



UNEP **Finance Initiative**  
Innovative financing for sustainability



# Responsible Property Investment

**What the leaders are doing**  
2nd edition

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# Project Team

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# Foreword

*“All the evolution we know of proceeds from the vague to the definite”.*

**Charles Sanders Peirce, American philosopher**

While evolutionary theory is most commonly associated with the ‘survival of the fittest,’ this fundamental principle can just as easily be applied to sustainability in commercial real estate and to the field of responsible property investment (RPI).

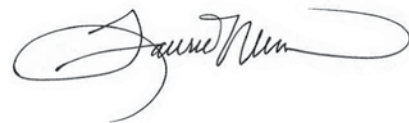
The Property Working Group (PWG) is pleased to present its latest report on current best practices in this particular domain. The report builds upon one of the Group’s earliest reports, published in 2008, on what leading organisations across the globe were doing in terms of considering environmental, social and governance (ESG) issues as part of their investment decision-making methods.

In bringing together another wide-ranging collection of case studies from around the world, the PWG hopes to further illustrate how the topic of sustainability in the context of commercial real estate investment has evolved, how responses have developed, how attitudes and approaches have matured, and how overall progress from the vague to the definite is being made. There is much to be proud of, but equally there is more work to be done in this rapidly changing landscape. We recognise that the evolution process within RPI is not only continual, but also differential in terms of the component elements that together contribute to the discipline of commercial real estate investment. As such, this updated report looks to present best practice examples and to align them with the key strategic and functional activities of asset allocation, stock selection, portfolio management, refurbishment, and information sharing among others.

We hope that by providing this timely report we can continue to support, endorse and promote the evolution and acceptance of RPI practices.



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# Executive Summary

The field of Responsible Property Investment<sup>1</sup> (RPI) has gained increasing prominence and acceptance among real estate investors in both developed and developing countries over the past few years. The inclusion of RPI principles into investors' decision-making processes is driven by several factors. The most prominent drivers according to investors whose work is highlighted in this publication are:

- A need to better understand the impact of environmental and social issues such as climate change, resource scarcity, and mass urbanisation on macro property trends that could damage or enhance the long-term performance of property assets and businesses.
- Gaining a competitive advantage by getting ahead of more stringent regulatory environmental and social requirements. These are arising in several markets and have the potential to impact risk/adjusted returns and cost structures by requiring, for instance, that buildings are improved or retrofitted to meet a particular environmental performance.
- Responding to tenant demands for more environmentally efficient buildings that could contribute to lower tenants' occupancy costs and environmental impacts.
- To foster better collaboration and alignment of interests between the different actors involved in the investment and use of real estate.
- It is the fiduciary responsibility of property investors to understand the implications of environmental and social issues on the performance of their investments and to seek appropriate risk-adjusted investment returns as well as economic ways to improve the sustainability of the assets they buy and hold.

RPI principles can be integrated into and have a bearing over the different stages of the property investment process. This report looks at each stage of the investment process and highlights case studies of what some of the foremost property investment organisations around the world have been doing to apply RPI principles within their decision-making, thereby improving the environmental and social performance or governance of their property portfolios. Some of the issues examined by the case studies include:

**Influence of RPI in asset allocation and stock selection:** Investors are starting to integrate environmental, social and governance factors alongside traditional measures of financial risk as part of their asset allocation and portfolio risk analysis. RPI can enhance the existing analysis that customarily lies behind investment decision-making. The results obtained from such analysis can contribute to specific decisions about whether to acquire or dispose of a property, or identify which properties would benefit from specific RPI interventions to improve their operational efficiency. In terms of stock selection, RPI can be applied to underperforming buildings that can be repositioned or otherwise made more valuable through an improvement of their ESG performance.

**Using RPI criteria to set minimum standards for fund or asset selection:** Investors are starting to use RPI criteria to set minimum standards for funds or individual assets they may acquire or hold. Standards can be applied at different levels (across the whole fund or for certain type of properties within the fund, or for assets over certain value) and can be set according to industry benchmarks, certification schemes, or other accreditation schemes.

**Setting minimum standards for investment in a listed or non listed real estate fund:** Investors that do not directly invest in property assets and wish to integrate RPI have sought to make an assessment of the RPI performance of the fund or property company in order to inform their buy or hold decisions. Until recently it has been challenging for investors to compare the RPI credentials of different funds or property companies, and understand 'best in class' performance, as no comprehensive independent mechanism existed to do this. Recently, investor-backed organisations such as the Global Real Estate Sustainability Benchmark have started to fill in this gap.



**Setting minimum RPI standards for investment in individual assets:** A number of investors are starting to set minimum RPI standards for all assets within a fund. They are doing this by using independent third-party rating systems, such as the internationally used Leadership in Energy and Environmental Design (LEED) and the Building Research Establishment Environmental Assessment Method (BREEAM) rating systems and more country specific systems such as the Comprehensive Assessment System for Built Environment Efficiency (CASBEE) in Japan and the National Australian Built Environment Rating System (NABERS) in Australia. As currently no single rating system is used for all buildings globally, investors have to set their own 'best practice' standards made in reference to local market standards and performance.

**Integrating RPI into the management of portfolios and assets:** Investors are beginning to look at the risks posed by one or a small number of ESG issues on a whole fund or portfolio to quantify the impact that these risks may have on performance. This also allows investors to put in place strategies to address any significant risks that are identified or, instead, to capitalise on existing opportunities. The identification of RPI risks and opportunities can also contribute to changes in asset management – either through making day-to-day management changes to improve environmental efficiency or through more significant refurbishment to higher standards.

**Responding to tenant demands:** Investors are increasingly integrating RPI principles within their asset and property management activities to respond to tenants being increasingly concerned about the environmental performance and operational efficiency of the assets they occupy. As utility prices increase, and labelling of efficient buildings increases, it is likely that this could contribute to reduce rent, increase void periods and lead to faster depreciation in less efficient assets due to reduced tenant demand.

**Driving innovation in RPI through collaboration and knowledge sharing:** RPI is a relatively young and dynamic field. Industry standards and best practices are evolving, and many innovations in investment strategy and implementation are the result of formal and informal collaboration among key investors and other stakeholders.

# Introduction

The concept of Responsible Property Investment (RPI) is gaining increasing prominence within the real estate investment world. While the term is broad and may be applied differently in different markets around the globe, in its simplest sense, RPI is the integration of environmental, social and governance (ESG) issues into investors' decisions regarding real estate.

Consideration of ESG issues within property investment strategies can be complex and challenging. The range of issues that need to be considered can be extensive, stakeholder interests can be diverse, while challenges and opportunities may also arise during different stages of the property life-cycle. Property investment can also involve longer time horizons than other asset classes, which means that RPI strategies need to consider long-term issues such as changes in regulation, consumer expectations and physical risks (such as flooding, drought, etc.) and the impact these may have on fund and asset performance.

There are many reasons why investors are, and should be adopting RPI principles within their investment approach. Some key drivers cited by the companies whose work is showcased within this report are as follows:

- Issues such as climate change, resource scarcity, mass urbanisation, and changing societal needs will impact macro property investment trends. All of these issues present long-term risks to the performance of property assets and business. Understanding these issues and considering them as part of buy, hold and sell decisions could enhance long-term performance relative to those investors that do not understand these trends.
- In many countries, the regulatory environment is becoming more stringent on a range of environmental and social issues. This may lead to requirements to improve buildings, and less sustainable assets will probably require greater expenditure to do this, therefore delivering poorer returns. Any investors who understand and pre-empt these new standards may be well placed to outperform their competitors.
- Tenants are increasingly demanding environmentally efficient buildings, to reduce both their occupancy costs and environmental impact. With the likelihood that energy prices will continue to increase around the world, along with growing water scarcity, and rising costs of resources and transportation, tenants will continue exercising their preference for occupying 'greener' properties. The income growth from such investments is therefore likely to be superior to that from less sustainable, less desirable, housing stock.
- Adopting RPI principles will lead to better communication and collaboration between all parties involved in the investment and use of real estate. This should reduce fragmentation and misalignment of interests and ultimately improve building quality for the benefit of both tenants and investors.

Given this changing context, it is the fiduciary responsibility of property investors to understand the implications of these issues and to seek appropriate risk-adjusted investment returns as well as economic ways to improve the sustainability of the assets they buy and hold.

The purpose of this report is to help those making investment decisions and managing existing commercial, residential and industrial real estate portfolios and funds to understand how ESG issues impact the current value and prospective investment performance of the assets they own and manage. The report also provides insight and examples of how investors might implement financially sound RPI practices.

This report looks at each stage of the investment process and highlights case studies of what some of the foremost property investment organisations around the world have been doing to apply RPI principles to their decision-making, thereby improving the environmental and social performance or governance of their property portfolios. As the integration of RPI principles into investment decision-making is fairly advanced in some parts of the world, and relatively new in other markets, this report seeks to reflect current best practices across these different markets, as well as provide examples of emerging and innovative practices today, which the Property Working Group (PWG) hopes will become common and widespread tomorrow.

# Integrating RPI into the investment process

## **Influence of environmental, social and governance issues on strategic asset allocation in a multi-class investment strategy**

For many investors, real estate forms one part of a multi-asset class investment strategy. In deciding on the relative place real estate will play in their overall asset allocation, investors will consider factors such as the time horizon for investment, risk tolerance, liquidity preference, future liabilities, as well as tactical market analysis of the relative performance expectations of the various asset classes over a given period. In addition, regulatory constraints such as Basel 3 and Solvency II may also have an impact on asset allocation. Over the past few years, consultants and pension funds have also started to consider the potential impact environmental, social and governance issues could have on long-run risk and return profiles of different asset classes, and in turn, how these risks should be factored into asset allocation strategies.

In 2011, CalPERS commissioned the consultant Mercer to develop the report ‘Climate Change Scenario’s – Implications for Strategic Asset Allocation’,<sup>2</sup> which analysed the potential financial impacts of four climate change scenarios playing out on investors’ portfolios up to 2030. The report identified a series of steps for institutional investors to consider in their strategic asset allocation and provided a framework that could be used by institutional investors to enhance their understanding of climate-related investment risks and opportunities across asset classes and regions. In 2012, Mercer published a follow-up survey ‘Through the Looking Glass, how investors are applying the results of the climate change scenarios study’<sup>3</sup> examining what twelve investors who represent almost \$2 trillion of assets under management have been doing to implement the recommendations made in the original report. Of the investors surveyed:

- More than half have decided to include climate change considerations in future risk management and/or strategic asset allocation processes
- Half have undertaken or plan to make changes to their actual asset allocations
- One-third have begun to or plan to allocate more to ‘climate sensitive assets’ (identified in the report as real estate, infrastructure, private equity, sustainable equities (listed and unlisted), efficiency/renewables (listed and unlisted) and commodities (including agricultural land and timberland))
- More than half of participants either have, or plan to review, climate risks within climate-sensitive asset classes identified in the report

The report contains several case studies of specific examples of what investors have been doing to pay heed to these risks within strategic asset allocation. The case study below from Forsta AP Fonden (AP1) demonstrates the impact the consideration of climate change risks by investors could have on strategic asset allocation to property.

## What does this mean in practice?

### Integrating climate change risks into asset allocation strategies - Forsta AP-Fonden (AP1)<sup>4</sup>

AP1 believes that climate change is an important risk factor with implications for their portfolio, and therefore needs to be considered during the asset allocation process. The tailored findings AP1 received from the [Mercer] climate study have helped to implement a significantly more structured and effective approach to reviewing climate change risks.

The findings in the climate report have strengthened the Fund's conviction of the necessity to increase the share of real assets in the portfolio by, for instance, investing in real estate, agricultural land, timberland and infrastructure. An increased investment proportion in agricultural land and timberland would be consistent with the overall profile AP1 is aiming for. The incentives for making these investments have thus increased in importance but there are considerable other environmental, social and governance issues to be analysed before it can be realised.

AP1's participation in the [Mercer] project has not only given them better insight into the potential effects of climate change on different asset classes and the long-term performance of their portfolio, it has also provided them with better tools for their strategic asset allocation analysis, which is the core of their investment model. Going forward, the analytical approach that was applied in the study will be incorporated into the strategic reviews that AP1 used to determine its long-term investment orientation.

### Influence of RPI in asset allocation

Real estate investors are starting to integrate environmental, social and governance factors alongside traditional measures of financial risk as part of their asset allocation and portfolio risk analysis. This involves the application of short, medium and long-term trend analysis to asset classes and target geographies.

### Influence of RPI in stock selection

Due diligence in the acquisition and disposition of properties is at the core of real estate investment. Beliefs about the quality of a building and its location, consumer demand, regulatory and political environments in which the building operates, and its price relative to its long-term value all naturally underwrite investment decision-making. For many investors, RPI is seen as enhancing the existing analysis that customarily lies behind investment decision-making. ESG analysis offers an expanded set of tools to measure a building's value, and can play an important role in justifying business decisions.

ESG analysis may also enhance an investor's capacity to see how trends that are currently under-estimated in the market – climate change, increased urbanisation, demographic and consumer preference changes – may increase risk or opportunity in the future. The information gathered by such a scorecard can lead to specific decisions about whether to acquire or dispose of a property, or identify which properties would benefit from specific RPI interventions. RPI as an approach may help identify opportunities to improve the environmental and social performance of existing buildings, for example, taking advantage of RPI interventions to improve operational efficiency and tenant satisfaction. In terms of building stock selection, RPI can be applied to underperforming buildings that can be repositioned or otherwise made more valuable through an improvement of their ESG performance.

The case studies on page 11 provide some examples of how investors and fund managers are seeking to integrate ESG issues within their stock selection processes.

## What does this mean in practice?

### Integrating environmental and social risks into stock selection - IL&FS Investment Managers (IIML)

Since its adoption in early 2011, IL&FS Investment Managers (IIML) has assessed all investee companies against their Environment and Social Policy and Framework (ESPF) Policy. The ESPF Risk Rating Process helps to identify and mitigate significant environmental and social risks. Site inspections are undertaken by the ESPF team to identify environmental and social issues and then ratings are awarded as per ESPF Risk Rating Scale. Based on the risk criteria, the project is considered for investment. Appropriate covenants and ESPF observations are factored into investment agreements. Covenants and controls are monitored based on the ratings allotted and periodic visits are made during the life of the investment. This way, ESG issues are appropriately factored into the decision to invest and monitored throughout the investment period.

Applying the ESPF process, IIML decided to invest in the 'Kohinoor Square' project which is a mixed development consisting of a signature 52-storey, 230-metre tall commercial tower and retail space as well as a 34-storey residential tower. The project is located at mid-town Mumbai, a major junction on main/suburban railway line enabling easy commutes for people working in the development. This being a redevelopment of an erstwhile textile mill, it will help to restore the employment potential of the local area by creating new avenues of employment. The project aims to achieve a LEED 'Platinum' rating. The project design has incorporated the following features for this purpose:

- **Sewage and waste:** The site will have its own sewage treatment unit to purify and recycle grey water for toilet flushing, gardening, car washing etc. The design also includes rainwater harvesting to reduce dependence on the municipal water supply. It also aims to recycle the condensate from chillers of the air conditioning system. Further, wet waste from garbage is to be used to generate organic manure through vermi-composting, which will be used for gardening, and recyclable waste is to be sent to approved recyclers. Since none of the untreated sewage is being disposed of, there will be no burden on the already stretched civic infrastructure of Mumbai.
- **Energy:** Design of the double glazed facade using high performance glass fixed at an angle will cause light to be deflected, thus reducing the air conditioning load while allowing in an adequate amount of natural light. The project will also have the latest building management system, which will sense occupancy levels and adjust air conditioning and airflow accordingly. It also aims to use an energy efficient non-CFC air conditioning system. High indoor air quality is planned through ivy covered bio-walls and gardens on terraces and refuge areas are aimed at improving overall air quality.
- **Sustainable development:** The project has been using fly ash in the concrete mix, thus utilising a material that would otherwise be considered waste.
- **A municipal / public car park** for accommodating 1000 cars has been proposed which will be handed over to the local municipal corporation for operation. This would help ease traffic congestion created by cars parked on main arterial roads surrounding the project.

Among the various advantages of the design approach articulated above, the most significant is expected to be in the reduction in energy use and therefore the running and maintenance costs of the property. It is believed that this will increase the leasing prospects of the commercial property. The project's central location and close proximity to a bus / train terminus encourages the use of public transport, thereby reducing air pollution and traffic congestion. Furthermore, lower dependence on municipal services for sewage, garbage disposal and storm water drainage have the potential to improve tenant / resident satisfaction levels.

### Integrating environmental risk and opportunities into stock selection - PRUPIM<sup>5</sup>

PRUPIM uses its FAIRVAL system to assess the 'fair value' of properties it holds or might purchase in the future. Through explicitly considering the rate of return on risk-free assets, the premium rate needed to compensate for perceived risks, and the income growth these properties are expected to deliver, PRUPIM can estimate the 'worth' of investment properties.

Several years ago, PRUPIM introduced a 'sustainability screen' into its FAIRVAL system. For each property a series of simple yet meaningful questions is asked about its sustainability credentials. These questions relate to those property features most likely to impact asset value and performance in the medium term. Among other things, they ask about building labels attached to the asset, the presence (or otherwise) of energy, water and waste management systems, the presence of on-site energy generation and water harvesting, and dependency on private vehicular access.

As the need to apply this screen to every potential or held asset, practicality is paramount. As such, the screen comprises a 'click through' table of 11 simple questions. Each answer to each question is accorded a specific score relevant to that land use type. While there is not enough data yet to relate these scores directly to a monetary value, as they are always given high visibility alongside the financial outputs of the FAIRVAL model, PRUPIM's investment professionals are actively able to use this information when considering 'buy/hold' decisions. By demanding such data from market brokers, the potential for meaningful empirical data is being improved.

# Using RPI criteria to set minimum standards for fund or asset selection

A number of investors and fund managers are beginning to use RPI criteria to set minimum or baseline standards for funds or individual assets they may acquire or hold. Such standards may be applied at different levels, for example: across the whole fund, only for certain property types within the fund (e.g. shopping centres, multi-let offices, etc.), assets over a certain value, etc. Standards may be set in relation to industry benchmarks, certification schemes or other accreditation schemes with local and/or international relevance.

Standard setting for RPI can be compared to similar approaches in public equity investing. For example, investors may adopt a 'best in class' approach to property selection, only investing in assets or funds that meet minimum RPI standards. In the same way that 'best in class' equity investment is determined by reference to external assessments of the credentials of companies (e.g. FTSE4Good, the Dow Jones Sustainability Index), for the real estate sector 'best in class' investment should also be determined by reference to an external assessment of the sustainability credentials of an investment.

## **Setting minimum RPI standards for investment in a listed or non-listed real estate fund**

When investors do not directly invest in property assets, those who are seeking to integrate RPI within their decision-making have sought to make an assessment of the RPI performance of the fund or property company in order to inform their buy or hold decisions. However, until recently it has been challenging for investors to compare the RPI credentials of different funds or property companies, and understand 'best in class' performance, as no comprehensive independent mechanism existed to do this. Investors therefore have traditionally relied on undertaking their own analysis of the public reporting of these companies or on information provided by the funds, as shown by the case study on page 13.



## What does this mean in practice?

### Novethic Barometer on Eco-efficiency Reporting in the Property Sector - Caisse des Dépôts et des Consignations

Caisse des Dépôts fosters best reporting practices in the French real estate sector through its subsidiary company Novethic, a research centre on Corporate Social Responsibility (CSR) and Socially Responsible Investment (SRI). Created in 2007, Novethic Barometer on Eco-efficiency Reporting in the Property Sector annually measures the quality of communications of French listed property companies on the environmental performance of their assets. For the last two years, this barometer has been published along with a survey on unlisted fund managers. Financial and sustainability reports as well as websites are analysed, through a rating system divided into three parts:

- Energy and carbon performance during the operational stage (50%): Sub criteria include considerations on measurement, certifications, reduction strategies and commitments.
- Energy and carbon performance for the full life cycle of buildings (35%): In particular, embodied energy due to materials and users transport is considered.
- Company leadership, exemplary operations and sustainability management innovations (15%)

The barometer for 2012 is shown below:



source: Novethic, 2012

The 2012 edition highlighted an overall improvement in the quality of information with virtually all companies providing transparent and robust information on energy consumption and certifications. Progress in reporting this information compared to the first edition has been tremendous, as companies have started competing to score well in the Novethic ranking. In addition, the barometer also contributes to highlight environmental issues usually less accounted for. For example, in the previous editions, energy for the full life-cycle of a building was scarcely mentioned. As weighting for this part was reinforced, property companies were pressured into engaging this issue to maintain their score in Novethic ranking, which resulted in an average increase of 14% against this criterion. With its publication having become a much-anticipated event for the French real estate industry, the barometer has participated in promoting best reporting practices in environmental reporting, and has indirectly contributed to more integrated sustainability management practices.

Over the past few years, the Global Real Estate Sustainability Benchmark (GRESB) has established itself as one of the prominent systems with which investors can compare the sustainability performance of listed and unlisted real estate companies and funds. GRESB was developed by the University of Maastricht and is supported by a number of large institutional investors, which are asking their underlying investment managers to complete the survey in order to understand and compare performance. In 2011, there were 340 survey respondents, managing \$928 billion in real estate assets. On the basis of their responses to the survey, companies and funds are awarded a score, and leading companies or funds are awarded 'Green Stars'.<sup>6</sup>

Given that the survey is relatively early in its development, the primary use of the results by investors is to understand the performance of their underlying investments, and to engage with companies that are perceived to be underperforming. However, it is conceivable that some investors could start to use the results as one part of their decision-making in relation to where to make investments, or where to disinvest. For example, investors could choose only to invest in funds with a Green Star.

## What does this mean in practice?

### How investors are using the results of the GRESB Survey to engage with fund managers – Aviva Investors Global Real Estate Multi-Manager

The Aviva Investors Real Estate Multi-Manager (REMM) team believes that it is necessary for managers to be conscious of the ESG credentials of the property funds they manage, both as a part of risk management best practice and to future-proof their property portfolios. It is for this reason that the team started sending out an annual sustainability questionnaire to all their underlying real estate funds in 2005. In 2010, it joined forces with GRESB with the hope that this wider industry initiative would eventually become the benchmark for sustainably monitoring of unlisted and listed portfolios worldwide.

REMM has incorporated a range of ESG initiatives into its processes that allow the team to actively engage with fund managers on an ongoing basis, including:

- Annual engagement programme: Every year REMM assesses the environmental performance of all the funds invested in around the world using GRESB. Following the results of the annual assessment, the team engages with all funds to encourage improvements and best practice in this area and especially to promote such activity in those managers that score poorly. The engagement programme this year for example was tailored to each fund and ranged from bespoke written feedback and additional information requests in specific areas of weakness to face-to-face meetings with managers.
- Due diligence on new investments: At the outset of any new investment, REMM ensures that ESG policies and behaviours are assessed and reviewed. All new investments are asked to fill out the annual GRESB survey. These results are then viewed in detail by the deal team and summarised in all papers presented to the REMM Global Investment Committee prior to investment.
- Criteria in contracts: With respect to post-investment ESG monitoring, REMM ensures that every new investment contributes to the annual survey by way of a side letter. This ensures that all new funds participate in the survey.
- Detailed engagement: When REMM has concerns regarding the ESG credentials of an unlisted fund, and attempts at engagement have failed, it may be deemed appropriate to divest the investment where this is possible (subject, for example, to liquidity constraints).
- Additional support: REMM will work with weaker scoring funds that require extra guidance and support to devise a plan to strengthen their ESG credentials and future performance on the survey.

### Setting minimum RPI standards for investment in individual assets

A number of fund managers are beginning to set minimum RPI standards for all assets within a fund (or certain assets or asset classes). Independent third-party rating systems, such as the internationally used Leadership in Energy and Environmental Design (LEED) and the Building Research Establishment Environmental Assessment Method (BREEAM) rating systems (the former emanating from the US, the latter from the UK; both now with international versions) and more country specific systems such as the Comprehensive Assessment System for Built Environment Efficiency (CASBEE) in Japan and the National Australian Built Environment Rating System (NABERS) in Australia, have for many years provided a system for evaluating and comparing a building's sustainability performance. As no single rating system is used for all buildings globally, investors have to set their own 'best practice' standards made in reference to local market standards and performance – for example, in Australia, the current industry average performance against NABERS for offices is 2.5 stars,<sup>7</sup> therefore an investor operating in this market could set their 'best practice' minimum standard that all new acquisitions would need to have a rating of 3 stars or above. Such minimum standards can be social as well as environmental. Urban regeneration funds may use government-designed target areas to build their pipelines for acquisitions and developments. Examples of this are shown on pages 15 and 16.

## What does this mean in practice?

### The rise of the Green Property Fund

Over the past few years, a number of green property funds have been launched around the world, setting higher environmental performance standards for the properties they acquire and/or within the portfolio (with acquisitions being targeted to those properties where improvements can be made). Two examples of such funds are shown below.

#### Climate Change Capital's Climate Change Property Fund

Climate Change Capital's Climate Change Property Fund (CCPF) was one of the first UK property funds to specifically market itself as a 'green fund'. The CCPF has so far invested £68m of equity in UK commercial property assets, with its acquisitions being focused on those buildings which can either be repositioned through environmentally sustainable retrofits or that are already low carbon. The investment rationale behind the fund is that it will deliver outperformance or 'green alpha' through:

- Lower operating costs that will help protect/enhance value at rent review and lease renewal events.
- The fund and assets will have lower exposure to carbon taxation, helping to protect/enhance value at rent review and lease renewal events.
- Protection against future legislation – for example, the UK Energy Act (October 2011) enables the introduction of mandatory energy efficiency standards for UK non-domestic leased buildings. By only holding top quartile buildings, the fund is less exposed to the impact of this legislation than other funds.
- Future-proofed compliant assets with low CAPEX/obsolescence exposure for end investors.

CCPF was awarded a Green Star in the 2011 GRESB survey, a validation of the funds sustainability performance. So far the fund has reduced carbon emissions by 10.6%, and increased the energy performance rating of two assets it has refurbished following their acquisition.

#### Investa Commercial Property Fund

Investa's Commercial Property Fund (ICPF) is a core property fund that holds a diversified portfolio of prime grade commercial office assets located across the major east coast Australian commercial office markets. It is the world's only accredited Socially Responsible Investment (SRI) wholesale property fund.

For the year to 31 October 2011, ICPF was the best performing office fund and best performing multi-asset fund on the Mercer/IPD index. The average NABER's rating for the portfolio is 3.9 stars exceeding the current market average of 2.5 stars.

## Focusing on Regeneration Projects – igloo Regeneration Partnership



In 2000, Aviva Investors (then Norwich Union) identified that there was both investor demand for an urban regeneration fund and the potential for outperformance from what was an under-invested area in UK Real Estate. They appointed igloo Regeneration as their development managers and formed the igloo Regeneration Partnership. This fund was identified by Professor Gary Pivo (University of Arizona) as the world's first Responsible Real Estate Fund in work developed for UNEP FI.

The investors are from a range of funds with different managers including both public and private sector insurance and pension-based investors and a small number of responsible investors. Strategically these investors saw the need to begin to hedge and shift their current exposures to car oriented suburban development towards more sustainable investments.

The fund undertakes mixed-use regeneration in deprived inner-city urban areas with its 'Footprint' sustainable investment policy influencing both project selection and project design and delivery. The Footprint Policy covers design, environment, society and health, happiness and wellbeing.

A third party auditor assesses the performance of the projects against the 'Footprint' policy. Board decisions to progress with projects are dependent on achieving an acceptable 'Footprint' rating with these assessments also reviewed by the independent audit committee that will give guidance on how the project can be improved at its next stage.

The significance of the 'Footprint' approach to investment is probably best demonstrated in igloo's Porth Teigr project in Cardiff Bay. In 2007, the Welsh Government selected igloo for the development of 38 acres of former docks in Cardiff Bay. The selection of igloo was predominantly down to their adherence to sustainable investment using 'Footprint'. Working with the Welsh government in 2010 igloo secured the deal to construct the new Drama Studios for the British Broadcasting Corporation (BBC) in Cardiff. This major investment of over £35M was sold to the British Steel Pension Fund in 2011. Both the BBC and British Steel selected this scheme for their investment because of the buildings sustainable features and their desire to ensure that any such large-scale investment should have a major legacy value to the area of South Wales. Since its completion in August 2011, the Drama Studios have won a series of awards for design and environmental performance, including BREEAM Global Award winners 2012 (Wales) for the scheme that achieved the highest score globally in 2012 and RICS Awards Wales 2012 – Regeneration Project of the Year.

The building has a range of sustainable features, including achieving an Energy Performance Certificate rating of 'A', making the property 38% more energy efficient than is currently required by Building Regulations, thereby saving 200,000Kg of carbon emissions. The building has achieved a BREEAM 'outstanding rating' making it the largest building in Wales and second largest in UK to do so. This could have only been achieved when the occupier (BBC) fully undertakes to operate the building utilising the sustainable features that have been included in its construction. These are the first studios in which the BBC has used LCD lighting for all shoots, including high definition. They have done this without a single complaint about lighting levels from the directors, saving energy not only through expending less energy in the lighting, but also by reducing heat generation, which means that the studios no longer need to be air conditioned. The BBC now lists BREEAM Outstanding as a minimum requirement for any new space.

# Integrating RPI into the management of portfolios and assets

## **Understanding RPI risks and opportunities for portfolios and assets**

For many investors, the first step in improving the performance of assets from an RPI perspective is to understand their current performance, and what risks and opportunities this may present. Such analyses can then be used to identify whether amendments to the investment process and investment decision-making should be made and where resources (financial and non-financial) should be focused.

The way in which many investors have undertaken these analyses is to separate a discrete number of properties from a larger portfolio for intensive scrutiny. Such analysis could focus on looking at the performance of a sub-set of buildings against a range of RPI issues, for example energy use, water efficiency, waste management and recycling, health and safety, worker productivity, degree of tenant engagement, social contribution; or it could focus on a small number of issues.

The reduced number of properties (and issues) offers investors and asset managers the opportunity to understand what information is required, what information is available, and how the information needs to be normalised. This will allow them to take into account factors that can affect performance such as occupancy, footfall, floor area, type of services provided, as well as understanding what gaps there are and how these could be filled in future. It also enables an understanding of how information can be compared across different properties and different geographies.

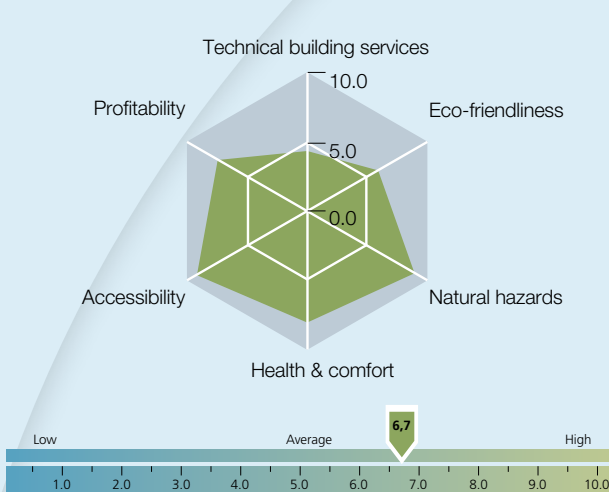
The lessons learned in gathering data from a sub-set of properties can make full-scale information gathering across the portfolio more effective. This approach may be especially effective for large asset owners and managers. Some examples of how such an approach has been applied are provided in the case studies on pages 18 and 19.

## What does this mean in practice?

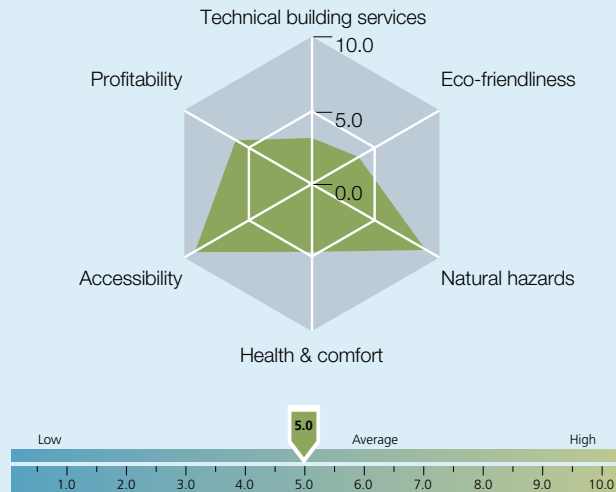
### Measuring and improving performance - UBS

UBS has developed their own rating system to measure the sustainability performance of their properties. This internal benchmark tracks the sustainability performance of buildings and portfolios and enables fund managers to define goals and action plans. The rating system looks at environmental, social and economic factors as part of its analysis, including profitability, eco-friendliness, natural hazards, health and comfort, accessibility and technical building services. An example of the outputs of this analysis for two funds and the evolution of the rating of a third fund are shown below:

#### UBS (D) Euroinvest Immobilien



#### UBS (LUX) Real Estate - Euro Core Fund - Euro Zone



UBS is already using the rating system to drive improvements in performance. For example, the 11 office buildings in the UBS (D) Sector Real Estate Europe Fund have seen significant improvements in performance between 2009 and 2010.

### Results of the sustainability rating

#### UBS (D) 3 Sector Real Estate Europe

**-10%**

drop in power consumption for communal/shared areas

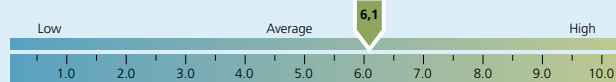
**-10%**

drop in water consumption

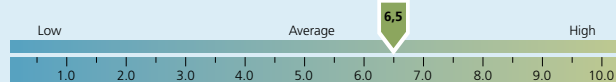
**-12%**

less CO<sub>2</sub> emissions from heating and electricity

#### Status 2009



#### Status 2010

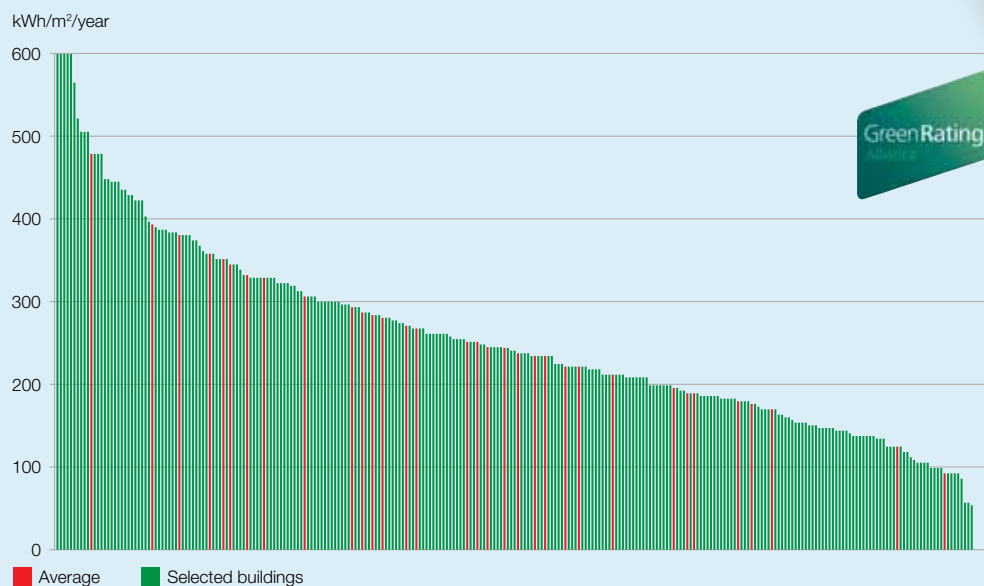




## Using the Green Rating™ Audit Scheme to understand performance - AXA Real Estate

AXA has used Green Rating™ audit scheme to understand the environmental performance of 47 of its real estate assets. The Green Rating™ audit scheme (which was transferred to the Green Rating Alliance in 2011) provides a measurement system against key environmental parameters. AXA Real Estate has found that the results of the Green Rating™ audit can be used to enhance asset management and provide a solid foundation for improving sustainability in a given asset.

It also provides a benchmarking tool, as a building's performance is compared against the six million m<sup>2</sup> of office, logistics and retail buildings that have already been audited in more than 100 cities in 16 countries around the world, representing €17 billion Gross Asset Value (GAV).



Green Rating™ audits are now a tool of reference in most of the requests for proposals AXA Real Estate takes part in, having attracted the investors' eyes as one of the few reliable global tools currently available to improve a property's sustainability.

A number of investors are beginning to look at the risk posed by one or a small number of RPI risks and opportunities on a whole fund or portfolio, in order to quantify the impact that risk may have on performance. It will also allow investors to put in place strategies to deal with any significant risks that are identified or, instead, to capitalise on opportunities. Examples of such issues that have been investigated include the impact of resource scarcity (e.g. rising energy costs, water scarcity, increased transportation costs, rising commodity prices), climate change (e.g. flooding, drought, storm damage), user productivity (air quality, lighting levels, thermal comfort) and changes in technology (e.g. cloud computing, internet shopping). Three examples of work undertaken to examine the impact of an issue on performance are shown on pages 20 and 21.

## Anticipating the potential impacts of climate change - Sonae Sierra<sup>8</sup>

In 2009, Sonae Sierra undertook an analysis to understand the potential impact of climate change in the regions in which they operate in reference to the findings of the Intergovernmental Panel on Climate Change (IPCC) and other sources. The study looked at both the broad climate change risks and impacts they may have in different regions (see summary findings below) as well as the financial risks associated with climate change at a sample of Portuguese shopping centre assets, with the study focusing on three main components: energy (mainly electricity), water and insurance costs.

The analysis was done by identifying potential changes in energy use resulting from climate change under different scenarios and calculating the cost of these changes based on two main assumptions: firstly that the price of electricity would be unchanged relative to what it was in 1990 and secondly, that the price will change as a result of climate change policies. In order to estimate the impact on the profitability of operations at the selected assets, two approaches were taken. The first was an accounting approach, in which it was assumed that the cost structure would remain unaltered and reductions in profitability were based on existing financial data for each shopping centre. The second involved estimating the relationship between profitability and electricity prices using an econometric approach. The econometric approach allows for the adjustment of operations in the centres to change prices of inputs such as electricity and accounts for other indirect effects such as increased visitors during periods of higher temperatures.

The results of the study revealed that:

- The increased demand for energy and the anticipated increase in the price of energy is expected to reduce profitability by a maximum of between 2% and 5% in 2030, and between 3% and 6% in 2050 with variations between the different shopping centres.
- In the case of water it was not possible to estimate the potential increase in demand due to climate change but the increase in water cost was examined with the conclusion that it could reduce profitability by between 0.15% and 2%.
- The likely increase in insurance costs was estimated at 21%. This could affect profitability between 0.1% and 0.7%.

In 2010, the Centre for Molecular Biology and Environment of the University of Minho in Portugal undertook a follow-up study on ecosystem services dependency at the two pilot shopping centres, AlgarveShopping and NorteShopping. This study used the outputs of the first study and highlighted other potential risks associated with climate change, such as seasonal water shortages, flooding due to extreme weather events and the possible introduction of a carbon emissions tax.

These studies emphasised the importance of reducing dependency on fossil fuels and main water supplies, increasing operational efficiency and improving drainage on shopping centre sites. These are strategies that Sonae Sierra is already actively pursuing. Nonetheless, Sonae also recognises that climate change is a complex phenomenon that could have further ramifications for business activities in the different locations in which it operates. To this end, they have a defined objective to develop and implement a long-term climate change adaptation strategy covering investment, development, management and corporate activities.



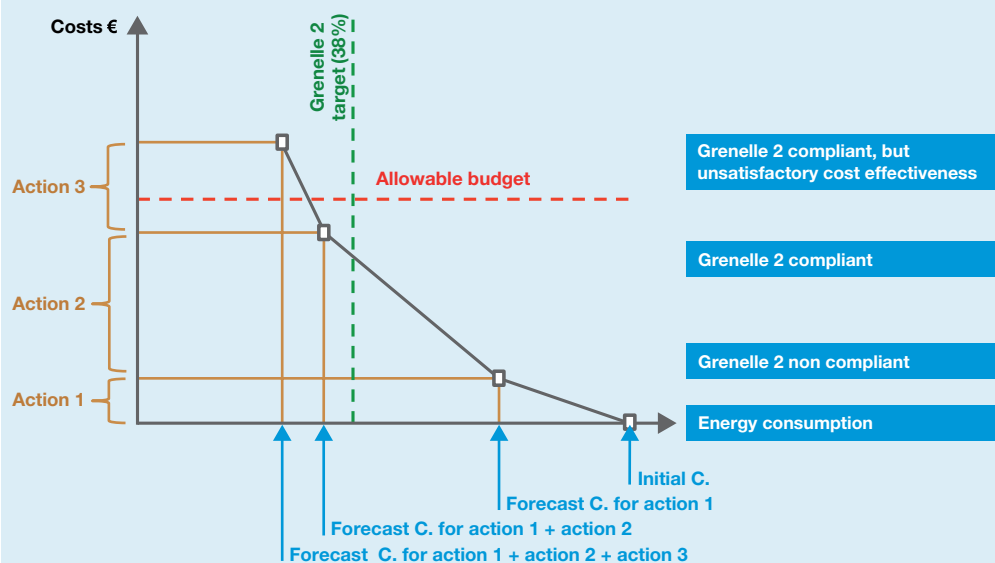
Potential impacts of climate change in Europe and Brazil

Region	Potential impacts
Europe – Atlantic Region	<ul style="list-style-type: none"> <li>• Increased coastal erosion and flooding.</li> <li>• Loss of ecological habitat.</li> <li>• Storm risk in winter.</li> </ul>
Europe – Central Region	<ul style="list-style-type: none"> <li>• Increased likelihood of winter flooding.</li> <li>• Health risks as a result of heat waves.</li> </ul>
Europe – Mediterranean Region	<ul style="list-style-type: none"> <li>• Reduced water availability and increased likelihood of drought.</li> <li>• Loss of biodiversity.</li> <li>• More frequent forest fires.</li> <li>• Increased energy demand in summer for cooling, reduced hydropower capacity.</li> <li>• Health risks as a result of heat waves.</li> </ul>
Brazil – North Region	<ul style="list-style-type: none"> <li>• Higher temperatures and more heat waves.</li> <li>• Lower rainfall and risk of drought.</li> </ul>
Brazil – Central West Region	<ul style="list-style-type: none"> <li>• Higher temperatures and more heat waves.</li> <li>• More periods of intense rainfall.</li> </ul>
Brazil – South East Region	<ul style="list-style-type: none"> <li>• More periods of intense rainfall.</li> <li>• Higher temperatures and more heat waves.</li> <li>• Less frosts in the São Paulo region.</li> </ul>

## Anticipating regulatory constraint on property stock: GRECO Project - Caisse des Dépôts et des Consignations

In 2010, Caisse des Dépôts et des Consignations (CDC) initiated a project with its asset manager AEW Europe, to understand the potential impact of the French environmental law 'Grenelle 2'. Grenelle 2 outlines a regulatory obligation to reduce the energy consumption of existing commercial property stock by 38% by 2020. Although this law has still not been formally enacted, this future regulatory requirement represents a depreciation risk for existing portfolios, as refurbishment work will likely be necessary to comply with the regulations. In order to benefit from a broad perspective on the impacts, this project was applied to all types of assets (including residential properties).

The underlying objective of the project was to develop a dynamic platform that would enable CDC and AEW Europe to understand the impact of the improvement/refurbishment programme that would need to take place across the portfolio to comply with the legislation. In order to do so, energy audits were carried out on the whole portfolio and recommendations were provided setting out the various refurbishment efforts that would need to be undertaken to improve energy performance by 38% for each asset or globally. Each recommendation was assessed both according to energy efficiency and to cost effectiveness, as presented on the graph below:



An internet platform was thus developed to store the collected data, help investment decision-making and monitor the implementation of the action plans. In order to ensure the continuity of the platform and to reach the reduction targets, dynamic aspects were integrated within. For example, the tool allows the asset manager to monitor the impact of buy and sell decisions on the energy performance of the portfolio. As for existing stock refurbishment, the tool is designed to monitor both the actual consumption and the predicted reductions that would be achieved through the refurbishment efforts.

## Understanding the impact of indoor air quality on occupier productivity - AXA Real Estate

In 2011, AXA Real Estate launched a study aimed at getting insights into the impact of indoor air quality on work efficiency. The study is predicated on the assumption that indoor air quality can affect occupiers' productivity in the workplace. However, air quality not only remains difficult to measure and changeable over time, it is also a delicate topic that tenants are often reluctant to communicate externally.

The study has two stages: first, a theoretical literature survey and second, a series of experimental practical assessments of some currently occupied buildings.

The first step has already concluded that around 10% of the absenteeism is due to poor maintenance of indoor air quality. In practical terms, this represents an average potential saving of €30 per m<sup>2</sup> per year. In early 2012, an experiment was launched in an occupied office building. Initially this involved organising meetings with the tenants in order to explain to them the purpose of this process, and then to send anonymous questionnaires allowing everyone to provide their perception of the air quality.

The next step consists of carrying out a one-week indoor air analysis in six selected places on three different levels of the building. Results will be analysed and then serve as the basis of an action plan, including further measurements after the testing and polling phase to establish if and where benefits have been achieved.

# Integrating RPI into asset management strategies

Once RPI risks and opportunities have been identified, they can be used to drive changes in asset management – either through making day-to-day management changes or through more significant refurbishment to higher standards.

## **Environmental efficiencies driving operational cost savings**

A key focus for all RPI strategies is ensuring that zero and low-cost environmental improvement measures are being implemented as part of the day-to-day management of assets. Such measures can lead to significant reductions – for example, the Carbon Trust, a UK-based organisation that works with governments and companies to reduce carbon emissions, estimates that good energy management can result in savings of 5%-25%, with typical payback periods of two years or less. It is not unusual to save 5%-10% with just minimal capital expenditure.<sup>9</sup> If investors can better future-proof their assets, ideally through zero and low-cost measures, then they can stave off the accelerated depreciation and increasing risk premium that will impact unimproved assets.

Most low-cost energy saving measures are considered good housekeeping, and there is growing body of guidance on the type of initiatives that can be implemented, including optimising Building Management System settings, ensuring that services such as lighting, air conditioning and heating are being provided only when the building is in occupation, upgrading lighting with more energy efficient bulbs and fixtures, installing lighting sensors, as well as engaging with tenants to reduce energy use (e.g. switching off screens, lights in meeting rooms). Measures can also extend wider than energy saving and address issues such as reducing water consumption, promoting green travel options, increasing recycling and reducing waste generation. On pages 23 to 25 there are several case studies of environmental efficiency projects implemented by landlords, along with details of the savings generated by these efforts.

## What does this mean in practice?

### Driving environmental efficiency improvements through a standardised approach - Bentall Kennedy's experience in developing and using the LEED Existing Building: Operations and Maintenance Standard



Bentall Kennedy was one of 11 partners with the USGBC involved in developing the LEED Existing Building: Operations and Maintenance Standard (EB: O&M) volume certification programme in the United States. LEED EB:O&M volume certification has enabled them to expand and standardise sustainable best practices across their U.S. office portfolio and improve operational performance cost-effectively. The LEED EB:O&M volume programme encompasses procedures, policies, and processes that are implemented portfolio-wide in a scalable manner. The programme also includes training and education, energy audits, technical testing/analysis and strategic retrofits.

In 2010, Bentall Kennedy was successful in the simultaneous certification of 28 buildings through the LEED EB:O&M volume programme, including 6 Gold, 17 Silver, and 5 Bronze Certified. The LEED EB: O&M certified buildings represent approximately 5.9 million square feet of Class A office space in nine U.S. markets and more than \$1.2 billion in assets under management.

Bentall Kennedy was the first U.S. investment advisor and the largest single owner, on behalf of their client MEPT, to participate in the programme. In addition, they expect to receive final certification of an additional 17 office buildings during the first half of 2011, representing almost 2.3 million square feet and \$400 million in value.

Key LEED EB:O&M performance highlights from the first group of 28 certified buildings include:

- Average ENERGY STAR score of 85, or 35% greater energy efficiency than the national U.S. average.
- \$974,500 in estimated landlord and tenant energy savings. (Note: This is an estimated value, based on total kWh of actual, normalised reduction in use from start to finish of the certification from ENERGY STAR Portfolio Manager and pricing from the Department of Environment)
- A 37% reduction in water use, resulting in 13.4 million gallons saved annually and more than \$100,000 in operational cost savings.
- Purchase of 18.4 million kWh hours of Green-e Certified renewable energy credits.

## Driving environmental improvements through a strategic approach - Colonial First State Global Asset Management

Colonial First State Global Asset Management (CFSGAM) Property's Operational Performance Strategy (OPS) covers the management and operation of property assets by specifying practices to implement ESG considerations in each building under management. The OPS serves to embed efficiency improvements throughout the assets' operations, for the benefit of all stakeholders. This approach seeks to maintain and enhance asset value, mitigate operational and legislative risk, achieve full operational potential and provide quality accommodation for tenants in conjunction with social and financial objectives, to achieve a balanced outcome. The ESG principles underlying the OPS are to:

- Benchmark the environmental footprint of the funds which hold the assets, and the individual properties managed
- Responsibly improve the operational performance and efficiency of all assets over time by setting measurable short and long-term targets as appropriate
- Explore and implement as appropriate, the adoption of management and design practices, systems and technologies which promote innovative performance solutions
- Understand and influence the associated supply chain activities
- Influence, direct and educate key stakeholders to act in a sustainable manner, and
- Report and disclose performance in a format that is tailored to suit the information user.

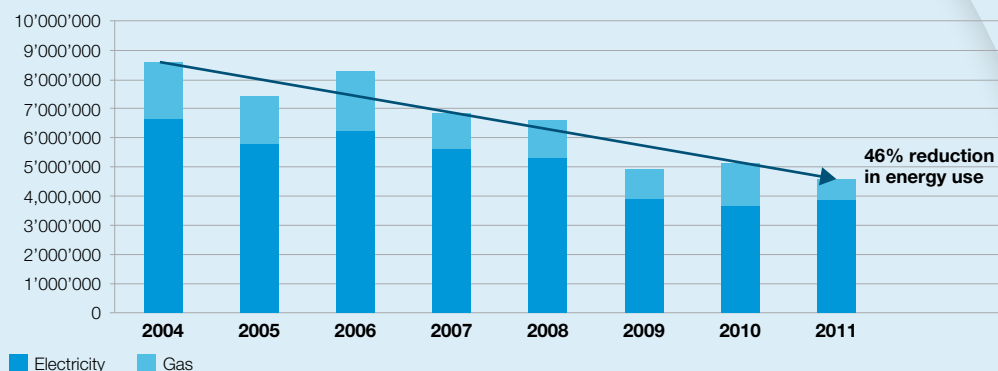
This strategic approach has generated significant results. For example, CFSGAM has made substantial reductions in the environmental footprint of the Commonwealth Property Office Fund (CPA) since 2007. The portfolio is now 30.4% more energy efficient, 21.3% more water efficient and producing 30.2% lower emissions. The portfolio of office assets across Australia has an average 4.1 star NABERS energy rating and an average 3.7 star NABERS water rating. The team continues to work on improvements across the board, whether that is diverting waste from landfill, optimising energy performance, improving data collection or implementing market leading initiatives to reduce emissions and water consumption. In 2013, CFSGAM is targeting a NABERS Energy weighted portfolio average of 4.5 stars, a NABERS Water weighted portfolio average of 3.8 stars and will aim to achieve a waste diversion target of 65%.



## Driving environmental improvements at an asset level - Cribbs Causeway, PRUPIM

In the first 'What the Leaders are Doing' Report, PRUPIM showcased the efforts it was undertaking to reduce energy consumption at one of its large shopping centre assets, Cribbs Causeway, Bristol, a joint venture between PRUPIM, Capital Shopping Centres and JT Bayliss. PRUPIM is the asset manager of the property.

PRUPIM has continued to drive significant energy improvements at the mall, and between 2004 and 2010 has reduced energy consumption by 46%, saving its tenants nearly a million pounds and reducing carbon emissions by over 6000 tonnes cumulatively over that period.



A wide range of measures was implemented to achieve these savings. The first step was to understand where the energy was being used, and then identify the most cost effective methods to reduce consumption. Since 2004, a range of measures have been implemented including:

- Optimise air conditioning strategy – moved to natural ventilation and targeted use of air conditioning
- Optimise lighting strategy:
  - Undertaken energy efficient upgrades, installed PIR and lux meters, turned off roof lights, reduce back of house lighting
  - Introduction of lighting zones in car parks to reduce nocturnal lighting
  - Pruned trees in order to increase natural light
  - Limited escalator operation to hours of operation
- Change to operational processes

It is not only energy use that the centre has focused on, since 2008/09 recycling has increased from 38% to 58% and it is intended that the site will become zero waste to landfill in the next year by working with a local Mechanical Biological and Thermal (MBT) operator. During that same period, the site has also reduced water use by 8%, saving £9000 annually. This has been achieved through the installation of water efficient fixtures and fittings.

Significant work has also been undertaken to promote a sustainable transport policy for the site. A range of measures have been implemented: there is a purpose-built bus station, extensive bus shelters and sees the passage of about 95,000 buses a year. In 2011, real-time information screens were added to the bus station and the mall launched the innovative Cribbs Causeway Travel Card, giving direct, unlimited discount travel to its employees. The mall also has a car share club and provides electric vehicle charging points, as well as mobility scooters to its 12,000 mobility-impaired visitors.

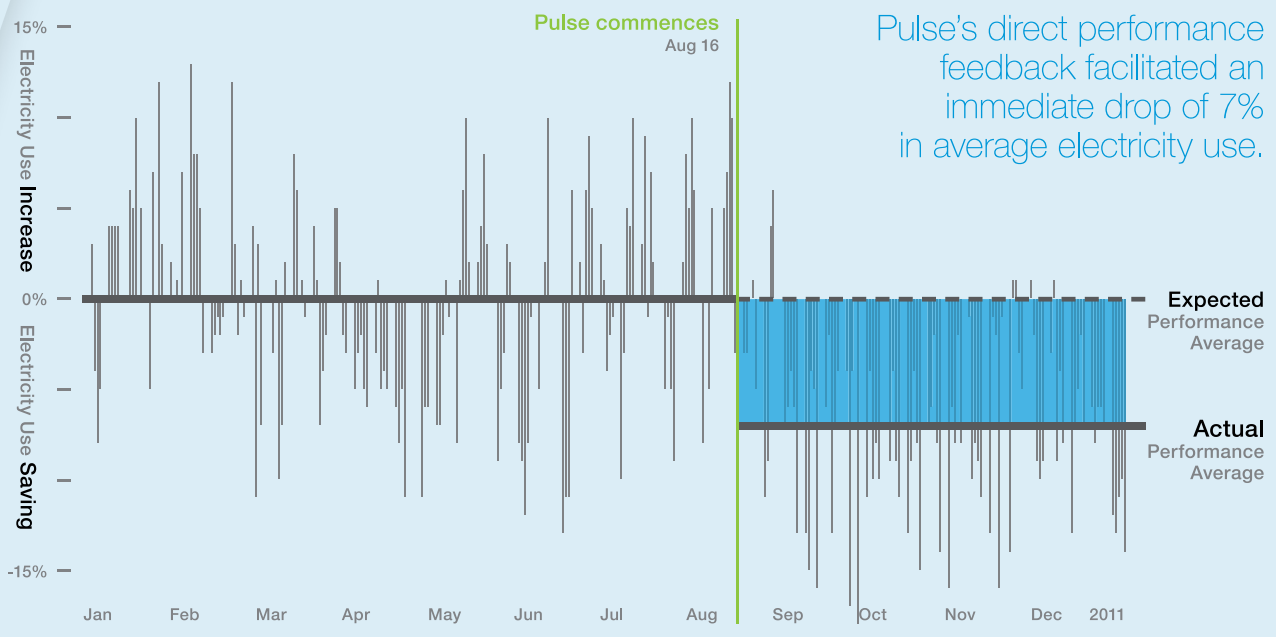
One of the biggest challenges in improving the energy efficiency of commercial buildings is a lack of robust performance data. Without accurate information on how much energy is used and where it is being used, owners (as well as those that operate the building on their behalf) and occupiers are unaware of how their building is performing. Increasingly, landlords leading on the RPI agenda are looking for more accurate real-time information on the performance of assets. A key way in which this is being achieved is through the installation of Automatic Meter Reading (AMR's) or Smart Meters, including sub-meters for individual tenants, floors and/or plant and equipment. Such metering considerably enhances the understanding of building performance. It can also help to identify where reductions can be made, ensure that unnecessary waste is minimised, and enhance communication and engagement with tenants.

### Real time energy monitoring - Investa

During 2011, Investa developed Pulse, a visualisation tool that allows for a more collaborative approach to identifying energy efficiency improvements. The system is already delivering significant benefits.

The Pulse tool gives building operators daily weather-normalised feedback on the performance of their buildings, informing them whether yesterday their building had a 'good day', or not. Equipped with this information, Investa's building operators have been able to tweak and fine-tune their plant and equipment on a daily basis. Initiatives that work are retained and those that do not are discarded.

The chart below shows how the introduction of Pulse resulted in a step-change improvement in electricity use for three buildings in Market Street, Sydney. Since Pulse began, there have been consistent savings of approximately 7% against the buildings' performance model, where 0% equates to the 'expected' performance of the building and activity below zero represents an energy saving. Investa recognises the importance of the 'people factor' in cutting energy use from building operations; finding ways to better inform, empower and motivate its people to deliver better comfort to Investa building occupants while considering the energy used to provide that service.<sup>10</sup>



## Delivering socio-economic benefits

By 2050, the UN predicts that two thirds of world's population — about 6 billion people — will be living in cities.<sup>11</sup> Buildings form the fabric of these urban landscapes, and while cities are a major hub of national production and consumption — economic and social processes that generate wealth and opportunity — they are also subject to episodes of disease, crime, pollution and poverty. If buildings are well designed, built to high efficiency standards and well managed, they can derive significant social benefits, which in turn present opportunities for investors. Some examples of how the integration of these issues within RPI strategies and the benefits they are delivering are shown below:

### Responsible Contractor Policy Programme - CalPERS

#### Purpose

The California Public Employees' Retirement System's ('CalPERS') invests in real estate primarily through outside investment managers. The CalPERS Responsible Contractor Programme (RCP) Policy ('the Policy') is intended to ensure that contractors, investors, managers, consultants, or other participants selected by CalPERS to invest in real estate take prudent and careful action while managing the RCP. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns while using contractors.

#### Introduction

CalPERS has a deep interest in the condition of workers employed by CalPERS and its managers and contractors. CalPERS, through the Policy set forth in the Current Policy, supports and encourages fair wages and benefits for workers employed by its contractors and subcontractors, subject to fiduciary principles concerning duties of loyalty and prudence, both of which further require competitive returns on CalPERS real estate and infrastructure investments.

CalPERS endorses small business development, market competition, and control of operating costs. CalPERS supports many of the ideals espoused by labour unions and encourages participation by labour unions and their signatory contractors in the development and management of CalPERS real estate and infrastructure investments. CalPERS believes that an adequately compensated and trained worker delivers a higher quality product and service. The Policy includes provisions for transition, monitoring, and enforcement.

#### RCP Policy Applies to

- Real Estate or Infrastructure investments in which CalPERS owns a greater than 50% interest. Other types of investments are not included (e.g. commingled funds, mezzanine debt, international investments) and housing development partnerships are exempted though voluntary compliance is strongly recommended, and
- Contracts over \$100,000.

#### Current Policy

Current Policy is the result of work from CalPERS staff, fiduciary attorneys, investment managers and labour stakeholders, the Policy:

- Defines an RCP contract, an RCP investment, a responsible contractor and other terms;
- Sets fiduciary duties, competitive bidding, abidance by Local, State and National laws and other principal requirements;
- States that CalPERS strongly prefers managers and contractors to hire Responsible Contractors to provide services to RCP Investments;
- Sets roles and responsibilities of investment managers, CalPERS staff and labour stakeholders;
- Sets transition enforcement, monitoring and administration requirements;
- Establishes that managers are responsible for communicating the Policy to all contractors, maintaining written policies and procedures on the Policy, and monitoring and enforcing compliance of the Policy;
- Requires managers to annually provide to CalPERS certification that they are in compliance with the RCP and an RCP report, which includes the number and dollar amount of RCP contracts;
- Requires managers to establish competitive bidding procedures and notify potential bidders of the Policy; and
- Requires CalPERS, its investment managers and their contractors to remain neutral when union organising activities of service personnel occur in the Core Real Estate Portfolio.

#### Real Estate Portfolio RCP FY 2011 Results

For the Fiscal Year 2010-11, RCP Policy compliance totalled 97.5%. Real Estate and Infrastructure Policy managers paid in excess of \$647 million toward RCP contracts for the reporting period.

## Delivering social benefits in Africa through RPI - Actis



The surging growth of African cities has created a new wave of challenges for property investors in the region. Rapid urbanisation will see an influx of 58 million people into the urban centres of sub-Saharan Africa between 2010 and 2020, and a further 69 million will arrive in the following decade. This urban swell feeds a chronic demand for residential, office and retail facilities. If this development proceeds unplanned and without supporting infrastructure or building standards the future outlook of these cities will be grim.

For Actis, this growth, if properly managed, also presents a huge opportunity. In an effort to better secure the real estate future of the region, Actis launched its first sub-Saharan African private equity real estate fund in 2006. Since that time, the team has built up a portfolio of developments in Ghana, Kenya, Nigeria, Tanzania, Uganda and Zambia managed by real estate professionals in Johannesburg, Lagos, London and Nairobi.

Sustainability is at the core of Actis' real estate investment strategy. The resource pressures in the developing markets of Africa mean that it is essential to understand the water, energy and total sustainability profile of investments if value is to be created.

In 2007, before Actis's Real Estate fund had been deployed, Actis established a sustainability guidance programme to govern all of its real estate investments. This guidance provides co-investors, architects, designers and builders with measures for building design and construction. Over the last five years Actis has updated and refined the guidance so that by meeting all the measures it enables a building to be certified by an internationally recognised rating scheme.

All future Actis developments will be certified by international green rating standards such as LEED or Green Star and will be at least 25% more energy efficient than existing buildings in the region. In implementing these guidelines and building to international green rating standards, Actis commits to:

- Create jobs through construction, building materials, supply chain, ancillary businesses around the development and jobs within the development post completion.
- Engage a mixture of local and international employees and experts to allow a transfer of knowledge and skills.
- Introduce planned housing and community development to reduce health and safety risk such as poor sanitation, amateur wiring, uncomfortable housing and traffic density, and even the risk of building collapse.
- Substitute formal housing ownership for urban slums to reduce crime and develop positive community participation.
- Consider community and city planning to assess the impact of the proposed development on the surrounding community and environment, including traffic and housing density.

An example of the implementation of this approach is at Accra Mall in Ghana, which opened in 2008. It attracts 135,000 shoppers a week, and as well as shops, it houses a cinema, bars, restaurants, a dentist and a medical centre. Actis managed the development process, invested the equity and raised the debt to finance this US\$36m project.

The mall has had tangible positive impacts on the local economy: as well as employing 900 people, it has stimulated the local supply chain, helped attract investment in the surrounding area, boosted activity in the formal sector, and provided better and more affordable goods. Ghanaian workers at the mall are paid higher wages to those earned elsewhere in retail in Ghana. The increase in formal employment enables more workers to open bank accounts to manage their salaries. This, in turn, has led banks and their partners to offer new products and services such as insurance and pensions, thereby developing the financial services sector in Ghana.

Actis drew on its pan-African network to secure high quality anchor tenants for the mall, including South Africa's Game and Shoprite. These well-established retailers helped trigger a chain reaction in improving quality standards among employees and suppliers. All retail staff is now trained in customer service, first aid, and fire prevention. In addition, Actis has offered many suppliers training on managing stocks, such as the use of barcodes. Shoprite has been particularly active through its 'Proudly Ghanaian' labelling system, offering support and advice to local businesses.

Actis sold its stake in Accra Mall in May 2012 to South African commercial and retail property developer, Atterbury, and financial services group, Sanlam.

### **Delivering community benefits - Majid Al Futtain Properties**

Majid Al Futtain has allocated around 7,500 square metres in the Mall of the Emirates for Dubai Community Theatre & Arts Centre (DUCTAC), which aims to contribute to the creative and cultural development of Dubai by presenting and hosting a programme of events and participatory activities for Dubai's many multi-national communities and visitors alike.

The Theatre & Arts Centre is the first modern, non-profit, cross-community creative centre in the Gulf. This flagship project was the brainchild of local theatre-lovers, arts enthusiasts, artists and business people who recognised the need for an entertainment and educational centre for the community and future generations of Dubai.

### **Redevelopment and Engaging the Community - The Link REIT**

As the owner and manager of the largest portfolio of retail space in Hong Kong, The Link REIT believes that a sustainable enterprise provides not only financial returns for investors, but also serves its stakeholders and enhances the communities in which it operates.

Fresh markets are an integral part of Hong Kong people's lives, providing fresh food and daily necessities. This is where customers come for different kinds of goods, share living and cooking tips with neighbours and bond through everyday interactions with stall tenants. Despite their importance to the local communities, fresh markets in Hong Kong face many challenges such as outdated facilities, increased competition from supermarkets and entrenched perceptions that these markets are wet and dirty. With nearly 100 fresh markets as part of its portfolio, The Link REIT tries to revitalise these often overlooked community hubs and enhance their position in the marketplace.

An example of such a project is the 30 year-old Tai Yuen Market. The Link REIT engaged key stakeholders including tenants and market associations throughout the project, and obtained valuable feedback which were incorporated into the revitalisation. The extensive HK\$120 million (equivalent to approximately US\$15.4 million) project led to major improvements in architecture, design, efficiency, ventilation, drainage and lighting, resulting in a more comfortable shopping environment. To better serve the local community, The Link REIT added additional barrier-free access points and widened the corridors. The Link REIT also installed ATM facilities, wash basins and an electronic payment system to provide customers with more convenience and better services. Other sustainability initiatives include rooftop organic farming, centralised waste composting, and other energy efficiency measures. They resulted in The Link REIT winning the Environment Excellence Award at the Asian CSR Awards in 2011.

Positive social impacts of this project include improved hygiene and environment, job opportunities for local residents, and the passing on of family businesses to the next generation. The Tai Yuen Market revitalisation project achieved a 12.2% return on investment through tangible results such as better utilisation of space, higher occupancy rates, introduction of new tenants, improved business for existing tenants, and increased footfall and influx leasing enquiries by potential tenants.

The Tai Yuen Market revitalisation project has not only renewed the culture of fresh market shopping, but also started a new chapter in Hong Kong's fresh market development.

### **Integrating RPI principles in development and refurbishment projects**

The development of a new building offers significant opportunities to create an asset with strong environmental credentials and one which can deliver socio-economic benefits. Significant refurbishments are also a key point in the property life-cycle when investors have the opportunity to make significant improvements in the asset's environmental performance that may not be possible (physically and/or financially) while the building is occupied.

Investors and fund managers are seeking to integrate RPI principles within their development and refurbishment projects as a way of future-proofing the assets against current and future minimum standards for environmental/energy performance, growing occupier requirements, and rising utility costs, thereby reducing the risk of depreciation.



## What does this mean in practice?

### Delivering Darling Quarter a 6 Green Star Office in Sydney, Australia - Lend Lease



Darling Quarter was completed in July 2011, and is Sydney's newest urban regeneration project, transforming an under-utilised brownfield site into a vibrant mixed-use destination. The development of Darling Quarter was a collaborative effort between the owners (the Lend Lease managed APPF Commercial and an offshore joint venture partner), Lend Lease, the Sydney Harbour Foreshore Authority (SHFA), and the Commonwealth Bank of Australia (CBA). From the outset, all stakeholders shared a common goal in ensuring Darling Quarter was recognised as a world-leader in sustainable design and place making.

The commercial component of the development comprises two eight-storey buildings housing more than 6,200 employees across 59,000 square metres of flexible office space, together with 5,000 square metres of retail. The precinct also includes community amenities such as a youth theatre, community green, and Sydney's largest free children's playground with interactive play features.

The office component of the precinct, Commonwealth Bank Place, was awarded a 6 Star Green Star Office As-Built v3 certified rating in February 2012, becoming the first Australian office building to achieve this significant industry milestone. The commercial building features chilled beam air conditioning, a single pass fresh air system which avoids the recirculation of air through the office space, highly efficient plant and equipment, innovative lighting control technology and a high performance façade with carefully placed shading devices to minimise solar heat loads through the envelope. In addition, a tri-generation plant reduces greenhouse gas emissions associated with the generation of electricity and cooling. Energy modelling indicates the building is capable of operating at NABERS rating of 5 Star + 40% CO<sub>2</sub> reduction. This is equivalent to a 72% reduction in carbon emissions when compared to the average performance of typical existing office buildings in Australia.

Potable water minimisation initiatives include blackwater recycling, low flow fixtures and fittings, and a rainwater recycling system incorporating a 300,000 litre storage tank. The sewer mining and blackwater treatment system installed within the building were designed to treat and recycle 100% of the blackwater generated by the building, through sourcing additional effluent from the sewer mains. The system is able to supply non-potable water capable of meeting 90% of the total cooling tower, toilet flush and irrigation annual demand saving approximately 52,000,000 litres of potable water that would otherwise have to be used. This represented potable water savings equivalent to 20 Olympic sized pools or 86 million bottles of water each year.

The importance of sustainable buildings is also highlighted to all the tenants in the building. Interactive media walls attractively display the data from the monitoring systems in prominent locations to enable the building occupants to see and understand how they can reduce their energy and water consumption. For example, tenants can make an informed choice to use the stairs rather than the lifts to save energy and to increase their personal fitness and wellbeing. The media walls use LED technology to ensure efficient performance. Analysis on the energy consumption of the walls versus their projected benefits in reducing energy usage shows that the benefits far outweigh their own energy consumption.

The Lend Lease managed APPF Commercial is committed to achieving minimum 5 Star Green Star Office As Built certifications for all new developments and 4.5 Star NABERS Energy certification for all existing assets. The Fund believes that achieving high environmental ratings reduces exposure to risk and asset obsolescence by ensuring that assets are future ready.



## Using redevelopment to drive environmental improvements - F&C REIT

25 Great Pulteney Street, UK, is an office redevelopment recently completed by F&C REIT in the Soho neighbourhood of London. The site was previously occupied by a poor quality 1960s building that was no longer commercially viable and was inappropriate to the area. Options for redevelopment of the existing building were fully explored, though demolition and complete redevelopment was decided as the most appropriate option. This would ensure that the project created a high-quality development that would complement the upmarket Soho streetscape and neighbourhood.

Sustainability issues have been a key driver for 25 Great Pulteney Street. The project has achieved the targeted BREEAM rating of 'Excellent' and an Energy Performance Certificate rating of 'B'. In addition, despite the relatively long gestation period of the building, it has proven to be 'future-proofed'; performing well today even compared to current benchmarks. Built estimates of carbon emissions have been calculated to be 15.9 KgCO<sub>2</sub>/m<sup>2</sup> per annum. A combination of passive and active sustainable design features have contributed to the high performance and low energy use of the building.

An energy strategy appraisal concluded that a ground source heat pump system, combined with geothermal bore holes, would be an extremely effective low carbon renewable energy source. The installed system utilises 22 bore holes each drilled to a depth of 120 metres, taking care of all of the building's heating and cooling needs. Key features of the building are the terraces and green roof. The roof has been specifically designed to provide a diverse range of flora and habitat to encourage biodiversity. Herbs and wild strawberries have also been planted to encourage the 'adoption' of the space by tenants who can interact with their surroundings on a more personal level.

The redevelopment of 25 Great Pulteney Street has rejuvenated a significant site on a prime street in Soho. The previous building was a visual and economic blight on the area having been left in a state of neglect for many years. The development is considerate of and responsive to its historic setting but also assertive, representing a modern vision that is very much in step with vibrant Soho. 'Finial Response', the public art piece installed on Great Pulteney Street, allows the site to interact not only with tenants but also with curious pedestrians who are drawn to the building.

## Using refurbishment to drive environmental improvements - Bentall Kennedy



50 Post Office Square was built in 1947 and is located in Boston, USA, in the financial district beside a lush urban park. In 2011, a major renovation of the building's infrastructure commenced, and exterior streetscaping was subsequently undertaken. A second phase of refurbishment is currently underway with a goal of achieving a LEED Silver designation. Through investment by one of Bentall Kennedy's prominent separate account clients, improvements in the environmental performance will be achieved during the refurbishment.

"It was important for our client to reposition the building as a prestigious, high quality building which displays environmental leadership as well as possesses all the positive amenities and comforts of a new building. Many of the improvements were made feasible by taking advantage of temporarily high, but anticipated vacancy level (430,000 square feet of a total of 636,000). When we learned that a major block of space would be available we realised that we had the opportunity to make significant upgrades, which would not have been possible if the space was occupied. We believe that the refurbishments and a LEED designation will increase the value and earning potential of the building significantly both in the near and the long-term. We expect very low vacancy rates once the refurbishment is complete." - Joseph Shea, SVP Asset Management, Bentall Kennedy.

Weekly construction meetings at the project include a discussion of the progress toward LEED certification. Some of the key improvements being made are:

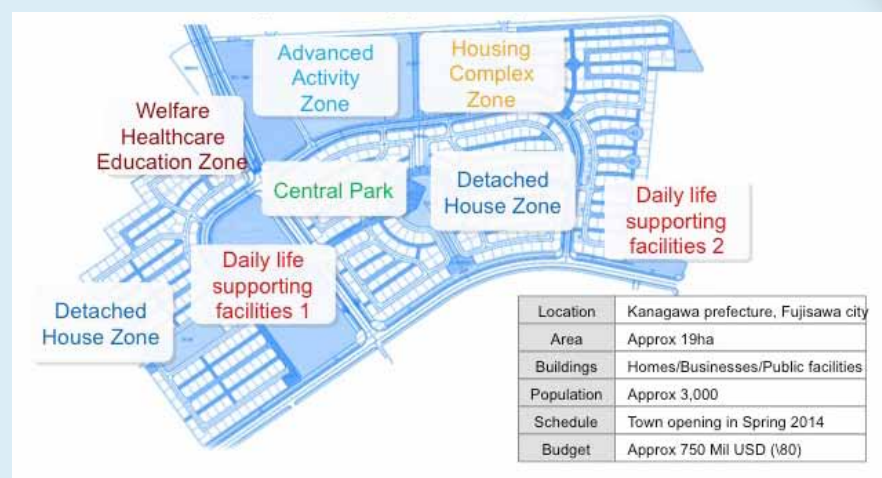
- New energy management systems to maximise energy efficiency, tenant comfort, and use of fresh air for cooling.
- Reduction of the thickness of the interior perimeter walls to maximise natural light penetration and sight lines for occupants.
- Replacement of outdated water and light fixtures with low flow and high efficiency fixtures to significantly reduce water and utility use.
- Elevator system upgrades, including destination based controllers.

The changes made to date have already resulted in reduced energy consumption and improved tenant satisfaction. Refurbishing older buildings like 50 Post Office Square is a proactive way to capitalise on the prime locations of existing assets and grow the portfolio of desirable, high-performing, LEED-certified buildings with a comparatively lower environmental footprint than demolishing, rebuilding or building on a greenfield.

Some investors are not only considering the sustainability improvements that can be made at an asset or development level but are considering the integration of RPI principles in the development of new cities.

## Designing smart cities - Fujisawa Sustainable Smart Town, Japan

Panasonic Corporation has gained approval to go ahead with the construction of the Fujisawa Sustainable Smart Town (Fujisawa SST), a pioneering smart city project which has been planned with Fujisawa City and eleven other partner companies. The infrastructure development for the project has started in September 2012.



One of the companies involved in the project is Mitsui Sumitomo Trust Bank Limited which is responsible for designing an evaluation index for the Fujisawa Sustainable Smart Town that will enable an assessment of environmental value creation through the project. The indicators will assess:

- Performance against overarching environmental objectives - Fujisawa SST project is stretching environmental targets such as a 70% reduction in CO<sub>2</sub> emissions and 30% reduction in daily water use and 30% of renewable energy utilisation. The project is also setting safety/security targets such as 3 days of lifeline maintenance as a community continuity plan.
- The impact of individual measures on achieving the overarching objectives – measures that will be implemented to achieve the environmental targets (such as smart energy generation, green travel options) will be assessed in relation to their contribution to overall reductions. This assessment will take place at a town level (e.g. 'green axis' creation) and/or individual house level (e.g. effectiveness of home energy management system, etc.).
- Economic effects and environmental added value – the evaluation index will also seek to measure both the economic effects of the project such as income increase, cost reduction and risk reduction from the quantified effects of the project as well as the environmental added value.

The evaluation index will not only be used to provide feedback on the development plans as the project progresses, but also to explain the benefits to potential buyers on the value of houses.

# Responding to tenant demands

Investors and fund managers are increasingly integrating RPI principles within their asset and property management activities to respond to tenants being increasingly concerned about the environmental performance and operational efficiency of the assets they occupy. As utility prices increase, and labelling of efficient buildings increases, it is likely that this could reduce rent, increase void periods and lead to faster depreciation in less efficient assets due to reduced tenant demand.

## Green leases

Green leases are one way in which landlords and tenants are looking to formalise the agreement between them to cooperate to reduce the environmental impact of the building, which they own or occupy. Green leases are standard commercial leases with added environmental measures to promote environmental efficiency (e.g. reducing energy and water use, encouraging recycling, promoting green travel). There is no single type of green lease but instead they range from 'light green' (clauses to raise awareness and encourage collaboration) through to 'dark green' (clauses that require specific performance standards to be met with penalties if these are not achieved) to suit individual owners and tenants. Green lease clauses are not widespread in the commercial property market at present but their numbers are likely to increase in the future, and indeed some countries have made, or are proposing to make, such clauses a legal requirement.

## What does this mean in practice?

### A tenant's perspective on green leases - Deutsche Bank<sup>12</sup>

Deutsche Bank has stressed that by avoiding emissions from its facilities it can make steps toward achieving carbon neutrality. Deutsche Bank's global portfolio consists of approximately 3,000 buildings in 74 countries. These buildings account for more than 65 % of its global emissions. The refurbished Group Head Office in Frankfurt – Deutsche Bank Towers – highlights the environmental improvements that can be achieved in existing properties. The refurbishment has led to a 67% decrease in heating and cooling energy use and reduced water consumption by 74%. All of the Bank's major building projects seek to achieve LEED certification. This lowers costs, and improves its community standing, as well as reducing the environmental impact. Deutsche Bank has 19 LEED certifications to date.

#### Green Leases clauses

Deutsche Bank's 'Green Lease' programme ensures that the buildings it occupies meet commercial requirements and comply with sustainability aspects even if it does not own or operate them. Deutsche Bank negotiates green terms into tenancy agreements to encourage landlords to make more sustainable choices before it takes occupancy. Its green leases cover the consumption of resources within the entire building – not just the space Deutsche Bank occupies – and it requires that performance data be made available.

Newly concluded rental contracts contain 'green' clauses on energy and water efficiency criteria, air quality inside buildings, waste management and environmentally friendly cleaning of the interiors. In 2011, Deutsche Bank introduced a global green lease administration system that tracks Key Performance Indicators (KPI's) for its existing leases. These KPIs track environmental measures, including energy performance ratings, green cleaning, waste services, and sub-metering of energy and water. It continues to introduce green leases across its portfolio, particularly in those buildings that are targeted for LEED certification.

In 2012, Deutsche Bank will be using the green lease database to drive lease transactions and compliance where there are opportunities for improvement. Through its own commitment and co-operation with other organisations, it aims to make a contribution towards more sustainable facility management. Initiatives include:

- Establishing practical standards and instruments for 'Green Lease' agreements,
- Compiling a catalogue of sustainability criteria for real estate agencies
- Defining ecological selection criteria for new sites and their construction
- Demanding energy and environmental ratings for leased real estate properties so that lessees can compare sites
- Working with the Greenprint Foundation to establish global standards for reporting carbon emissions in buildings

## Working with tenants to achieve environmental objectives

Given the increasing importance of sustainability issues among tenants, there is a growing number of examples in which landlords have worked with tenants to make environmental improvements. These changes have also enabled landlords to retain existing tenants, while adding value to the asset.

### What does this mean in practice?

#### How improving environmental performance contributed to tenant retention - Pramerica Real Estate Investors<sup>13</sup>

Pramerica Real Estate Investors acquired the 206,000-square-foot Visseringlaan office building in The Hague, Netherlands, with more than half of the building leased to an agency of the European Union. As a government agency, the tenant was keenly interested in occupying a building with low carbon emissions. Constructed in 1980 with few upgrades over the years, the building's carbon footprint was unacceptably high. In advance of the lease expiration in a market with an office vacancy rate of 30%, the asset management team identified a mutual opportunity: providing a low carbon solution to retain the tenant and keep the property stabilised.

During the lease renewal process, Pramerica Real Estate Investors conducted a cost/benefit analysis that took into account the tenant absorption rate, lease term, income, marketing costs, market incentives, maintenance costs, refurbishment costs, capital investment of the low carbon upgrades, and environmental benefits.

After reviewing several scenarios, the business moved forward on a €1 million energy efficiency upgrade. Renovations included: installing new high-efficiency boilers, upgrading the ventilation and cooling system, enhancing the building management system, installing external sun blinds on all windows, and improving water efficiency.

The improvements significantly reduced the building's carbon footprint while adding nearly €2.2 million to its value. The upgraded ventilation has dramatically improved the building's air quality, provided the tenants with a superior working environment and helped to reduce their operating and consumption costs. Additionally, undertaking this strategy contributed to the anchor tenant's decision to renew its lease term, extended the life of the building, improved investor returns and reduced carbon emissions.

## Working with occupiers develop a standard to understand and compare the sustainability of commercial properties - Mitsubishi UFJ Trust and Banking Corporation

Following the significant humanitarian and economic impacts of the Great East Japan Earthquake (March 11, 2011), Mitsubishi UFJ Trust and Banking Corporation (MUTB) has been working with tenants of commercial property to understand the sustainability factors (environmental and social) that they consider important as part of their occupation of these buildings.

MUTB set up a committee of several academics and experts in this field, with the intention of using the tenant research to develop a standard which enables tenants to understand and compare the sustainability of commercial properties. MUTB hoped that through the development of such a standard they would be able to identify value in sustainable properties.

In the research, the tenants were asked to rate the aspects that they consider when they choose commercial buildings. The aspects were classified into eleven categories such as location, rent and expenses, floor size and shape, building specification, security, tenant comfort and productivity, flexibility, building management and environment and energy savings.

Given the recent earthquake, key issues for many tenants were the requirements that commercial buildings are capable of earthquake resistance, that they have emergency support, and that they are sufficiently flexible for business change. Other key issues included a desire for high energy efficiency which leads to reduce costs and electricity savings.

MUTB has used this research to develop a sustainability standard, which can be used to classify buildings according to their performance in relation to 28 assessment items. The standard is flexible, as weighting can be assigned according to tenant preferences. MUTB will be using the standard to assist its clients in making decisions about their commercial property occupation. The sustainability standard applies to both, tenants and owners.

### Building With User-Friendly Qualities

Providing Users with a variety of Business Qualities			
Point of view	Personnel	Management	Society (People)
<b>Business Qualities</b>	<ul style="list-style-type: none"> <li>Comfort (to ease stress caused by working, commuting and daily life)</li> <li>Ease of Work (well-equipped with IT)</li> </ul>	<ul style="list-style-type: none"> <li>Support for Risk Management (safety for personnel, ensuring continuation of important business)</li> <li>Support for Corporate Compliance (personnel's health, energy savings, low carbon society)</li> <li>Enhancement of Intellectual Productivity</li> <li>Conforms to Corporate Image</li> </ul>	<ul style="list-style-type: none"> <li>Improved Energy Efficiency (variety of measures for environmental protection and energy savings)</li> <li>Universal Design (ease of use for everyone)</li> <li>Contribution to Community</li> </ul>
<b>Specifications of Building</b>	<ul style="list-style-type: none"> <li>Good air-conditioning and lighting (controlled in small zones)</li> <li>Spacious workplace/recreational area with a view</li> <li>Employee lounge</li> <li>User-friendly lavatories</li> <li>Installation of a cafeteria, proximity to restaurants/shops</li> <li>Power supply</li> <li>Communication line</li> </ul>	<ul style="list-style-type: none"> <li>Earthquake resistance / seismic isolation / vibration control</li> <li>Emergency power system</li> <li>Disaster prevention equipment</li> <li>Flood prevention measures</li> <li>Smoking section</li> <li>Security</li> <li>CO<sub>2</sub> emissions reduction</li> <li>Entrance</li> <li>Size and shape of floor panel</li> </ul>	<ul style="list-style-type: none"> <li>Window control system / water supply / renewable energy</li> <li>Owner's attitude (natural resources saving, energy savings, longevity)</li> <li>Energy Performance Certification Programme (Tokyo)</li> <li>LEED/CASBEE</li> <li>Remove barriers in legal compliance</li> <li>Shelter (in the case of disaster)</li> </ul>

### Engaging with suppliers

Many property investors rely on third parties such as asset, property and facility managers to undertake the day-to-day management of their assets. Engagement with suppliers, along with clear standards, targets and deliverables set out within the contract is key to ensuring that everyone's interests are aligned.



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## What does this mean in practice?

### Implementing a Responsible Property Management strategy - Hermes Fund Managers

Hermes has put in place a structured responsible property management programme, which seeks to ensure that all external property managers operate in a responsible manner and facilitate the sharing of best practices between their property and asset managers. Some key aspects of this programme are shown below.

#### Minimum management requirements

Hermes' Property Management Requirements set out minimum requirements and best practices for how they expect their properties to be managed. They provide their Property Managers (PMs) with a simple checklist of actions that need to be followed. These include progress being monitored at quarterly meetings and assistance from their sustainability advisor. RPI-specific requirements linked to financial performance bonuses are also included in contracts with PMs.

#### Supporting tools

To assist PMs with an evolving programme of work, Hermes provides a suite of tools to monitor and report on progress. They provide tools to measure energy, water, waste, travel, and community engagement throughout the year. On an annual basis the company benchmarks their performance using Upstream's Operational Performance Benchmarking service to enable comparison vis-à-vis competitors.

The sustainability improvements identified through this comprehensive programme are analysed by the property managers, and, if appropriate, are included in their asset management strategies for implementation. This allows Hermes to deliver real sustainability improvements and cost savings across their portfolio.

#### Achieving goals faster and more efficiently

Building on past initiatives and good practices, Hermes has developed an RPI Centre of Excellence programme, which are used as exemplars for other property managers to help showcase successful initiatives, disseminate knowledge and share experiences. This approach has proven very successful and has shown that through active learning and capacity building, targets can be achieved faster and more efficiently.

# Driving innovation in RPI through collaboration and knowledge sharing

RPI is a relatively young and dynamic field. Industry standards and best practices are evolving, and many innovations in investment strategy and implementation are the result of formal and informal collaboration among key investors and other stakeholders.

There is a growing number of groups facilitating the exchange of information, supporting academic and practitioner research, and building networks of practitioners engaged in the field. The result has been a rapid growth in research and information exchange on topics such as the financial value of green building certification, energy performance and benchmarking, urban regeneration, green retrofit standards and tenant engagement.

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## What does this mean in practice?

### Establishing the Ghana Green Building Council - Actis

Actis is facilitating the adaptation of international standards to the specific climatic and socio-economic needs of East and West Africa. Tailoring critical sustainability factors to international green rating systems gives investors and tenants a real sense of how their buildings are performing against the critical issues in their locality. The system guides the design or retrofitting process, ensures resource efficiency, highlights the use of local materials, and enables a suitable social, cultural and economic outcome.

In West Africa Actis partnered with the World Green Building Council, the African Union of Architects, and its local development team to establish an internationally recognised Ghana Green Building Council to customise international standards (such as Green Star) that meet the region's environmental and social needs. For example, water shortages are a particular problem in Ghana and any relevant green rating scheme should give special consideration and weight to water conservation, recycling and reuse. Through this approach, specific factors can be addressed, including site issues relative to urban growth, water efficiency, non potable water utilisation, energy efficiency, solid waste management, local availability of construction material, and sourcing of imported materials.

These customised regional standards will enable realistic investment appraisal as Actis seeks to ensure that its real estate investments are appropriately suited for the environmental risks facing the region. With 70 million people in West Africa projected to move to cities over the lifetime of the properties that are currently being developed, Actis needs to make sure its buildings can continue to deliver value for money as resource scarcities mount. This means applying green standards that are suited to local needs.

Actis is adapting the Green star rating system to Ghana Actis's office development, One Airport Square, which will be the first and only Green Star certified green commercial building in Ghana. Actis is aiming for the development to obtain a 4 star rating. The building will comprise about 20,000 square metres of Grade A office space and will feature superior Mechanical, Electrical and Plumbing (MEP) systems, including 100% standby power generation capabilities, international standard parking provision, raised floors, air conditioning, and a well- designed lobby and other common areas.



One Airport Square will consume 40% less energy, and incur lower operating costs and less maintenance than other similar buildings. Window overhangs provide shade and reduce energy cooling costs, automatic presence sensors create high efficiency lighting where needed, centralised fresh air systems recover heat, and storage tanks on the roofs collect and recycle rainwater as potable water. Furthermore, the building orientation has been designed to maximise natural sunlight. Sourcing local materials such as concrete and steel and working with local contractors encourages social and economic growth in the vicinity and brings down the cost of imported materials.

Through the establishment of the Ghana Green Building Council, there has been knowledge transfer of international green building technologies to local Ghanaians while gaining essential insights on the ground from local development partners. Actis hopes that the development of a voluntary, internationally recognised green rating tool suited to local conditions will spur the market for sustainable green buildings in the region.

### The Better Building Partnership - UK collaboration between large real estate owners and managers

The Better Buildings Partnership (BBP) is an exclusive collaboration of London's leading commercial property owners and allied organisations, supported by the Mayor of London and the Greater London Authority. Their aim is to develop solutions to improve the sustainability of London's existing commercial building stock and achieve substantial CO<sub>2</sub> savings in support of the mayor's target of a 60% reduction by 2025.

The Better Buildings Partnership was successfully launched in December 2007 and its members are Blackstone Group, British Land Company, Canary Wharf, GE Capital Real Estate, Grosvenor, Hammerson, Henderson Global Investors, Hermes, Land Securities, Legal & General Property, PRUPIM, Quintain, Transport for London, and Workspace Group.

The BBP develops its solutions through a series of working groups, each of which takes up one main challenge facing the property market and attempts to develop a solution or toolkit that can help the market work to overcome it. Groups comprise BBP members, associate BBP members, industry groups as well as companies relevant to developing solutions.

The Working Groups are:

- Green Leases Working Group - produced and published a Green Lease Toolkit in April 2009, which is currently being used by BBP members and the wider industry.
- Sustainability Benchmarking Working Group - produced and published a Better Metering Toolkit in April 2011 providing an interactive guide designed to support both owners and occupiers in understanding the benefits of installing advanced metering systems in a building and the current options available. The working group also produced a Sustainability Benchmarking Toolkit in November 2009 outlining the challenges to benchmarking energy performance in commercial property.
- Sustainable Retrofit Working Group - produced and published a Low Carbon Retrofit Toolkit in May 2011 outlining the barriers and possible solutions through a low carbon retrofit roadmap to accelerate retrofit activity within the commercial property sector.
- Property Agents Working Group - Property Agents Working Group produced and published a Managing Agents Sustainability Toolkit in March 2011 providing an interactive reference guide which sets out a full range of sustainability services that an owner should consider, and that requires its managing agent to give to their clients. The Working Group also published a Transactional Agents Sustainability Toolkit in April 2012 that provides sales and letting agents with concise, clear information on the pros and cons of a comprehensive range of building elements. This practical reference guide allows them to successfully advise their clients on the sustainability of commercial space.
- Owner and Occupier Working Group - produced and published a Green Building Management Toolkit providing guidance and tools to support commercial property owners in setting-up and running a Green Building Management Groups.<sup>14</sup>

# Conclusion

The goal of the UNEP FI PWG and the UN-backed Principles for Responsible Investment is to facilitate the transition of RPI into real estate investment best practice. The increase of industry collaboration is, from this perspective, a welcome development, and its continuation is vitally important for the growth of the field of RPI.

From the investor's perspective, such collaboration will help to develop institutional capacity to create better RPI strategies and to put them into practice. This collaboration will also help to build capacity and spur innovation throughout the industry, so that industry-wide ESG investment performance improves, and the built environment becomes more sustainable. The UNEP FI PWG hopes to have increased the attention to and the awareness of RPI with this report by the means of exemplifying best practice case studies.

# References and Notes

- 1 Responsible Property Investment refers to the integration of environmental, social and governance issues into investors' decision-making regarding real estate.
- 2 <http://www.calpers.ca.gov/eip-docs/about/video-web-center/videos/pension-investments/mercer-study-allocation.pdf>
- 3 <http://www.mercer.com/climatechange>
- 4 Through the Looking Glass, how investors are applying the results of the climate change scenarios study,p11, Mercer, 2012
- 5 PRUPIM is a subsidiary of Prudential plc, a company incorporated in the United Kingdom ("Prudential UK"). Prudential UK is not affiliated in any manner with Prudential Financial, Inc, a company whose principal place of business is in the United States of America.
- 6 <http://gresb.com/content/GRESB-Report-20112.pdf>
- 7 NABERS, 2011 Energy for Offices – Future proofing the rating scale
- 8 Sonae Sierra, 2011 Social, Environmental, Economic and Social Report
- 9 Carbon Trust, Energy management: A comprehensive guide to controlling energy use, [http://www.carbontrust.com/media/13187/ctg054\\_energy\\_management.pdf](http://www.carbontrust.com/media/13187/ctg054_energy_management.pdf)
- 10 Detailed information on this tool as well as live Pulse visualisations are available from Investa's Green Buildings Alive website: [www.greenbuildingsalive.com](http://www.greenbuildingsalive.com)
- 11 <http://www.un.org/en/globalissues/humansettlements/>
- 12 [http://www.banking-on-green.com/en/content/sustainability\\_projects\\_initiatives/green\\_buildings.html](http://www.banking-on-green.com/en/content/sustainability_projects_initiatives/green_buildings.html)
- 13 Pramerica Real Estate Investors and Pramerica Investment Management are trading names of Prudential Investment Management, Inc., the principal asset management business and an indirect subsidiary of Prudential Financial, Inc. ('Pramerica Financial'), a company incorporated and with its principal place of business in the United States. Pramerica Financial is not affiliated in any manner with Prudential plc, a company incorporated in the United Kingdom.
- 15 These toolkits are all available on the Better Building Partnership website: <http://www.betterbuildingspartnership.co.uk/>

# About UNEP FI and its Property Working Group

The aim of the UNEP FI Property Working Group is to encourage property investment and management practices that achieve the best possible environmental, social and financial results.

The members of the group are:

Actis, UK  
Aviva Investors (Aviva plc), UK  
Allianz Real Estate (Allianz SE), Germany  
AXA Real Estate Managers (AXA – Group Management Services), France  
Bentall Kennedy, USA & Canada  
BNP Paribas Real Estate Investment Services (BNP Paribas Fortis), France  
British Columbia Investment Management Corporation (bcIMC), Canada  
Caisse des Dépôts, France  
CalPERS, USA  
Colonial First State Global Asset Management (Commonwealth Bank of Australia), Australia  
F&C REIT Asset Management, UK  
Infrastructure Leasing & Financial Services, India  
Investa Property Group, Australia  
Lend Lease, Australia  
Mitsubishi UFJ Trust & Banking Corporation, Japan  
Portigon, Germany  
PRUPIM (Prudential plc), UK  
The Link REIT, Hong Kong  
The Sumitomo Trust & Banking Co. Ltd., Japan  
Sustainable Development Capital LLP, UK  
UBS Global Real Estate (UBS AG), Switzerland

## **United Nations Environment Programme Finance Initiative**

The United Nations Environment Programme Finance Initiative (UNEP FI) is a global partnership between the United Nations Environment Programme and the private financial sector. UNEP FI works closely with over 220 financial institutions that are signatories to the UNEP FI Statements, and a range of partner organisations, to develop and promote linkages between the environment, sustainability and financial performance. Through regional activities, a comprehensive work programme, training activities and research, UNEP FI carries out its mission to identify, promote, and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations.

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## About the UNEP Finance Initiative

The United Nations Environment Programme Finance Initiative (UNEP FI) is a strategic public-private partnership between UNEP and the global financial sector. UNEP FI works closely with over 200 financial institutions that are Signatories to the UNEP FI Statements, and a range of partner organisations, to develop and promote linkages between the environment, sustainability and financial performance.

Through a comprehensive work programme, regional activities, training and research, UNEP FI carries out its mission to identify, promote and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations.



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Innovative financing for sustainability

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