
Hammerson Ireland Shopping Centre Portfolio						
Dundrum Town Centre	50%	Y	Y	N (Acquired 2016)	Y	Y
Ilac	50%	Y	Y	Y (Acquired 2016)	Y	Y
Swords Pavilions	50%	Y	Y	N (Acquired 2017)	N	Y
Hammerson France Shopping Centre Portfolio						
Espace, Saint Quentin	25%	Y	Y	Y	Y	Y
Italie 2, Paris	100%	Y	Y	Y	Y	Y
Jeu de Paume, Bauvais	100%	Y	Y	N (Sold July 2018)	N	N
Les 3 Fontaines, Cergy-Pontoise	100%	Y	Y	Y	Y	Y
O'Parinor Shopping Centre, Aulnay-sous-Bois	25%	Y	Y	Y	Y	Y
Place des Halles, Strasbourg	100%	Y	Y	N (Sold July 2018)	N	N
Les Terrasses du Port, Marseille	100%	Y	Y	Y	Y	Y
Nicetoile, Nice	10%	Y	Y	N (purchased in 2015)	Y	Y
Saint Sebastien, Nancy	100%	Y	Y	N (Sold Jan 2018)	N	N
SQYOuest, Saint Quentin	100%	Y	Y	Y	Y	Y

Data Coverage

Table 9.1 (continued)

ASSETS INCLUDED IN THE WHOLE PORTFOLIO, LIKE-FOR-LIKE AND EPRA DATA SETS FOR 2018	OWNERSHIP	GROUP	WHOLE PORTFOLIO	LFL DATA VS. 2015 BASELINE)	EPRA	NET POSITIVE (BY OWNER SHIP %)
Hammerson UK Retail Parks Portfolio						
Abbey Retail Park, Belfast	100%	Y	Y	Y	Y	Y
Abbotsinch Retail Park, Glasgow	100%	Y	Y	Y	Y	Y
Battery Retail Park, Birmingham	100%	Y	Y	N (Sold Feb 2018)	N	N
Brent South Shopping Park, Brent Cross	41%	Y	Y	Y	Y	Y
Central Retail Park (1 & 2), Falkirk	100%	Y	Y	Y	Y	Y
Cleveland Retail Park, Middlesborough	100%	Y	Y	Y	Y	Y
Cyfarthfa Retail Park, Merthyr Tydfil	100%	Y	Y	Y	Y	Y
Dallow Road, Luton Warehouse	100%	Y	Y	Y	Y	Y
Elliot's Field, Rugby	100%	Y	Y	N	N	N
Fife Central Retail Park, Kirkcaldy	100%	Y	Y	N (Sold Apr 2018)	N	N
Imperial Retal Park, Bristol	100%	Y	Y	N (Sold Apr 2018)	N	N
Lakeside Leisure Park, Thurrock	100%	Y	Y	N (Sold Apr 2018)	N	N
Parc Tawe Retail Park, Swansea	100%	Y	Y	Y	Y	Y
Ravenhead Retail Park, St Helens	100%	Y	Y	Y	Y	Y
St Oswalds Retail Park, Gloucester	100%	Y	Y	Y	Y	Y
Telford Forge Retail Park	100%	Y	Y	Y	Y	Y
The Broadway, Didcot	100%	Y	Y	Y	Y	Y
The Orchard Centre, Didcot	100%	Y	Y	Y	Y	Y
Wrekin Retail Park, Telford	100%	Y	Y	N (sold in January 2018)	N	N

[a]Westquay South, Southampton data is incorporated into WestQuay, Southampton from 2018

Table 9.1 (continued)

ASSETS INCLUDED IN THE WHOLE PORTFOLIO, LIKE-FOR-LIKE AND EPRA DATA SETS FOR 2018	OWNERSHIP	GROUP	WHOLE PORTFOLIO	LFL DATA VS. 2015 BASELINE)	EPRA	NET POSITIVE (BY OWNER SHIP %)
Hammerson Corporate Portfolio[a,b]						
Aquis House, Reading	n/a	Y	N	N	N	Y
Dundrum Offices, Dublin	n/a	Y	N	N	N	Y
Kings Place, London	n/a	Y	N	N	N	Y
Rue Cambon, Paris	50%	Y	Y	Y	Y	Y

[a]Following completion of the sale of the Hammerson Office Portfolio in June 2013, from 2014 we only report our corporate office data.

[b]Data captured for rented space. Not Hammerson owned.

Table 9.1 (continued)

ASSETS INCLUDED IN THE WHOLE PORTFOLIO, LIKE-FOR-LIKE AND EPRA DATA SETS FOR 2018	OWNERSHIP	GROUP	WHOLE PORTFOLIO	LFL DATA VS. 2015 BASELINE)	EPRA	NET POSITIVE (BY OWNER SHIP %)
Hammerson Strategic Portfolio						
126 Vicar Lane	100%	Y	N	N	N	Y
27-30 Ladybeck	100%	Y	N	N	N	Y
27 Eastgate	100%	Y	N	N	N	Y
29-31 Eastgate Street	100%	Y	N	N	N	Y
7 Eastgate	100%	Y	N	N	N	Y
7-25 Eastgate Street	100%	Y	N	N	N	Y
AEU House	100%	Y	N	N	N	Y
Hereford House (Prev. 487850)	100%	Y	N	N	N	Y
Lydia Street Garage	100%	Y	N	N	N	Y
National Deposit House	100%	Y	N	N	N	Y
Provident House	100%	Y	N	N	N	Y
The Point	100%	Y	N	N	N	Y
Union House	100%	Y	N	N	N	Y
Hammerson Premium Outlets Portfolio – Value Retail						
Bicester Village, UK	50%	N	N	N	N	Y
La Roca Village, Barcelona	41%	N	N	N	N	Y
Las Rozas Village, Madrid	37%	N	N	N	N	Y
La Vallée Village, Paris	26%	N	N	N	N	Y
Maasmechelen Village, Brussels	27%	N	N	N	N	Y
Fidenza Village, Milan	34%	N	N	N	N	Y
Wertheim Village, Frankfurt	45%	N	N	N	N	Y
Ingolstadt Village, Munich	15%	N	N	N	N	Y
Kildare Village, Dublin	41%	N	N	N	N	Y
Hammerson Premium Outlets Portfolio – VIA Outlets						
Batavia Stad Amsterdam Fashion Outlet	47%	N	N	N	N	Y
Fashion Arena Prague Outlet	47%	N	N	N	N	Y
Landquart Fashion Outlet, Zürich	47%	N	N	N	N	Y
Freeport Lisboa Fashion Outlet	47%	N	N	N	N	Y
Hede Fashion Outlet, Gothenburg	47%	N	N	N	N	Y
Mallorca Fashion Outlet	47%	N	N	N	N	Y
Wroclaw Fashion Outlet, Poland	47%	N	N	N	N	Y
Sevilla Fashion Outlet	47%	N	N	N	N	Y
Zweibrücken Fashion Outlet, Germany	47%	N	N	N	N	Y
Vila do Conde Porto Fashion Outlet, Portugal	47%	N	N	N	N	Y
Oslo Fashion Outlet	47%	N	N	N	N	Y

Table 9.2

GENERAL STANDARD DISCLOSURES

We conducted a Materiality Review in 2018 the findings which have led to a review of our relevant material aspects for GRI compliant reporting and the GRI Index. Water and economic value are no longerconsidered material issues for GRI reporting purposes. Water, it continues to be one of the core pillars towards our Net Positive targets. For this reason the GRI Index references the water standard GRI-303 (2016 edition)

STRATEGY AND ANALYSIS		**LOCATION**	**2018 LOCATION**
102-14	Chief Executive statement	Annual Report and Accounts	Page 4-7
ORGANIZATIONAL PROFILE			
102-1	Annual Report and Accounts	Annual Report and Accounts	Hammerson Plc.
102-2	Annual Report and Accounts	Annual Report and Accounts	Page 4
102-3	Annual Report and Accounts	Annual Report and Accounts	Page 190
102-4	Annual Report and Accounts	Annual Report and Accounts	Page 5, 186-187
102-5	Annual Report and Accounts	Annual Report and Accounts	Page 190
102-6	Annual Report and Accounts	Annual Report and Accounts	Page 4-5,18-23
102-7	Annual Report and Accounts	Annual Report and Accounts Sustainability Report	Page 1,4-5,186-187 Page 10, 129
102-8	HR/ Employee data tables	Sustainability Report Annual Report and Accounts	Page 129-131 Page 41-43
102-41	HR/ Employee data tables	Sustainability Report	Page 129
102-9	Supply chain section in introduction	Sustainability Report	Page 28-31
102-10	Annual Report and Accounts	Annual Report and Accounts Positive Places website	Page 5, 10-11 Full 2018 asset list including disposals http://sustainability.hammerson.com/downloads/download412.pdf
102-11	Introduction risk section	Annual Report and Accounts Sustainability Report	Page 56-62 Page 26
102-12	CEO statement	Sustainability Report	Page 4-7, 20-21
102-13	Membership of associations	Sustainability Report	Page 32
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES			
102-45	AR&A, entities/assets included	Annual Report and Accounts	Page 186-187
102-46	Introduction	Sustainability Report	8-9, 24-25, 138
102-47	Introduction and this table	Sustainability Report Annual Report and Accounts	Page 24-25 Page 35
102-48	Restatements section in data sections	Sustainability Report	Restatements specified in relevant data sections
102-49	Changes in reporting	Sustainability Report	Page 138, 146
STAKEHOLDER ENGAGEMENT			
102-40	List of stakeholder groups	Sustainability Report	Page 28-31
102-42	Identifying and selecting stakeholders	Sustainability Report	Page 28-31
102-43	Approach to stakeholder engagement	Sustainability Report	Page 28-31
102-44	Key topics and concerns raised	Sustainability Report	Page 28-31

Table 9.2 (continued)

GENERAL STANDARD DISCLOSURES

REPORT PROFILE		**LOCATION**	**2018 LOCATION**
102-50	Reporting period	Annual Report and Accounts	01 January 2018 – 31 December 2018
102-51	Date of most recent report	Sustainability Report	March 2018
102-52	Reporting cycle		Annual
102-53	Contact point for questions regarding the report		Back Cover
102-54	Reporting in accordance with the GRI Standards		This report has been prepared in accordance with the GRI Standards: Core option
102-55	GRI Index	Sustainability Report	Page 146-148
102-56	External assurance	Sustainability Report	Data assured by Deloitte LLP. The assurance statement is available on the Positive Places website http://sustainability.hammerson.com/monitor-and-evolve/gri-disclosures.html
GOVERNANCE			
102-18	Governance structure	Sustainability Report	Page 34-35
ETHICS AND INTEGRITY			
102-16	Values, principles, standards, and norms of behavior	Sustainability Report Annual Report and Accounts	Page 122 Page 42
SPECIFIC STANDARD DISCLOSURES **DMA and Indicators**			
CATEGORY: ENVIRONMENTAL **MATERIAL ASPECT: ENERGY**			
103-1	Explanation of the material topic and its Boundary	Sustainability Report	Page 49,52
103-2	The management approach and its components	Sustainability Report	Page 14-17, 46-49
103-3	Evaluation of the management approach	Sustainability Repor	Page 14-17,46-49
302-1	Energy consumption within the organization	Sustainability Report	Page 62-69
302-4	Reduction of energy consumption	Sustainability Report	Page 70-73
302-5	Reductions in energy requirements of products and services	Sustainability Report	Page 75
CRE1			Page 66-73

Table 9.2 (continued)

GENERAL STANDARD DISCLOSURES

MATERIAL ASPECT: WATER LOCATION 2018 LOCATION

103	Explanation of the material topic and its Boundary	Sustainability Report	Page 78-79
103-2	The management approach and its components	Sustainability Report	Page 14-17,21 48, 78-79
103-3	Evaluation of the management approach	Sustainability Report	Page 14-17,21,78-79
303-1	Water withdrawal by source	Sustainability Report	Page 80-82
CRE2			Page 80-83

MATERIAL ASPECT: EMISSIONS

103	Explanation of the material topic and its Boundary	Sustainability Report	Page 25,46-47
103-2	The management approach and its components	Sustainability Report	Page 14-17,20,46-51
103-3	Evaluation of the management approach	Sustainability Report	Page 14-17,20,46-51
305-1	Direct (Scope 1) GHG emissions	Annual Report Sustainability Report	Page 189 Page 52-57,75,140-141
305-2	Energy indirect (Scope 2) GHG emissions	Annual Report Sustainability Report	Page 189 Page 52-57,75,140-141
305-3	Other indirect (Scope 3) GHG emissions	Annual Report Sustainability Report	Page 189 Page 52-57, 74-75, 140-141
305-5	Reduction of GHG emissions	Sustainability Report	Page 58-61
305-6	Emissions of ozone-depleting substances (ODS)	Sustainability Report	Page 74
CRE3		Sustainability Report	Page 54-57

MATERIAL ASPECT: EFFLUENTS AND WASTE

103	Explanation of the material topic and its Boundary	Sustainability Report	Page 84-87
103-2	The management approach and its components	Sustainability Report	Page 14-17,21,48,84-87
103-3	Evaluation of the management approach	Sustainability Report	Page 14-17,21,86-87
306-2	Waste by type and disposal method	Sustainability Report	Page 90-93
306-3	Significant spills	Sustainability Report	Page 112

MATERIAL ASPECT: LOCAL COMMUNITIES

103	Explanation of the material topic and its Boundary	Sustainability Report	Page 25, 36-43
103-2	The management approach and its components	Sustainability Report	Page 36-43
103-3	Evaluation of the management approach	Sustainability Report	Page 133
413-1	Operations with local community engagement, impact assessments, and development programs	Sustainability Report	Page 135
CRE7		Sustainability Report	Page 134

SUB-CATEGORY: HEALTH AND SAFETY[a]
ASPECT: CUSTOMER HEALTH AND SAFETY

103	Explanation of the material topic and its Boundary	Sustainability Report	Page 104-111
416-1	Assessment of the health and safety impacts of product and service categories	Sustainability Report	Page 104-111
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Sustainability Report	Page 112

ASPECT: OCCUPATIONAL HEALTH AND SAFETY

103	Explanation of the material topic and its Boundary	Sustainability Report	Page 111
403-1	Occupational health and safety management system	Sustainability Report	Page 110
403-5	Worker training on occupational health and safety	Sustainability Report	Page 111

[a]Health and Safety, although not a material aspect, is an important part of our ESG reporting coverage. For this reason the GRI Index references the health and safety standards GRI 403 and 416 (2016 edition)

Methodological Notes

For calculating our financial metrics associated with environmental performance

Table 9.3

INDICATOR	DEFINITION	DATA COVERAGE	DATA QUALIFYING NOTE AND PRINCIPLES APPLIED
Energy cost	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 c360.
		All Hammerson obtained energy (including sub metered tenant consumption)	Unit cost data from assets, then multiplied by consumption
Water cost	Charges for both water and wastewater along with standing charges and any water/ environmental taxes	All UK and French managed properties included	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
Waste cost	Standing charges, labour costs, and equipment rental	Inclusion of all managed properties where data is available	Cost information provided by the assets
Climate change levy expenditure (UK only)	Amount of electricity and gas upon which Climate change Levy is due and the appropriate Levy	Amount of electricity and gas upon which Climate change Levy is due and the appropriate Levy	
Energy efficiency investments	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 business plans supplied by the centres
Investments in waste management improvements	Includes: Low capital investment rechargeable through the service charge and capital investment	Across all portfolios where applicable	Information from annual business plans supplied by the centres
Investments in water management improvements	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 business plans supplied by the centres

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

Positive Places