

SUSTAINABLE REAL ESTATE INVESTMENT

IMPLEMENTING THE PARIS CLIMATE AGREEMENT: AN ACTION FRAMEWORK

February 2016



Glossary

ACEEE	American Council for an energy-efficient Economy
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
BBP	Better Buildings Partnership
BREEAM	Building Research Establishment Environmental Assessment Methodology
CASBEE	Comprehensive Assessment System for Built Environment Efficiency
COP	Conference of the Parties
EMS	Environmental Management System
EPRA	European Public Real Estate Association
ESG	Environmental, Social and Governance
GRESB	Global Real Estate Sustainability Benchmark
GRI	Global Reporting Initiative
ICGN	International Corporate Governance Network
IGCC	Investor Group on Climate Change
IIGCC	Institutional Investors Group on Climate Change
INCR	Investor Network on Climate Risk
INREV	European Association for Investors in Non-Listed Real Estate Vehicles
ISA	International Sustainability Alliance
LEEDS	Leadership in Energy and Environmental Design
NABERS	National Australian Built Environment Rating System
PRI	Principles for Responsible Investment
RealPAC	Real Property Association of Canada
REIT	Real Estate Investment Trust
RICS	Royal Institution of Chartered Surveyors
SASB	Sustainability Accounting Standards Board
UNEP FI	United Nations Environment Programme Finance Initiative

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EXECUTIVE SUMMARY

Sustainable real estate investment Implementing the Paris climate agreement: An action framework

This framework is designed to help real estate investment stakeholders identify key drivers and overcome the most common barriers for action to integrate ESG and climate change risks into their decision making processes. It has been carefully prepared with input from many knowledgeable industry experts and resources produced over the past five years.

After Paris, time for action.

Climate

On 12th December 2015 history was made in Paris when 195 countries agreed to work together to substantially curb global warming^①. As investment buildings consume around 40% of the world's energy and contribute up to 30% of its annual GHG emissions, the people who manage global real estate assets - valued at around US\$50 trillion^② - are therefore one of the most important decision making groups on earth to hear this clarion call.

Fiduciary duty

As part of wider efforts to implement the Paris Agreement, every real estate asset owner, investor and stakeholder must now recognise they have a clear fiduciary duty to understand and actively manage environmental, social, governance (ESG) and climate-related risks as a routine component of their business thinking, practices and management processes.

Long term

Failure to actively address these risks will not only hinder global efforts to address the climate challenge, but will also hurt long-term returns, undermine economic sustainability and reduce the calibre of the infrastructure passed to future generations.

Time to act

The importance that investors, regulators, other stakeholders and occupiers place on strategies to curb energy consumption and carbon pollution can only increase from here. So no matter where each organisation is on the journey to address these risks, now is the time to review investment programmes and benchmark current practices.



① Paris Climate Agreement, at COP 21, where 195 nations agreed to limit global average temperature rise to well below 2.0 degrees Celsius (3.6 degrees Fahrenheit), with an aspiration to limit it to 1.5 degrees Celsius above pre-industrial levels, and phase out fossil fuels by the end of the 21st century.

② La Salle Investment Management (2015). Research & Strategy. Available here

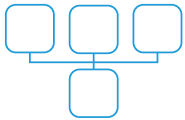
Why use this guide?



Explains how informed and active asset management around these issues represents a clear business opportunity

to improve returns and future-proof the value of real estate investments. Evidence shows that more efficient “greener” properties incur lower operating expenses, support efforts to achieve

top of market rents, have fewer vacancy and void periods, are at lower risk of mortgage default and meet the increasing needs of occupiers to provide living and working space that helps to improve employee engagement, health, and productivity.



Offers a Framework for all enabling alignment and interaction along often complex supply chains as there is no size barrier for organisations to addressing ESG and climate risk.

Because it drives enhanced risk adjusted returns at both the asset and portfolio level. Moreover, rather

like low carbon technologies, the cost of integrating ESG and climate change risks, is falling all the time. This framework addresses what can be done within each component of the often complex supply chains that support property development and management in order to set clear expectations and incentives which will align the actions of consultants, managers and service providers.



Distils material from many sources into one guide that is easy to use and helps every type of real estate investor make sense of available resources.

Dozens of detailed publications and potential practices have been reviewed so this guide highlights a common set of requests likely to have greatest impact. Different sections are directed at specific

audiences and of all levels of experience including: Asset Owners and Trustees and their Investment Advisors; Direct Real Estate Investment Managers and Property Companies and their Real Estate Consultants, and Real Estate Equity and REITS, Bond and Debt Investors and their Financial Advisors.



Emphasises the physical impacts of climate change and highlights the potential socio-economic benefits of integrating climate and ESG

:By the year 2070, 150 million people will live in large coastal cities at risk of coastal flooding which have \$35 trillion worth of property— likely to be worth around 9 percent of the global GDP. Moreover, as more people migrate toward these densely populated and predominantly low-lying

areas, city governments will be working with the property industry to make good on their own COP21 pledges to mitigate climate risk and reduce the impact that buildings have on the environment. How investors choose to manage the built environment can also deliver socio-economic benefits given its materiality in terms of share of global wealth, energy use, green house gas emissions, and its climate, health or productivity impacts.



Provides investors and their advisors/ consultants with guidance on how to move from inquiry and requests for disclosure, to prescriptive requests focused on results:

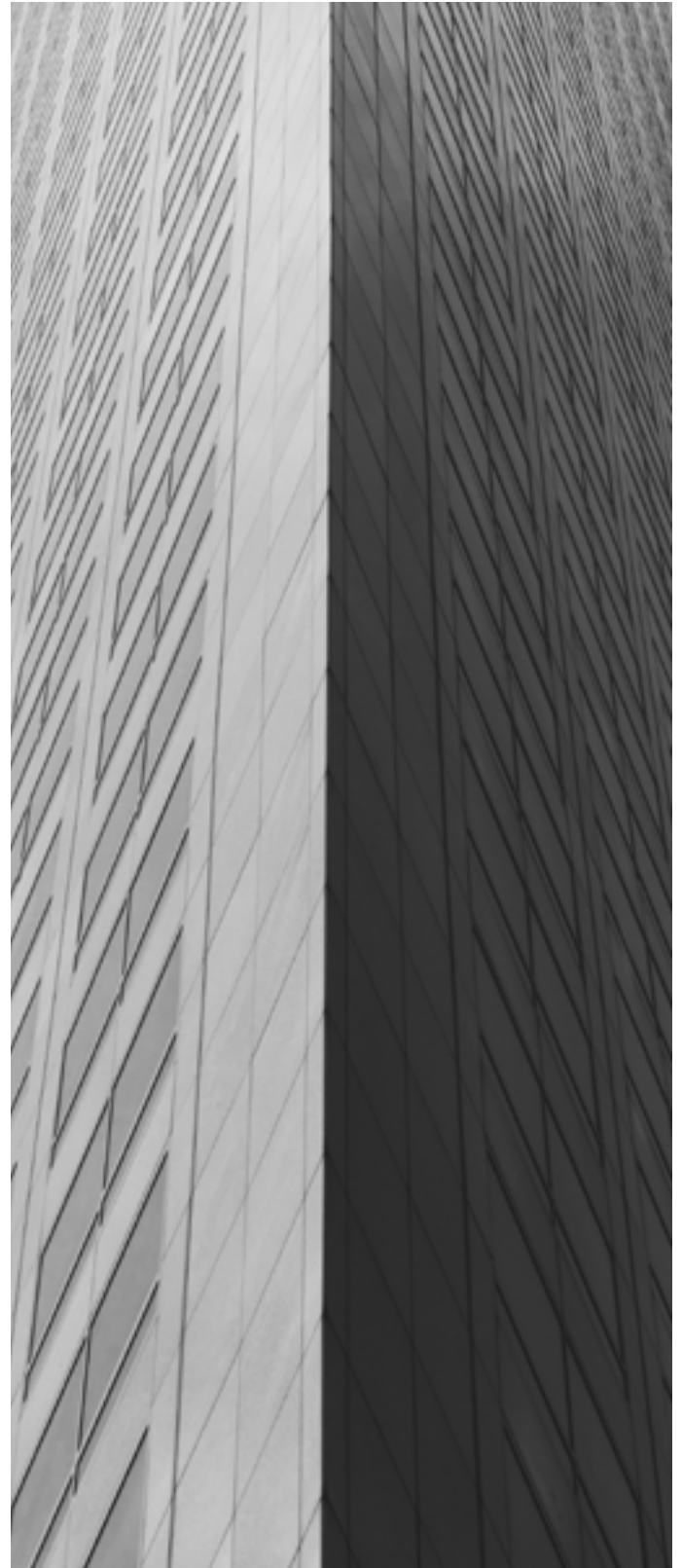
this includes giving investment managers and consultants more

direct and prescriptive guidance, providing direct feedback on both programmes and performance and engaging directly with real estate investment managers and consultants.

Framework for action: A step by step guide for property investors

This framework sets out the measures and actions needed to support the integration of ESG and climate risks into the business of real estate investment and management. The approach taken is designed to transform aspirational measures into default practices for all stakeholders in the property sector.

The info-graphic hereafter provides a summary of the key steps in the investment process, must do actions within this framework and recommended resources to guide real estate investors and their advisers throughout the entire lifecycle of a real estate investment portfolio.



Sustainable Real Estate Investment

Implementing the Paris Climate Agreement: An Action Framework

Audiences
Real Estate Investors



Owners & Advisers



Direct Investor



Equity, Bonds, Debt



All

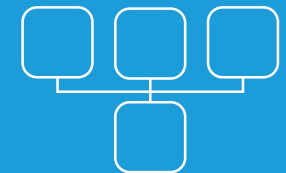
WHY USE THIS GUIDE ?



Explains how informed and active asset management around climate and ESG represents a clear business opportunity.



Emphasises the physical impacts of climate change and highlights the potential socio-economic benefits of integrating climate and ESG.



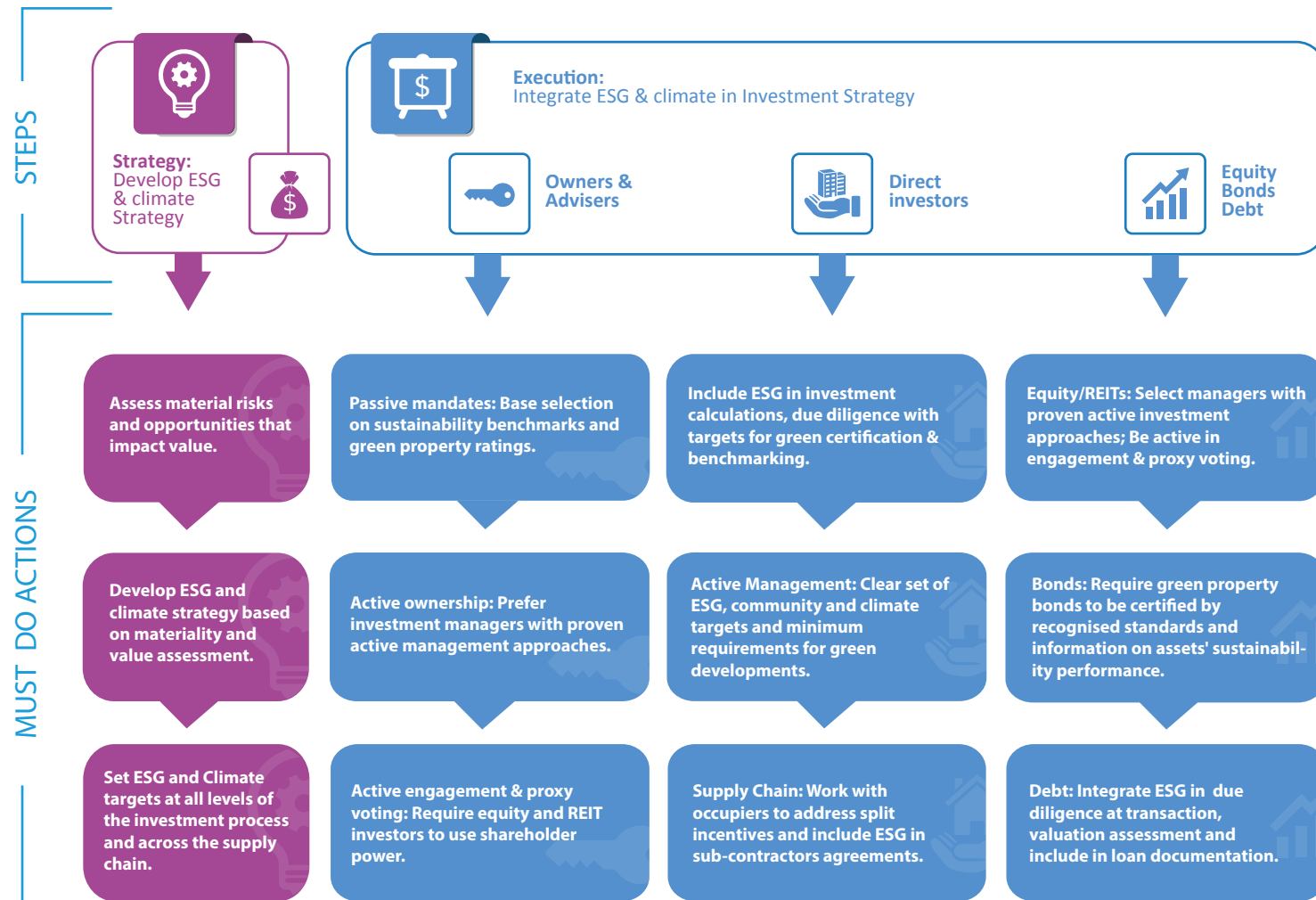
Offers a Framework for all enabling alignment along often complex supply chains, as there is no size barrier for organisations addressing ESG and climate risks.



Provides investors with guidance for managers and advisors to move from inquiry and disclosure to prescriptive requests focusing on performance.



Distils material from many sources into one guide that is easy to use and helps every type of real estate investor make sense of available resources.



RECOMMENDED RESOURCES

'Investing in a time of climate change' Mercer 2015	'The-21st-century-investor-ceres-blueprint-for-sustainable-investing' Ceres 2013	'Advancing Responsible Business in Land, Construction and Real Estate Use and Investment', RICS / UN Global Compact, 2015	'Developing an asset owner climate change strategy', PRI 2015	ICGN model mandate initiative ICGN 2012	'G4 Sustainability Reporting Guidelines: Construction and Real Estate Sector Disclosures' GRI 2015, Global.	'PRI Policy Frameworks for Long-Term Responsible Investment: The Case for Investor Engagement in Public Policy', PRI 2015, Global
'Developing an asset owner climate change strategy', PRI 2015	'Advancing Responsible Business in Land, Construction and Real Estate Use and Investment', RICS / UN Global Compact, 2015	'Trustee's Guide: Protecting value in real estate through better climate risk management' IIGCC 2014	'Climate Change Investment Solutions Guide', IIGCC 2015	'Aligning expectations: guidance for asset owners on incorporating ESG factors into manager selection, appointment and monitoring', PRI 201	'PRI reporting framework – Asset Owners, Direct, Equity and Debt investments', PRI, Global	
'Climate Change Investment Solutions Guide', IIGCC 2015	'Trustee's Guide: Protecting value in real estate through better climate risk management' IIGCC 2014	'Assessing climate change risks and opportunities for investors - Property and Construction Sector' IGCC 2013	'The-21st-century-investor-ceres-blueprint-for-sustainable-investing', Ceres 2013	'Sustainability metrics: translation and impact on property investment and management' UNEP FI et al 2014	'Global Real Estate Sustainability Benchmark' GRESB 2015 (annually)	
'The-21st-century-investor-ceres-blueprint-for-sustainable-investing' Ceres 2013	'Investing through an adaptation lens' IGCC 2015	'Unlocking the energy efficiency retrofit investment opportunity' UNEP FI 2014	Green Property Bonds Standards, Climate Bonds Initiative 2015	'Greening the building supply chain' UNEP SBCI 2014, Global	'Sector led operational benchmark and indexes for Direct Investors, Real Estate Companies and their Advisers	
'Investing through an adaptation lens', IGCC 2015		'Sustainability and commercial property valuation - Professional Guidance Note, Global', RICS 2013	'Green bond guidance for real estate sector' GRESB	'Global Real Estate Sustainability Benchmark' GRESB 2015 (annually), Global		

Why integrate environmental, social, governance and climate risks into investment decisions?

How we choose to manage the real estate that constitutes our built environment is of crucial importance, both financially and socially. There are material asset value improvements and long-term risk reductions that can be achieved at limited cost through the integration of environmental, social and governance (ESG) and climate risks into real estate investments.

The buildings sector consumes around 40% of the world's energy and contributes up to 30% of global annual GHG emissions. At the same time, the global universe of investable real estate is worth about US\$50 trillion^①. On the heels of the historic Paris Climate Agreement to limit global average temperature rise to well below 2°C (3.6 degrees Fahrenheit), with an aspiration to limit it to 1.5°C above pre-industrial levels, and phase out fossil fuels by the end of the 21st century, the importance that investors, regulators, other stakeholders and occupiers will place on strategies which reduce energy consumption and carbon pollution will continue to rise. Supporting the real estate sector to accelerate the integration of ESG and climate risks into investment decisions and to scale up energy and climate-related investments, including retrofitting, is a key factor in ensuring these goals are achieved.

In real estate, the value proposition has been proven through numerous research publications, expert assessments and practical case studies. More efficient and "green" properties can reduce operating expenses, support efforts to achieve top of market rents, reduce vacancy and void periods, lower risk of mortgage default and meet the increasing needs of occupiers who are using their offices to make their employees more engaged, healthier, and productive. Given the business case and further supported by the in-depth study by UNEP FI et al; which shows that fiduciary duty is not a barrier or excuse to not consider ESG in investment decisions, there should be no more doubt about the timeliness and need for this framework. The following are the key components of the business rationale to integrate ESG and climate risks into real estate asset management and investment processes:

Material opportunities to enhance investment performance

There is growing evidence in multiple geographies that a climate-friendly and sustainable real estate sector can both preserve and increase asset value. Indeed, there is growing market, expert and academic evidence of an emerging correlation between green building characteristics and investment performance. Buildings, which do not have such characteristics, may in some cases suffer from 'brown discounting'. The main drivers that explain this are:

- The understanding that ESG and climate externalities are material in size and, while initially hard to quantify for each investment and stakeholder, impossible, now, to ignore.
- The growing evidence that connects "green real estate" positively with investment fundamentals; including increased client demand, lower void lengths, lower obsolescence, reduced rates of depreciation, lower operational costs, and higher liquidity; recent data also shows that green and energy certified office and residential buildings have a lower risk of mortgage default compared to that of non-certified properties.
- Tightened regulation, posing a real threat of regulatory obsolescence.

Moreover, increasingly, the real estate sector is recognising the commercial potential of energy efficiency and climate related investments which both reduce energy consumption, improve energy productivity and efficiency and associated expenditures, as well as exposure to current and future climate change legislation^②. The following market trends illustrate this shift:

- Technology and operating processes are currently being used to improve energy efficiency of existing building portfolios by a further 2-4% each year and are estimated to continue to do so for the foreseeable future.

Evidence of impact to investment performance: ACADEMIC & MARKET RESEARCH

PRI 'The environmental and financial performance of buildings' – 2012: "On the whole, evidence from the US, the Netherlands and Singapore has begun to demonstrate a convincing case that the financial performance of certified office buildings is superior to that of non-certified properties."

Impact of US LEEDS and Green Energy Star: Eichholtz, Kok, Quigley, 2011. Eichholtz, Kok, Younder, 2012, US: Rental and sales premium for green certified LEEDs, Energy Star buildings .

Pat McAllister and Franz Fuerst. (2011a), Eco-labeling in Commercial Office Markets: Do LEED and Energy Star Office Obtain Multiple Premiums?, 1999-2009 – And (2011b), Green Noise or Green Value? Measuring the Effects of Environmental Certification on Office Values. 1999-2008

Value impact in the UK: Chegut, A., Eichholtz, P., & Kok, N. (2011), 2000-2009, UK: Supply, Demand, and the Value of Green Buildings shows positive correlation

MSCI/IPD indices, 2014 & 2015: out-performance for Australia NABERS, and France HQE certified buildings due to capital appreciation

Japan CASBEE 2015: outperformance shown in research carried out by Japan's Smart Wellness Office Research Committee, showed that CASBEE rated properties delivered higher compared average rents than non-CASBEE rated assets, with out-performance of 3.64%. When based on CASBEE ratings, properties with higher CASBEE ratings delivered higher rents with out-performance of 1.70% per rating (S, A, B+, B-, C or non-CASBEE).

① La Salle Investment Management (2015). Op. Cit.

② Non-exhaustive references: PRI (2012) 'The environmental and financial performance of buildings; Eichholtz, Kok, Quigley (2011 & 2); Eichholtz, Kok, Younder (2012); EU Commission (2013); MSCI indices (2014 & 2015). On mortgage risk see: An X and Pivo G, Default Risk of Securitized Commercial Properties: Do Sustainability Property Features Matter, Real Estate Research Institute Conference Paper, (2015); Kaza N, Quercia RG, and Rian CY, Home Energy Efficiency and Mortgage Risk, Cityscape 16, 1, (2014)

③ Frankel, Ari (2015). Green means go – But what colour is the light? RI Insight, Responsible Property Investment, Oct 15

- Over the long-term, these efficiency gains drive reduced operating costs for commercial and residential buildings, resulting in enhanced asset values.
- New buildings can readily be designed to use 30-50% less energy than required by most 2005 energy codes and increasingly can achieve zero net energy consumption at ever lower investment costs.

Regulatory changes affecting investors

With the adoption of the Paris Agreement at COP21, we can expect all ratifying countries to increasingly pursue strategies aimed at reducing GHG emissions and transitioning towards a low-carbon economy. The investment community will be impacted through more regulation as countries implement their nationally determined action plans, and there will be a stronger focus on the carbon footprints of investments and their exposure to further regulation and, potentially, restrictions on business expansion.

Similarly, we can expect the analyst community to be placing greater emphasis on carbon risks and the possibility of stranded assets in analysing publicly traded securities. This is likely to give way to a spill over effect where all entities seeking investment capital, whether public or private, are analysed from a climate perspective. We can expect to see globally growing requirements for mandatory disclosure, benchmarking and public dissemination of carbon production data from private entities and utilities, as that information can be used to provide a baseline for cap and trade systems and support climate regulation. For those jurisdictions that choose a carbon tax over a cap and trade system, the impact of such a tax will also be a focus of analysts and investors.

There is an increasing community expectation that corporations and investment funds will take into account ESG issues. This trend has grown considerably since the introduction of the Principles for Responsible Investment in 2006. That expectation is particularly prominent in the pension fund and superannuation sector, with growing pressure on funds to allocate their investments to sustainable business organisations. In parallel, investors in listed companies and stock exchanges themselves are demanding greater transparency and reporting on “externalities” - such as ESG and climate - whose impacts are often invisible in standard financial accounts and yet economically material.^①

The following examples highlight this regulatory trend which can be observed in Europe, the US, China, Japan, Brazil and Australia:

- In Europe, the EU non-financial reporting directive on disclosure of non-financial and diversity information is driving integrated reporting and disclosure of ESG and climate risks.
- In Australia, SASB envisions a world where a shared understanding of corporate sustainability performance allows companies and investors to make informed decisions that drive value and improve sustainability outcomes^②. The policy framework is evolving to mandate more transparent disclosure across numerous jurisdictions. New reporting guidelines and regulations from ASIC and the ASX Corporate Governance Council will have implications for companies’ sustainability reporting.
- Japan published its Corporate Governance Code requiring listed companies to take appropriate measures to address sustainability issues including social and environmental matters. The Code forms an exhibit of Tokyo stock exchange securities listing regulations and the rule entered into force on 1 June 2015.

In order to create and sustain long-term value, and to avoid losses, many institutional investors and their stakeholders have already recognised it as their fiduciary duty to understand and actively manage these factors. By integrating ESG and climate risks into their businesses, real estate investors are better able to understand and actively manage these market shifts, including occupier preferences and changing behaviour, market externalities, new regulatory frameworks and legal requirements. Failing to consider ESG integration is a failure of fiduciary duty.^③



‘Fiduciary Duty in the 21st century’, UNEP FI, PRI, UNGC and UNEP Inquiry 2015

The report examines the reasons why investors are not systematically integrating ESG as part of their fiduciary duty and proposes practical actions for institutional investors and policy-makers to address these barriers.

- Fiduciaries need to be able to show that they have identified and assessed the risks (to companies and to their portfolios). In the case of climate change, for example, this would require them to:
- Show that they have recognized relevant risks.
- Analyse how climate change might affect investment returns over the short, medium and long-term.
- Explicitly manage the risks, and not assume that the risks are automatically managed by other risk management strategies.
- Interrogate and challenge the individuals or organisations (e.g. investment managers, companies) to ensure that these risks are being effectively managed.
- Establish processes that enable them to demonstrate the actions they have taken.



^① European Commission (2014). Directive 2014/95/EU as regards disclosure of non-financial & diversity information by certain large undertakings and groups.

^② SASB (2015). <http://www.sasb.org>

^③ UNEP FI et al. (2015). Fiduciary Duty in the 21st Century.

Productivity and socio-economic benefits to society

Green buildings provide benefits to their occupiers: Working in buildings with good air quality and high levels of daylight has been shown to reduce absenteeism, improve productivity and concentration, reduce stress levels and achieve an overall increase in user wellbeing. Such improvements are proven to translate into financial benefits. A EU study found that health benefits from energy efficiency improvements in buildings could be worth €40-80bn a year^②. Similarly, a study in the US found the potential benefits of improved indoor air quality and healthier workplaces to be worth US\$17-30bn a year, with additional savings of US\$20-60bn from improved employee productivity^③.

In addition, investment in responsible real estate can deliver significant benefits to support economic and social growth. European studies have shown that improving energy efficiency of new and refurbished buildings in Europe by 20% could create over 750,000 jobs by 2020 for an investment of around €40 billion per year. In the US, ACEEE^④ notes that for every US\$1 million invested in the energy efficient renovation of buildings 21 jobs can be supported for 20 years – a considerable net improvement over other comparable infrastructure investments. This is an important gain for society, not least in light of the prevailing levels of unemployment, especially among the young. It would also help stimulate the construction industry and support the real estate market in the long term.

Near and long term physical impacts of climate change

There is global consensus, highlighted by the Paris Climate Conference, COP 21, that it will be less expensive to invest and regulate climate change today than to do nothing, recognising that the risks of uncontrolled climate change are real and costly to society.

The real estate sector is highly exposed to extreme weather events and rising sea levels. Estimates show that by 2070, 150 million people in the world's large port cities will be at risk from coastal flooding, along with US\$35 trillion worth of property—an amount that will equal nine percent of global GDP^⑤.

The medium to long term risks of climate obsolescence, increasing insurance costs and extreme weather events are the drivers for the need for an adaptation strategy to manage these uncertainties in the real estate investment business. The “cost of doing nothing” is already evident with resulting monetary losses relating to real estate and infrastructure that have tripled over the last decade: Global direct losses recorded by re-insurance companies amounted to an average of around US\$150 billion annually between 2002 and 2012^⑥.

Moreover, as global population continues to migrate toward these very cities, governments and all stakeholders in the global property industry will be working together - not only reducing the impact that buildings have on the environment, but also mitigating the impact that the changing environment has on these densely populated low-lying areas and the buildings within.

Good momentum to date, significant scaling up required

There is good momentum in the real estate industry and some progress already to report. Property fund managers have taken steps to organise and proliferate best practices. There has thus been a significant amount of activity, initiatives and energy dedicated to building a better understanding of these issues and identifying various approaches to mitigate them and take advantage of the opportunities arising from ESG and climate change. This work has led to the development of considerable and detailed knowledge and the production of guidance, frameworks and publications to guide investors across their investment processes. Given that it can indeed be confusing for newcomers facing the sheer amount of literature available today and to understand its relevance to specific investment strategies and geographical locations, we are seeking to make this publication serve as a platform to make sense of and disseminate this knowledge globally.

At the individual level, some of the world's largest institutional investors have already issued energy or carbon reduction targets for their real estate portfolios, sending clear signals that the time for further action is upon us^⑦. As COP21's impact makes its way through the investment universe, more such targets will be issued. Arguably, this is the most

important step investors can take, as it unleashes and creates demand for many of the steps laid out in this guide. Investment managers have also actual results to show with a number of real estate owners across geographies who have already demonstrated it is possible to drive down year-over-year carbon emissions from energy consumption at their properties^⑧.

At the global level, the G20 work leading to COP21 identified policy and markets-led pathways which can together deliver this up-scaling and over 100 banks from 42 countries as well as around US\$4 trillion in investment managers formally endorsed their support and commitment to adapt their business processes in recognition of this opportunity as announced at the COP21 in December 2015.

The scale of the investment opportunity in energy efficiency building retrofits globally is around US\$300 bn annually by 2020 and supported by a robust business case^⑨. However, while considerable evidence shows that climate change, energy security and resource scarcity pose clear investment risks to and create significant opportunities for real estate investments, current investments levels are well below the optimum economic and societal rates. Indeed, the current rate of private sector investments flowing into this opportunity is just a fifth of that which is required to stay within the below 2°C pathway^⑩.



① Renovate Europe (2015). Multiple benefits of investing in energy efficient renovation of buildings- A study by Copenhagen Economics.

② Fisk, William J. (2000). Health and productivity gains from better indoor environments and their relationship with building energy efficiency. Annual Review of Energy and the Environment, Vol. 25, pp. 537 – 566.

③ ACEEE factsheet (2012). How does Energy Efficiency Create Jobs.

④ Nicholls, R. J. et al. (2008). Ranking Port Cities with High Exposure and Vulnerability to Climate Extremes: Exposure Estimates. OECD Environment Working Papers, No. 1, OECD Publishing

⑤ Münchener Rückversicherungs Gesellschaft (2013). Topics Geo: Natural catastrophes 2012 - Analyses, assessments, positions. München, p.52

⑥ For example, among the largest pension funds: CalPERS (20%), APG (25%)

⑦ These groups include among many others: the ULI Greenprint Center for Building Performance, the Toronto, London and Sydney Better Buildings Partnerships, the White House Better Buildings Challenge, the Sustainable Building Alliance.

⑧ McKinsey & Company (2009). Opt. Cit.

⑨ Energy Efficiency Financial Institutions Group (EEFIG) (2015). Op. Cit.

How to integrate ESG and climate risks: A framework for action

We recognise that for real estate investors to support the achievement of the meaningful targets set out in the Paris Climate Agreement, in a manner that protects and enhances value in the world's largest asset class, will require sound execution. To support this aim, we have produced a step-by-step operational framework that Real Estate investors can apply systematically to integrate ESG and climate risks factors into their investment processes. For some, they are just getting started. No matter at what point one is along the ESG journey, this framework will be effective.

Audience

The measures which are laid out in the framework are intended to “flip the switch” – meaning that, based on the evidence provided in terms of risks and opportunities, rather than being aspirational, they should become default practice required from investors to ensure financial performance is secured and enhanced and for investors to comply with their fiduciary duties.

This investor framework addresses three specific investor audiences within the real estate investment space:



Asset Owners and Trustees and their Investment Advisors,



Direct Real Estate Investment Managers and Property Companies and their Real Estate Consultants,



Real Estate Equity and REITs, Bond and Debt Investors and their Financial Advisors.

This guide was written to help the above identified stakeholders move past the most common barriers and identify the drivers for the integration of ESG and climate risks into decision making processes. The most common barriers for the investor audiences are identified as:

- **Too much information or don't know where to start:** This framework distils dozens of detailed publications and potential practices to highlight the ones which should have the highest impact and are most easily implementable.
- **Uncertain on most relevant actions to take:** Most publications have to date focused almost exclusively on inquiry rather than on more concrete actions. This framework presents a common set of the most impactful requests which the investor audiences should make for themselves and of their fund managers and REITs.
- **Incomplete feedback loops and supply chain integration:** Integrating ESG into real estate investments involve many interconnected organizations, and can rarely be accomplished purely by internal change within one organisation. Therefore, in addition to a set of actions, clear expectations are provided to get alignment with consultants, managers and service providers.

Framework and clear set of actions

To achieve this aim, for each of the three audience a tailored investor framework has been developed based on the experience of leading practitioners in the sector. The investor framework is built on five key steps that cover the entire lifecycle of an investment portfolio. Each step has a clear set of actions that should be implemented. The intent is that upstream stakeholders understand the specific items and actions which they themselves can take, and what their downstream partner could reasonably be asked to do as a matter of course, i.e. whereby the default practice is to implement those actions, or justify why they are not feasible.

The five key elements and underlying actions, summarised in the infographic hereafter, do not need to be taken sequentially. The steps are laid out logically, from one to the next, to help promote understanding of how they fit together and reinforce each other, but they can each live on their own.

Each step of this investor framework is supported by recommended actions that can be applied systematically by each specific investor audience. The project team recognises that due to resource constraints individual stakeholder may only be able to take a limited number of actions. To that end, the framework identifies specific actions that investors should take to start integrating ESG and climate risks as well as those that they could take if they wish to deepen their integration with investment strategies. All are ones which the stakeholders very well should know about, and those who are leaders will very likely be acting upon many of the “could” actions.

Making sense of resources: tool mapping

To tackle the over-abundance of tools, resources and information published over the 5 years, the framework helps make sense of these valuable resources and focus the attention as to where to start. To that effect, the investor framework directs the reader to the relevant resources and tools to help implement each of the steps. The tools and publications are summarised for each target audience and their specific relevance in each step of their real estate investment process is illustrated.

The mapping and synthesising of the global and regional resources available is provided in Annexes and selected resources by audience for each step are included throughout this framework. They are illustrated through a ‘Resource mapping’ graph, available in annex, acting as simple and graphic guides to make sense of, and navigate through, the practical knowledge available to real estate practitioners. The Annex to this work contains a full resource mapping methodology and further details on this process.

The integration of these steps within the existing investment and asset management strategies will improve transparency and provide a robust platform to integrate ESG and climate risk and share this data among the various organisational levels of the investment company.

Sustainable Real Estate Investment

Implementing the Paris Climate Agreement: An Action Framework

Audiences
Real Estate Investors



Owners & Advisers



Direct Investor



Equity, Bonds, Debt



All

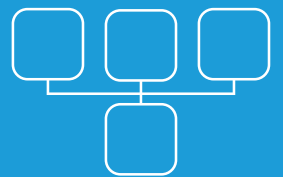
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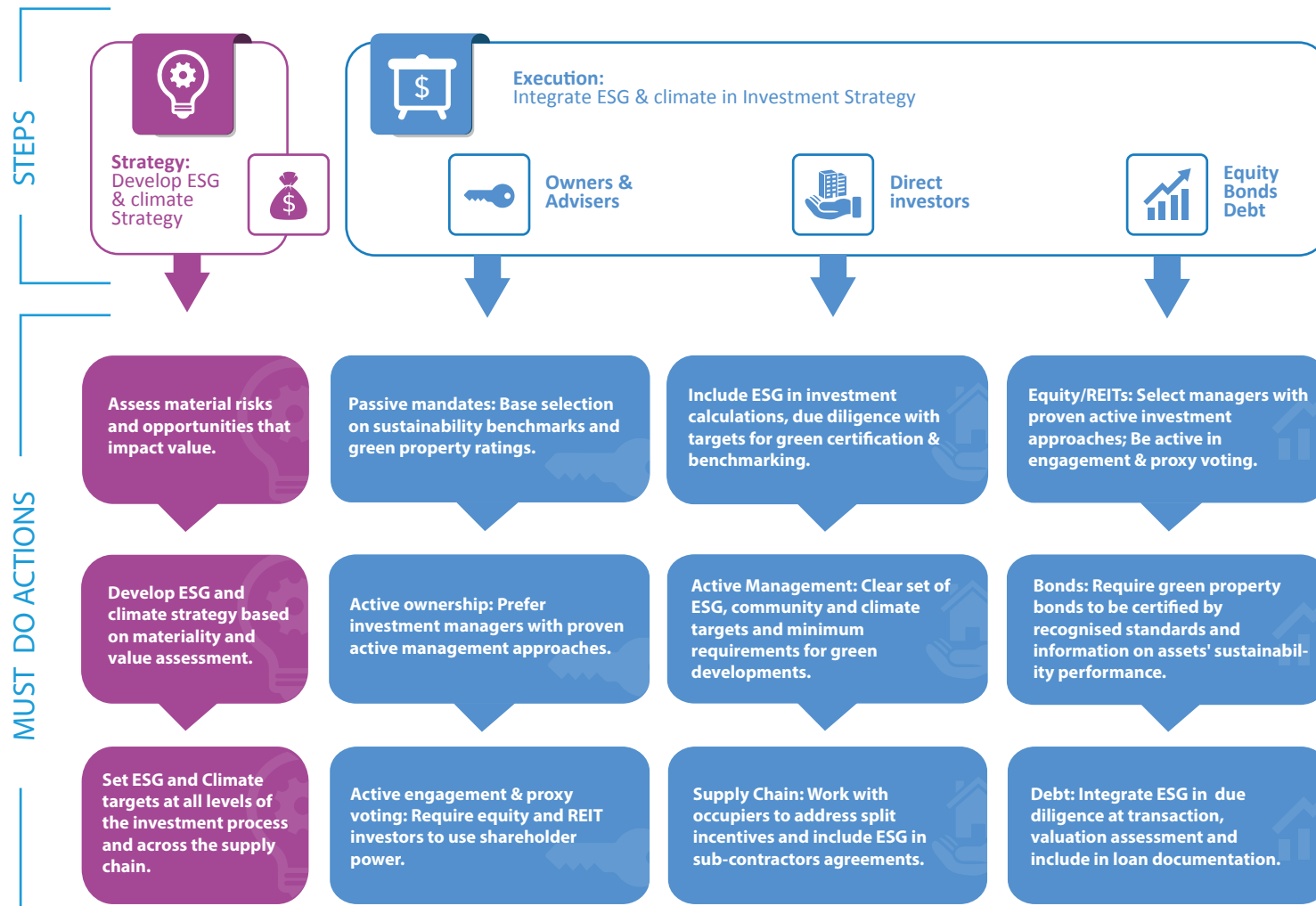
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Distils material from many sources into one guide that is easy to use and helps every type of real estate investor make sense of available resources.



RECOMMENDED RESOURCES

<p>'Investing in a time of climate change' Mercer 2015</p>	<p>'The-21st-century-investor-ceres-blueprint-for-sustainable-investing' Ceres 2013</p>	<p>'Advancing Responsible Business in Land, Construction and Real Estate Use and Investment', RICS / UN Global Compact, 2015</p>	<p>'Developing an asset owner climate change strategy', PRI 2015</p>	<p>ICGN model mandate initiative ICGN 2012</p>	<p>'G4 Sustainability Reporting Guidelines: Construction and Real Estate Sector Disclosures' GRI 2015, Global.</p>	<p>'PRI Policy Frameworks for Long-Term Responsible Investment: The Case for Investor Engagement in Public Policy', PRI 2015, Global</p>
<p>'Developing an asset owner climate change strategy', PRI 2015</p>	<p>'Advancing Responsible Business in Land, Construction and Real Estate Use and Investment', RICS / UN Global Compact, 2015</p>	<p>'Trustee's Guide: Protecting value in real estate through better climate risk management' IIGCC 2014</p>	<p>'Climate Change Investment Solutions Guide', IIGCC 2015</p>	<p>'Aligning expectations: guidance for asset owners on incorporating ESG factors into manager selection, appointment and monitoring', PRI 201</p>	<p>'PRI reporting framework - Asset Owners, Direct, Equity and Debt investments', PRI, Global</p>	
<p>'Climate Change Investment Solutions Guide', IIGCC 2015</p>	<p>'Trustee's Guide: Protecting value in real estate through better climate risk management' IIGCC 2014</p>	<p>'Assessing climate change risks and opportunities for investors - Property and Construction Sector' IGCC 2013</p>	<p>'The-21st-century-investor-ceres-blueprint-for-sustainable-investing', Ceres 2013</p>	<p>'Sustainability metrics: translation and impact on property investment and management' UNEP FI et al 2014</p>	<p>'Global Real Estate Sustainability Benchmark' GRESB 2015 (annually)</p>	
<p>'The-21st-century-investor-ceres-blueprint-for-sustainable-investing' Ceres 2013</p>	<p>'Investing through an adaptation lens' IGCC 2015</p>	<p>'Unlocking the energy efficiency retrofit investment opportunity' UNEP FI 2014</p>	<p>Green Property Bonds Standards, Climate Bonds Initiative 2015</p>	<p>'Greening the building supply chain' UNEP SBCI 2014, Global</p>	<p>'Sector led operational benchmark and indexes for Direct Investors, Real Estate Companies and their Advisers</p>	
<p>'Investing through an adaptation lens', IGCC 2015</p>		<p>'Sustainability and commercial property valuation - Professional Guidance Note, Global', RICS 2013</p>	<p>'Green bond guidance for real estate sector' GRESB</p>	<p>'Global Real Estate Sustainability Benchmark' GRESB 2015 (annually), Global</p>		

FRAMEWORK FOR ACTION

FOR ASSET OWNERS
AND TRUSTEES AND
THEIR INVESTMENT
ADVISORS



Strategy

Develop a material ESG and climate strategy



Key elements

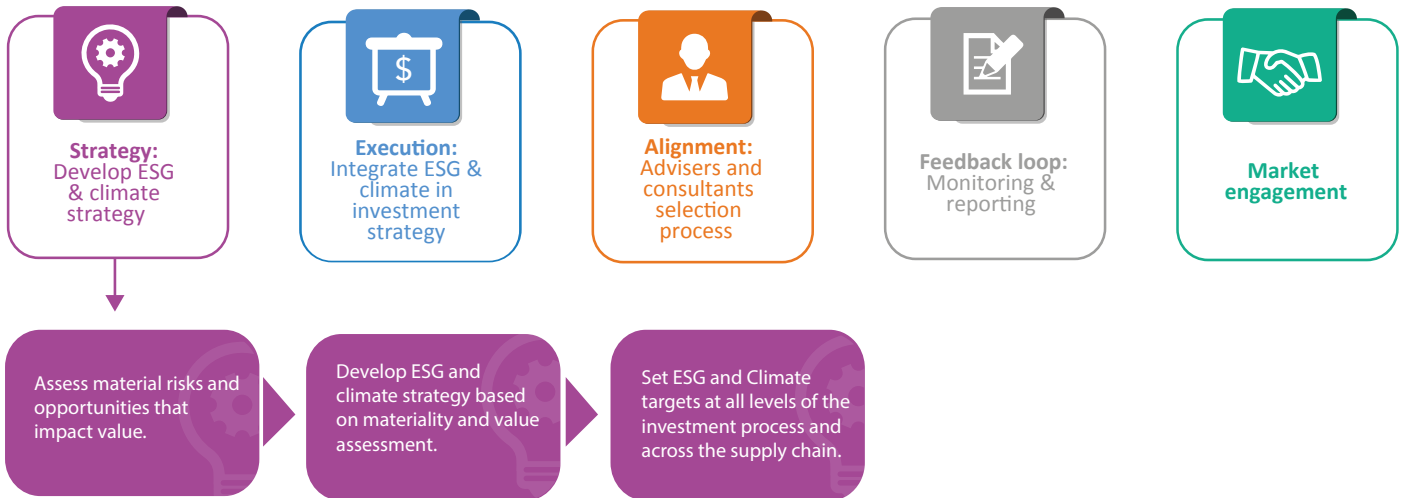
Preparing and drafting an ESG and climate risk and opportunity policy and strategy which focuses on material risks and opportunities will enable asset owners to understand the evidence and decide what is the most appropriate approach for them to manage these risks. It enables asset owners, trustees and their advisers to better identify and manage those risks and opportunities in a way that is consistent with their fiduciary duty to exercise due care, skill and diligence in the pursuit of the best interests of fund beneficiaries .

Stakeholders engaged in this process should factor in existing and likely changes in the regulatory environment over the investment horizon, financial regulations surrounding climate change risk disclosure, and rating methodologies by mainstream groups such as Bloomberg, Moody's, and MSCI, as well as ESG groups such as Sustainalytics, Oekom, Trucost, and others.

Key elements of this process include a review and understanding of relevant ESG and climate risks and opportunities, the development and selection of dedicated ESG and climate risks policies and strategies and the determination of which measurements are appropriate for target setting.

Stakeholders should also decide which targets are appropriate for their investment strategies, and which will be made public, and which remain private. It is understandable that not all may be appropriate for the public domain. The guide will help stakeholders set reasonable and achievable goals, which can be stretched over time.





When a strategy is in place, such targets may be more uniquely tailored to the stakeholder. However, the action of setting targets can stand on its own. Most important is to define what the targets are, who is responsible for measuring them, how they will be measured, at what frequency they will be reported on, and what the incentives or expected consequences are if the targets are met, exceeded, or missed.





Recommended Actions

The following is a non-exclusive list of actions which form the core components required to develop an ESG and climate risk policy and strategy which focuses on material risks and opportunities:

<p>Assess risks and opportunities</p>	<p>SHOULD </p> <p>Question and assess whether key ESG and climate risks are being considered in real estate strategic asset allocation and investment strategies.</p> <p>Ask advisers support to identify appropriate sources of information to assess current strategic allocation and investment strategy, their expert view on the relevance of these risks to current real estate investment strategy and their help in answering the following questions in order to identify gaps in existing processes and evaluation framework to account for ESG and climate risks:</p> <ul style="list-style-type: none"> • What are the impacts of changes in sustainability policy and regulation throughout the real estate investment cycle? • What are ratings agencies, regulators, legal advisors and other stakeholders saying about the materiality of ESG and climate risks? • What ESG and climate impacts are already included in assessment of risks, are there risks which will be material over the life of my asset portfolio which are not yet included? • What will be the likely impacts of ESG and climate risks on the valuation assessment of real estate assets over their useful lives? • Will real estate assets face regulatory or physical “obsolescence” due to ESG and climate risk factors over their useful lives? • What are and will be the impacts from the societal shift to place greater economic value on ESG and climate factors on real estate assets/ strategies over the fund life? <p>COULD </p> <p>Establish regular or on-going ESG and climate risk assessment, including:</p> <ul style="list-style-type: none"> • Identify relevant information sources and collect relevant data on regular basis. • Review risks and opportunities on regular basis.
<p>Develop ESG and climate policy and strategy</p>	<p>SHOULD </p> <p>Develop or maintain a regularly updated policy and strategy stating specific approaches to integrate ESG and climate risk into investment framework.</p> <p>Policy and strategy should determine how ESG and climate risk assessment processes will impact strategic real estate asset allocation and investment management including:</p> <ul style="list-style-type: none"> • Identify key procedures in asset acquisition, management, operation, planning, new developments. • Refurbishment, upgrade, rental, and manager selection which are impacted by ESG and climate risk strategy. • Set ESG and climate change indicators to evaluate new investment opportunities. • Define ESG and Climate criteria for selection of new mandates and monitoring of existing mandates. • Determine requirements for reporting and feedback from all relevant investment managers and advisers. • Determine reporting process to members and stakeholders. • Establish periodicity and approach should be used to review and evaluate ESG and Climate risk policy and strategy. <p>COULD </p> <p>Take a leadership role in terms of dissemination and supporting training of advisers /managers so that the pace of change is accelerated.</p> <p>Determine appropriate approach to embed a dynamic, data-driven assessment of ESG and climate risks into investment strategies.</p>



Set targets

SHOULD



Determine and set appropriate, verifiable and material targets, both quantitative and qualitative, to manage environmental, social and governance issues in their portfolios.

Issue clear directives to external managers or REITs managing their property assets to deliver these targets, including requirement for their executives to be responsible for delivery of performance.

Targets can include:

- Quantitative and material targets to reduce energy, carbon intensity, water and waste of the portfolio over specified timeframe.
- Set a goal to measure and reduce the environmental/ resource intensity of a portfolio against relevant benchmarks over a given time period.
- Set qualitative targets for achieving relevant green property certifications for a percentage of the portfolio over a specified timeframe, targets can aim to grow over time.
- Set quantitative and qualitative targets to address social impacts of the portfolio, including community engagement and contribution to local communities.
- Set quantitative targets for the inclusion of green lease clauses in the lease agreements with tenants.
- Set quantitative targets to measure and provide minimum quality levels for indoor air quality, affecting health and productivity.
- Target for a specified proportion of the fund's assets in real estate to be powered by clean energy, to be highly energy efficient, to achieve minimum requirements for renovations, or to be "best in class" with respect to resource intensity.
- Require periodic reports on progress against targets.

COULD



Engage with property managers, operators and maintenance to ensure that "best in class" energy/ carbon reduction technologies and operating procedures are in place across a growing percentage of the managed portfolio over a given timeframe.

Require ESG and climate risk "learnings" to be socialized among internal stakeholders.



Supporting resources for developing an ESG policy and strategy

The project team reviewed the available literature and based on best practice defined a map of the relevant tools and practical knowledge available to asset owners and their advisers to implement this step, available in the [Annexes](#). The most relevant have been selected to provide additional support to investors willing to dive deeper in understanding the actions and their rationale.

“Investing in a time of climate change” Mercer 2015, Global “An-Investment-Framework-for-Sustainable-Growth”

Mercer 2014

“Climate change scenarios: Implications for strategic asset allocation” Mercer 2011



These three studies help asset owners and investors better understand and estimate the impacts of climate change on investment strategies and financial performance. They address the following questions: Which financial impact could climate change have- at which magnitude and when?

What are the key risks and opportunities, how do we manage and integrate those into current investment processes?; Which actions could an investor take to become more resilient to climate change?

“Climate Change Investment Solutions Guide”

IIGCC 2015, Europe



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement are important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

“Advancing Responsible Business in Land, Construction and Real Estate Use and Investment”

RICS / UN Global Compact, 2015, Global



The document provides a guide to the practical application of the 10 principles of the UN global Compact to the land, construction and real estate sectors. It helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

“The-21st-century-investor-eres-blueprint-for-sustainable-investing” Ceres 2013, North America



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement is important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

“Developing an asset owner climate change strategy”

PRI 2015, Global



This pilot framework offers a step-by-step approach for addressing climate change across three main strategies: engage, invest and avoid. Case studies outline existing examples of asset owner action, including several initiatives that have been started by project participants during the project.

“Investing through an adaptation lens”, IGCC 2015 ‘Assessing climate change risks and opportunities for investors - Property and Construction Sector’

IGCC 2013, Australia



The later guide provides practical insights on how investors can and should be investing through an adaptation lens. The former provides information to help investors assess and integrate climate risk and opportunity within the property and construction sector into investment analysis.

The guide covers the following key areas and steps for this process: Identify current risks; Identify risk variance and impacts; Identify the adaptation strategies and mitigation measures; Assess materiality. The guide then proposes steps to integrate the information into investment processes.

“Trustee’s Guide: Protecting value in real estate through better climate risk management” IIGCC 2014



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant

to equity real estate investors. The guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement is important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

Execution

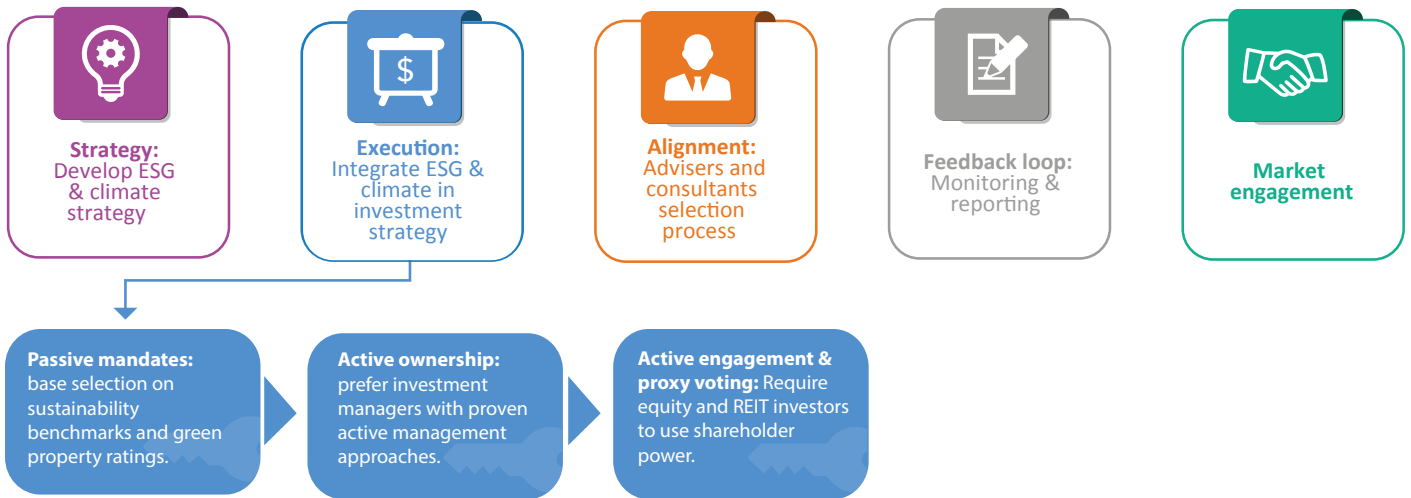
Integrate ESG and climate in investment strategy



Key elements

Investors should align their ESG and climate risk management processes with their ESG and climate risk policy and strategy by selecting and embedding them in the already existing risk management processes. The real estate investment process naturally has points at which value is created and where risks lie. Stakeholders should articulate how any interventions either increase the likelihood that value is created, and / or highlight how risk management is improved. Taking this approach will help ground any actions in what is of material concern for a particular company or investment strategy.




Key elements of this process include a review the selection of the type of investment strategy with a focus on active management for direct real estate investment and active engagement and proxy voting for equity, debt and bonds investments.





Recommended Actions

The following is a list of recommended actions which should be followed by Asset Owners, Trustees and Investment Advisors to integrate ESG & climate in their various real estate investment strategies.

<p>Passive mandates and screening</p>	<p>SHOULD </p> <p>Select passive mandates with screening based on sustainable real estate benchmarks and green property ratings:</p> <ul style="list-style-type: none"> • Measure and reduce exposure to ESG and climate risks. • Measure and increase exposure to ESG and climate-related property opportunities. • Require periodic reports on progress against targets.
<p>Active Ownership</p>	<p>SHOULD </p> <p>Select an active ownership strategy for real estate assets that integrates ESG and climate risks in real estate investment strategy.</p> <p>Require investment managers to have in place a policy and strategy on ESG and climate risks.</p> <p>Request managers to have in place processes for integrating ESG and climate risks into their strategic, investment, asset management and operational processes. For details on the request to be made see step 3 Alignment:</p> <p>This can include to:</p> <ul style="list-style-type: none"> • Have dedicated procedures in all investment management phases: asset acquisition, management, operation, planning, new development, refurbishment and upgrade, rental and manager selection which are impacted by ESG and climate risk strategy. • Determine and set appropriate, verifiable and material targets, both quantitative and qualitative, to manage environmental, social and governance issues in your portfolio. • Monitor portfolio and underlying real estate assets performance in carbon, energy and natural resource intensity (e.g.: portfolio level and individual asset case studies), and social impacts such as community engagement, contribution to local communities, job creation. • Report against relevant Real Estate sustainability benchmarks to monitor and compare absolute and performance against peers. • Publicly report ESG and climate risk assessments and management activities. • Engage with managers and request them to report on the extent to which they support or resist ESG and climate risk policies at the regulatory level. <p>COULD </p> <p>Monitor manager performance at asset level:</p> <ul style="list-style-type: none"> • Require reporting based on relevant asset level benchmark. • Require detailed monitoring and reporting through integrated and seamless data management systems providing building and asset level information to owners in a timely, usable way.



Active engagement & Proxy Voting

SHOULD



Require equity investment managers to actively engage with underlying listed real estate companies or investment managers, need to ensure they:

- Have dedicated procedures in all investment management phases: asset acquisition, management, operation, upgrade, rental, planning and manager selection which are impacted by ESG and climate risk strategy.
- Monitor portfolio and underlying real estate assets performance in carbon, energy and natural resource intensity (e.g.: portfolio level and individual asset case studies), and social impacts such as community engagement and contribution to local communities.
- Use relevant Real Estate sustainability benchmarks to monitor and compare absolute and performance against peers.
- Publicly report their ESG and climate risk assessments and management activities.
- Engage with managers and request them to report on the extent to which they support or resist ESG and climate risk policies at the regulatory level.

Require equity investment managers to use their shareholders right to contribute to proxy voting including:

- Supporting motions that strengthen ESG and climate risk management.
- Introducing motions to request active management of ESG and climate risk.

COULD



Monitor manager performance at asset level:

- Require reporting based on relevant asset level benchmark.
- Require detailed monitoring and reporting through integrated and seamless data management systems providing building and asset level information to owners in a timely, usable way.



Resources for the integration in Investment Strategy

The project team reviewed the available literature and based on best practice defined a map of the relevant tools and practical knowledge available to asset owners and their advisers to implement this step, see [Annexes](#). Among these resources, the following were identified as particularly useful for implementing the recommended actions for integrating ESG in their investment strategies:

“Advancing Responsible Business in Land, Construction and Real Estate Use and Investment”

RICS / UN Global Compact, 2015, Global



The document provides a guide to the practical application of the 10 principles of the UN global Compact to the land, construction and real estate sectors. It helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

“Trustee’s Guide: Protecting value in real estate through better climate risk management” IIGCC 2014



This guide covers the key questions which asset owners and investment managers should be asking themselves when developing their ESG and climate policy and strategy and their investment strategy to integrate ESG and climate risks into their businesses. It covers four areas: Assessing risks and opportunities, managing regulatory risks, manager selection, incentives and rewards.

“The-21st-century-investor-eres-blueprint-for-sustainable-investing” Ceres 2013, North America



The report acts as a guide to help investors satisfy the fiduciary responsibilities. It is designed to help concerned trustees or board members advance a process for better oversight and decision making that enhances sustainable risk-adjusted returns. It outlines the critical decisions that trustees must make regarding board policies and implementation and specific steps in the investment process that will benefit from trustee involvement.

“Investing through an adaptation lens”, IGCC 2015 Assessing climate change risks and opportunities for investors - Property and Construction Sector’

IGCC 2013, Australia



This guide provides information to help investors assess and integrate climate risk and opportunity within the property and construction sector into investment analysis. The guide covers the following key areas and steps for this process: Identify current risks; Identify risk variance and impacts; Identify the adaptation strategies and mitigation measures; Assess materiality. The guide then proposes steps to integrate the information into investment processes.

The follow up guide in 2015 provides practical insights on how investors can and should be investing through an adaptation lens.

Alignment

Advisers and managers selection process



Key elements

Having set ESG and climate risk policies and targets and decided on the most appropriate approach to integrate ESG into the investment strategies, it is fundamental for asset owners to instruct their advisors and investment managers, whether direct managers or equity/REITs investors, accordingly. Asset owners need to send this signal – strongly, clearly, and consistently - both to their investee companies and funds, and to their investment consultant / advisers, if applicable.

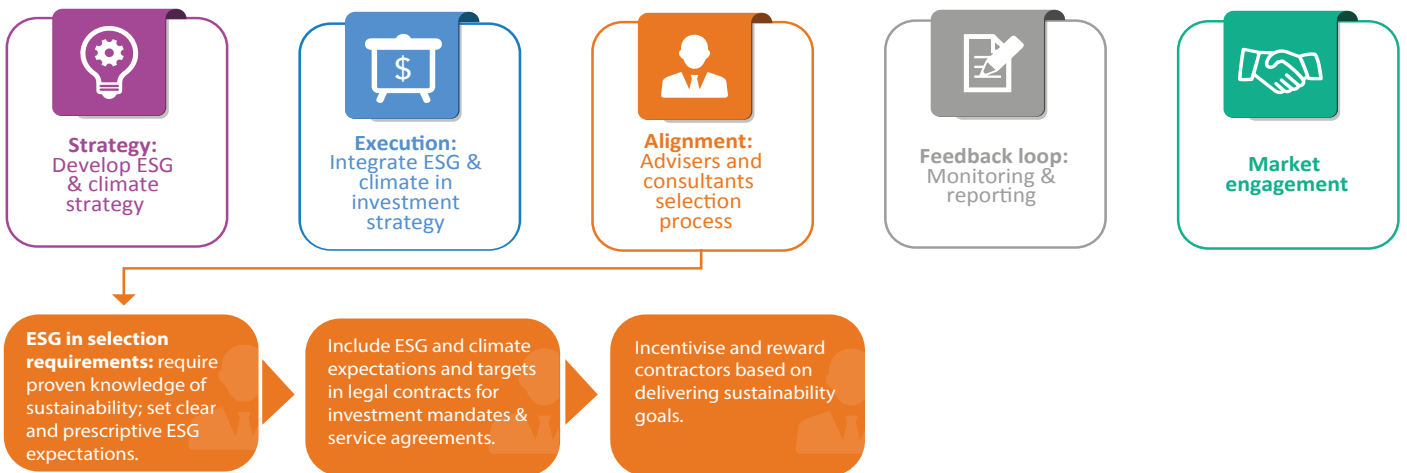
The material ESG and climate risk components identified in the first two steps also need to inform the selection process with clear ESG and explicit climate portfolio expectations. Specific quantitative and qualitative targets based on absolute performance, and against benchmarks, should be included in the mandate and connected to economic incentives, rewards and penalties where appropriate.

While much progress has been done on real estate sustainability benchmarks, those who are comparing REITs and investment managers should be careful to not oversimplify this process by looking only at ratings, certifications and benchmarks. These provide indications, but not answers. It is imperative for those investigating to engage with property companies, to understand both how ESG and climate risks are applicable to each business model, and how well ESG is understood and acted upon by the most senior decision makers. This is by far the best way to assess which managers are ticking boxes or bolting on ESG as an afterthought, and which are serious contenders. This framework and its actions provide a one-stop shop for how to check on and engage with investee companies.

Finally, whether engaging with existing investees or making a new investment, investors/asset owners should be explicit in their requests for qualifications and requests for proposals (RFPs) to invest their precious capital and which specific actions they expect managers to take with respect to the integration of ESG & climate risks and opportunities. REITs and investment managers will respond more favourably as such language becomes a series of asks and contains some prescriptive requirements. This approach would be major improvement over open-ended inquiry. Lastly, REITs and investment managers would benefit greatly if they were to receive feedback on the nature of the responses, which are provided, both today, and in the future. Critically, there must be back and forth dialogue.

Asset owners should set expectations of their property managers with respect to ESG and climate risks. Responsibility for the achievement of any targets which are set at the portfolio and asset level should be clearly defined, with agreed upon mechanisms for the process and frequency of data collection and reporting.

While rewarding property managers for hitting sustainability targets is currently the exception rather than the norm, it is one, which could be among the most impactful. At a minimum, asset owners could notify their direct investment managers and equity/REITs investors that a minimum level of expertise, service, and sustainability performance is required in order to keep or win their business.





Recommended Actions

The following is a list of recommended actions which should be followed by Asset Owners, Trustees and Investment Advisors to integrate ESG & climate in the selection process of their advisors and consultants.

<p>Selection requirements</p>	<p>SHOULD </p> <p>Favour active investment and investment managers demonstrating integration of ESG and climate risks in their investment processes.</p> <p>Include specific requirements for ESG and climate investments and expertise in the selection processes.</p> <p>Focus selection engagement process on specific direct requests and past performance rather than open-ended questions, these could include:</p> <ul style="list-style-type: none"> • Ask for opinion on asset level or portfolio out-performance opportunities through greater integration of ESG and climate criteria. • Require specific description of mechanisms used to embed ESG and climate risks in the buy, hold and sell decisions being made on properties. • Request description of how the investment manager implements ESG and climate risks in their asset management approaches throughout the real estate investment cycle with requested evidence of track records and concrete examples. • Request and review performance against portfolio and asset level benchmarks to ensure that ESG and climate risk criteria are effectively integrated in investment processes. • Require examples of experience in executing portfolio strategies to reduce the environmental footprint of the managed properties. • Adviser/ consultant to demonstrate that their ESG and climate research is understood and implemented in some meaningful way by the real estate / property researchers and that ESG and climate is not treated as a specialist silo. <p>COULD </p> <ul style="list-style-type: none"> • Seek managers who link compensation to energy or carbon performance / reductions, green / energy efficiency certification, or other targets which have either been set voluntarily by the manager or requested by the asset owner.
<p>ESG and climate risk in Investment mandates</p>	<p>SHOULD </p> <p>The mandate or investment management agreement should include clear and detailed expectations for incorporating ESG and climate risk factors and the process for monitoring ESG and climate risk implementation and performance.</p> <p>For direct investors the request should be made as part of the investor active management.</p> <p>For equity investment managers these should be part of the requirements to undertake engagement and voting activities with the assets invested in.</p> <p>In both cases, according to the specificity of the mandate, the investment manager should be required to:</p> <ul style="list-style-type: none"> • Incorporate criteria to assess the capabilities of managers/ advisers in measuring and managing the physical risks of climate change. • Have dedicated procedures in all investment management phases: asset acquisition, management, operation, upgrade, rental, planning and manager selection which are impacted by ESG and climate risk strategy. • Determine and set appropriate, verifiable and material targets, both quantitative and qualitative, to manage environmental, social and governance issues in your portfolio. • Monitor portfolio and underlying real estate assets performance in carbon, energy and natural resource intensity (e.g.: portfolio level and individual asset case studies), and social impacts such as community engagement and contribution to local communities. • Have an Environmental Management System (EMS) that applies to the entity level. • Use relevant Real Estate sustainability benchmarks to monitor and compare absolute and performance against market peers. • Have clear reporting requirements including narrative and quantitative reporting against targets. • Publicly report their ESG and climate risk assessments and management activities. • Engage with managers and request them to report on the extent to which they support or resist ESG and climate risk policies at the regulatory level.



Set and reward clear performance targets

SHOULD



The mandate should include appropriate, verifiable and material targets, both quantitative and qualitative, to manage environmental, social and governance issues in portfolio. Targets can include:

- Quantitative targets to undertake voting and engagement activities where appropriate (Equity, bonds, debt).
- Quantitative and material targets to reduce energy, carbon intensity, water and waste of the portfolio over specified timeframe.
- Set a goal to measure and reduce the environmental/ resource intensity of a portfolio against relevant benchmarks over a given time period.
- Quantitative and qualitative targets to address social impacts of the portfolio, including community engagement and contribution to local communities.
- Set quantitative targets for the inclusion of green lease clauses in the lease agreements with tenants.
- Target for a specified proportion of the fund's assets in real estate to be powered by clean energy, to be highly energy efficient, to achieve minimum requirements for renovations, or to be "best in class" with respect to resource intensity.

Require periodic reports on progress against targets Specific incentives are provided for ESG and climate.

COULD



Provide specific incentives for performance against agreed ESG and climate risks requirements:

- Incentivize pro-active seeking and reporting of ESG and climate risk management improvements.
- Reward with economic incentives/ penalties as appropriate, for performance against agreed ESG and climate portfolio targets for both, absolute and benchmarks performance.



Resource mapping and selected reference resource for advisers and manager selection

The project team reviewed the available literature and based on best practice defined a map of the relevant tools and practical knowledge available to asset owners and their advisers to implement this step. More details are provided on selected resources of particular relevance when selecting advisers, and their direct investors, property companies, and Equity/REITS, Bond and Debt vehicles and investors.

ICGN model mandate initiative, ICGN 2012



This Model Mandate provides a guideline for asset owners on how to formulate a contract to align the activities of their fund managers with their own long-term interests.

“Aligning expectations: guidance for asset owners on incorporating ESG factors into manager selection, appointment and monitoring” PRI 2013



This guidance helps asset owners assess whether their managers’ investment policies and processes are consistent with their ESG expectations. It aims to support them in their dialogues with managers so that they gain a clear understanding of the ESG risks and opportunities affecting their portfolios and how their managers are addressing them.

This guidance is also relevant for fund-of-fund managers who outsource investment activities and who need greater confidence that managers are aligned with their own expectations.

Global Real Estate Sustainability Benchmark – Asset Owners, Direct, Equity and Debt investments,

GRESB 2015, Global



Through GRESB, direct real estate investor members are able to monitor the annual GRESB survey results for all their direct investments and, if they invest in listed real estate securities, all listed real estate companies’ results. By using the GRESB Portfolio Analysis tool, investors are able to select investments to compare results, e.g. for a particular investment manager, a region or country, or a particular property type. They are also able to undertake portfolio analysis for self-selected groups of their investments.

The GRESB debt survey represents an initial step in monitoring real estate debt and assessing how to integrate ESG and climate risks into this growing financial instrument for real estate investment. The survey aims to increase transparency in the debt market and guide investors on best practice implementation.

Feedback loop

Monitor, report and benchmark



Key elements

All stakeholders are responsible in monitoring progress against goals and targets which are set – as per Step 1 & 2 - to demonstrate that ESG & climate change risks and opportunities are being managed and acted upon to the best of the ability of all those involved.

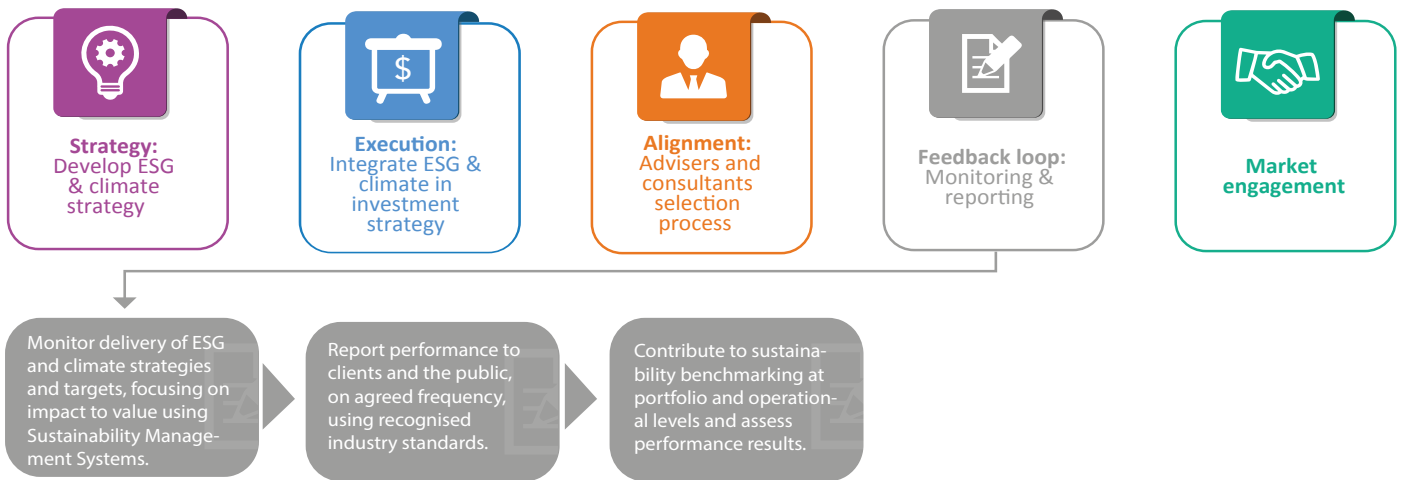
The regular observation, evaluation, benchmarking and recording of ESG and climate risk management activities should take place routinely within a pre-agreed monitoring and reporting schedule with the appointed manager and advisers. Reports should be practical and oriented towards delivering performance on ESG and climate risk factors and offer decision makers with relevant information. Monitoring should also involve feedback about the progress of the various strands of activity outlined and agreed in the Strategy Review for Asset Owners and Trustees.

It is important to demonstrate how the property portfolio's sustainability performance has changed over previous months and years, and to be able to present such changes on a like-for-like basis, normalised for weather and occupancy (or instead of occupancy some other measure of intensity). Additionally, controlling for boundaries and being consistent in measuring within these boundaries is very important.

In 2014, The UNEP FI Property Working Group published a comprehensive guide to sustainability metrics and how to deploy a Commercial Real Estate Sustainability Management (CRESM) system. UNEP FI et al. (2014c). Sustainability metrics: translation and impact on property investment and management.

Asset owners could request from their direct investment managers and equity/REIT investors to procure such a system to facilitate accurate, robust, efficient data collection practices which make reporting at the building, portfolio and company level quite simple. This would likely reduce quite substantially the level of effort currently expended in reporting to multiple building, portfolio and company level sustainability related frameworks for commercial property.




An additional benefit of such an approach is that regulatory issues relating to buildings and energy data benchmarking and disclosure are on the rise; and this was the case before COP21. Going forward, access to energy, carbon, water, and waste data will become increasingly valuable and required.







Recommended Actions

The following is a non-exclusive list of actions, which should be considered to form the core of such monitoring and reporting processes:

<p>Monitoring Process</p>	<p>SHOULD </p> <p>Include ESG and climate risk-related expectations in manager monitoring requirements against investment strategies and quantitative ESG and climate risk performance targets:</p> <p>(See step 1 “Define ESG and climate policy and strategy”).</p> <ul style="list-style-type: none"> • Request the investment manager to monitor performance through an Environmental Management System (EMS) that applies to the entity level. • Request regular monitoring against selected benchmarks and information around exemplar or best-in-class activities. • Monitor performance against specific agreed targets, both absolute and relative performance compared to selected portfolio level benchmarks. <p>COULD </p> <ul style="list-style-type: none"> • Request for Environmental Management System (EMS) to be aligned with a standard and/or verified or certified by an independent third party. • Include external verification or assurance where data or conclusions will be published or where material decisions will be taken based on this data. • Request information from manager on underlying real estate asset performance in carbon, energy and natural resource intensity (portfolio level and individual case studies). • Within each portfolio require the identification of “best performer” and “worst performer” (asset type, geography or portfolio) to allow focus on effective intervention and performance improvement. • Ensure “deep dive” on divergent assets (with positive or negative impact) to understand the overall portfolio effect of these and what the manager proposes as the “learning’s” arising from this analysis. • Keep track of new technologies, which may allow ESG and climate, risks to be reduced on a portfolio basis.
<p>Reporting standards and requirements</p>	<p>SHOULD </p> <p>Define ESG and climate risk-related expectations in manager reporting requirements and discussions. (Refer to step: Select investment manager for details)</p> <ul style="list-style-type: none"> • Require systematic reporting by the manager in a cost effective format or dashboard, which provides material ESG and climate performance information in a meaningful and coherent manner. • Require information should cover all material topics that reflect the organization’s significant economic, environmental, and social impacts, or that would substantively influence the assessments and decisions of stakeholders. • Agree delivery date and format for a report with sections for “business as usual progress towards agreed targets” as well as an “exception report” area for managers to identify or highlight particular incidents in the reporting period. • Select and agree on reporting standards, and scope and depth of reporting required, with a focus on materiality to the business and value drivers and accounting for geographical or regional norms and regulatory expectations. • Include a placeholder for relevant regulatory update and industry framing section in recognition of the fact that ESG and climate frameworks are not static and changes to the regulatory environment or competitive landscape are important to monitor. • Enable manager to provide free-form comments to the standard and data driven format. • Agree on data sources and ensure that reports are systematically filled with the most relevant and updated data from the manager. • Agree in advance on periodicity and materiality thresholds for reporting activities.



Reporting standards and requirements	<p>COULD </p> <ul style="list-style-type: none"> • Migrate towards actionable and information-intensive measures for reporting and away from “check-box” approaches. • Implement a feedback loop to ensure that, where selected reporting tools are not “best fit” then this can be reported upon.
Benchmarking	<p>SHOULD </p> <p>Determine relevant portfolio level and operational level benchmarks based upon characteristics of portfolio and geography.</p> <ul style="list-style-type: none"> • Request submission to relevant portfolio wide sustainability investment management framework. • Request submission to relevant operational level and asset performance benchmarks, where such benchmarks are available. • Require reporting to include benchmark results and analysis. • Require a performance analysis and reporting against the benchmark to identify what are the most material areas of focus are and how to best track them.

Selected resources for Monitoring & Reporting

The project team reviewed the available literature and based on best practice defined a map of the relevant tools and practical knowledge available to implement this step, see Annexes. Below are selected resources of particular relevance for Monitoring & Reporting.

“G4 Sustainability Reporting Guidelines: Construction and Real Estate Sector Disclosures”, GRI 2015, Global



This resource is the definite guidance on performance indicators and reporting processes for anyone who invests in, develops, constructs, or manages buildings. The GRI Guidelines, help reporting organizations disclose their most critical impacts – be they positive or negative – on the environment, society and the economy. They can generate reliable, relevant and standardized information with which to assess opportunities and risks, and enable more informed decision-making – both within the business and among its stakeholders. The GRI’s Construction and Real Estate sector guidance makes reporting relevant and user-friendly for organizations in this targeted sector.

“Global Real Estate Sustainability Benchmark – Asset Owners, Direct, Equity and Debt investments”

GRESB 2015, Global



Through GRESB, direct real estate investor members are able to monitor the annual GRESB survey results for all their direct investments and, if they invest in listed real estate securities, all listed real estate companies’ results. By using the GRESB Portfolio Analysis tool, investors are able to select investments to compare results, e.g. for a particular investment manager, a region or country, or a particular property type. They are also able to undertake portfolio analysis for self-selected groups of their investments.

The GRESB debt survey represents an initial step in monitoring real estate debt and assessing how to integrate ESG and climate risks into this growing financial instrument for real estate investment. The survey aims to increase transparency in the debt market and guide investors on best practice implementation.

“PRI reporting framework – Asset Owners, Direct, Equity and Debt investments” PRI, Global



The PRI Reporting Framework seeks to answer one question: How do you govern and implement responsible investment? The framework is composed of modules, with general modules tailored for multiple asset class investors and dedicated modules focused by asset class. Reporting through the Framework is mandatory for all PRI signatories and responses are translated into Transparency Reports which are available on the PRI website as a public demonstration of signatories’ commitment to implementing the Principles for Responsible Investment.

Market engagement



Key elements

Over 1,400 finance sector institutions managing over US\$59 trillion of assets subscribe to the United Nations supported Principles for Responsible Investment and it is likely that the level of engagement between business and public policymakers will increase, especially as more and more real estate investors integrate ESG and climate risks into their business practices and regulations on these matters become more developed.

Real estate investors should consider taking an active role in public policy and sector engagement to promote acceptance and implementation of ESG and climate risks measures across the real estate industry. This ensures sector-wide tools are developed enabling industry comparison and better monitoring of the sector's and portfolio's performance.

It is also important that they play a role, directly, or indirectly through sector organisations, in establishing positive dialogue and engaging with public policy to ensure that a robust regulatory framework supports the effective integration of ESG and climate risks in real estate investments.

Recommended Actions

There are three key areas in which all real estate investment stakeholders can optimise their engagement with public policy:

1. Engage, directly or indirectly, on public policy to manage risks.
2. Support research on ESG and climate risks;
3. Support sector initiatives to develop resource to understand risks and integrate ESG.

PRI Policy Frameworks for Long-Term Responsible Investment: The Case for Investor Engagement in Public Policy, Global



This PRI policy framework shows why public policy engagement is essential for long-term investors, provides examples of investor engagement in public policy, lessons learned, and offers practical recommendations for better integration of ESG factors in the public policy-making process.



FRAMEWORK FOR ACTION

FOR DIRECT REAL ESTATE INVESTMENT MANAGERS
PROPERTY COMPANIES AND THEIR REAL ESTATE CONSULTANTS



Strategy

Develop a material ESG and climate strategy



Key elements

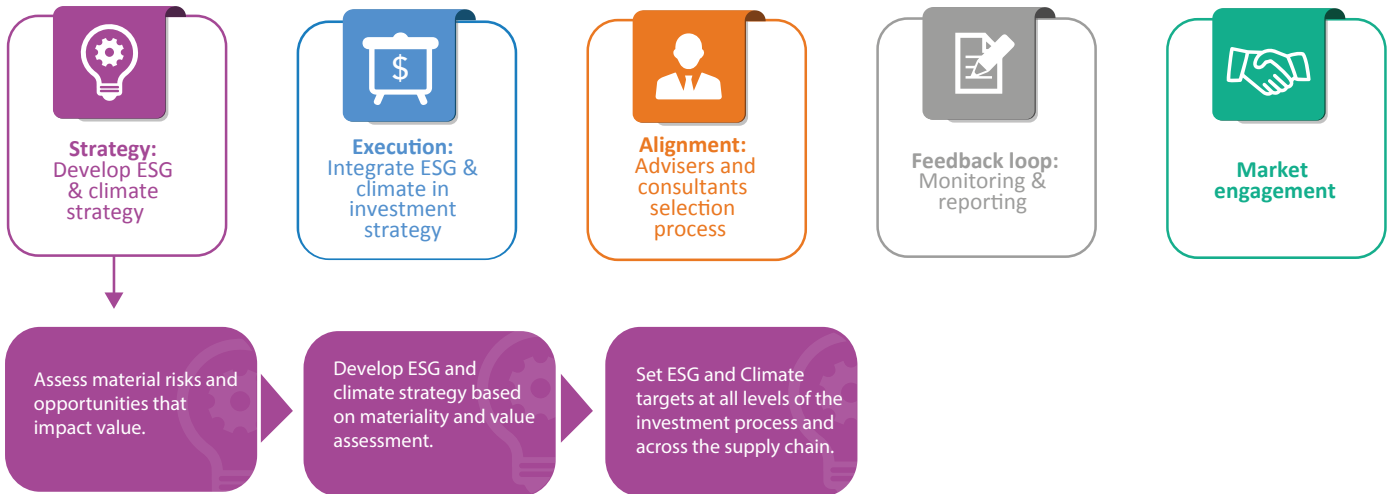
Preparing and drafting an ESG and climate risk and opportunity policy enables Direct Real Estate Investors, Property Companies and their Consultants to better identify and manage ESG and climate risks and opportunities in ways consistent with their fiduciary duty to exercise due care, skill and diligence in the pursuit of the best interests of fund beneficiaries, without being prescriptive as to how this is achieved.

Stakeholders engaged in this process should factor in existing and likely changes in the regulatory environment over the investment horizon, financial regulations surrounding climate change risk disclosure, and rating methodologies by mainstream groups such as Bloomberg, Moody's, and MSCI, as well as ESG groups such as Sustainalytics, Oekom, Trucost, and others.

Key elements of this process include a review and understanding of the ESG and climate risks and opportunities, the development and selection of dedicated ESG and climate risk policies and strategies together with the determination and setting of targets that are actionable and transparent.

Stakeholders should also decide which targets are appropriate for their investment strategies, and which will be made public, and which remain private. It is understandable that not all may be appropriate for the public domain. This step will help stakeholders set reasonable and achievable goals, which can be stretched over time.




When a strategy is in place, such targets may be more uniquely tailored to the stakeholder. However, the action of setting targets can stand on its own. Most important is to define what the targets are, who is responsible for measuring them, how they will be measured, at what frequency they will be reported on, and what the incentives or expected consequences are if the targets are met, exceeded, or missed.





Recommended Actions

The following is a non-exclusive list of actions which are recommended to Direct Real Estate Investment Managers, Property Companies and Real Estate Consultants, to develop their ESG and climate risk policy and strategy:

<p>Assess risks and opportunities</p>	<p>SHOULD </p> <p>Question and assess whether key ESG and climate risks are being considered in real estate strategic asset allocation and investment strategies.</p> <p>Ask consultants support on appropriate sources of information to assess current investment strategy, their expert view on the relevance of these risks to current real estate investment strategy, and their help in identifying gaps in existing processes and evaluation framework to account for ESG and climate risks:</p> <ul style="list-style-type: none"> • What are the impacts of changes in sustainability policy and regulation throughout the real estate investment cycle? • What are ratings agencies, regulators, legal advisors and other stakeholders saying about the materiality of ESG and climate risks? • What ESG and climate impacts are already included in assessment of risks, are there risks that are material over the life of my asset portfolio which are not yet included? • What will be the likely impacts of ESG and climate risks on the valuation assessment of real estate assets over their useful lives? • Will real estate assets face regulatory or physical “obsolete” due to ESG and climate risk factors over their useful lives and/or become stranded assets? • What are and will be the impacts from the societal shift to place greater economic value on ESG and climate factors on real estate assets/ strategies over the fund live? <p>COULD </p> <p>Establish regular or on-going ESG and climate risk assessment. This can include:</p> <ul style="list-style-type: none"> • Identify relevant information sources and collect relevant data on regular basis. • Review risks and opportunities on a regular basis. • Review the value impacts on the portfolio on a regular basis.
<p>Develop ESG and climate policy</p>	<p>SHOULD </p> <p>Develop or update policy and strategy stating specific approaches to integrate ESG and climate risk into investment framework. Policy and strategy should determine how ESG and climate risk assessment processes will impact strategic real estate asset allocation and investment management including:</p> <ul style="list-style-type: none"> • Identify key procedures in asset acquisition, management, operation, planning, new developments, refurbishment, upgrade, rental, and manager selection, which are impacted by ESG and climate risk strategy. • Integrate new tools and ESG and climate risk data sources to more effectively model their impacts on value and investment decisions in management systems. • Include relevant ESG and climate risk factors and assessments in inputs to management systems at asset level. • Set priorities to evolve ESG and climate targets in line with ESG and climate risk strategy review results and requirements within the management system. • Determine requirements for reporting and feedback to asset owners and stakeholders. • Establish periodicity and approach to review and evaluate ESG and Climate risk policy and strategy.



Develop ESG and climate policy

COULD



Take a leadership role in terms of dissemination and supporting training of advisers /managers so that the pace of change is accelerated.

Determine appropriate approach to embed a dynamic, data-driven assessment of ESG and climate risks into investment strategies.

Exploit synergies when collecting and processing building-related information.

Set targets

SHOULD



Determine and set appropriate, verifiable and material targets, both quantitative and qualitative, to manage environmental, social and governance issues in your portfolio.

Where relevant, issue clear directives to external property managers managing your property assets to deliver these targets, including requirement for their executives to be responsible for delivery of performance.

Targets can include:

- Qualitative targets to have in place investment and asset management procedures and tools to integrate ESG in climate risks in asset acquisition, management, operation, planning, new developments, refurbishment, upgrade, rental and occupier management.
- Quantitative and material targets to reduce energy, carbon intensity, water and waste of the portfolio over specified timeframes.
- Set a goal to measure and reduce the environmental/ resource intensity of a portfolio against relevant benchmarks over a given time period.
- Quantitative and qualitative targets to address social impacts of the portfolio, including community engagement and contribution to local communities.
- Set quantitative targets for the inclusion of green lease clauses in the lease agreements with tenants.
- Target for a specified proportion of the fund's buildings to be powered by clean energy, to be highly energy efficient, to achieve minimum requirements for renovations, or to be "best in class" with respect to resource intensity.
- Require periodic reports on progress against targets.

COULD



Engage with property managers, operators and maintenance to ensure that "best in class" energy/ carbon reduction technologies and operating procedures are in place across a growing percentage of the managed portfolio over a given timeframe.

Share best practice and ensure ESG and climate risk "learnings" are socialized among internal stakeholders.



Resource mapping and selected reference resources

The resource-mapping graph also shows the range of resources available and their relevance to this particular audience, see [Annexes](#). Below are selected resources of particular relevance for Direct Real Estate Investment Managers, Property Companies and Real Estate Consultants when developing their ESG and climate risk strategy.

“Advancing Responsible Business in Land, Construction and Real Estate Use and Investment”

RICS / UN Global Compact, 2015, Global



The document provides a guide to the practical application of the 10 principles of the UN global Compact to the land, construction and real estate sectors. It helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

“Unlocking the energy efficiency retrofit investment opportunity”

UNEP FI 2014, Global



The energy efficiency report provides a detailed briefing on the business case and why investors should invest in energy efficiency retrofit opportunities. It provides a clear and simple seven-step approach to effectively increase the supply of financeable energy retrofit projects in real estate portfolios.

“Climate Change Investment Solutions Guide”

IIGCC 2015, Europe



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement are important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

“Trustee’s Guide: Protecting value in real estate through better climate risk management”

IIGCC 2014



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement is important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

“The-21st-century-investor-eres-blueprint-for-sustainable-investing”

Ceres 2013, North America



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement is important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

“Investing through an adaptation lens”, IGCC 2015

“Assessing climate change risks and opportunities for investors - Property and Construction Sector” IGCC 2013, Australia



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement is important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

Execution

Integrate ESG and climate in investment strategy



Key elements

ESG and climate risks should be an integral part of investment management and related business processes along with the traditional decision-making factors and parameters, rather than being seen as an add-on or separate category. To do so, investors should integrate ESG and climate factors in each element of their investment, asset management and operational processes. These processes cover governance, strategy and targets, risk assessment, active management and refurbishment, monitoring, comparability and reporting across the portfolio, extending throughout the industry to stakeholder and sector engagement.

There are major benefits to integrating ESG and climate risks in the investment strategy and through the investment and asset management processes across all organisational levels. As described in the introduction, these benefits include the ability to better manage risks and better capture opportunities to improved long-term performance. Beyond the investment manager’s own portfolio, it supports improvements in transparency and comparability across markets, enabling asset owners to better engage with investment managers on the implementation of responsible investments and for investment managers to gain market visibility for their efforts.

Finally, given the growing interest from asset owners to fulfil their fiduciary duty, this will help investment managers be prepared for assessment against ESG and climate risk management frameworks early during the investment manager selection process.

Managing and monitoring of asset managers’ sustainability performance has become simpler and more transparent with the emergence and uptake of a large number of global and regional sustainability benchmarks and reporting guidelines.

Real estate investors should integrate ESG and climate risk management requirements into their supply chains in all areas where investment managers have control and influence. To do this, they need to ensure that their proper employees have responsibility and empowerment to drive compliance with these procedures.





Recommended Actions

The following is a non-exclusive list of actions, which are recommended to Direct Real Estate Investment Managers, Property Companies, and Real Estate Consultants, to fully integrate ESG and climate risk in their investment strategy and asset management processes.

Investment strategy: ESG in investment calculations and valuations

SHOULD



Be more explicit about how sustainability affects the value of individual assets and the risk of depreciation of entire portfolios.

- Measure how these factors impact on real estate investment performance and how they influence real estate market fundamentals.
- Capture the value of property level sustainability investment at the fund or corporate level Leverage work of RICS and US Appraisal Institute to work with valuation professionals and adopt internal investment models to integrate ESG and climate risks considerations in the assessment of value.
- Provide valuers with building sustainability characteristics information.
- Collaborate with valuers to incorporate sustainability data as part of the standard valuation assessments.
- Consideration should be given to the impact on a property's likelihood to command top market rents, become vacant, remain vacant, and other market fundamentals that drive value.
- Request valuers' opinion on risk posed by the sustainability characteristics of buildings, according to RICS rules.

COULD



Integrate ESG and climate risk information into the discounted cash flow models of real estate investments and the valuation assessment of portfolios.

- Working on Discounted Cash Flow models taking account of sustainability metrics.
- Link existing Discounted Cash Flow models with Monte Carlo Simulation techniques.

Investment strategy: ESG in transactions, Investment and asset selection

SHOULD



Assess sustainability risks at acquisition of new assets and through assets' lifecycles and identify mitigation strategies to future proof and enhance the value of the portfolio.

Carry out a sustainability due diligence for new acquisitions for prospective assets, including:

- Identify cost effective environmental improvements to future proof the value of assets.
- Commission investment grade study to estimate the savings which would be delivered from CapEx potential measures identified during due diligence.
- Integrate cost of mitigation improvements in refurbishment budgets.

COULD



- Contractually require information from seller and letting and leasing agents on sustainability characteristics of new acquisitions.
- Integrate risks identified and refurbishment costs into discounted cash flow analysis.



Investment strategy: Green certification and benchmarking

SHOULD



Contribute to dedicated sustainability benchmarking and reporting tools to improve management and the monitoring of funds' sustainability performance.

Contribute and use operational level benchmarks to assess and analyse performance of assets against sector performance.

Assess and monitor asset level green building and energy certificates.

COULD



Determine methodology to benchmark and measure relative performance of specific ESG/ climate themed approaches against the remainder of the portfolio.

- Proportions of energy provided from renewable sources.
- Highly energy efficient buildings for class and use.
- On-site renewable power.
- Near zero energy buildings.

Active management: property management

SHOULD



Reinforce the positive impacts of active property management to deliver continuous ESG and climate performance. This should include:

- Integrate requirements for sustainability improvements and occupier comfort and health enhancement through the active property management and planned and preventive maintenance programmes.
- Set minimum operational environmental, health and social performance requirements and targets.
- Clearly assign responsibility for targets to appropriate asset and property managers, whether in-house or sub-contracted.
- Implement Energy Management Systems in the property, have them audited by a third party, and ensure that data gathering and tracking are consistent and timely.
- Monitor and report on monthly and quarterly basis performance against targets with continuous feedback between property managers, asset managers and sustainability experts.

COULD



Focus active property management on a building by building level.

- Monitor and analyse building level ESG and climate risk performance data on regular basis, monthly or quarterly.
- Set individual building targets in line with the portfolio target and supported by the asset investment strategy.
- Support a continuous and knowledge-based feedback between property managers, asset managers and sustainability experts.

Determine proportion or strategy to integrate the above assets into the overall investment approach.

- Proportions of energy provided from renewable sources.
- Highly energy efficient buildings for class and use.
- On-site renewable power.
- Near zero energy buildings.



Active management: property management

SHOULD

Reinforce the positive impacts of active property management to deliver continuous ESG and climate performance. This should include.

- Integrate requirements for sustainability improvements and occupier comfort and health enhancement through the active property management and planned and preventive maintenance programmes.
- Set minimum operational environmental, health and social performance requirements and targets.
- Clearly assign responsibility for targets to appropriate asset and property managers, whether in-house or sub-contracted.
- Implement Energy Management Systems in the property, have them audited by a third party, and ensure that data gathering and tracking are consistent and timely.
- Monitor and report on monthly and quarterly basis performance against targets with continuous feedback between property managers, asset managers and sustainability experts.

COULD

Focus active property management on a building by building level.

- Monitor and analyse building level ESG and climate risk performance data on regular basis, monthly or quarterly.
- Set individual building targets in line with the portfolio target and supported by the asset investment strategy. Support a continuous and knowledge-based feedback between property managers, asset managers and sustainability experts. Determine proportion or strategy to integrate the above assets into the overall investment approach.
- Proportions of energy provided from renewable sources.
- Highly energy efficient buildings for class and use.
- On-site renewable power.
- Near zero energy buildings.

Active Management: Sustainable development and refurbishment

SHOULD







Consider ESG and climate risk improvements in all development and refurbishment activities and look for opportunities for these factors to drive a renovation.

- Maintain and use development and refurbishment guides with minimum ESG and climate risk requirements. Minimum requirements should capture all aspects of ESG, environmental footprints, resource efficiency, construction and occupational health impacts and labour rights.
- Ensure that building documentation (building files / passports) is issued within project development and refurbishment projects and that these are continuously updated during the management phase.
- Use contractors and refurbishment teams who have experience in and track records in successfully and economically reducing ESG and climate building footprints.
- Produce and use sustainable fit-out guides for tenants.

COULD

Showcase assets for new low carbon or sustainable technologies or practices.



<p>Supply Chain integration: Work with occupants</p>	<p>SHOULD </p> <p>Work with tenants to find ways to agree joint ESG and climate risk management programmes to achieve environmental objectives through programmes.</p> <ul style="list-style-type: none"> Engage with tenants to share data and align lease clauses to incentivize landlords to reduce building operating expenses and core contractual components of “green leases” . Consider establishing a “Green Building Management Group” (GBMG) to manage engagement. Targets or objectives which may come for the owners or from any of the occupants can be discussed and plans can be made accordingly to implement and monitor progress. GBMGs are helpful in driving green leasing strategies, especially those where tenant buy in is needed or desired for capital projects which deliver operational savings to the tenant and may be recovered from tenants via the service charge. Align incentives and define contractual responsibility for operational practices that minimize energy use with clear share of benefits between occupants and owners. Identify engagement activities responding to the needs of occupants that also strengthen the ESG and climate performance of the buildings. Work to maintain strong levels of occupant comfort, productivity, and satisfaction, owners and property managers should both implement and educate building occupants on building materials, chemical compositions of carpeting & paint, air quality, and related strategies to drive employee and occupant performance and health. <p>COULD </p> <ul style="list-style-type: none"> Provide incentives where appropriate with engagement tools to strengthen occupants dialogue. Facilitate collection of relevant data and achievement of ESG and climate targets from occupant.
<p>Supply Chain integration: Community engagement and social impacts</p>	<p>SHOULD </p> <p>Engage with building’s community and local stakeholders.</p> <p>Identify ESG impacts of buildings to local communities and implement community programmes to mitigate these impacts.</p> <p>COULD </p> <p>Engage with community stakeholders and programmes to involve them with monitoring of impacts and in the formulation of ESG mitigation approaches.</p>
<p>Supply Chain integration: Integrate in employees and contractors requirements</p>	<p>SHOULD </p> <p>Integrated ESG and climate risk management requirements throughout the supply chain and in all areas where investment managers have control and influence.</p> <p>Ensure that all employees have responsibility for ensuring compliance and implementation labour best practice, including decent labour practices, work conditions, and human rights principles.</p> <p>Develop a supply chain policy stating requirements for the whole value chain ensures that ESG and climate principles are included in external contracts, such as with property managers, refurbishment teams and surveyors, leasing and letting agents, and that in turn they require similar terms from their suppliers.</p> <p>Have specific requirements included in contract with external contractors, requirements should include:</p> <ul style="list-style-type: none"> Create a framework of requirements (that have to be applied at all corporate levels) for type, extent, format and frequency of data/information exchange with third-party service providers. Amend the contractual arrangements with these counterparts accordingly. <p>COULD </p> <p>Include supply chain and contractors in the ESG and climate risk dialogue to ensure that they are both educated and that their ideas can be considered in the building’s management, development and renovation programme. Participate and join forces with others to encourage higher standards of ESG and climate risk visibility and engagement.</p> <p>Our real estate supply chain policy ensures that our principles are included in our contracts with our property managers, refurbishment teams and surveyors and that in turn they require similar terms from their suppliers.</p>



Resource mapping and selected reference resources

Below are selected resources of particular relevance for Direct Real Estate Investment Managers, Property Companies and Real Estate Consultants when integrating ESG in their investment strategy. The resource-mapping graph also shows the range of resources available and their relevance to this particular audience. It is based on the result of the survey of global practitioners to ask them help position and calibrate the publications identified in the literature review.



“Advancing Responsible Business in Land, Construction and Real Estate Use and Investment”

RICS / UN Global Compact, 2015, Global

The report helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

“Assessing climate change risks and opportunities for investors - Property and Construction Sector”

IIGCC 2013, Australia



This guide provides information to help investors assess and integrate climate risk and opportunity within the property and construction sector into investment analysis. The guide covers the following key areas and steps for this process: Identify current risks; Identify risk variance and impacts; Identify the adaptation strategies and mitigation measures; Assess materiality. The guide then proposes steps to integrate the information into investment processes. The follow up guide in 2015 provides practical insights on how investors can and should be investing through an adaptation lens.

“Unlocking the energy efficiency retrofit investment opportunity”

UNEP FI 2014, Global



The energy efficiency report provides a detailed briefing on the business case and why investors should invest in energy efficiency retrofit opportunities. It provides a clear and simple seven-step approach to effectively increase the supply of financeable energy retrofit projects in real estate portfolios.

“Sustainability and commercial property valuation - Professional Guidance Note, Global”

RICS 2013, Global



This guidance note encompasses the wide range of ESG economic factors relating to sustainability that can impact on value and of which valuers should be aware. Topics covered include: The role of the valuer; Assessing a building's sustainability characteristics; Reflecting sustainability characteristics in market value, fair value, market rent and investment value.

“Trustee’s Guide: Protecting value in real estate through better climate risk management” IIGCC 2014



This guide covers the key questions which asset owners and investment managers should be asking themselves when developing their ESG and climate policy and strategy and their investment strategy to integrate ESG and climate risks into their businesses. It covers four areas: Assessing risks and opportunities, managing regulatory risks, manager selection, incentives and rewards.

“Sustainability metrics: translation and impact on property investment and management”

UNEP FI et al 2014, Global



The report provides a framework for a corporate real estate sustainability management (CRESM) system for property investment and management organisations, and offers a pragmatic three level approach (corporate, portfolio and single building level) that aims to help the industry manage the complexity of sustainability metrics and to organize information flows more efficiently.

“Whose Carbon is it? GHG Emissions and Commercial Real Estate” REALpac and ICF 2011, North America



At the completion of this document, the reader should have an appreciation for the complexities of greenhouse gas accounting, knowledge of the critical factors involved in accounting for greenhouse gases in the commercial building sector, and the ability to apply suggested guidance to their portfolio.

Alignment

Advisers and managers selection process



Key elements

Having defined the most appropriate approach to integrate ESG into the investment strategy, it is fundamental for Direct Real estate Investors and Property Companies to instruct their sub-contracted asset, property or facility managers, where relevant. The material ESG and climate risk components identified in the first two steps need to be integrated in the selection of these contracted parties. Key elements of this process comprise the selection process, having clear ESG and climate portfolio expectations, setting clear targets based on absolute performance and performance against benchmarks to be included in the service agreement with reference to economic incentives, rewards and penalties as appropriate.

Investment managers should set expectations of their property managers with respect to their ESG and climate strategies and set targets with clear responsibility for the achievement of any targets, which are set at the property level. Property managers should be requested to implement sustainability standards for operations, based on relevant regional and local guides.



While rewarding property managers for hitting sustainability targets is currently the exception rather than the norm, it is one, which could be among the most impactful. At a minimum, investment managers could notify their property managers that a minimum level of expertise, service, and sustainability performance is required in order to keep or win their business.





Recommended Actions

The following is a non-exclusive list of actions addressing ESG and climate risks, which should be considered for inclusion during the contractors and manager selection process:

<p>Selection requirements</p>	<p>SHOULD </p> <p>Include specific requirements for ESG and climate investments and expertise in the selection processes.</p> <p>Focus selection engagement process on specific direct requests and past performance rather than open-ended questions, these could include:</p> <ul style="list-style-type: none"> • Ask for opinion on asset level or portfolio out-performance opportunities through greater integration of ESG and climate criteria. • Request description of how the investment manager implements ESG and climate risks in their asset and property management approaches throughout the real estate investment cycle with requested evidence of track records and concrete examples. • Request and review performance against benchmarks to ensure that ESG and climate risk criteria are effectively integrated in asset management processes. • Require examples of experience in executing portfolio strategies to reduce the environmental footprint of the managed properties. <p>COULD </p> <ul style="list-style-type: none"> • Seek managers who provide contractual assurance for energy or carbon performance / reductions, green / energy efficiency certification, or other targets sets jointly with the manager.
<p>ESG and climate risk in service agreement</p>	<p>SHOULD </p> <p>The service agreement should include clear and detailed expectations for incorporating ESG and climate risk factors and the process for monitoring ESG and climate risk implementation and performance. The asset, property or facility manager should be required to:</p> <ul style="list-style-type: none"> • Have dedicated procedures in all relevant asset and property management phases: asset acquisition, management, operation, upgrade, rental, planning and manager selection, which are impacted by ESG and climate risk strategy. • Monitor portfolio and underlying real estate assets performance in carbon, energy and natural resource intensity (e.g.: portfolio level and individual asset case studies), and social impacts such as community engagement and contribution to local communities. • Have an Environmental Management System (EMS) that applies to the entity level. • Use relevant Real Estate sustainability benchmarks to monitor and compare absolute and performance against market peers. • Have clear reporting requirements including narrative and quantitative reporting against targets.
<p>Set and reward clear performance targets</p>	<p>SHOULD </p> <p>The service agreement should include appropriate, verifiable and material targets, both quantitative and qualitative, to manage environmental, social and governance issues in portfolio. Targets can include:</p> <ul style="list-style-type: none"> • Quantitative and material targets to reduce energy, carbon intensity, water and waste of the portfolio over specified timeframe. • Set a goal to measure and reduce the environmental/ resource intensity of a portfolio against relevant benchmarks over a given time period. • Quantitative and qualitative targets to address social impacts of the portfolio, including community engagement and contribution to local communities. • Set quantitative targets for the inclusion of green lease clauses in the lease agreements with tenants. Require periodic reports on progress against targets; Specific incentives are provided for ESG and climate.



**Set and
reward clear
performance
targets**

COULD



Set targets for a specified proportion of the fund's assets in real estate to be powered by clean energy, to be highly energy efficient, to achieve minimum requirements for renovations, or to be "best in class" with respect to resource intensity.

Provide specific incentives for performance against agreed ESG and climate risks requirements.

- Incentivize pro-active seeking and reporting of ESG and climate risk management improvements.
- Reward with economic incentives/ penalties as appropriate, for performance against agreed ESG and climate portfolio targets for both, absolute and benchmarks performance.

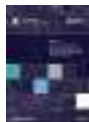


Resource mapping and selected reference resources for contractors and manager selection

The project team reviewed the available literature and based on best practice defined a map of the relevant tools and practical knowledge available to implement this step. More details are provided on selected resources of particular relevance when selecting advisors, and their contractors and property managers. Among the most impactful. At a minimum, investment managers could notify their property managers that a minimum level of expertise, service, and sustainability performance is required in order to keep or win their business.

“Advancing Responsible Business in Land, Construction and Real Estate Use and Investment”

RICS / UN Global Compact, 2015, Global



The document provides a guide to the practical application of the 10 principles of the UN global Compact to the land, construction and real estate sectors. It helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

“Greening the building supply chain” UNEP SBCI 2014, Global



The report aims to identify opportunities for achieving greater resource efficiency in the building sector supply chain and contribute towards wider socio-economic goals. It defines prioritisation of green interventions to support the development of a Sustainable Buildings and Construction programme. The Report also maps the interdependencies upstream and downstream of the construction site, allowing the various stakeholders to gain insight into their role and on how they impact on the overall system.

The Report also introduces an “Intensity Analysis Methodology” based on an LCA approach aimed at improving the understanding of environmental impacts of selected materials and providing indications about potential entry points for green interventions within the building materials supply chains.

“Sustainability metrics: translation and impact on property investment and management”

UNEP FI et al 2014, Global



The report provides a framework for a corporate real estate sustainability management (CRESM) system for property investment and management organisations, and offers a pragmatic three level approach (corporate, portfolio and single building level) that aims to help the industry manage the complexity of sustainability metrics and to organize information flows more efficiently.

Feedback loop

Monitor, report and benchmark



Key elements

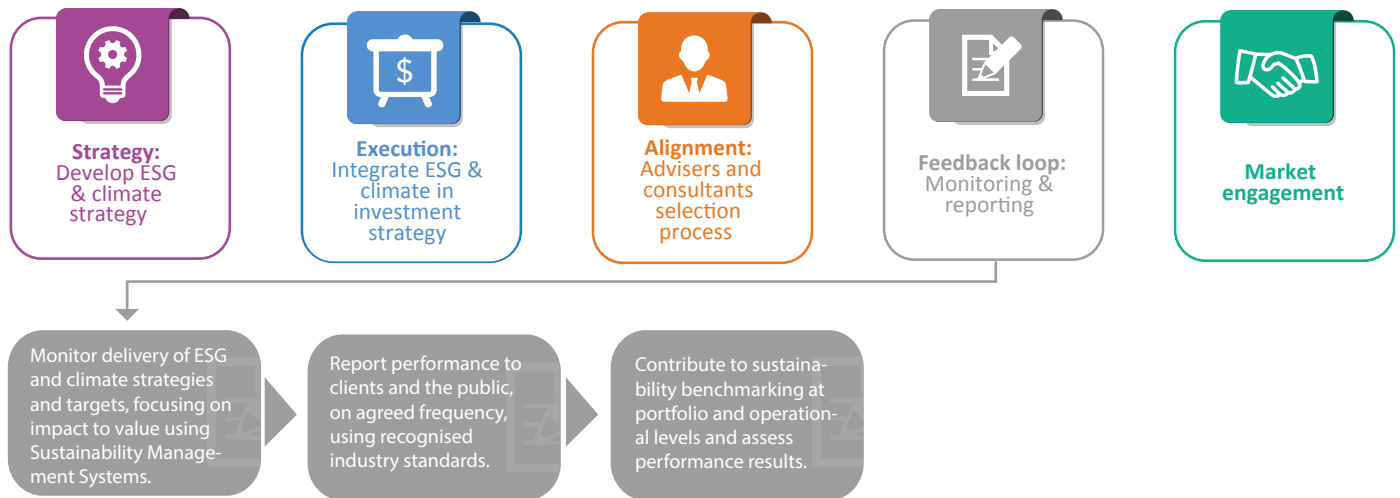
All stakeholders have responsibility in monitoring progress against goals and targets which are set – as per Step 1 & 2 - to demonstrate that ESG & climate change risks and opportunities are being managed and acted upon to the best of the ability of all those involved.

The regular observation, evaluation, benchmarking and recording of ESG and climate risk management activities should take place routinely within a pre-agreed monitoring and reporting schedule with the appointed manager and advisers. Reports should be practical and oriented towards delivering performance on ESG and climate risk factors and offer decision makers with relevant information. Monitoring should also involve feedback about the progress of the various strands of activity outlined and agreed in the Strategy Review for direct investors, property companies and their consultants .

It is important to demonstrate how the property portfolio's sustainability performance has changed over previous months and years, and to be able to present such changes on a like-for-like basis, normalized for weather and occupancy (or instead of occupancy some other measure of intensity). Additionally, controlling for boundaries and being consistent in measuring within these boundaries is very important.

In 2014, The UNEP FI Property Working Group published a comprehensive guide to sustainability metrics and how to deploy a Commercial Real Estate Sustainability Management (CRESM) system. Direct investors, property companies should consider to procure such a system to facilitate accurate, robust, efficient data collection practices which make reporting at the building, portfolio and company level quite simple. This would likely reduce quite substantially the level of effort currently expended in reporting to multiple building, portfolio and company level sustainability related frameworks for commercial property.





An additional benefit of such an approach is that regulatory issues relating to buildings and energy data benchmarking and disclosure are on the rise; and this was the case before COP21. Going forward, access to energy, carbon, water, and waste data will become increasingly valuable and required.





Selected resources for Monitoring & Reporting

The project team reviewed the available literature and based on best practice defined a map of the relevant tools and practical knowledge available to implement this step, see Annexes. Below are selected resources of particular relevance for Monitoring & Reporting.

<p>Monitoring process</p>	<p>SHOULD </p> <p>Define ESG and climate risk-related expectations in monitoring requirements against investment strategies and quantitative ESG and climate risk performance targets (see step Define ESG and climate policy and strategy).</p> <ul style="list-style-type: none"> • Monitor performance through an Environmental Management System (EMS) that applies to the entity level. • Monitor performance against specific agreed targets, both absolute and relative performance compared to selected portfolio level benchmarks. • Monitor underlying asset performance in carbon, energy and natural resource intensity (portfolio level and individual case studies). • Within each portfolio identify “best performer” and “worst performer” (asset type, geography or portfolio) to allow focus on effective intervention and performance improvement. • Keep track of new technologies which may reduce ESG and climate risks on a portfolio basis selected portfolio level benchmarks. <p>COULD </p> <ul style="list-style-type: none"> • Request for Environmental Management System (EMS) to be aligned with a standard and/or verified or certified by an independent third party. • Include external verification or assurance where data or conclusions will be published or where material decisions will be taken based on this data. • Ensure “deep dive” on divergent assets (with positive or negative impact) to understand the overall portfolio effect of these.
<p>Reporting standards and requirements</p>	<p>SHOULD </p> <p>Define ESG and climate risk-related expectations in reporting requirements to asset owners and to stakeholders.</p> <ul style="list-style-type: none"> • Define delivery date and format for reporting to asset owners with sections for “business as usual progress towards agreed targets” as well as an “exception report” area to identify or highlight particular incidents in the reporting period. • Provide systematic updated in a cost effective format or dashboard, which provides ESG and climate performance information in a meaningful and coherent manner. • Include a placeholder for relevant regulatory update and industry framing section in recognition of the fact that ESG and climate frameworks are not static and changes to the regulatory environment or competitive landscape are important to monitor. • Include free-form comments to the standard and data driven format to enable reporting on policy and process implementation progresses. • Identify and integrate data sources from across the investment process and ensure that reports are furnished systematically with the most relevant and updated data relevant to the asset owner. • Request regular performance updates against selected benchmarks and information around exemplar or best-in-class activities. • Define periodicity and materiality thresholds for reporting activities. <p>Publicly report ESG and climate risk assessments and management activities. Define ESG and climate risk-related expectations in reporting requirements to external stakeholders</p> <ul style="list-style-type: none"> • Select reporting standards, and define scope and depth of reporting, with a focus on materiality to the business and value drivers and accounting for geographical or regional norms and regulatory expectations. • Define periodicity and materiality thresholds for reporting activities. Selected portfolio level benchmarks. <p>COULD </p> <p>Include external verification or assurance where data or conclusions will be published or where material decisions will be taken based on this data.</p> <p>Migrate towards actionable and information-intense measures for reporting and away from “check-box” approaches. Implement a feedback loop to ensure that, where selected reporting tools are not “best fit” then this can be reported upon.</p>



Reporting standards and requirements

SHOULD

Determine relevant portfolio level and operational level benchmarks based upon characteristics of portfolio and geography.

- Contribute to relevant portfolio wide sustainability investment management framework.
- Contribute to relevant operational level and asset performance benchmarks, where such benchmarks are available.
- Integrate benchmark relevant results and analysis in reporting requirements.

COULD

- Do a performance analysis against the benchmark to identify what are the most material areas of focus and how to best address them.

Selected reference tools for Monitoring & Reporting

Managing and monitoring of asset managers’ sustainability performance has become simpler and more transparent with the emergence and uptake of a large number of global and regional sustainability benchmarks and reporting guidelines. The project team reviewed the available literature and based on best practice defined a map of the relevant tools and practical knowledge available to implement this step, see Annexes.

Below are selected resources of particular relevance for Monitoring & Reporting based on the result of the survey of global practitioners.

“G4 Sustainability Reporting Guidelines: Construction and Real Estate Sector Disclosures”, GRI 2015, Global



This resource is the definite guidance on performance indicators and reporting processes for anyone who invests in, develops, constructs, or manages buildings. The GRI Guidelines, help reporting organizations disclose their most critical impacts – be they positive or negative – on the environment, society and the economy. They can generate reliable, relevant and standardized information with which to assess opportunities and risks, and enable more informed decision-making – both within the business and among its stakeholders. The GRI’s Construction and Real Estate sector guidance makes reporting relevant and user-friendly for organizations in this targeted sector.

“PRI reporting framework – Asset Owners, Direct, Equity and Debt investments” PRI, Global



The PRI Reporting Framework seeks to answer one question: How do you govern and implement responsible investment? The framework is composed of modules, with general modules tailored for multiple asset class investors and dedicated modules focused by asset class. Reporting through the Framework is mandatory for all PRI signatories and responses are translated into Transparency Reports which are available on the PRI website as a public demonstration of signatories’ commitment to implementing the Principles for Responsible Investment.

“Global Real Estate Sustainability Benchmark – Asset Owners, Direct, Equity and Debt investments”

GRESB 2015, Global



Through GRESB, direct real estate investor members are able to monitor the annual GRESB survey results for all their direct investments and, if they invest in listed real estate securities, all listed real estate companies’ results. By using the GRESB Portfolio Analysis tool, investors are able to select investments to compare results, e.g. for a particular investment manager, a region or country, or a particular property type. They are also able to undertake portfolio analysis for self-selected groups of their investments.

The GRESB debt survey represents an initial step in monitoring real estate debt and assessing how to integrate ESG and climate risks into this growing financial instrument for real estate investment. The survey aims to increase transparency in the debt market and guide investors on best practice implementation.



Key elements

Over 1,400 finance sector institutions managing over US\$59 trillion of assets subscribe to the United Nations supported Principles for Responsible Investment and it is likely that the level of engagement between business and public policymakers will increase, especially as more and more real estate investors integrate ESG and climate risks into their business practices and regulations on these matters become more developed.

Real estate investors should consider taking an active role in public policy and sector engagement to promote acceptance and implementation of ESG and climate risks measures across the real estate industry. This ensures sector-wide tools are developed enabling industry comparison and better monitoring of the sector's and portfolio's performance.

It is also important that they play a role, directly, or indirectly through sector organisations, in establishing positive dialogue and engaging with public policy to ensure that a robust regulatory framework supports the effective integration of ESG and climate risks in real estate investments.

Recommended Actions

There are three key areas in which all real estate investment stakeholders can optimise their engagement with public policy:

1. Engage, directly or indirectly, on public policy to manage risks.
2. Support research on ESG and climate risks;
3. Support sector initiatives to develop resource to understand risks and integrate ESG.

PRI Policy Frameworks for Long-Term Responsible Investment: The Case for Investor Engagement in Public Policy, Global



This PRI policy framework shows why public policy engagement is essential for long-term investors, provides examples of investor engagement in public policy, lessons learned, and offers practical recommendations for better integration of ESG factors in the public policy-making process.



FRAMEWORK FOR ACTION

FOR EQUITIES, BONDS
AND DEBT INVESTORS
AND THEIR FINANCIAL
ADVISORS



Strategy

Develop a material ESG and climate strategy



Key elements

ESG and climate risks should be managed by investors in alignment with their ESG and climate risk policy and strategy by selecting and embedding it in the most appropriate investment strategy.

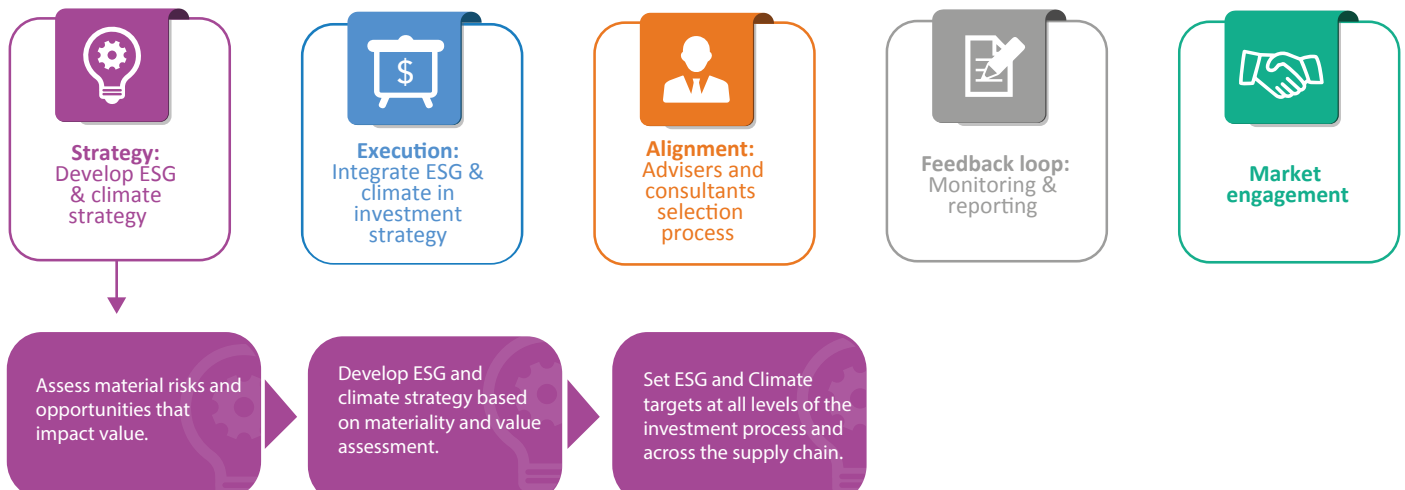
Preparing and drafting a ESG and climate risks and opportunities policy will enable investors to understand the evidence and decide what is the most appropriate approach for them to manage these risks and integrate the required management approaches in their determined investment strategies. It enables Equities, Bonds and Debt investors and their Financial Advisors to better identify and manage ESG and climate risks and opportunities in ways consistent with their fiduciary duty to exercise due care, skill and diligence in the pursuit of the best interests of fund beneficiaries .

Key elements of this process include a review and understanding of the ESG and climate risks and opportunities, the development and selection of dedicated ESG and climate risks policies and strategies and the determination and setting of actionable and transparent targets.

Stakeholders engaged in this process should factor in existing and likely changes in the regulatory environment over the investment horizon, financial regulations surrounding climate change risk disclosure, and rating methodologies by mainstream groups such as Bloomberg, Moody's, and MSCI, as well as ESG groups such as Sustainalytics, Oekom, Trucost, and others.

Stakeholders should also decide which targets are appropriate for their investment strategies, and which will be made public, and which remain private. It is understandable that not all may be appropriate for the public domain. This will help stakeholders set reasonable and achievable goals, which can be stretched over time.




When a strategy is in place, such targets may be more uniquely tailored to the stakeholder. However, the action of setting targets can stand on its own. Most important is to define what the targets are, who is responsible for measuring them, how they will be measured, at what frequency they will be reported on, and what the incentives or expected consequences are if the targets are met, exceeded, or missed.





Recommended Actions

The following is a non-exclusive list of actions which form the core components required to develop an ESG and climate risk policy and strategy which focuses on material risks and opportunities:

<p>Assess risks and opportunities</p>	<p>SHOULD </p> <p>Question and assess whether key ESG and climate risks are being considered in real estate strategic asset allocation and investment strategies.</p> <p>Ask advisers support to identify appropriate sources of information to assess current strategic allocation and investment strategy, their expert view on the relevance of these risks to current real estate investment strategy and their help in answering the following questions in order to identify gaps in existing processes and evaluation framework to account for ESG and climate risks:</p> <ul style="list-style-type: none"> • What are the impacts of changes in sustainability policy and regulation throughout the real estate investment cycle? • What are ratings agencies, regulators, legal advisors and other stakeholders saying about the materiality of ESG and climate risks? • What ESG and climate impacts are already included in assessment of risks, are there risks which will be material over the life of my asset portfolio which are not yet included? • What will be the likely impacts of ESG and climate risks on the valuation assessment of real estate assets over their useful lives? • Will real estate assets face regulatory or physical “obsolescence” due to ESG and climate risk factors over their useful lives? • What are and will be the impacts from the societal shift to place greater economic value on ESG and climate factors on real estate assets/ strategies over the fund life? <p>COULD </p> <p>Establish regular or on-going ESG and climate risk assessment, including:</p> <ul style="list-style-type: none"> • Identify relevant information sources and collect relevant data on regular basis. • Review risks and opportunities on regular basis.
<p>Develop ESG and climate policy and strategy</p>	<p>SHOULD </p> <p>Develop or maintain a regularly updated policy and strategy stating specific approaches to integrate ESG and climate risk into investment framework.</p> <p>Policy and strategy should determine how ESG and climate risk assessment processes will impact strategic real estate asset allocation and investment management including:</p> <ul style="list-style-type: none"> • Identify key procedures in asset acquisition, management, operation, planning, new developments. • Refurbishment, upgrade, rental, and manager selection which are impacted by ESG and climate risk strategy. • Set ESG and climate change indicators to evaluate new investment opportunities. • Define ESG and Climate criteria for selection of new mandates and monitoring of existing mandates. • Determine requirements for reporting and feedback from all relevant investment managers and advisers. • Determine reporting process to members and stakeholders. • Establish periodicity and approach should be used to review and evaluate ESG and Climate risk policy and strategy.



Develop ESG and climate policy

COULD



Take a leadership role in terms of dissemination and supporting training of advisers /managers so that the pace of change is accelerated.

Determine appropriate approach to embed a dynamic, data-driven assessment of ESG and climate risks into investment strategies.

Exploit synergies when collecting and processing building-related information.

Set targets

SHOULD



Determine and set appropriate, verifiable and material targets, both quantitative and qualitative, to manage environmental, social and governance issues in your portfolio.

Where relevant, issue clear directives to external property managers managing your property assets to deliver these targets, including requirement for their executives to be responsible for delivery of performance.

Targets can include:

- Qualitative targets to have in place investment and asset management procedures and tools to integrate ESG in climate risks in asset acquisition, management, operation, planning, new developments, refurbishment, upgrade, rental and occupier management.
- Quantitative and material targets to reduce energy, carbon intensity, water and waste of the portfolio over specified timeframes.
- Set a goal to measure and reduce the environmental/ resource intensity of a portfolio against relevant benchmarks over a given time period.
- Quantitative and qualitative targets to address social impacts of the portfolio, including community engagement and contribution to local communities.
- Set quantitative targets for the inclusion of green lease clauses in the lease agreements with tenants.
- Target for a specified proportion of the fund's buildings to be powered by clean energy, to be highly energy efficient, to achieve minimum requirements for renovations, or to be "best in class" with respect to resource intensity.
- Require periodic reports on progress against targets.

COULD



Engage with property managers, operators and maintenance to ensure that "best in class" energy/ carbon reduction technologies and operating procedures are in place across a growing percentage of the managed portfolio over a given timeframe.

Share best practice and ensure ESG and climate risk "learnings" are socialized among internal stakeholders.



Resource mapping and selected resources to integrate in strategy

The project team reviewed the available literature and based on best practice defined a map of the relevant tools and practical knowledge available to implement this step, see [Annexes](#). Below are selected resources of particular relevance for Equity, Bond and Debt investors when developing their investment strategy.

“Investing in a time of climate change” Mercer 2015, Global “An-Investment-Framework-for-Sustainable-Growth”

Mercer 2014

“Climate change scenarios: Implications for strategic asset allocation” Mercer 2011



These three studies help asset owners and investors better understand and estimate the impacts of climate change on investment strategies and financial performance. They address the following questions: Which financial impact could climate change have- at which magnitude and when? What are the key risks and opportunities, how do

we manage and integrate those into current investment processes?; Which actions could an investor take to become more resilient to climate change?

“Climate Change Investment Solutions Guide”

IIGCC 2015, Europe



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The

guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement are important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

“Advancing Responsible Business in Land, Construction and Real Estate Use and Investment”

RICS / UN Global Compact 2015, Global



The document provides a guide to the practical application of the 10 principles of the UN global Compact to the land, construction and real estate sectors. It helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

“The-21st-century-investor-ceses-blueprint-for-sustainable-investing” Ceres 2013, North America



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement is important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

“ Developing an asset owner climate change strategy”

PRI 2015, Global



This pilot framework offers a step-by-step approach for addressing climate change across three main strategies: engage, invest and avoid. Case studies outline existing examples of asset owner action, including several initiatives that have been started by project participants during the project.

“Investing through an adaptation lens”, IGCC 2015

“Assessing climate change risks and opportunities for investors- Property and Construction Sector’

IIGCC 2013, Australia



The later guide provides practical insights on how investors can and should be investing through an adaptation lens.

The former provides information to help investors assess and integrate climate risk and opportunity within the property and construction sector into investment

analysis.

The guide covers the following key areas and steps for this process: Identify current risks; Identify risk variance and impacts; Identify the adaptation strategies and mitigation measures; Assess materiality. The guide then proposes steps to integrate the information into investment processes.

“Trustee’s Guide: Protecting value in real estate through better climate risk management” IIGCC 2014



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change.

While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The guide proposes a four-step

framework for considering climate change investment solutions. It also affirms that corporate and policy engagement is important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

Execution

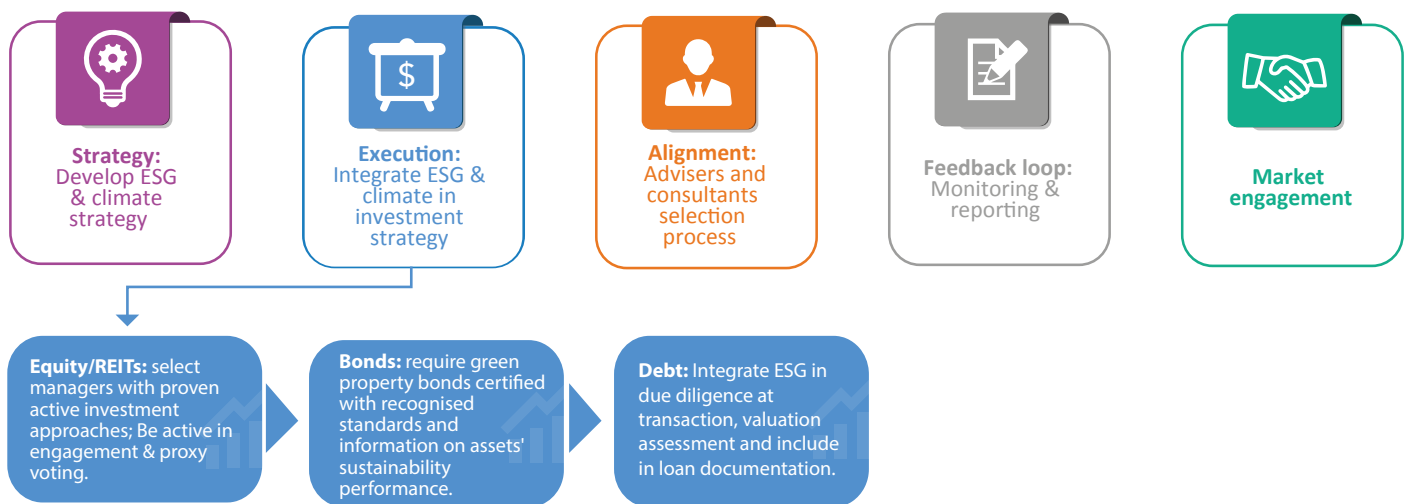
Integrate ESG and climate in investment strategy



Key elements

ESG and climate risks should be managed by investors in line with their ESG and climate risk policy and strategy by selecting and embedding it in the most appropriate manner within key procedures in the existing investment processes and strategies. The real estate investment process naturally has points at which value is created and where risks lie. Stakeholders should articulate how any interventions either increase the likelihood that value creation within the existing business model is realized, and / or highlight how risk management is improved. Taking this approach will help ground any actions in what is of material concern for a particular company or investment strategy.







Key elements of this process include a review the selection of the type of investment strategy with a focus on relevant asset classes, active engagement and proxy voting for equity/REITS, integration of ESG investment procedures for debt and certification of bonds investments to green property bonds standards.





Recommended Actions

The following is a non-exclusive list of actions, which should be considered for inclusion in the investment strategy with specific recommendations for each type of financial instruments:

<p>Measures by asset class Equity Portfolios</p>	<p>SHOULD </p> <p>Give preference and award active property ESG and climate risks investment mandates. Review passive mandates to include a screening based on benchmarks and green property ratings in underlying entities. Require integration of new tools and ESG and climate risk data sources to more effectively model their impacts on equity value and investment decisions. Require investors to measure and increase exposure to ESG and climate related equity opportunities. Ensure that all opportunities to use voting power through engagement & Proxy voting targeting the inclusion and wider consideration of ESG and climate risks.</p> <p>COULD </p> <p>Measure and reduce portfolio exposure to ESG and climate risks and consider divestment strategies for “worst in class”. Set portfolio decarbonisation or ESG footprint targets and measure and manage over time against determined benchmarks.</p>
<p>Green Property Bonds</p>	<p>SHOULD </p> <p>Ensure that Green Property Bond complies with Green Bond Issuance Standards. Request information from issuer on underlying real estate asset performance in carbon, energy and natural resource intensity (portfolio level and individual case studies) for existing bonds.</p> <p>COULD </p> <p>Require “Green” criteria by issuer to be externally verified. Consider divestment from issuers with “worst in class ESG and climate performance”.</p>
<p>Debt Portfolios</p>	<p>SHOULD </p> <p>Integrate ESG and climate criteria into valuation and debt investment assessments. Due diligence issuer for ESG and climate risks at transaction points with a focus on: Energy Performance Certificates, Flood Risks, Green Building Certifications, On-Site renewable Energy Generation, EcoPAS Questionnaire, Borrower Sustainability Credentials. Include ESG and climate risk factors in loan documentation (if involved in the primary issuance or private placement). Evaluate managers on their use of ESG and climate criteria in daily fund management activities.</p> <p>COULD </p> <ul style="list-style-type: none"> • Review existing loan portfolios for ESG and climate risk. • Require ESG and climate risk data from issues of all existing loan portfolios. • Consider divestment from issuers with “worst in class ESG and climate performance”.



Resource mapping and selected resources to integrate in investment process

The project team reviewed the available literature and based on best practice defined a map of the relevant tools and practical knowledge available to implement this step, see [Annexes](#). Below are selected resources of particular relevance for Equity, Bond and Debt investors when developing their investment strategy.

“Climate Change Investment Solutions Guide”

IIGCC 2015, Europe



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement are important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

“Investing through an adaptation lens”, IGCC 2015 Australia & “Assessing climate change risks and opportunities for investors - Property and Construction Sector”

IGCC 2013, Australia



The later guide provides information to help investors assess and integrate climate risk and opportunity within the property and construction sector into investment analysis.

“Trustee’s Guide: Protecting value in real estate through better climate risk management”

IIGCC 2014 Global

“Protecting value in real estate: Managing investment risks from climate change”

IIGCC 2013, Europe



This guide covers the key questions which asset owners and investment managers should be asking themselves when developing their ESG and climate policy and strategy and their investment strategy to integrate ESG and climate risks into their businesses. It covers four areas: Assessing risks and opportunities, managing regulatory risks, manager selection, incentives and rewards.

“The-21st-century-investor-ceres-blueprint-for-sustainable-investing”

Ceres 2013, North America



The report acts as a guide to help investors satisfy the fiduciary responsibilities. It is designed to help concerned trustees or board members advance a process for better oversight and decision making that enhances sustainable risk-adjusted returns. It outlines the critical decisions that trustees must make regarding board policies and implementation and specific steps in the investment process that will benefit from trustee involvement.

“Advancing Responsible Business in Land, Construction and Real Estate Use and Investment”

RICS / UN Global Compact, 2015, Global



The document provides a guide to the practical application of the 10 principles of the UN global Compact to the land, construction and real estate sectors. It helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

“Green Property Bonds Standards”

Climate Bonds Initiative 2015,

“Green Bond Guidelines” GRESB 2015, Regional



The document provides a guide to the practical application of the 10 principles of the UN global Compact to the land, construction and real estate sectors. It helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

“Debt tools - New lending decisions framework & Loan documentation”

BBP 2015, Regional



These two reports provide a list of potential sustainability due diligence items lenders might want to undertake in relation to a new lending decision secured against commercial real estate and illustrate potential ways to adapt existing processes for monitoring existing loans/borrower to incorporate relevant sustainability issues.



Alignment

Advisers and managers selection process



Key elements

Having set the ESG and climate risks policies and targets and decided on the most appropriate approach to integrate ESG into the investment strategy, it is fundamental for real estate investors using equities, debt and bonds to include ESG and climate risk strategy and targets in their selection processes and mandates to their direct real estate investors, real estate portfolios or property companies. Establishing clear ESG and climate portfolio expectations, including specific targets based on absolute performance and against benchmarks, are key to this process and these expectations must be explicitly included in any mandate terms and connected to economic incentives, rewards and penalties as appropriate.

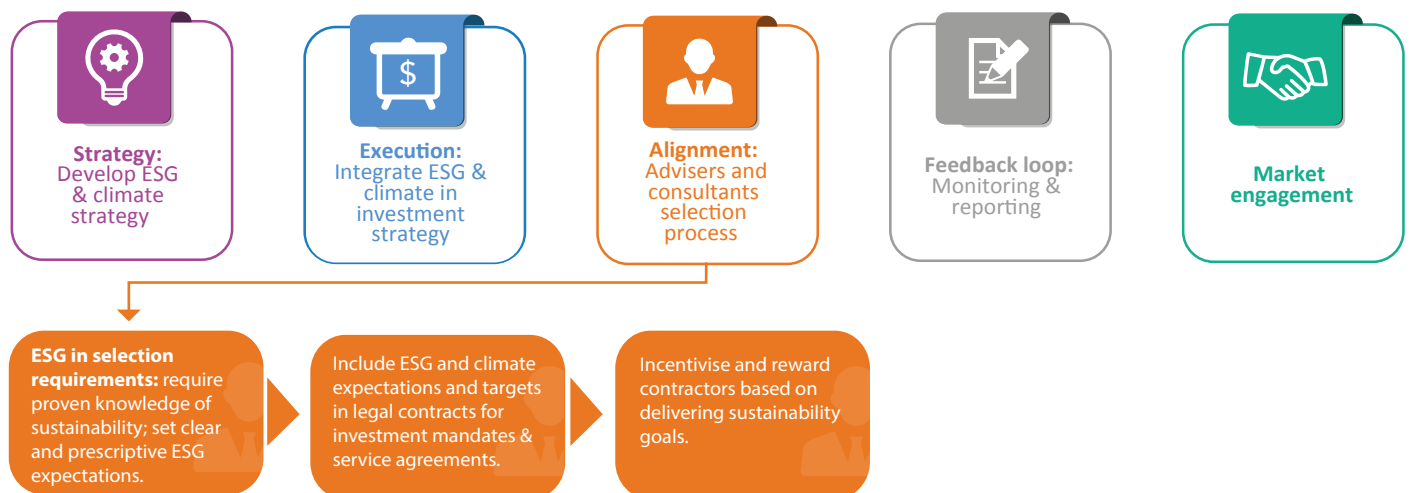
While much progress has been done on real estate sustainability benchmarks, REITs who are comparing direct investment managers and property companies should be careful not to oversimplify this process by looking only at ratings, certifications and benchmarks.

These provide indications, but not answers. It is imperative for those investigating to engage with property companies, to understand both how ESG and climate risks are applicable to each business model, and how well ESG is understood and acted upon by the most senior decision makers. This is by far the best way to assess which managers are ticking boxes or bolting on ESG as an afterthought, and which are serious contenders. This framework and its actions provide a one-stop shop for how to check on and engage with investee companies.

Finally, whether engaging with existing investees or making a new investment, investors should be explicit in their requests for qualifications and RFPs to invest their precious capital and specify which actions they expect managers to take with respect to the integration of ESG & climate risks and opportunities. Investment managers and property companies will respond more favourably as such language becomes a series of asks and contains some prescriptive requirements. This approach would be major improvement over open-ended inquiry.

Asset owners should set expectations of their property managers with respect to ESG and climate risks. Responsibility for the achievement of any targets which are set at the portfolio and asset level should be clearly defined, with agreed upon mechanisms for the process and frequency of data collection and reporting.




While rewarding investment managers and property companies for hitting sustainability targets is currently the exception rather than the norm, it is one which could be among the most impactful. At a minimum, asset owners could put their investment managers and property companies on notice that a minimum level of expertise, service, and sustainability performance is required in order to keep or win their business.








Recommended Actions

The following is a non-exclusive list of actions addressing ESG and climate risks which should be considered for inclusion during the direct real estate investment manager and/or property company selection:

<p>ESG and climate risk in service agreement</p>	<p>SHOULD </p> <p>Favour active investment and investment managers demonstrating integration of ESG and climate risks in their investment processes.</p> <p>Include specific requirements for ESG and climate investments and expertise in the selection processes.</p> <p>Focus selection engagement process on specific direct requests and past performance rather than open-ended questions, these could include:</p> <ul style="list-style-type: none"> • Ask for opinion on asset level or portfolio out-performance opportunities through greater integration of ESG and climate criteria. • Require specific description of mechanisms used to embed ESG and climate risks in the buy, hold and sell decisions being made on properties. • Request description of how the investment manager implements ESG and climate risks in their asset management approaches throughout the real estate investment cycle with requested evidence of track records and concrete examples. • Request and review performance against benchmarks to ensure that ESG and climate risk criteria are effectively integrated in investment processes. • Require examples of experience in executing portfolio strategies to reduce the environmental footprint of the managed properties. • Adviser/ consultant to demonstrate that their ESG and climate research is understood and implemented in some meaningful way by the real estate / property researchers and that ESG and climate is not treated as a specialist silo. <p>COULD </p> <p>Seek managers who link compensation to energy or carbon performance / reductions, green / energy efficiency certification, or other targets which have either been set voluntarily by the manager or requested by the asset owner.</p>
<p>ESG and climate risk in Investment Mandates agreement</p>	<p>SHOULD </p> <p>The mandate or investment management agreement should include clear and detailed expectations for incorporating ESG and climate risk factors and the process for monitoring ESG and climate risk implementation and performance.</p> <p>For equity investment manager these should be part of the requirements to undertake engagement and voting activities with the assets invested in. The investment manager should be required to:</p> <ul style="list-style-type: none"> • Incorporate criteria to assess the capabilities of managers/ advisers in measuring and managing the physical risks of climate change. • Have dedicated procedures in all investment management phases: asset acquisition, management, operation, upgrade, rental, planning and manager selection which are impacted by ESG and climate risk strategy. • Monitor portfolio and underlying real estate assets performance in carbon, energy and natural resource intensity (e.g. portfolio level and individual asset case studies), and social impacts such as community engagement and contribution to local communities. • Have an Environmental Management System (EMS) that applies to the entity level. • Use relevant Real Estate sustainability benchmarks to monitor and compare absolute and performance against market peers.



<p>ESG and climate risk in investment mandates</p>	<p>SHOULD </p> <ul style="list-style-type: none"> • Have clear reporting requirements including narrative and quantitative reporting against targets. • Publicly report their ESG and climate risk assessments and management activities. • Engage with managers and request them to report on the extent to which they support or resist ESG and climate risk policies at the regulatory level.
<p>Set and reward clear performance targets</p>	<p>SHOULD </p> <p>The mandate should include appropriate, verifiable and material targets, both quantitative and qualitative, to manage environmental, social and governance issues in portfolio. Targets can include:</p> <ul style="list-style-type: none"> • Quantitative targets to undertake voting and engagement activities where appropriate (Equity, bonds, debt). • Quantitative and material targets to reduce energy, carbon intensity, water and waste of the portfolio over specified timeframe. • Set a goal to measure and reduce the environmental/ resource intensity of a portfolio against relevant benchmarks over a given time period. • Quantitative and qualitative targets to address social impacts of the portfolio, including community engagement and contribution to local communities. • Set quantitative targets for the inclusion of green lease clauses in the lease agreements with tenants. • Target for a specified proportion of the fund's assets in real estate to be powered by clean energy, to be highly energy efficient, to achieve minimum requirements for renovations, or to be "best in class" with respect to resource intensity. <p>Require periodic reports on progress against targets Specific incentives are provided for ESG and climate.</p> <p>COULD </p> <p>Provide specific incentives for performance against agreed ESG and climate risks requirements.</p> <ul style="list-style-type: none"> • Incentivize pro-active seeking and reporting of ESG and climate risk management improvements. • Reward with economic incentives/ penalties as appropriate, for performance against agreed ESG and climate portfolio targets for both, absolute and benchmarks performance.



Resource mapping and selected reference resource for advisers and manager selection

The project team reviewed the available literature and based on best practice defined a map of the relevant tools and practical knowledge available to asset owners and their advisers to implement this step. More details are provided on selected resources of particular relevance when selecting advisers, and their direct investors, property companies, and Equity/REITS, Bond and Debt vehicles and investors.

“Aligning expectations: guidance for asset owners on incorporating ESG factors into manager selection, appointment and monitoring” PRI 2013, Global

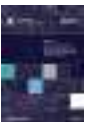


This guidance helps asset owners assess whether their managers’ investment policies and processes are consistent with their ESG expectations. It aims to support them in their dialogues with managers so that they gain a clear understanding of the ESG risks and opportunities affecting their portfolios and how their managers are addressing them.

This guidance is also relevant for fund-of-fund managers who outsource investment activities and who need greater confidence that managers are aligned with their own expectations.

‘Advancing Responsible Business in Land, Construction and Real Estate Use and Investment’

RICS / UN Global Compact, 2015, Global



The document provides a guide to the practical application of the 10 principles of the UN global Compact to the land, construction and real estate sectors. It helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

“The-21st-century-investor-ceses-blueprint-for-sustainable-investing” Ceres 2013, North America



The report acts as a guide to help investors satisfy the fiduciary responsibilities. It is designed to help concerned trustees or board members advance a process for better oversight and decision making that enhances sustainable risk-adjusted returns. It

outlines the critical decisions that trustees must make regarding board policies and implementation and specific steps in the investment process that will benefit from trustee involvement.

“Climate Change Investment Solutions Guide”

IIGCC 2015, Europe



The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement are important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

“Trustee’s Guide: Protecting value in real estate through better climate risk management” IIGCC 2014 Global

“Protecting value in real estate: Managing investment risks from climate change” IIGCC 2013, Europe



This guide covers the key questions which asset owners and investment managers should be asking themselves when developing their ESG and climate policy and strategy and their investment strategy to integrate ESG and climate risks into their businesses. It covers four areas: Assessing risks and opportunities, managing regulatory risks, manager selection, incentives and rewards.

“Investing through an adaptation lens”, IIGCC 2015 Australia &

“Assessing climate change risks and opportunities for investors - Property and Construction Sector”

IIGCC 2013, Australia



This guide provides information to help investors assess and integrate climate risk and opportunity within the property and construction sector into investment analysis.

The guide covers the following key areas and steps for this process: Identify current risks; Identify risk variance and impacts; Identify the adaptation strategies and mitigation measures; Assess materiality. The guide then proposes steps to integrate the information into investment processes.

The follow up guide in 2015 provides practical insights on how investors can and should be investing through an adaptation lens.

Feedback loop

Monitor, report and benchmark



Key elements

All stakeholders have responsibility in monitoring progress against goals and targets which are set – as per Step 1 & 2 - to demonstrate that ESG & climate change risks and opportunities are being managed and acted upon to the best of the ability of all those involved.

The regular observation, evaluation, benchmarking and recording of ESG and climate risk management activities should take place routinely within a pre-agreed monitoring and reporting schedule with the appointed manager and advisers. Monitoring should also involve giving feedback about the progress of the various strands of activity outlined and agreed in the Investment Strategy and the mandate of the direct real estate investor or real estate company.

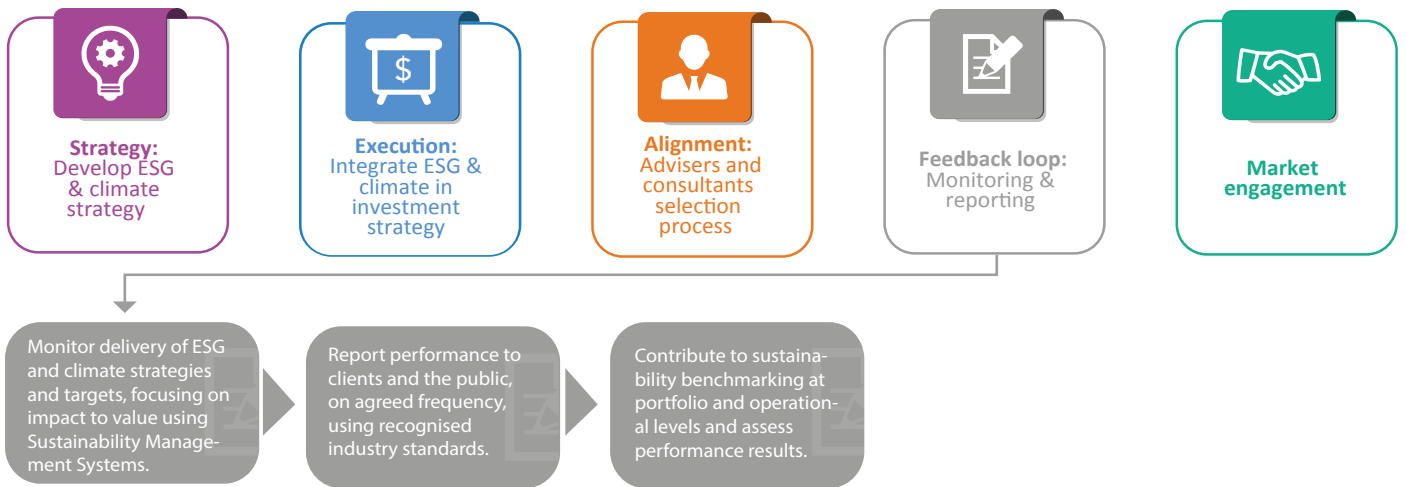
Reports should be practical and oriented towards delivering performance on ESG and climate risk factors and offer decision makers relevant information. Monitoring should also involve feedback about progress.

It is important to demonstrate how the property portfolio's sustainability performance has changed over previous months and years, and to be able to present such changes on a like-for-like basis,

normalised for weather and occupancy (or instead of occupancy some other measure of intensity). Additionally, controlling for boundaries and being consistent in measuring within these boundaries is very important.

In 2014, The UNEP FI Property Working Group published a comprehensive guide on sustainability metrics and how to deploy a Commercial Real Estate Sustainability Management (CRESM) system. Equity/REIT investors could request from their direct investment managers and property companies and debt and bonds investments the procurement of such a system to facilitate accurate, robust and efficient data collection practices which make reporting at the building, portfolio and company level quite simple. This would likely reduce quite substantially the level of effort currently expended in reporting to multiple building, portfolio and company level sustainability related frameworks for commercial property.




An additional benefit of such an approach is that regulatory issues relating to buildings and energy data benchmarking and disclosure is on the rise; and this was the case before COP21. Going forward, access to energy, carbon, water, and waste data will become increasingly valuable and required.








Recommended Actions

The following is a non-exclusive list of actions, which should be considered for inclusion in the investment strategy with specific recommendations for each type of financial instruments:

<p>Monitoring Process</p>	<p>SHOULD </p> <p>Define ESG and climate risk-related expectations in monitoring requirements against investment strategies and quantitative ESG and climate risk performance targets (see step Define ESG and climate policy and strategy).</p> <ul style="list-style-type: none"> • Monitor performance through an Environmental Management System (EMS) that applies to the entity level. • Monitor performance against specific agreed targets, both absolute and relative performance compared to selected portfolio level benchmarks. • Monitor underlying asset performance in carbon, energy and natural resource intensity (portfolio level and individual case studies). • Within each portfolio identify “best performer” and “worst performer” (asset type, geography or portfolio) to allow focus on effective intervention and performance improvement. • Keep track of new technologies which may reduce ESG and climate risks on a portfolio basis. <p>COULD </p> <ul style="list-style-type: none"> • Request for Environmental Management System (EMS) to be aligned with a standard and/or verified or certified by an independent third party. • Include external verification or assurance where data or conclusions will be published or where material decisions will be taken based on this data. • Ensure “deep dive” on divergent assets (with positive or negative impact) to understand the overall portfolio effect of these.
<p>Reporting standards and requirements</p>	<p>SHOULD </p> <p>Define ESG and climate risk-related expectations in reporting requirements to asset owners and to stakeholders.</p> <ul style="list-style-type: none"> • Define delivery date and format for reporting to asset owners with sections for “business as usual progress towards agreed targets” as well as an “exception report” area to identify or highlight particular incidents in the reporting period. • Provide systematic updated in a cost effective format or dashboard, which provides ESG and climate performance information in a meaningful and coherent manner. • Include a placeholder for relevant regulatory update and industry framing section in recognition of the fact that ESG and climate frameworks are not static and changes to the regulatory environment or competitive landscape are important to monitor. • Include free-form comments to the standard and data driven format to enable reporting on policy and process implementation progresses. • Identify and integrate data sources from across the investment process and ensure that reports are furnished systematically with the most relevant and updated data relevant to the asset owner. • Request regular performance updates against selected benchmarks and information around exemplar or best-in-class activities. • Define periodicity and materiality thresholds for reporting activities. <p>Publicly report ESG and climate risk assessments and management activities.</p> <p>Define ESG and climate risk-related expectations in reporting requirements to external stakeholders.</p> <ul style="list-style-type: none"> • Select reporting standards, and define scope and depth of reporting, with a focus on materiality to the business and value drivers and accounting for geographical or regional norms and regulatory expectations. • Define periodicity and materiality thresholds for reporting activities.



Reporting standards and requirements	<p>COULD </p> <p>Include external verification or assurance where data or conclusions will be published or where material decisions will be taken based on this data.</p> <p>Migrate towards actionable and information-intensive measures for reporting and away from “check-box” approaches. Implement a feedback loop to ensure that, where selected reporting tools are not “best fit” then this can be reported upon.</p>
Benchmarking	<p>SHOULD </p> <p>Determine relevant portfolio level and operational level benchmarks based upon characteristics of portfolio and geography.</p> <ul style="list-style-type: none"> • Contribute to relevant portfolio wide sustainability investment management framework. • Contribute to relevant operational level and asset performance benchmarks, where such benchmarks are available. • Integrate benchmark relevant results and analysis in reporting requirements. <p>COULD </p> <ul style="list-style-type: none"> • Do a performance analysis against the benchmark to identify what are the most material areas of focus and how to best address them.

Selected reference tools for Monitoring & Reporting

Managing and monitoring of asset managers’ sustainability performance has become simpler and more transparent with the emergence and uptake of a large number of global and regional sustainability benchmarks and reporting guidelines. The project team reviewed the available literature and based on best practice defined a map of the relevant tools and practical knowledge available to implement this step, see Annexes. Below are selected resources of particular relevance for Monitoring & Reporting based on the result of the survey of global practitioners.

“G4 Sustainability Reporting Guidelines: Construction and Real Estate Sector Disclosures”, GRI 2015, Global



This resource is the definite guidance on performance indicators and reporting processes for anyone who invests in, develops, constructs, or manages buildings. The GRI Guidelines, help reporting organizations disclose their most critical impacts – be they positive or negative – on the environment, society and the economy. They can generate reliable, relevant and standardized information with which to assess opportunities and risks, and enable more informed decision-making – both within the business and among its stakeholders. The GRI’s Construction and Real Estate sector guidance makes reporting relevant and user-friendly for organizations in this targeted sector.

“PRI reporting framework – Asset Owners, Direct, Equity and Debt investments” PRI, Global



The PRI Reporting Framework seeks to answer one question: How do you govern and implement responsible investment? The framework is composed of modules, with general modules tailored for multiple asset class investors and dedicated modules focused by asset class. Reporting through the Framework is mandatory for all PRI signatories and responses are translated into Transparency Reports which are available on the PRI website as a public demonstration of signatories’ commitment to implementing the Principles for Responsible Investment.

“Global Real Estate Sustainability Benchmark – Asset Owners, Direct, Equity and Debt investments”

GRESB 2015, Global



Through GRESB, direct real estate investor members are able to monitor the annual GRESB survey results for all their direct investments and, if they invest in listed real estate securities, all listed real estate companies’ results. By using the GRESB Portfolio Analysis tool, investors are able to select investments to compare results, e.g. for a particular investment manager, a region or country, or a particular property type. They are also able to undertake portfolio analysis for self-selected groups of their investments.

The GRESB debt survey represents an initial step in monitoring real estate debt and assessing how to integrate ESG and climate risks into this growing financial instrument for real estate investment. The survey aims to increase transparency in the debt market and guide investors on best practice implementation.



Key elements

Over 1,400 finance sector institutions managing over US\$59 trillion of assets subscribe to the United Nations supported Principles for Responsible Investment and it is likely that the level of engagement between business and public policymakers will increase, especially as more and more real estate investors integrate ESG and climate risks into their business practices and regulations on these matters become more developed.

Real estate investors should consider taking an active role in public policy and sector engagement to promote acceptance and implementation of ESG and climate risks measures across the real estate industry. This ensures sector-wide tools are developed enabling industry comparison and better monitoring of the sector's and portfolio's performance.

It is also important that they play a role, directly, or indirectly through sector organisations, in establishing positive dialogue and engaging with public policy to ensure that a robust regulatory framework supports the effective integration of ESG and climate risks in real estate investments.

Recommended Actions

There are three key areas in which all real estate investment stakeholders can optimise their engagement with public policy:

1. Engage, directly or indirectly, on public policy to manage risks.
2. Support research on ESG and climate risks;
3. Support sector initiatives to develop resource to understand risks and integrate ESG.

PRI Policy Frameworks for Long-Term Responsible Investment: The Case for Investor Engagement in Public Policy, Global



This PRI policy framework shows why public policy engagement is essential for long-term investors, provides examples of investor engagement in public policy, lessons learned, and offers practical recommendations for better integration of ESG factors in the public policy-making process.



Appendices



Framework for action: Methodology

This report has been compiled using a 3-step method which allowed the authors to cast the net wide and review over 40 relevant publications in the space and then engage repeatedly, including through a structured survey, with expert reviewers to ensure that the results are fit for purpose. The following section describes the three key steps of this methodology:

Approach and audience

This report is designed to address the practicalities of “how to integrate ESG and climate risks in real estate” by means of an investor framework which is tailored for three specific target audiences:

1. Asset Owners, Trustees and Investment Advisors;
2. Direct Real Estate Investment Managers, Property Companies and their Consultants
3. Real Estate Equity, Bonds and Debt Investors and their Financial Advisors.

The framework is compiled and written by sector practitioners to provide clear guidance in a straight-forward manner with practical steps and actions that real estate investors and their advisors, managers and other stakeholders can easily put into place and integrate ESG and climate risks into their business practices and processes. Furthermore, authors have designed the steps to be accessible for investors at the start of their ESG and climate integration procedures as well as those more advanced.

Step by step guide with clear set of actions

This framework is designed to be accessible for investors at the start of their ESG and climate integration procedures as well as those more advanced. In the key segments of the text designed to give recommended steps for each audience segment the reader will find tables which have actions labelled “Should” and “Could”. These key words are designed to differentiate actions for audiences of different levels of sophistication:



Initiate and intermediate Level (“Should”):

A beginner to intermediate user, with limited ESG and climate risk experience, would first identify their audience (eg. trustee) and then proceed to the relevant steps indicated for that audience and compare the detail of each of the steps recommended here in the relevant sections with their internal processes. This user “should” simply ensure that the steps indicated are executed diligently within the business processes which they manage.



Advanced Level (“Could”):

An advanced user, who has already started integrating ESG and climate risks into their business practices and procedures, can use the report to compare the best practice methodology with their own to identify new ideas and potential improvements. The more advanced user should consider the additional activities marked “could” as well as verify that they are already implementing those marked as “should”. These users will also gain value from the tool mapping of the sector publications useful as a way to direct their further investigation or to justify greater resource allocation into monitoring and reporting and public policy engagement and market transformation.

Making sense of resources : tool mapping

To ensure a fresh and well-informed approach, the consortium focused on reviewing, building upon and synthesising the robust literature, guidelines and tools and all resources that have already been published over the last five years. To achieve this, the project team took the following approach:

- Compile a list of relevant literature to review in consultation with experts and relevant investor networks, who provided over 40 publications, all of which are listed in the Bibliography section in this appendix;
- Use expert interviews to identify a set of criteria by which these publications could be sorted and assessed;
- Survey global practitioners to allow them to sort, position and calibrate the existing publications according to their relevance to this framework and the selected target audiences;
- Identify ‘selected’ resources, most relevant and useful for each audience in each step of the investor framework;
- Use infographics to communicate this work in a consolidated and easy-to-read manner providing a “map” to help real estate investing stakeholders easily navigate the extensive literature reviewed.

Tool mapping of selected resources



In order to visualise the wealth of evidence and publications covering these issues, the 'Tool mapping' graph below helps categorise each publication by relevance to each audience and each step of the investor framework.

Audiences Real Estate Investors



Global Resources

Resource	Owners & Advisers	Direct Investor	Equity, Bonds, Debt	All	Market Engagement
'Investing in a time of climate change', Mercer 2015, Global; 'An-Investment-Framework-for-Sustainable-Growth', Mercer 2014; 'Climate change scenarios: Implications for strategic asset allocation', Mercer 2011, Global	Key, Bar Chart				
'Developing an asset owner climate change strategy', PRI 2015, Global	Key	Key, Bar Chart			
'Financial institutions taking action on climate change' UNEP et al 2014, Global	Money Bag	Bar Chart			
Advancing Responsible Business in Land, Construction and Real Estate Use and Investment', RICS / UN Global Compact, 2015, Global	Money Bag	Key, Hand, Bar Chart	Bar Chart		
'Sustainability metrics: translation and impact on property investment and management', UNEP FI et al 2014, Global		Hand	Bar Chart		
'Unlocking the energy efficiency retrofit investment opportunity', UNEP FI 2014, Global	Hand	Hand			
'Sustainability and commercial property valuation - Professional Guidance Note', RICS 2013, Global		Hand			
'What the leaders are doing', UNEP FI 2012, Global	Money Bag				
'Green Bonds Principles', ICMA 2015, Global					
ICGN model mandate initiative, ICGN 2012			Bar Chart		
'Aligning expectations: guidance for asset owners on incorporating ESG factors into manager selection, appointment and monitoring', PRI 2013			Key, Bar Chart		
'Greening the building supply chain' UNEP SBCL, 2014, Global					
'Global Real Estate Sustainability Benchmark', GRESB 2015 (annually), Global	Bar Chart		Key, Bar Chart	Money Bag	
'Global Reporting Initiative - Construction and Real Estate Sector Supplement', GRI 2011, Global				Money Bag	
'PRI reporting framework - Asset Owners, Direct, Equity and Debt investments', PRI, Global				Money Bag	
'Sector led operational benchmark and indexes for Direct Investors, Real Estate Companies and their Advisers', Various, Regional				Money Bag	
'Corporate Register', Corporate Register 2015 (and annually), Global				Money Bag	
'Global Reporting Initiative - Construction and Real Estate Sector Supplement', GRI 2011, Global					Money Bag

Audiences Real Estate Investors



Regional Resources

Resource	Owners & Advisers	Direct Investor	Equity, Bonds, Debt	All	Market Engagement
'Climate Change Investment Solutions Guide' IIGCC 2015, Europe	Key, Bar Chart	Bar Chart			
'The 21st-century-investor-eres-blueprint-for-sustainable-investing', Ceres 2013, North America		Key, Bar Chart	Bar Chart		
Trustee's Guide: Protecting value in real estate through better climate risk management', IIGCC 2014; 'Protecting value in real estate: Managing investment risks from climate change', IIGCC 2013, Europe	Money Bag	Key, Hand, Bar Chart	Bar Chart		
'Investing through an adaptation lens', IIGCC 2015 & 'Assessing climate change risks and opportunities for investors - Property and Construction Sector', IIGCC 2013, Australia	Money Bag	Key, Hand, Bar Chart	Bar Chart		
'Whose Carbon is it? GHG Emissions and Commercial Real Estate', 2010, RealPAC and ICF, North America		Hand			
Green Property Bonds Standards, Climate Bonds Initiative 2015, Regional	Key, Bar Chart	Key, Hand, Bar Chart			
'A statement of investors expectations for the Green Bonds Market', 2015, CERES,		Bar Chart			
'Green bond guidance for real estate sector', GRESB, regional		Bar Chart			
'Debt tools - New lending decisions framework & Loan documentation', BBP 2015, Regional	Bar Chart	Bar Chart			

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About CERES – Investor Network on Climate Risks

The Investor Network on Climate Risk (INCR) is a North America-focused network of institutional investors dedicated to addressing the financial risks and investment opportunities posed by climate change and other sustainability challenges. INCR currently has more than 110 members representing over \$13 trillion in assets. INCR is a project of Ceres, a non-profit advocate for sustainability leadership that mobilizes investors, companies and public interest groups to accelerate and expand the adoption of sustainable business practices and solutions to build a healthy global economy.

For more information, see www.ceres.org

About the Investor Group on Climate Change

IGCC is a collaboration of 60 institutional investors and advisors, managing over \$1 trillion and focusing on the impact that climate change has on the financial value of investments in Australasia. The IGCC aims to encourage government policies and investment practices that address the risks and opportunities of climate change, for the ultimate benefit of superannuate and unit holders. One of IGCC's streams of work is focussed on climate change risk and opportunities in the built environment, as well as considerations around climate change adaptation and resilience.

For more information, see www.igcc.org.au

About the Institutional Investors Group on Climate Change

The Institutional Investors Group on Climate Change is the investor voice on climate solutions in Europe. It is a collaborative forum where 120 members – mainly mainstream investors including some of the largest pension funds and asset managers in the EU – with over €13 trillion assets under management. IIGCC's mission is to provide investors with a common voice to encourage public policies, investment practices and corporate behaviour, which address long-term risks and opportunities associated with climate change. One of its major work programmes focuses on best practice for integrating climate risk in real estate investment practice and climate policy affecting the commercial property sector.

For more information, see www.iigcc.org

About the Principles for Responsible Investment Initiative

The PRI works with its international network of signatories to put the six Principles for Responsible Investment into practice. Its goal is to understand the investment implications of environmental, social and governance issues and to support signatories in integrating these issues into investment and ownership decisions.

The six Principles were developed by investors and are supported by the UN. They have more than 1,400 signatories from over 50 countries representing US\$59 trillion of assets. They are voluntary and aspirational, offering a menu of possible actions for incorporating ESG issues into investment practices. In implementing the Principles, signatories contribute to developing a more sustainable global financial system.

For more information, see www.unpri.org

About UNEP Finance Initiative

The United Nations Environment Programme Finance Initiative (UNEP FI) is a unique global partnership between the United Nations Environment Programme (UNEP) and the global financial sector founded in 1992. UNEP FI works closely with over 200 financial institutions who have signed the UNEP FI Statements as well as a range of partner organisations to develop and promote linkages between sustainability and financial performance. Through peer-to-peer networks, research and training, UNEP FI carries out its mission to identify, promote and realize the adoption of best environmental and sustainability practice at all levels of financial institutions' business activities. The property work stream at UNEP FI aims to encourage sustainability in property finance and scale up Responsible Property Investment (RPI) as well as increase market spread of ESG in Real Estate investments.

For more information, see www.unepfi.org

About the Royal Institution of Chartered Surveyors

RICS promotes and enforces the highest professional qualifications and standards in the development and management of land, real estate, construction and infrastructure. Our name promises the consistent delivery of standards – bringing confidence to the markets we serve. We accredit 118,000 professionals and any individual or firm registered with RICS is subject to our quality assurance. Their expertise covers property, asset valuation and real estate management; the costing and leadership of construction projects; the development of infrastructure; and the management of natural resources, such as mining, farms and woodland. From environmental assessments and building controls to negotiating land rights in an emerging economy; if our members are involved the same professional standards and ethics apply.

For more information, see www.rics.org/uk/

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