

Living cities

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GROSVENOR



Grosvenor  
Environment Review  
2011

Introduction

Grosvenor is a privately owned property group with offices in 19 of the world’s most dynamic cities. Our future success is tied to the sustainable growth of the cities in which we have a presence. We have a vested interest in the future shape of the urban landscape and aim to help create and manage attractive and vibrant cities in which people choose to live and work.

We have three regional investment and development businesses in Britain & Ireland, the Americas and Asia Pacific; an international fund management business, which operates across these markets and in continental Europe; and a portfolio of indirect investments. As at 31 December 2011, the Group had total assets under management of £12.5bn. Please see our Annual Report and Accounts for a full description of the Group’s structure, activities and financial performance, available at [www.grosvenor.com](http://www.grosvenor.com)

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Front cover/back cover image

15 Passmore Street, London, England, was awarded the second highest EcoHomes score of any UK residential refurbishment accredited in 2011 (see page 12).

Our environment action plan

Our long-term plan is to reduce our environmental impact by improving performance in the following areas. The six issues we consider most material to the Group are highlighted.

 <b>Energy &amp; carbon</b> Reduce energy consumption and help reduce climate change by understanding and reducing our carbon footprint.	 <b>Water</b> Reduce water consumption, protect water sources and prevent pollution.	 <b>Waste</b> Reduce waste to landfill and maximise reuse and recycling.
 <b>Building rating standards</b> Gain building rating standards accreditation measuring the environmental performance of our buildings during design, construction and operation.	 <b>Ecology</b> Manage the ecological impact of our developments and existing buildings. Protect and enhance ecological features and resources (habitats and species).	 <b>Supply chain &amp; materials</b> Consider environmental objectives in the selection of suppliers and materials.
 <b>Design</b> Create and manage well-designed, environmentally-sustainable buildings and places.	 <b>Development</b> Consider our environmental impact when acquiring sites and during the construction process.	 <b>Employee engagement</b> Encourage our staff to play an active part in improving our environmental performance.
 <b>Environmental management system</b> Develop a consistent EMS for use across the Group.	 <b>Governance</b> Maintain a Group-wide environment action plan and report performance against our objectives and strategy.	 <b>Indoor environmental quality</b> Improve the indoor environmental quality of our buildings.
 <b>Investment</b> Implement a sustainable investment policy for Grosvenor’s investments and funds under management. Understand the impact of global energy prices on our portfolio and environmental sustainability on rents and values.	 <b>Property management</b> Ensure all our properties are managed in line with our environmental objectives.	 <b>Refurbishment</b> Modify existing buildings to reduce energy and water consumption and improve climate resilience.
 <b>Stakeholder engagement</b> Engage with key industry bodies and regulators on environmental issues and policy-making.	 <b>Tenant engagement</b> Work with our tenants to help reduce their environmental impacts.	 <b>Travel</b> Promote sustainable travel to and from the assets we own and manage.





## Chief Executive's foreword

“The unsustainable demand which the world's population is placing on natural resources is well-documented. Individuals and organisations are struggling to understand the implications. What is clear is that we all have a responsibility to meet the challenge this presents, and the property industry has a key role to play.”



**Mark Preston**  
Group Chief Executive

Grosvenor has improved its environmental performance over the last few years. The contents of this, our second Environment Review, demonstrate recent progress. However, as a Group that takes a long-term view, we need to set these incremental improvements in a wider context.

We live in a world that is becoming increasingly urban. Half of the world's population already lives in towns or cities and this is projected to rise to 70% by 2050. Grosvenor has a deep understanding of cities built up through many years experience. Our success is tied to the long-term sustainability of the cities we invest in.

Over the next year we will begin to research how cities will be affected by social, economic and environmental macro-trends; how sustainable urban communities can be created in this context; and what role Grosvenor can play. The research will be led by our Operating Companies, taking account of the particular market conditions they face on a regional and sector basis.

As well as being the right thing to do, we believe that looking at what we do in the context of sustainable cities will strengthen our business and help secure our future.

**Mark Preston**  
Group Chief Executive

## Environment & Design Director's review

**“To improve our data collection and reporting we launched an online database to record environmental performance across the Group. The database allows us to measure, monitor, benchmark and report our performance. Investment and property managers can now access real-time information to check the environmental performance of their buildings.”**



**Kate Brown**  
Group Environment & Design Director

### Performance

Reducing our carbon footprint is one of the most important things we can do to improve our environmental performance. Each of our Operating Companies has a carbon management plan detailing their emissions reduction strategies. Our 2011 performance shows the impact of this strategy – total Group-wide emissions fell by 19.8% and by 8.7% when measured on a like-for-like basis. Notable like-for-like carbon emissions reductions in the Grosvenor Fund Management and Grosvenor Asia Pacific portfolios were 10.3% and 9.0% respectively.

Our like-for-like water consumption also fell by 7.7%, increased water efficiency in the Grosvenor Fund Management portfolio made an important contribution to this. Our absolute waste footprint fell significantly largely due to a decrease in properties reporting waste data. The amount of waste diverted from landfill, through recycling and other disposal methods, was just over 50%. When measured on a like-for-like basis we increased the amount of waste diverted from landfill by 2%.

In 2010 we published our aggregated Group-wide environmental performance. This year, we also provide a breakdown by Operating Company. The variation across the Group demonstrates the challenge of setting common standards across regions and sectors, which are subject to different legislation, environmental rating systems, carbon reduction targets and climate pressures. Therefore, our Group-wide strategy is supplemented by local plans responding to these varying conditions. Also, it is worth remembering that what might be an incremental improvement in one market can be a significant advance in another.

### Strategy

Our Group-wide environment action plan is at the beginning of this Review.

We have also started to work on a long-term sustainability vision. More than 350 staff members contributed their views on the environmental issues which they believe will have the most impact on our business over the next 30 years. The future sustainability of cities was identified as a key issue which Grosvenor is well placed to respond to. We will continue to develop our long-term vision in 2012 through a programme of internal engagement and research. This will help our Operating Companies establish how it will impact their business strategies.

### Data collection and reporting

To improve our data collection and reporting we launched an online database to record environmental performance across the Group. The database allows us to measure, monitor, benchmark and report our performance. Investment and property managers can now access real-time information to check the environmental performance of their buildings.

Automating data collection makes our internal and external reporting more efficient, identifying and eliminating most data errors and anomalies at the point of input.

Environmental performance data at 454 of our directly-managed properties is now recorded online. We have also recorded all of our historical data so we can analyse trends.

Using the Global Reporting Initiative's new Construction and Real Estate Sector Supplement guidelines, we have self-certified our Environment Review to a Level C. GRI use is still not widespread in the property industry. Few companies achieve certification at all, even fewer at levels higher than C, particularly those with an international spread of assets.

“As well as informing Grosvenor’s own investment and development decisions, the energy efficiency research should contribute towards wider understanding and debate in the property industry on how to move towards a more sustainable future.”

### The market

Widespread economic and political turmoil during 2011 meant that many governments were not focused on environmental concerns. The United Nations Climate Change conference in Durban, South Africa, highlighted the challenges of getting a global agreement on emissions reduction targets. These challenges show now, more than ever, that industry needs to take a lead.

Despite this, a number of encouraging themes emerged across our markets, including clearer reporting standards, increased mandatory disclosure of environmental performance and greater use of carbon pricing.

The Global Reporting Initiative’s Construction and Real Estate Sector Supplement means the property industry now has a consistent reporting framework, which will bring greater international transparency.

### Understanding the issues

The built environment has a huge role to play in increasing energy efficiency, with over 40% of global emissions coming from buildings.

In 2011 we completed a three-year research programme into energy efficiency in the built environment, undertaken with Cambridge University’s Centre for Energy Studies.

The Energy Efficiency in the Built Environment (EEBE) research programme, had three main themes:

- generating and using energy scenarios for the future of energy use in buildings, looking forward to 2050;
- investigating the interventions needed to overcome the barriers to increased energy efficiency; and
- contributing to the understanding of policy in this area.

In 2011 we published three short reports summarising the findings. These are available at [www.grosvenor.com](http://www.grosvenor.com). Copies of the full reports are available by emailing [enviro@grosvenor.com](mailto:enviro@grosvenor.com).

The research on energy security and environmental impact in 2050 highlights the transformational change needed, particularly in cities where the demand for energy is greatest.

As well as informing Grosvenor’s own investment and development decisions, the energy efficiency research should contribute towards wider understanding and debate in the property industry on how to move towards a more sustainable future.

In 2012 we plan to take a closer look at energy security and pricing. We also hope to research the issue of embodied energy generated during the production process. This will help us make more responsible materials decisions, in particular where we are retrofitting historic buildings – an enormous challenge and opportunity for us across our London estate.

Grosvenor Asia Pacific’s sponsorship of the joint research with the China Development Research Foundation is another important project which will help ensure that the provision of low cost housing is made in a sustainable way (see page 15).

### Awareness and education

One of the overriding themes from the Energy Efficiency in the Built Environment research was the need to encourage organisations and individuals to change the way they behave in order to overcome the barriers to improving energy efficiency. We have tried to address this in a number of ways.

In 2011 we held two sustainability leadership courses in conjunction with the Cambridge Programme for Sustainability Leadership. Senior staff across the Group attended, including many of our Operating Company Executive Directors. The courses aimed to help these staff understand the significance of sustainability issues at a macro-level and the likely impact on our businesses.

We devised a competencies framework for sustainability with the engineering consultants Arup. The framework defines the environmental skills and knowledge staff need to perform any given role.

“Our improved environmental performance is testament to the continued effort and enthusiasm of staff across the Group. Our people are our strongest advocates for change.”

To recognise the significant environmental improvements made by staff, we launched the Grosvenor Environment Prize, supported by Lady Tamara Grosvenor. Nominations were invited for employees and teams who have undertaken exemplary environmental projects in 2011.

At the end of 2011, we prepared to launch an online Personal Allowance Carbon Tracking system, so our staff can monitor and improve their personal environmental performance outside work.

Staff from across the Group attended internal and external workshops and seminars on a range of environmental subjects.

Working with tenants to improve environmental performance is a key part of our environment action plan. We have produced a guide for commercial occupiers encouraging them to work with us to improve the environmental performance of their properties. In 2012 we hope to extend this to more occupiers across our portfolio.

### Priorities for 2012

One of our major Group-wide tasks for 2012 is to develop our long-term vision around sustainable cities so that our Operating Companies can incorporate it into their strategic plans from 2013 onwards.

We also need to continue to improve the quality and coverage of our environmental performance data so we can better monitor and report our performance. Improving the quality and quantity of our performance data will allow us to benchmark our performance internationally, something Grosvenor Fund Management have already started doing (see page 17). In the coming year we will look at how we can use other international benchmarks.

At the property level we would like to set minimum environmental standards for refurbishments, as we have done with new developments. We also plan to issue guidelines for environmentally sustainable procurement to influence how we source materials.

Influencing behaviour is another priority, and we hope to do this with our staff through the launch of the personal carbon tracking system, and by working with our occupiers to improve the environmental performance of our assets.

### Conclusion

We hope that the emerging transparency across our markets internationally will continue into 2012 – both in terms of clearer reporting standards and increased mandatory disclosure of environmental performance. Industry has an important role to play in leading this. This availability of information will ensure that investors and occupiers are better positioned to make responsible decisions.

In 2011, our performance was greatly helped by the launch of our new online reporting database giving managers the feedback they need to spot opportunities to reduce the environmental impact of our assets. While our data quality is improving, we still need to increase the quantity of properties reporting particularly in the Grosvenor Britain & Ireland portfolio where the challenge is greater due to the nature of the portfolio.

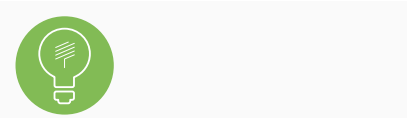
Our improved environmental performance is testament to the continued effort and enthusiasm of staff across the Group. Our people are our strongest advocates for change. 2012 promises to be a very exciting year and I look forward to working with our Operating Companies to see how we can use our expertise in cities to influence long-term sustainability in the urban areas in which we operate.

### Kate Brown

Group Environment & Design Director



Our Group-wide environmental priority areas



Energy & Carbon

Help reduce climate change, by measuring and minimising our carbon footprint.

What we said we would do in 2011

- Reduce carbon emissions across our directly-managed portfolio.
- Introduce energy efficiency measures across our portfolio.
- Complete and launch the research undertaken with Cambridge University’s Centre for Energy Studies on improving energy efficiency in the built environment.

What we did in 2011

- Reduced total Group-wide carbon emissions by 19.8%; reduced like-for-like emissions by 8.7%.
- Implemented energy efficiency improvements including reflective roofs, lighting retrofits and solar panels and upgraded heating, ventilation and air conditioning equipment.
- Published the energy efficiency research undertaken with Cambridge University and hosted seminars for colleagues and the property industry to discuss the findings.



We reduced energy consumption at our head office, 70 Grosvenor Street, London, England by 4.5%.



Water

Minimise water consumption in our portfolio, protect water sources and prevent pollution.

What we said we would do in 2011

- Improve landscape management and water efficiency in our directly-managed buildings.
- Improve data collection and reporting.

What we did in 2011

- Reduced water consumption by 7.7%.
- Installed low-flow sanitary ware, grey water harvesting and dual flush toilets in a number of our properties. Improved water conservation in landscaped areas by installing soil moisture sensors and drip irrigation systems.
- Introduced an online database to improve data collection and reporting.



Soil moisture sensors were installed at the Chelsea at Juanita Village residential apartments, Washington, US.



Waste

Reduce waste going to landfill and maximise reuse and recycling.

What we said we would do in 2011

- Increase recycling at our directly-managed assets.
- Increase the re-use of construction materials at our development sites.
- Improve data collection and reporting.

What we did in 2011

- Diverted 47% of waste from landfill.
- Recycled 99% of construction waste from the refurbishment of 15 Passmore Street, London, England.
- Introduced an online database to improve data collection and reporting.



A new recycling scheme at Woodcreek Apartment Homes, Washington, US, reduced the monthly waste collection cost by 43%.



Building rating standards

Gain building rating standards accreditation measuring the environmental performance of our buildings during design, construction and operation.

What we said we would do in 2011

- Gain building rating standards accreditation for all new developments.
- Gain building rating standards at major refurbishments completed in 2011.

What we did in 2011

- 23 developments and refurbishments were awarded environmental performance accreditation.
- Achieved ‘Excellent’ EcoHomes rating at 15 Passmore Street, London, England with the second highest score of any UK residential refurbishment accredited in 2011. Achieved a 5 Star NABERS ‘Excellent’ energy rating at 400 George Street in Brisbane, Australia.
- Performed Energy Star® benchmarking studies across our Grosvenor Americas office portfolio.



400 George Street, Brisbane, Australia, achieved a 5 Star NABERS ‘excellent’ energy rating in 2011.



Ecology

Minimise the ecological impact of our developments.

What we said we would do in 2011

- Identify opportunities to improve ecology and bio-diversity.

What we did in 2011

- Grosvenor Britain & Ireland participated in a Green Infrastructure Audit to find sites on the London estate for green roofs and walls.
- Completed landscaping projects at NEO Bankside, London, England; Trumpington Meadows, Cambridge, England; and The RISE, Vancouver, Canada.



Landscaping at NEO Bankside, London, England, includes seasonal fruit trees, bee hives and herb gardens.



Supply chain & materials

Consider environmental objectives in the selection of suppliers and materials.

What we said we would do in 2011

- Review the use of green leases for commercial occupiers placing obligations on owners and occupiers to improve environmental performance.

What we did in 2011

- Introduced green leases in the Grosvenor Americas office portfolio and offered a memorandum of understanding containing green lease clauses to all commercial occupiers on the London estate.
- Completed public realm works on Mount Street, London, England replacing sub-structure materials on the street using durable alternatives to concrete such as York stone and granite.
- Implemented a green cleaning policy at Carlyle Gateway I and II, Alexandria, US. 70% of all cleaning products used at the property meet LEED’s environmentally preferred product criteria.



Our commercial occupier at 1500K Street, Washington, US, has signed a green lease.

# Grosvenor Britain & Ireland

“The total capacity of the photo-voltaic panels installed on eight of our London estate properties in 2011 is enough to power 8,500 LED lightbulbs.”

Mike Levey  
Project Surveyor,  
Grosvenor Britain & Ireland



## The market

Despite very ambitious targets to reduce carbon emissions by 80% by 2050, UK policy-makers have given mixed messages about their commitment to improving environmental sustainability. For example, the Government announced its intention to cut the clean energy cash back scheme for the small-scale generation of renewable energy and abolish proposed repayments under the CRC Energy Efficiency Scheme.

Despite this, there are some encouraging policy proposals including the Renewable Heat Incentive and the much anticipated Green Deal, offering homeowners and businesses financing for energy efficiency measures.

## Our performance

Our externally managed portfolio achieved a 7.1% reduction in like-for-like carbon emissions during 2011. Externally managed properties are larger and have more established means of collecting data. Collecting accurate energy data for our internally managed portfolio – the properties we manage ourselves – is an ongoing challenge due to the complexity of the London estate and the large number of small supplies involved. As a result, we are not yet in a position to make an equivalent comparison for our internally managed portfolio. Our data accuracy is increasing as we install remote metering and improve monitoring.

Our like-for-like water consumption increased by 6.7% during 2011. This was due to an increase in occupancy rates. 70% of our waste was diverted from landfill. We only manage waste across a small percentage of our portfolio and for some assets data is not available because the waste is not measured.

## London estate

The 18 largest refurbishment projects on our London estate completed during 2011 were all refurbished to BREEAM EcoHomes standards of ‘Good’ to ‘Excellent’.

At 15 Passmore Street, a 19th century, two-bedroom terraced property in Belgravia, we were awarded an EcoHomes rating of ‘Excellent’ with the second highest score of any UK residential refurbishment accredited in 2011. The property, situated in a conservation area, was retrofitted with a range of features including photo-voltaic panels rainwater collection, high levels of insulation, low-flow sanitary ware and energy efficient lighting. 99% of the construction waste was recycled. Westminster City Council now use the project as a case study in their retrofitting guide.



Environmental improvements at 15 Passmore Street, London, England, reduced carbon emissions by 59%.

Fitting photo-voltaic panels on our historic London estate buildings is challenging. However, we installed photo-voltaic panels on five other properties including Grade II\* listed buildings in Belgravia. As well as making environmental sense, the solar panels generate income via the Government’s Feed in Tariff scheme, and save our residents money through reduced electricity bills and service charges.



“The public realm improvement works on Mount Street use durable materials to create a vibrant public space for people to enjoy for the long-term.”

Nigel Hughes  
Director, Planning & Environment,  
Grosvenor Britain & Ireland

At 62 Green Street, one of our residential development projects in Mayfair, we achieved a BREEAM ‘Very Good’ certification. This redevelopment of a 100 year-old building introduced solar hot water for the three upper apartments, a sedum roof and rain water harvesting to serve the toilets.

We also submitted a planning application to convert a Grade II listed former hotel at 119 Ebury Street in Belgravia into three highly sustainable flats. We hope this project will be a test case for using different sustainable technologies and materials within a heritage context. Working with a range of stakeholders, including Westminster City Council, English Heritage and the Victorian Society, we aim to achieve a sustainable building without compromising its architectural merits.

If we obtain planning consent we will reduce carbon emissions by 80%. This meets the Government’s 2050 emissions reduction targets and, we believe, would be a first for a listed building.

The public realm improvement works on Mount Street, Mayfair, were completed in 2011 with the installation of a new fountain by the Japanese architect Tadao Ando. We replaced all sub-structure materials to ensure greater strength and longevity of the roads and pavements. Long-lasting traditional materials such as York stone and granite were used as a more durable alternative to concrete. The scheme features extensive tree planting and has made the street more accessible to cyclists and pedestrians.

We reviewed ways to increase biodiversity across our London estate including looking at possible sites for green roofs and walls which provide insulation, create a habitat for wildlife and help to lower urban air temperatures. One of our gardening team is being trained as a bee keeper and we hope to site beehives on the estate in 2012.



The public realm works on Mount Street, London, England, used long lasting materials.

## Off estate

Outside the London estate, we completed landscaping around the residential development NEO Bankside, London, England. Private gardens with seasonal fruit trees, bee hives and well-stocked herb gardens blend with linear groves of aspen and birch. Rainwater harvesting is used to irrigate the landscaped gardens. Residents at NEO Bankside, which we are developing in joint-venture with Native Land, have access to a free bicycle hire service.

The Wildlife Trust continued to develop the 60-hectare country park in our Trumpington Meadows residential scheme in Cambridge. During 2011, new balancing ponds and swales to help manage flood risk were created and landscaped, the remaining meadows were sown and the final farmland hedges and copses planted.

We continued to reduce energy consumption at the Group’s head office, 70 Grosvenor Street, London, through further refinements to the Building Management System settings and timers, and installation of more energy efficient lighting. Energy consumption was 4.5% lower in 2011 than the preceding year.



# Grosvenor Americas

“Engaging in the Energy Star® benchmarking process has taught me a great deal about the practical and technical considerations involved with saving energy, and how these decisions can benefit an asset.”

Nina Latimer  
Asset Manager,  
Grosvenor Americas



## The market

The US continued to work towards reducing greenhouse gas emissions in line with the target announced in 2009 by President Obama, although this remains a commitment outside the Kyoto Protocol. President Obama’s Better Buildings Initiative announced in 2011 aims to make commercial buildings more energy efficient and accelerate private sector investment in energy efficiency.

California continues to lead the US in setting environmental standards. Assembly Bill 1103 which takes effect in July 2012, mandates energy benchmarking and disclosure for non-residential buildings.

## Our performance

During 2011, we successfully reduced our electricity, water and waste consumption through previously performed upgrades and increased awareness and accountability.

We continued to improve energy efficiency across our portfolio, reducing like-for-like carbon emissions by 1.7% through a range of measures including reflective roofs, energy efficient lighting, increased insulation and upgraded heating, ventilation and air conditioning equipment.

Water conservation is a particular issue for properties in some of our locations. We reduced water consumption by 5.3%, with improvement at 5500 Wisconsin Avenue, Chevy Chase, Maryland and Los Gatos Village Square, Los Gatos, California.

New recycling programmes were introduced in a number of our residential apartment communities. At Woodcreek Apartment Homes, Lynwood, Washington, we reduced monthly rubbish collection charges by 43% through recycling.

In our commercial leases we have started using green clauses which cover energy efficiency capital items, construction and cleaning practices.

Across our office portfolio we performed Energy Star® evaluations. Several of our properties including 251 Post Street and Caryle Gateway I and II, have earned the Energy Star® plaque with a rating of 75 or higher. These properties now serve as case studies for our staff.



The Energy Star® energy audit at Caryle Gateway I and II, Alexandria, Virginia will help us to identify ways to improve energy efficiency.

We are targeting LEED® certification on three current residential development projects: Drake in Calgary, District in Washington, DC, and 15 West in North Vancouver.

Landscaping at The RISE in Vancouver, British Columbia, won a Grand Award at the 2011 Annual Environmental Improvements Awards Program. Our landscaping contractor was recognised for use of indigenous plant material, organic soil and fertiliser, environmentally friendly pesticide and composting.

# Grosvenor Asia Pacific

“The new LED bulbs in the Shinsen office building use one fifth of the energy of halogen lighting, with an estimated saving of 36,853 kwh a year.”

Yutaka Matsumoto  
Project Manager, Grosvenor Asia Pacific



## The market

China’s 12th Five-Year Plan was approved by the National People’s Council in March 2011. The Plan sets various targets for environmental performance including use of green energy.

The appetite for sustainable buildings is growing; China is already the second largest market for LEED certification. Most of China’s provinces have established green building research centres and more than 20 provinces have chapters of the China Green Building Council, which is responsible for developing local environmental local rating standards and raising awareness of environmental issues.

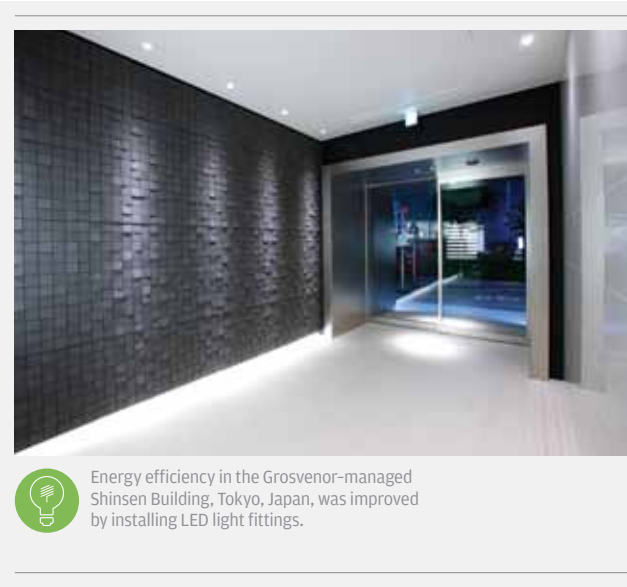
## Our performance

Our activity in 2011 focused primarily on improving energy efficiencies across the existing portfolio. We reduced our carbon emissions by 9.0% when measured on a like-for-like basis, largely as a result of increased energy efficiency across the portfolio. Our like-for-like water consumption also improved, water consumption was 4.2% lower than in 2010.

We replaced halogen lighting with energy efficient LED lighting in all the common parts in Shinsen, one of our office buildings in Tokyo. Rather than use new LED fittings, we found bulbs that fit the existing halogen light fitting, minimising material waste and implementation cost.

The China Green Building Council launched its Foreign Membership Scheme with Grosvenor as a Foundation Member. The scheme encourages members to support the Chinese Government’s commitment to reduce China’s greenhouse gas emissions intensity by 40% by 2020.

China’s Vice Minister for Construction has identified affordable housing as one of the biggest opportunities for sustainable building development. Grosvenor has committed to sponsor a joint housing research project with the China Development Research Foundation into the provision of sustainable low-income housing.



Energy efficiency in the Grosvenor-managed Shinsen Building, Tokyo, Japan, was improved by installing LED light fittings.

# Proprietary assets – indirect

In addition to our direct proprietary activity, we also invest indirectly in real estate through co-investment in Grosvenor-managed funds and other investments. Excluding the assets managed by Grosvenor Fund Management, we do not quantify the environmental impact of our indirect investments in this Review – with a few exceptions we do not directly manage them so it is harder to influence environmental management and collect data on their performance.

Our largest indirect investment is our shareholding in shopping centre specialist Sonae Sierra. Sonae Sierra is recognised as a leader in environmental management. Sonae publishes its environmental performance in its annual Corporate Responsibility Report. Please see [www.sonaesierra.com](http://www.sonaesierra.com) for more information.

Our indirect portfolio also includes a number of legacy assets, comprising several investments and joint ventures in Continental Europe and Australia, where we no longer have proprietary Operating Companies. These assets are managed by Grosvenor Fund Management.

We achieved environmental rating standards for two of our ‘legacy’ assets in 2011.

At the Bank of Queensland Centre, Brisbane, Australia we achieved a 4.5 Star NABERS energy rating and at 400 George Street, Brisbane, Australia we achieved 5 Star NABERS ‘Excellent’ energy rating.

To achieve these ratings we worked closely with building managers and tenants reviewing opportunities to maximise energy efficiency.

At 400 George Street it was a condition of a number of the tenant leases that we deliver a building performing to at least 4.5 Star rating. Key features include high performance air conditioning control systems and glazing and lift regenerative drives which use the heat created by the lift braking to generate energy.

To complement our base building 5 Star Green Star (Design and As Built) accreditation, and now 5 Star NABERS operational rating, a number of our occupiers at 400 George have sought to achieve accreditation for the design of their own office fit-out.

# Grosvenor Fund Management

“Achieving the Carbon Trust Standard provides independent verification that we have genuinely acted on climate change. It improves our reputation for environmental management.”

Helen Freeman  
Senior Property Manager,  
Grosvenor Fund Management



## The market

Our priority as fund managers is to create value for our investors. The importance our investors place on environmental performance varies by sector and market. While there is not yet definitive evidence that investors place greater value on assets with high environmental performance, there is significant anecdotal evidence that environmental issues are increasingly influential. In addition, the occupier market, particularly in the office sector, is starting to show a preference for greener buildings, with environmental performance typically being seen as an indicator of quality and efficiency. We expect this will continue to feed through into investor sentiment.

In 2011, the international property fund management industry improved transparency of environmental performance. A group of 340 of the world’s largest property fund managers disclosed detailed data on the environmental performance of their portfolios to the Global Real Estate Sustainability Benchmark (GRESB). This initiative led by institutional investors compares the environmental and social performance of public and private real estate portfolios.

## Our performance

We reduced like-for-like carbon emissions by 10.3% in 2011, which can be at least in part attributed to the implementation of energy efficiency schemes in our portfolio. We also reduced our water consumption by 11%. 54% of our waste was diverted from landfill.

Grosvenor Fund Management’s GRESB score was 49%: 50% for ‘Management & Policy’ and 48% for ‘Implementation & Measurement’ – compared to a peer group score of 46% and 27% respectively. We scored 83% for ‘Sustainability Policy & Disclosure’ where the criteria included environmental reporting and 74% for ‘Social Factors’ due to occupier engagement, use of green leases and employee training.

We continued to introduce ‘green leases’ across our portfolios signing eight in 2011, covering 700m² of space in the US and 3,000m² of space in Paris. Green leases help improve environmental performance in commercial buildings by placing a contractual obligation on owners and occupiers to minimise impacts in areas such as energy and waste. Willingness to mandate green practices in the lease document shows the shift in demand by occupiers for sustainable buildings.

Grosvenor Fund Management achieved the Carbon Trust Standard across its UK retail and office portfolios. The Standard is a mark of excellence that recognises measuring, managing and reducing carbon emissions over a three-year period. Continual improvement needs to be maintained in preparation for recertification in 2013.

We also achieved ISO 14001 renewals on all the properties owned by the Grosvenor London Office Fund.

We performed energy audits on two more US assets covering 30,000m², continuing the programme started in 2010. The energy audits indicated a number of opportunities to increase energy efficiencies, many of which we have already started implementing.

We continued to see the benefits of the ‘Energy from Waste’ schemes. Liverpool ONE, owned and managed by the Grosvenor Liverpool Fund, converted 20,000 litres of waste oil to energy in 2011. 660,000 kwh of electricity was generated by waste from assets owned by the Grosvenor London Office Fund.



Festival Place Shopping Centre, Basingstoke, one of the assets managed by Grosvenor Fund Management in the UK, is now certified by the Carbon Trust Standard.

## Adviser’s statement

Upstream Sustainability Services has been advising Grosvenor for over nine years on many aspects of its sustainability strategy and implementation. In 2011 we continued this support by delivering our new online sustainability data collection platform to all Grosvenor properties around the world. This new platform has enabled faster, more effective, and ultimately more accurate, data collection from the entire portfolio. While still early in the adoption process, the success of this new platform is evident in the improved quality of data gathered for this year’s report. With this improved process in place, Grosvenor is better placed to report publicly in line with best practice standards. We are delighted that this year, Grosvenor has achieved GRI level C for its Environment Review (and aligned with both EPRA and INREV’s recently published best practice guidelines). This achievement represents a significant landmark in Grosvenor’s journey towards its environmental objectives and ambitions.

A key part of our support to Grosvenor is verifying the performance data submitted for this report. We employ best practice techniques to validate the waste and water data contained within this Review (WSP is responsible for validating energy and carbon). Whilst it has not been subject to a full and independent audit, we believe that the Review is an accurate representation of Grosvenor’s environmental impacts (as outlined in the methodology).

This year has seen a marked improvement in both the completeness and accuracy of data submitted by both external suppliers and Grosvenor and we applaud and thank everyone involved for their continued efforts in this regard.

We look forward to working with Grosvenor in the future to identify ways to use environmental data more effectively in reducing the environmental footprint of its portfolio.

**Alex Edds**  
Director, Upstream Sustainability Services,  
Jones Lang LaSalle

WSP has been appointed by Grosvenor to assess the carbon footprint of the Company. This covers the footprint of the owned and managed property portfolio together with the associated operational footprint i.e. occupied offices and business related travel. The data to develop the footprint, provided by Upstream, has been independently assessed by WSP. The footprint is calculated from energy data in line with the GHG protocol. The quality of the data has improved significantly since the inception of the process in 2007. This year, a full year’s energy data was collected from 98% of the directly managed portfolio. The diverse nature of Grosvenor’s business means the development of comparable metrics and collection of performance data are challenging. Despite this, the carbon data presented does provide a robust assessment of the Group’s carbon impact and any improvements made.

**Andrew Bright**  
Technical Director, WSP

## GRI index

We have benchmarked the 2011 Environment Review against the Global Reporting Initiative sustainability reporting guidelines, and its Construction and Real Estate Sector Supplement. We assess our reporting framework and scope to be at level C. The table below sets out the details of how we conform to the GRI guidelines.

This Review also aligns with the new best practice sustainability reporting guidelines recently published by the European Public Real Estate Association and the European Association for Investors in Non-Listed Real Estate Vehicles, both of which Grosvenor is a member.

Standard disclosures – Performance indicators	2011	2010
<b>Environmental</b>		
<b>Energy</b>		
EN3 Direct energy consumption by primary energy source.	32,395,157 kWh	42,711,236 kWh
EN4 Indirect energy consumption by primary source.	62,651,270 kWh	80,637,787 kWh
CRE1 Building energy intensity.	296 kWh/m²/yr (129 assets)	380 kWh/m²/yr (141 assets)
<b>Emissions, effluents and waste</b>		
EN16 Total direct and indirect greenhouse gas emissions by weight.	38,893 tCO <sub>2</sub> e	48,606 tCO <sub>2</sub> e
EN17 Other relevant indirect greenhouse gas emissions by weight.	869 tCO <sub>2</sub> e	969 tCO <sub>2</sub> e
EN22 Total weight of waste by type and disposal method.	30 assets by mass (kg)	29 assets by mass (kg)
	Compost facility 1,000	Compost facility 0
	Hazardous waste treatment facility 0	Hazardous waste treatment facility 18,600
	Incineration 654,949	Incineration 1,248,330
	Landfill Facility, Hazardous 4	Landfill Facility, Hazardous 14
	Landfill Facility Non-Hazardous 3,617,282	Landfill Facility Non-Hazardous 4,477,839
	Materials Recovery Facility 131,984	Materials Recovery Facility 459,988
	Recycling 2,430,004	Recycling 2,705,396
	All routes 6,835,223	All routes 8,910,167
CRE2 Building water intensity	0.88 m³ per m² (110 assets)	0.89 m³ per m² (125 assets)
CRE3 Greenhouse gas emissions intensity from buildings.	131 kg CO <sub>2</sub> e/m²/yr (129 assets)	161 kg CO <sub>2</sub> e/m²/yr (141 assets)
<b>Social</b>		
<b>Training and education</b>		
LA12 Percentage of employees receiving regular performance and career development reviews.	98% of employees received performance and career development reviews.	100% of employees received performance and career development reviews.
<b>Product and Service labeling</b>		
CRE8 Type and number of sustainability certification, rating and labelling schemes for new construction, management, occupation and redevelopment.	For redeveloped/refurbished property: ■ 60 BREEAM Eco-Homes, including three 'Excellent', 13 'Very Good' and two 'Good' awarded in 2011 ■ Six BREEAM-Office including one 'Good' awarded in 2011 ■ One LEED Silver for Core and Shell For management property: ■ Three Energy Star® 75+ ■ One NABERS 4.5 ■ One HQE 'Very Good' ■ ISO 4001 renewed for all GFM UK ■ GFM UK retail and commercial portfolios achieved the Carbon Trust Standard For new construction and management property: ■ One NABERS 5.0	For redeveloped/refurbished property: ■ 42 BREEAM Eco-Homes ■ 2010 EcoHomes awards: one 'Excellent' and five 'Good' ■ Pre-2010 EcoHomes awards: two 'Excellent', 18 'Very Good', 12 'Good' four 'Pass'. ■ Pre-2010 EcoOffices awards: Four 'Very Good' For management property: ■ One Energy Star® 75+
<b>Economic</b>		
<b>Economic Performance</b>		
EC1 Direct economic value generated and distributed, including:	Annual Report and Accounts 2011, pages:	Annual Report and Accounts 2010, pages:
1. revenues	4, 82, 90-92, 104	2-3, 82, 90-92, 104
2. operating costs	85, 90-95	85, 90-95
3. employee compensation	88, 94	88, 94
4. donations and other community investments	79	79
5. retained earnings	84	84
6. payments to capital providers and governments	75, 78-79, 82-83, 85	75, 78-79, 82-83, 85

Our full GRI index is available at [www.grosvenor.com/About+Grosvenor/Environment/ENVIRONMENT.htm](http://www.grosvenor.com/About+Grosvenor/Environment/ENVIRONMENT.htm)



# Methodology

All performance data reported in this Review is for the assets that Grosvenor own and/or directly manage, 454 properties in total. We have excluded those assets in our indirect investments portfolio. We have also excluded from the like-for-like analysis Grosvenor occupied offices where we are not the landlord, due to lack of performance data. We do, however, monitor the environmental impacts of these assets and have included performance data in the absolute analysis. The exception is our head office, 70 Grosvenor Street, London which we own.

## Carbon footprint

### Carbon footprint methodology

Our footprint is calculated by WSP, a global environmental, engineering and management consultancy. It is calculated according to the principles of the Greenhouse Gas Protocol. The GHG Protocol-defined organisational boundary has been determined using the ‘operational control’ approach and therefore only includes emissions within our direct control. It does not include emissions associated with activities controlled by tenants or other third parties.

We continue to have major challenges in collecting robust data for Grosvenor Britain & Ireland’s internally managed portfolio. While the number of meter readings over estimations continues to improve, the year-on-year data set is not yet considered to be robust enough for direct comparison. It has therefore been decided to exclude this data from the like-for-like carbon analysis. Despite low confidence in the 2010 data in particular, data from properties in this portfolio has been included in the absolute analysis. Its inclusion has less than a 1% effect on the overall global emissions reduction and is therefore not considered to have had a material effect on the results.

The footprint is reported against a baseline year of 2010 in absolute terms and on a like-for-like basis.

## Absolute Emissions

This records total emissions from the activities under our control in the buildings which we directly manage, from our head office, and due to business-related travel. The carbon footprint covers the following GHG Protocol-defined areas:

Scope 1: Direct emissions from sources owned or controlled by Grosvenor, for example company vehicles and gas boilers;

Scope 2: Indirect emissions from purchased electricity. These emissions are considered indirect because the emissions physically occur at the point of electricity production; and

Scope 3: Indirect emissions from other company activities within the organisational boundary, such as those from business travel.

All directly-managed properties are included in this analysis, irrespective of when they entered or exited the portfolio, except for those where data quality was a concern. This year, a full year’s data was obtained for 98% of the directly-managed portfolio.

## Like-for-Like

The like-for-like analysis uses a static portfolio approach, which includes only those directly-managed properties that were in the portfolio for the duration of 2010 and 2011. It therefore allows us to compare exactly the same group of properties year-on-year and it shows the total emissions from the activities under Grosvenor’s control within those buildings. This measure excludes business travel, emissions from Grosvenor’s own offices, properties under development and any assets for which the data quality was in question. This year, 137 assets are included in this analysis.

## Water and Waste

Water and Waste data is recorded and analysed by Upstream Sustainability Services. Arrangements for water provision vary across the regions in which we operate. Tenants are responsible for obtaining water for the whole building in many instances and therefore have been omitted from our total water footprint. The automated infrastructure around water metering lags that of energy, so while we endeavour to itemise only that which we, as the landlord, use for common parts, it is often not possible to do so. Grosvenor Britain & Ireland represents the most difficult portfolio in terms of understanding water procurement arrangements, largely because of its historical nature and residential weighting.

In line with best practice, two waste footprints are reported (waste measured by mass and waste measured by volume). Measuring waste by mass is a more accurate method of recording waste movements and hence is the focus of our analysis, but in many regions of the world where we own or manage property, this level of sophistication is not widespread and therefore we have to rely on volumetric data. Some of our assets are unable to provide any waste information due to the waste management arrangements onsite – many simply receive an invoice for the collection with no breakdown of the amounts.

Please see [www.grosvenor.com/About+Grosvenor/Environment/ENVIRONMENT.htm](http://www.grosvenor.com/About+Grosvenor/Environment/ENVIRONMENT.htm) for a full breakdown of our water and waste data reporting.

# Glossary

## Absolute carbon emissions

Total tonnes of carbon emissions attributable to Grosvenor’s directly-owned and managed properties.

## BREEAM

Building Research Establishment Environmental Assessment Method run by BRE (UK developed). Designed to help construction professionals understand and mitigate the environmental impacts of the developments they design and build. Certified buildings are awarded a Pass, Good, Very Good, Excellent or Outstanding rating.

## Carbon footprint

A measure of the amount of carbon dioxide, and equivalent greenhouse gases, emitted by Grosvenor’s activities during 2011.

## Carbon Trust

Organisation that independently assesses carbon measurement, management and reduction.

## Clean energy cash back scheme

Financial incentive in the UK for energy producers to move away from conventional fossil fuels to renewable energy sources.

## Code for Sustainable Homes

An environmental assessment method for rating and certifying the performance of new homes, based on the Building Rating Establishment’s (BRE) Global’s EcoHomes scheme.

## Conservation area

UK designated geographical area with additional planning constraints, due its recognised special architectural and historic interest.

## CRC Energy Efficiency Scheme

The UK’s mandatory climate change and energy saving scheme introduced in April 2010.

## Drip irrigation system

Targeted and slow release irrigation system that prevents excessive water use.

## EcoHomes

An environmental rating scheme for homes in the UK, part of the BREEAM scheme.

## Embodied carbon

Total energy required for all materials and activities in the construction process.

## Energy audit

An inspection, survey and analysis of energy efficiency in a building.

## Energy efficiency capital items

For example, light bulbs that use relatively less energy

## Energy from Waste

The process of creating energy in the form of electricity or heat from the incineration of waste.

## Energy Star

An international standard for energy efficient consumer products (including buildings), originating in the US.

## English Heritage

UK Government’s statutory adviser on the historic environment.

## EPRA

The European Public Real Estate Association developed and manages the investment indices which define Europe’s listed real estate sector.

## Feed in tariff scheme

Enables payments to energy users for the renewable electricity they generate in the UK that feeds into the national grid.

## Green Deal

UK Government initiative enabling new technologies to be installed in homes on a loan that is paid back through energy bills for the property.

## Green electricity

Electricity from renewable energy sources, which therefore reduces carbon emissions.

## Green infrastructure audit

Assessment of urban land covered in grass or other foliage. Analysis of how the green spaces interconnect, support habitats and human use will be considered during the urban landscaping process.

## Green leases

A lease between a landlord and tenant of a commercial building which provides mutual contractual obligations for tenants and owners to minimise environmental impact in areas such as energy, water and waste.

## Green Star

A comprehensive, voluntary environmental rating system, developed in Australia, which evaluates the environmental design and construction of buildings against tailored sustainability criteria. Certified buildings are awarded between 4 and 6 Green Stars.

## Grey water harvesting

Grey water is waste water generated from domestic activities, such as laundry but not lavatories, which can be recycled on-site for uses such as landscape irrigation.

## GRI

Global Reporting Initiative is a non-profit international organization that promotes economic, environmental and social sustainability. GRI provides all companies and organizations with a comprehensive sustainability reporting framework.

## Grosvenor Group

Grosvenor Group Limited and its wholly-owned subsidiaries.

## HQE

The High Quality Environmental standard is a building rating commonly used in France to measure environmental performance.

## Incandescent light bulbs

Produce light by heating a filament wire to a high temperature until it glows and are considered energy inefficient. Intensity measure of carbon emissions.

## INREV

The European Association for Investors in Non-listed Real Estate Vehicles.

## ISO 14001

The Environmental Management Standard of the International Standards Organisation.

## Kyoto Protocol

An international agreement linked to the United Nations Framework Convention on Climate Change.

## LED lighting

Light Emitting Diodes considered relatively energy efficient.

## LEED®

Leadership in Energy and Environmental Design Green Building Rating System is a US-developed benchmark for the design, construction and operation of high-performance green buildings. Buildings are awarded Certified, Silver, Gold or Platinum certification.

## Like-for-like

A portfolio of assets that has been in our management control for eight consecutive quarters, also known as the static portfolio.

## London Estate

Grosvenor’s portfolio of office, retail and residential properties in the Mayfair and Belgravia areas of London’s West End.

## NABERS

National Australian Built Environment Rating System, a performance-based environmental rating system for existing buildings.

## Operating Companies

Grosvenor’s three regional investment and development businesses and Grosvenor Fund Management.

## Photo-voltaic panels

Also known as ‘solar panels’. These use energy from the sun to generate electricity or heat water.

## Renewable Heat Incentive

A UK government scheme to provide long-term financial support to renewable heat installations to encourage the uptake of renewable heat.

## Smart meter

An advanced meter (usually electrical) that identifies consumption in detail. The information can often be accessed and monitored at an external site.

## Sustainable growth

Growth which meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

## The Victorian Society

Charity campaigning to protect Victorian and Edwardian buildings.

## The Wildlife Trust

UK voluntary organisation dedicated to protecting wildlife and wild places at land and sea.

## Waste Footprint

The volume or mass of waste produced by Grosvenor’s activities during 2011.

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[www.grosvenor.com](http://www.grosvenor.com)

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