Managing the climate risks and opportunities in your real estate investments
Agenda

- Introduction from the PRI
  *Helene Winch, Director of Policy and Research, PRI*

- Mitigating climate risks in real estate investments: tools for asset owners and investment managers
  What are climate risks to property investments and how to mitigate them?
  *Tatiana Bosteels, Head of Responsible Property Investment, Hermes Real Estate, and Chair of the IIGCC Property Working Group*
  Standards in data and sustainability metrics in property: a tool to manage risk
  *James Gray-Donald, VP Sustainability, Bentall Kennedy*

- Conversation with asset owners and mutual: understanding and managing climate risks
  *Faith Ward, Chief Responsible Investment and Risk Officer, Environment Agency Pension Fund*
  *Helen Wildsmith, Head of Ethical & Responsible Investment, CCLA*

- Next steps
  *Helene Winch, Director of Policy and Research, PRI*
What are climate risks to property investments and how to mitigate them?

Tatiana Bosteels, Head of Responsible Property Investment, Hermes Real Estate, and Chair of IIGCC’s Property programme
IIGCC’s strategic objectives

IIGCC has 100 members with over €9 trillion assets under management

IIGCC provides investors with the collaborative platform to encourage public policies, investment practices, and corporate behaviour that address long-term risks and opportunities associated with climate change.

- Change Market Signals
  - Policies and frameworks that support investment in low carbon technologies
  - A robust carbon price signal
  - Energy efficiency measures
  - Removal of perverse incentives

- Inform investment practice
  - Improved investor awareness
  - Adoption of best practice
  - Integration of climate risk and opportunities
  - Improved investor reporting
Protecting value in real estate: Managing investment risks from climate change

- Science shows physical impacts of climate change will affect assets and investments.
- Growing regulation on climate and sustainability is changing real estate market conditions. Pressure will only intensify in coming years.
- Impacts on value from green building investment decisions made today are recognised by leading investors across OECD.
- Investors and occupiers are taking action and developing tools to mitigate these investment risks and enhance long term value.
- Consistent with institutional investors’ fiduciary duty to understand and actively manage of these investment risks.
- Guidance and tools for responsible investors are available
Physical impacts of climate change will affect assets and investments:

- **Climate change and extreme weather events** will affect agriculture and food supply, infrastructure, precipitation and the water supply in ways that are only partially understood;
- **Macroeconomic impacts** such as the expected reduction in productivity and economic growth in many developing countries;
- **Direct physical impacts of climate change** such as flood and storm risks to coastal population centres;
- **Threat to social stability** posed by high and volatile food prices resulting from changes in agricultural patterns.

Climate policy measures will affect investments:

- Keeping the global average temperature rise since pre-industrial times below 2°C will require a **growing number of regulations and policy measures**;
- There are risks and opportunities associated with **policy measures** directed at reducing greenhouse gas (GHG) emissions from electricity generation, large industrial sources, buildings, transport and other economic sectors.

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IIGCC / PRI webinar, Wednesday 21 January 2015
EU Climate regulation and resource efficiency standards targeting the real estate sector

- EU-wide carbon reduction targets
  - Near zero energy new buildings by 2017/19
  - 20% energy consumption reduction from buildings by 2020
  - 40% carbon reduction by 2030
  - 27% non-binding RE and EE targets by 2030
- Mandatory energy efficiency targets by 2014, if national strategies deemed insufficiently ambitious
- Key directives:
  - Energy Efficiency Directive (EED)
- Member States' own targets and programmes
- Voluntary energy and environmental certification of buildings: DGNB, MINERGIE-P, Miljoklanad’, ‘PromisE’, ‘Okoprofil, HQE, BREEAM, LEED
Decisions made by private sector investors and financial institutions will have a major influence on how society responds to climate change.

There will be significant demand for capital, with governments looking to the private sector to provide much of it.

Additional investment required in the energy supply sector alone is estimated to be between:

- **USD 190 and 900 billion per year through to 2050**

Significant decreases in investment in fossil fuel extraction and conventional fossil fuel-based power generation.

Significant increases in investment in low-carbon energy and energy efficiency.
To reach EU 2020 targets, energy savings across sectors requires investment of:

- Reduce greenhouse gas levels by 20%
- Increase share of renewables to 20%
- Reduce energy consumption by 20%

€850 Billion (2011-2020)
€85 Billion per year is required to reach target
€60 Billion per year from buildings

References:
1. Newell, MacFarlane, Kok & Quigley (2011)
3. Newell, MacFarlane, Kok & Quigley (2011)
Impact on investment performance

- Experts believe investment decisions made today on green building characteristics will impact the financial performance of real estate investments in the near future.

- Already influencing market fundamentals including:
  - functional and physical depreciation of buildings; reduced risks of obsolescence; enhanced tenant retention; reduced void periods; and reduced operating costs.

- Members of the IIGCC’s Property Programme have first hand experience from their own investment activities:
  - low energy certificate ratings being used to reduce acquisition prices as part of the overall transaction negotiations in France, UK and Germany;
  - requests for energy performance certificates early in the transaction process as part of their standard due diligence processes; setting minimum sustainability standards;
  - introduction of formal ‘green’ clauses in standard tenant leases and sustainability risk assessments prior to acquisition.
Higher rents, higher sales prices

- A correlation exists between more energy-efficient buildings, higher rents and higher sales prices:

**9%** sales premium for Buildings with top NABERS ratings – Australia¹

**4.8%** higher rents for Energy Star vs comparable non-Energy Star - US²

**8%** positive impact on sales prices for BREEAM rated office buildings– UK³

¹ Newell, MacFarlane, Kok & Quigley (2011)
³ Newell, MacFarlane, Kok & Quigley (2011)
Leading investors are taking action to address these issues

The **Global Investor Statement on Climate Change** (a collaboration between IIGCC, INCR, AlGCC, IGCC Australia/NZ, PRI and UNEP FI) was signed by nearly 350 institutional investors representing over $24trn and recognised by UN Secretary-General Ban Ki-moon.

Investors agreed to take action on climate change by:

1. Working with policymakers
2. Identifying and evaluating low-carbon investment opportunities
3. Developing capacity to assess the risks and opportunities of climate change
4. Engaging with companies
5. Reporting on actions and progress
Financial institutions taking action on climate change

Role of finance sector in low carbon climate resilient world

- Climate change is a systemic risk that is impacting the finance industry, as all sectors of the global economy. Thus climate leadership is emerging in the finance sector, through:

- Low carbon and energy efficiency finance and investing:
  - Pension fund allocation to low carbon and energy efficiency:
  - Growing green bond market: providing the debt capital needed to finance the low carbon transition.
  - Reducing real estate emissions and energy use: The industry is utilizing new tools, setting targets and steering portfolios and financing activities towards lower carbon, higher rated energy efficient buildings

- Measurement and transparency: The industry is collaborating to improve carbon and climate change risk/performance measurement and reporting by companies and by the finance institutions themselves.
Investors are no longer awaiting empirical evidence of impact to financial performance from valuation analysis.

Many have already started to embed green building programmes in their real estate investment and asset management practices.

Principles for Responsible Investment: signatories in over 1000 investment institutions & over US$45 trillion in AUM.

UNEP-FI, IIGCC investors’ experience: growing scale of adoption across the whole process of real estate investment management and its supply chain on a global basis.

Occupiers are responding to regulatory pressures and consumer demand by implementing environmental, social and governance (ESG) policies.

Changes are also happening within: property managers, letting leasing agents, surveyors, and valuers.
Sector led tools and instruments

- Sector organisations work to promote, develop and standardise sustainable real estate practices and measurement.
  - Better Buildings Partnerships
  - Green Rating Alliance
  - Global Real Estate Sustainability Benchmark
  - Global Reporting Initiative Construction and Real Estate Sector Supplement
  - IIGCC guides for pension funds
  - INREV and EPRA sustainability reporting guidelines
  - International Sustainability Alliance
  - IPD Eco-PAS, Eco Portfolio Analysis Service
  - UNEP FI Property Guides
  - PRI
  - RICS
  - Sustainable Building Alliance
Risk management toolkit for property investors

Investors and occupiers have developed tools to implement responsible investment and management strategies to mitigate these risks and enhance long term value including guidance to assist institutional investors investing in property or taking decisions related to real estate investment.
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<th>Guidance and examples of answers being sought</th>
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<td>Are we confident that the regulatory environment is consistent with institutional investors’ risk requirements to support investment in climate change proof and sustainable real estate?</td>
<td>Are we encouraging and pursuing opportunities to engage with policymakers to encourage policies that support scaling up investments in sustainable real estate as well as encouraging our investment managers to contribute to relevant policy and sector-led initiatives?</td>
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<td>Is the way in which we are rewarding our investment managers conducive to encouraging them to address climate and sustainability considerations?</td>
<td>Are the medium to long-term time horizons over which interventions to address climate change are set consistent with short term performance horizons typically placed on investment managers?</td>
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## Getting started with climate risk integration

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## Putting climate change on the agenda with managers

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<td><strong>What actions is the property investment manager taking to reduce the environmental footprint of the properties already held in the portfolio, through management and leasing of properties and how do these actions relate to the need to continue to provide competitive returns?</strong></td>
<td>Sustainability programmes are in place targeting energy, water, waste, transport and adaptation to climate change. These include activities aimed at establishing and maintaining accurate data, the public communication of performance targets, the disclosure of annual performance and the description of the actions that delivered the performance improvement.</td>
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<td><strong>What actions and what evidence can the property investment manager provide of reducing environmental impacts from development and refurbishment activities in recent years?</strong></td>
<td>The investment manager demonstrates understanding and implementation of measures to address medium term regulatory requirements in its development activities. For example there are minimum sustainability requirements for development and refurbishment projects aligned with market demand in specific geographies.</td>
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<td><strong>What actions is the investment manager taking to engage and cooperate with occupiers of the buildings being managed?</strong></td>
<td>An active occupier engagement policy is in place, including for example green clauses in standard leases, commitment to implement joint sustainability programmes with occupiers, and/or occupier surveys to assess the effectiveness of their implementation.</td>
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## Putting climate change on the agenda with managers

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<td>What policies does the property investment manager have in place to ensure that those supplying goods and services to the property portfolio are doing so in a responsible manner?</td>
<td>Impact assessments and the resulting policies covering key suppliers are in place, commensurate with the range of the investment manager activities. The policies can include a process to monitor suppliers’ performance and ensure that policies are implemented.</td>
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<td>How active is the property investment manager in dialogues within the property industry and with government to develop appropriate awareness and action to reduce the environmental impact of buildings?</td>
<td>The investment manager is an active contributor to policy dialogue, consultations and sector-led initiatives that support the commitment to disseminate responsible investment practices across the sector. The emphasis placed on training and learning within the organisation will be reflected in staff’s awareness and knowledge.</td>
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Standards in data and sustainability metrics in property: a tool to manage risk

James Gray-Donald, VP Sustainability, Bentall Kennedy
Sustainability Metrics
TRANSLATION AND IMPACT ON PROPERTY INVESTMENT AND MANAGEMENT

A report by the Property Working Group of the United Nations Environment Programme Finance Initiative
May 2014
Sustainability is no longer a niche issue

- The financial business case is clear: energy efficient and sustainable buildings provide an overall better market value for investors.
- There is an increasing demand for data to assess the sustainability credentials and performance of companies, portfolios and buildings.
- Asset owners and managers are increasingly confused by the ever thickening ‘alphabet soup’ of acronyms relating to building metrics and the organisations behind them.
The industry status

A survey of property investors and managers revealed that:

- **81%** have some form of “sustainability check” in place
- **58%** do not have any form of internal management system in place
- **16%** is able to use the information for sustainability reporting functions
Valuers perceive that sustainability aspects have an impact on market value

Sustainability factors are perceived by valuation professionals to have an impact on market value. Other factors include:

- Statutory certification (e.g. Energy Performance Certificate)
- Voluntary sustainability certification (e.g. BREEAM, LEED or equivalent)
- Actual energy performance
- Energy source (e.g. use of renewable energy)
- Flood / storm risk
- On-site flood defences
- Water conservation or recycling measure
- Waste reduction facilities (e.g. on-site waste segregation for recycling)
- Adaptability to other uses
- Building flexibility (e.g. possible re-configuration of internal layout)
- Accessibility of location
- Construction (use of sustainable material)
- Known contamination and/or pollution
- Occupier health and well being statistics
- Fire risk
- ‘Green’ lease clauses (if a let building)

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Switzerland  Germany  UK & Rest of the World
And these are already translated into sustainability metrics proper valuation guidance

"The January 2014 RICS Red Book edition now specifically lists sustainability as a factor that valuers must take into account when performing valuations and risk assessments for their clients as these sustainability factors can influence investment decision-making.

Ursula Hartenberger
Global Head of Sustainability, RICS

When a RICS property valuation is needed, clients will need to supply extended information. This will avoid additional risk premiums in the valuation process.
The way to success

Corporate Real Estate Sustainability Management (CRESM)

CRESM refers to the integrated management of all economic, environmental and social aspects of an organization’s property (real estate) activities and associated investment decision-making. It involves all relevant strategies, processes and organizational structures that support corporate governance and sustainable business and product development.

“\textit{The challenge that our industry faces is developing consistent and robust, yet efficient, frameworks that combine information from various sources and processes in order to inform investment decisions.}

\textbf{Ari Frankel}
Head of ESG Strategy, Real Estate, Deutsche Asset & Wealth Management
The way to success

**CORPORATE LEVEL**
- INVESTMENT MANAGEMENT

**PORTFOLIO LEVEL**
- PORTFOLIO MANAGEMENT
- ASSET MANAGEMENT

**SINGLE BUILDING LEVEL**
- ASSET MANAGEMENT
- PROPERTY MANAGEMENT
- FACILITY MANAGEMENT

Traditional decision-making basis

Additional sustainability-related data/information
Structuring information flows

Corporate Level:
• Investment Management

Portfolio Level:
• Portfolio Management
• Asset Management

Single Building Level:
• Asset Management
• Property Management
• Facility Management

Service providers (e.g. valuers/analysts)/Transaction partners/Stakeholders

External information flow

Service providers (e.g. technical due diligence/property management services)/Contractors

Cross-over information flow

Organisation-wide information flow
Collecting “physical” information at the building level

1. Building description A (volume & surfaces)
   - Size (m²) per zone of use
   - Volume (m³) and surface-volume-ratio (m²/m³)
   - External surfaces and orientation (walls, windows) (m²) by type
   - Internal surfaces (m²) by type
   - Ceiling/room height
   - Size/type of rooms (e.g., open-plan office, cellular office)
   - Width of doors and corridors
   - Size of facilities/rest-room regarding barrier-free accessibility
   - Ratio between usable (effective) floor area and traffic (common) area

2. Building description B (construction & products)
   - Construction type
   - Carrying structure and foundation
   - Load bearing reserve
   - Type of external walls/envelope
   - Type of windows and glazing
   - Type of internal walls
   - External surface materials
   - Internal surface materials
   - Other materials and products

3. Energy source
   - Energy sources (fossil, renewable) for heating
   - Energy sources (others)

4. Technical equipment
   - Heating and cooling system (HVAC-part 1)
     - incl. heat and hot water production, cooling generation
   - Energy generation for internal use and/or third parties (PV, etc.)
   - Ventilation system (HVAC-part 2)
   - Electrical system (incl. lighting)
   - Elevators & Internal transport
   - ICT
   - Water supply, distribution and wastewater (e.g., water efficient taps, rain- and grey-water usage, own clarification plant, rain-water infiltration, etc.)
   - Waste collection system
   - Distribution pipelines (e.g., within supply/utility shafts)
   - Controlling instrumentation
   - Measurement instrumentation
Collecting “performance / quality” information at the building level

Technical quality
- Structural safety
- Fire protection
- Noise protection
- Moisture protection
- Maintainability
- Flexibility and adaptability
- Ease of cleaning
- Durability
- Resilience against natural and man-made hazards
- Design for deconstruction and recyclability

Functional quality
- Serviceability (fitness for purpose, usability)
- Space efficiency

Cultural and social quality
- Aesthetic quality
- Urban design quality
- Cultural value
- Health & well-being
- Indoor air quality
- Comfort (thermal, visual, acoustic, olfactory)
- User safety
- User participation and control
- Accessibility (to and inside the building)

Environmental quality
- Energy performance
- Resource depletion
- GHG-emissions & GWP
- Other impacts on the global & local environment incl. risks to the local environment
- Land use change & sealing
- Water consumption
- Wastewater
- Waste (construction & user related)

Economic quality
- Life cycle costs
Value of information

IMPACT ON DECISIONS & ACTIONS ALONG THE LIFE CYCLE OF BUILDINGS

STRUCTURED INFORMATION / DATA PROCESSING

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Adjusting methods and need to be integrated into decision making tools

DCF coupled with Monte Carlo Simulation

Three-dimensional approach to portfolio analysis

Additional information opens up new (analytics) opportunities.
Taking collective action

The report contributes to changing the perspective on the management of sustainability-related information. It shifts the viewpoint from another duty within ESG and PRI commitments towards what it actually is an overall quality assurance tool and mechanism that supports all corporate processes. The resulting financial advantages need to be understood as an opportunity for the property industry which requires taking action – the sooner the better.
Recommendations at the corporate level

- Integrate sustainability into the corporate mission and value system
- Adjust the investment strategy by adding an ESG dimension to the investment targets
- Whenever property services are outsourced, create a framework of requirements with third-party service
- Set targets for portfolio level performance and monitor their compliance
- Produce meaningful sustainability reports
- Support the adoption of buildings documentation within the industry
- Cooperate with national and global initiatives (PRI, UNEP FI, GRI, etc.)
Recommendations at the portfolio level

- Adopt a three-dimensional approach to portfolio analysis whereby financial success factors are depicted in relation to the quality characteristics of the building as well as its location and market environment.
- Integrate sustainability considerations into existing decision-making instruments.
- Set sustainability performance targets for property and facility management and monitor compliance.
- Ensure that your external service-providers report continuously and consistently.
- Ensure that data in physical property characteristics are available for all buildings. Then add quality characteristics.
- Exploit synergies when collecting and processing building-related information.
Recommendations at the single building level

- Set sustainability performance targets and measure progress
- Extend facility management processes
- Make sustainability a requirement for new and refurbishment projects
- Actively request building-related information and documentation
- Ensure that building documentation is updated during the management phase
- Exploit the full potential of green leases
- Actively communicate the sustainability credentials of buildings/projects to banks and insurance companies
Conversation with asset owners and mutual: understanding and managing climate risks

Faith Ward, Chief Responsible Investment and Risk Officer, Environment Agency Pension Fund

Helen Wildsmith, Head of Ethical & Responsible Investment, CCLA
Conversation with asset owner

Faith Ward, Chief Responsible Investment and Risk Officer, Environment Agency Pension Fund

Environment Agency Pension Fund. £2.5bn AUM, part of UK Local Government Pension Scheme.

Carbon\climate risk progressively embedded in all asset classes over the last decade.

Why?
- Risk mitigation and protect value
- Investment theme

Target:
- 25% of EAPF in clean tech and strongly sustainable companies and funds by March 2015.
Conversation with asset owner

Faith Ward, Chief Responsible Investment and Risk Officer, Environment Agency Pension Fund

Practical implementation
- ESG issues, including climate risk in real asset due diligence.
- Fund managers report on risk management and metrics e.g. carbon emissions saved per £K invested.
- Managers asked to use GRESB framework to report to us as client.
- Investments in real estate where low carbon forms part of the strategy e.g. Threadneedle Low Carbon Workplace fund.

Next steps
- Further work on using impact methodology and carbon footprinting on real assets portfolio.
Conversation with mutual

Helen Wildsmith, Head of Ethical & Responsible Investment, CCLA Investment Management Ltd

CCLA - £5bn UK Church, Charity and Local Authority Mutual Fund Manager

- Climate change seen as a risk factor and opportunity across asset classes, including property
- Our multi-asset funds have invested in energy efficiency with the Green Investment Bank
Q&A

Please submit your questions via the chat box on the right
Next steps

Helene Winch, Director of Policy and Research, PRI

Contacts:

natasha.buckley@unpri.org
mlamanna@iigcc.org
tatiana.Bosteels@hermes-investment.com