

THE REAL ESTATE GREEN AGENDA

Presentation for Celesq

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Introduction

- The mountain of “green” legislation and environmental regulation, both local and international influencing the real estate industry and its funders
- A link between real estate value and “being green” and, if it exists, how to benchmark it?
- The finance world, environmental compliance and the influence on lending decisions



The Green Agenda

- Key Drivers to Sustainability – Legislative and Intergovernmental Background
- Who is influencing the Green Agenda
- Sources of Green Information
- Green Standards Benchmarking and Terminology
- Green Leases



Key Drivers to Sustainability in the UK

- **Legislation/Regulations:**

Environmental issues are discussed at the very highest political level and policy decisions taken at governmental, national, regional and local levels. Two main obligations are:

- by 2020 all new buildings need to be “nearly zero energy”;
- by 2050 emissions from all buildings need to be as “near to zero” as possible

- **Cost:** Some businesses have quickly realised that the sustainability agenda could be another way to cut costs inside the business. Green leasing for example can now make very good business sense, in particular in combating volatile energy costs

- **Tenant Corporate Social Responsibility (CSR):** the UK government is currently debating how to enact more stringent Environmental Social Governance reporting requirements

- **Investor Sentiment:** Reports issued by the UK government and the Royal Institution of Chartered Surveyors (RICS) suggest that green buildings will be of greater value



The UK Legislative Landscape

- The UK Energy Act received Royal Assent on 18 October 2011. One of its objectives is to encourage investment in energy efficiency measures for homes and commercial real estate
- The Green Deal is one key provision, which incentivises investment into energy efficiency improvements of existing buildings through providing finance to undertake improvement works, but with no upfront costs to owners or occupiers taking advantage of the scheme
- However, no commencement date has officially been set for non-domestic properties and is expected to be delayed until at least the first quarter of 2013
- As of April 2012, the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007 have been amended and will now require an EPC to be included in the marketing materials of a property being put up for rental or sale within 7 days. The EU Energy Performance of Buildings Directive (first adopted in 2002) sets minimum efficiency standards for both residential and commercial buildings. A recast of the Directive was adopted in 2010, known as EPBD2, and should take effect in EU Member States by Jan 2013
- Additionally, air conditioning reports must be entered onto the EPC register. Failure to comply with the amended regulations can result in a fine of up to £5,000
- This reflects the growing focus on EPC's (Energy Performance Certificates) through the Energy Act 2011 which stipulates that from 2018, it will be unlawful to let both residential and commercial premises that do not meet minimum energy efficiency standards

The UK Legislative Landscape *(continued)*

- The detail is not prescribed in primary legislation but Ministers have indicated that “worst performing property” will mean all buildings which are EPC-rated F or G, and therefore landlords will need to invest in energy efficiency improvements to upgrade them
- Draft Energy Efficiency Directive – currently being negotiated between Parliament and the Council, some version should be adopted by end 2012. There are 4 key elements of the directive include:
 - Public sector leading by example: procurement requirements, annual renovation target for public buildings
 - Provision of energy services and information: energy efficiency obligations for utilities, better metering and billing
 - Distribution of energy: 10 years national heat and cooling plans, cogeneration obligation, network tariffs
 - Industrial and services sector: mandatory energy audits

The UK Legislative Landscape – Why it Matters

- Real estates responsible for
 - 40 % of total energy consumption and
 - 35 percent of CO₂ emissions (full lifecycle)
- Implementing existing technologies by 2020 could help
 - reduce building's energy consumption by about 30 %
 - In turn reducing the EU's final energy consumption by as much as 11 %
 - **Savings in the EU's annual energy bill reaching a potential EUR 200 billion.**
 - **Achieving the EU's 20% energy efficiency target by 2020 could create up to 2 million new jobs**
- Regulatory pressures and market demand mean environmental issues will present significant long-term risks to property-investment performance.

Who is Influencing The Green Agenda

- Background – Global Influences
- Australia's Pixel Building – Worlds Greenest?



Sources of Green Information

- ukgbc.org
- bpf.org.uk
- ipd.com
- rics.org/sustainability
- BBP - Better Buildings Partnership
www.betterbuildingspartnership.co.uk



Real value in a changing world



Sources of Green Information *(continued)*

- BPF – The British Property Federation a membership organisation representing the interests of all those involved in property ownership and investment
www.bpf.org.uk
- Business Link – A free business advice and support service - www.businesslink.gov.uk
- Carbon Trust – A not-for-profit company, with the mission to accelerate the move to a low carbon economy - www.carbontrust.co.uk
- CIBSE – Chartered Institute of Building Services Engineers - www.cibse.org
- Environment Agency – UK Government public body for the environment
www.environment-agency.gov.uk
- UK-GBC – The UK Green Building Council is a membership organisation campaigning for a sustainable built environment - www.ukgbc.org
- Envirowise WRAP – Provides free and independent support to improve resource efficiency in organisations - <http://envirowise.wrap.org.uk/uk.html>

Worldwide Green Standards and Benchmark Terminology

- BREEAM/LEED
- NABERS/BUREAU VERITAS
- RICS SKA
- EPC/DEC



Green Leases

- What is a green lease - UK
 - A “green lease” in the UK is a general term for provisions in a commercial real estate lease or collateral document that aims at reducing the environmental impact of buildings and making buildings more resilient to environmental changes. UK law does not provide for a definition, or description of a “green lease”
 - In the UK green leases are often termed light green, medium green or dark green. Light green leases tend to be non-legally binding providing a framework for collaboration between landlord and tenant, objectives are often limited. Dark green leases are legally binding and generally contain a full range of requirements. Medium green leases are somewhere in between
 - The emphasis tends to be on energy efficiency but in fact a wider range of issues is usually dealt with such as water management, waste management, use of sustainable materials and transportation. This is reflected also in systems of certification that have been developed for green buildings such as BREEAM and LEED
 - The principal methods used to differentiate a “green lease” are clauses in the lease, provisions in a tenant handbook, a separate bespoke environmental plan for a building or a memorandum of understanding

Green Leases *(continued)*

- What is a green lease - US
 - At its most basic level, a “green lease” is a lease that furthers and supports the landlord’s and/or tenant’s goals of constructing, maintaining and operating a building or premises that is in conformance with identified sustainability goals and principles
 - However, as the diversity of green lease forms and guidelines created by various trade associations and entrepreneurs over the last few years serves to confirm, there is no such thing as a “one size fits all” or “model” green lease, but rather, as is the case with all other material business terms addressed in a lease, an effective green lease is one that allocates the responsibilities, risks and rewards associated with green building issues. Those issues will vary according to market sector (e.g. office, retail, industrial, etc.) and according to the scope of the sustainability goals and constituencies they are designed to address

Main Legislation/Drivers to Green Leases

- UK
 - Legislation has been the main driver to more sustainable real estate and therefore “greener leases”
 - Most of the legislation impacting the building sector comes through Directives, such as the Energy Performance of Buildings Directive (EPBD)
 - In May 2010, the existing EPBD evolved to strengthen the building energy performance requirements.
 - The original EPBD came into force in its UK transposition applicable for commercial buildings in 2008. Based on this directive, the obligation of establishing Energy Performance Certificates (EPCs) was introduced
 - Since then, there has been an increasing voluntary push for Display Energy Certificates (DECs) in commercial buildings. This has been led by members of the UK Green Building Council. The objective is to show actual operational performance rather than just labelling potential performance, which EPCs show

Main Legislation/Drivers to Green Leases *(continued)*

- The UK Government has also released its carbon plan that specified that by October 2012 Display Energy Certificates (DECs) will need to be rolled out to commercial buildings
- As part of the UK's Climate Change Programme, it introduced the Climate Change Levy Act (CCL) that came into force in 2001 and obliged non-domestic users to pay a tax on electricity, coal and gas consumed. The aim is to encourage the market towards low carbon energy sources. The future of the CCL is currently unclear, as work was started to reform it in 2011. No one is clear of future changes of rate and also its potential overlap with the Carbon Reduction Commitment scheme (CRC), which is looking more like a carbon tax
- Other measures to encourage greener and more energy efficient commercial buildings include:
 - **Government planning policies.** The Planning Policy Statement on Climate Change requires local authorities to provide a policy framework promoting renewable and low-carbon energy generation
 - **Local planning policies.** Local planning authorities have some discretion in the level of green or energy efficiency standards they require from new buildings in their area. London-wide regional policy sets particularly high standards

Main Legislation/Drivers to Green Leases *(continued)*

- US

- While there is no regulatory scheme regarding green construction or leases applicable to the private sector at the federal level, many municipalities, counties and states have begun to mandate that certain new buildings and/or build-outs meet minimum green standards, and many more have implemented sustainability-related incentive programs such as tax credits, tax exemptions, density bonuses, reduced permit fees, expedited approval and permitting, and grants. The scope and complexity of these regulations and incentive programs varies widely; however, a typical approach has been to require city or municipal buildings to meet specified sustainability standards while private development has instead been encouraged to meet these standards on a voluntary basis through the use of incentives
- Many of the regulatory programs that have been implemented to date are based at least in part upon the Leadership in Energy and Environmental Design (LEED) building rating system promulgated by U.S. Green Building Council (USGBC), a Washington, D.C.-based non-profit organization committed to the promotion of cost- and energy-efficient green buildings. USGBC reports that LEED initiatives including legislation, executive orders, resolutions, ordinances, policies, and incentives are found in 45 states, including 442 localities (384 cities/towns and 58 counties), 35 state governments (including the Commonwealth of Puerto Rico), 14 federal agencies or departments, as well as numerous public school jurisdictions and institutions of higher education across the United States

Main Legislation/Drivers to Green Leases *(continued)*

- As the participation in voluntary programs and incentives has grown so the shift to regulation of the private sector and the “mainstreaming” of green policy has increased. For example, California’s new mandatory building code – known as “CalGreen” – which went into effect at the beginning of 2011, incorporates sustainable building practices into private construction
- CalGreen requires all new construction to use less water, divert waste from landfills, use low emitting flooring and finishes, conduct inspections and commissioning of HVAC and other building systems, as well as implement post-occupancy systems management. CalGreen is also an example of the shift away from the narrow focus on initial building construction and renovation only to one that includes ongoing building operation and maintenance
- Other examples include New York City, which recently adopted a bill that requires large privately-owned buildings to conduct building system energy efficiency audits and commissioning every ten years, and California and Washington where building energy efficiency disclosures are now required in transactions involving nonresidential property
- The increasing regulatory focus not only on green construction but also on sustainable operations and maintenance practices means that, like it or not, many landlords and tenants now have to address issues associated with regulatory compliance in their lease agreements



IPD Sustainability

On the pulse of
the property world



- IPD is a global information business, dedicated to the objective measurement of commercial real estate
- As a provider of real estate performance analysis for funds, investors, managers and occupiers, IPD offers a full range of services including research, reporting, benchmarking, conferences and indices
- IPD has 10 business units across the world, provides services to 32 different markets and produces indices in 27 markets
- IPD recognises the impact that environmental considerations have on financial performance (both risk and return) and try address the gap between what is available and what is needed by investors in the field of environmental metrics
- We are not a certifying body and do not offer a certification tool – there are many of those available – IPD is focused on providing a better understanding and improved measurement of the relationship between environmental and investment performance
- There are several IPD markets that are currently developing sustainability services; including Australia, Canada, France, Denmark, Germany, Netherlands, South Africa, and the UK



IPD USA

- Based in Chicago, IPD USA currently does not offer any sustainability services to their clients. This is expected to change in the future and it is anticipated that they will follow the same approach undertaken by other IPD business units
- IPD USA provides a range of portfolio analytics and benchmarking services for the commercial real estate industry
- Portfolio Analysis Service (PAS)
 - PAS is a performance measurement and benchmarking tool designed to support the analysis of investment strategy, performance and risk profiles
 - It examines the strengths and weaknesses at portfolio, fund and asset level. The service provides standardised and bespoke/or custom benchmarks, allowing you to select an appropriate benchmark to fit your specific needs
- US Data Products and Research

IPD USA offers a wide range of data and research publications in order to help clients stay up to date with global and local real estate trends
- Lease Level Analysis

Analysis of rental profile, quality of tenants and risks associated with future income stream



IPD UK Sustainable Property Indicator (ISPI)

- In 2009, IPD UK was commissioned to produce a financial performance index which tracked the ‘greener’ properties in the UK market
- IPD began collecting data on the environmental characteristics of properties (e.g. EPCs, BREEAM ratings, flood risk, access to public transport etc.)
- Since 2009, IPD has produced the IPD UK Sustainable Property Indicator (ISPI) bi-annually, and is now sponsored by K&L Gates, CBRE and the IPF
- ISPI results from Q4 2011:
 - Sustainability data from a total of 115 funds, including 17 whole portfolios
 - Sustainability data completed on 1747 properties, of which only 791 had sufficient data to classify as “more” or “less” sustainable (45% by property count)
 - Of these 791, some 81 were considered “more” sustainable by property count (10.2%)
 - £3.1bn considered “more” sustainable by capital value (25.5%)

INCLUDED in framework	EXCLUDED from framework
Building Quality	Building Adaptability
Building Accessibility	Occupier Satisfaction
Energy Efficiency	Contextual Fit
Water Efficiency	Occupation Impact
Waste Management	Pollution
Flood Risk	



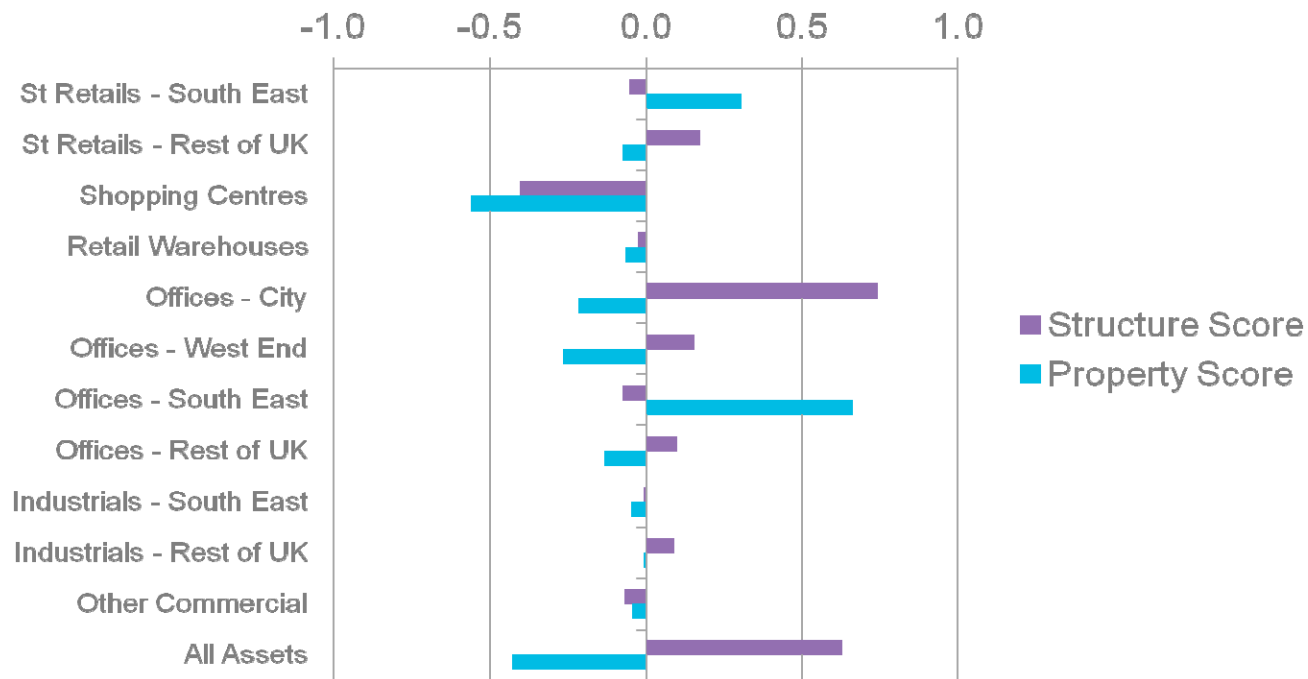
Performance: IPD UK Sustainable Property Indicator (ISPI)

Full Year 12 month returns to December 2011



IPD UK Sustainable Property Indicator (ISPI) Attribution Analysis Full Year 2011

More sustainable properties versus IPD UK Quarterly Databank



IPD UK Sustainable Property Indicator (ISPI)

Conclusions

- Given the small sample size and the fact that sustainability factors have not yet been priced into the market valuations, anything we note in the most recent performance numbers must be treated with a high degree of caution
- The ISPI out performance of 2011 is due to structural reasons rather than sustainability reasons
- No conclusions can yet be drawn from these performance numbers as to the impacts of sustainability on investment performance

What Next for IPD UK?

- Investors want to understand better the sustainability risks on every asset in their portfolio
- Valuers need to take environmental qualities into account in their appraisals
- Eco-Portfolio Analysis Service (EcoPAS):
 - focuses on 17 environmental questions thought likely to impact asset and portfolio values, as well as performance, and demonstrates the extent to which investors are facing greater or lesser risks than their competitors
 - data supplied by valuers, as well as investors and IPD
 - whole portfolios, not just cherry picked assets

IPD Australia Green Property Index

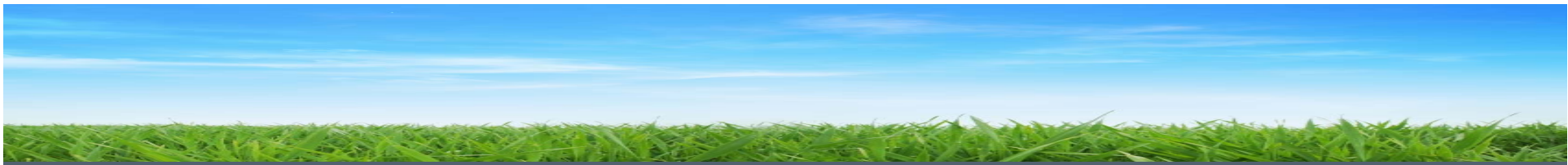
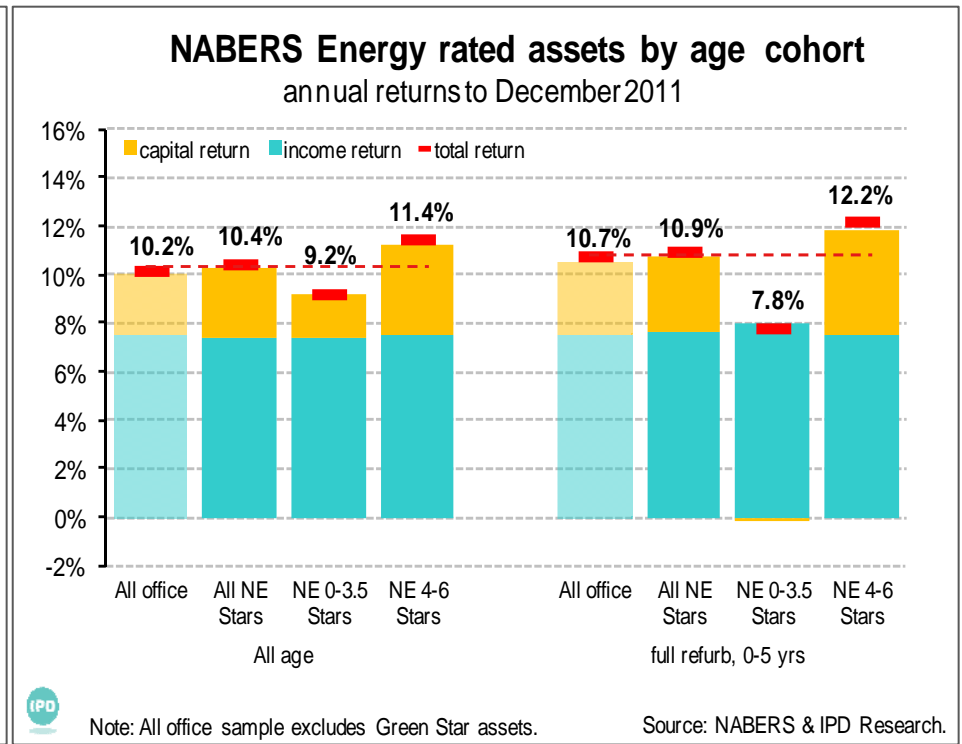
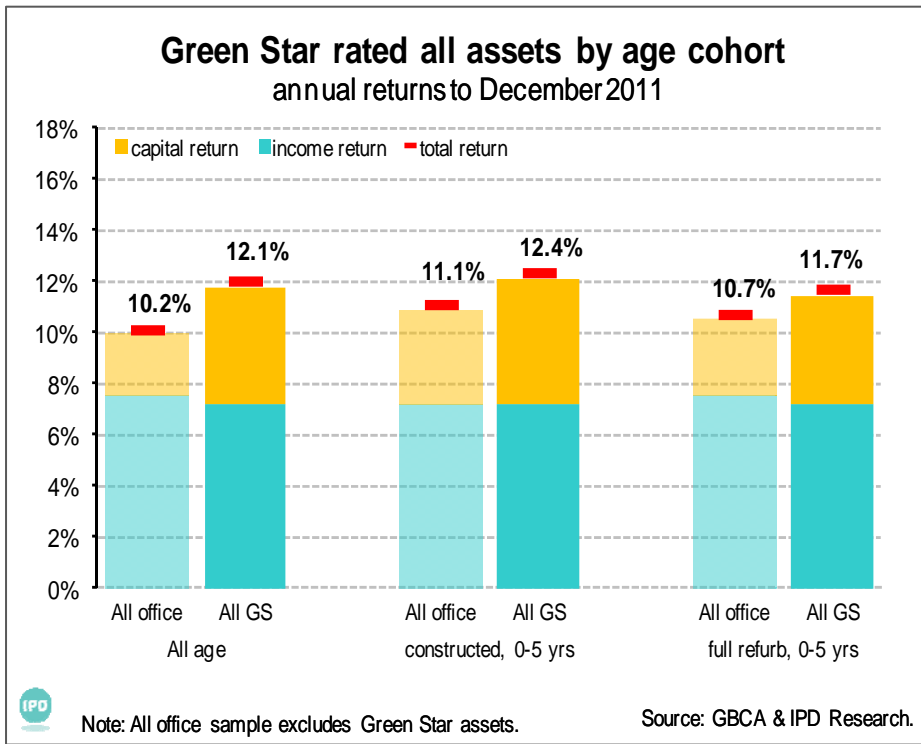
- First launched in March 2011 and tracks the investment performance for Green-Star and NABERS rated office assets
- Appraisers have taken sustainability into account in their market valuations in Australia for a number of years

Headline Results 2011

- Prime office buildings rated by Green Star have outperformed the all prime office benchmark (excluding Green Star assets) by 250bps over the year to Dec 2011
- Outperformance of Green Star assets is consistent when segmenting the returns by buildings of all ages and those constructed or fully refurbished within the last five years
- Prime office assets with a high NABERS Energy rating outperformed the all prime office benchmark (excluding Green Star assets) by 80bps over the year to Dec 2011
- High rated NABERS Energy buildings also outperform when compared to prime office buildings that have undergone a full refurbishment with the last five years

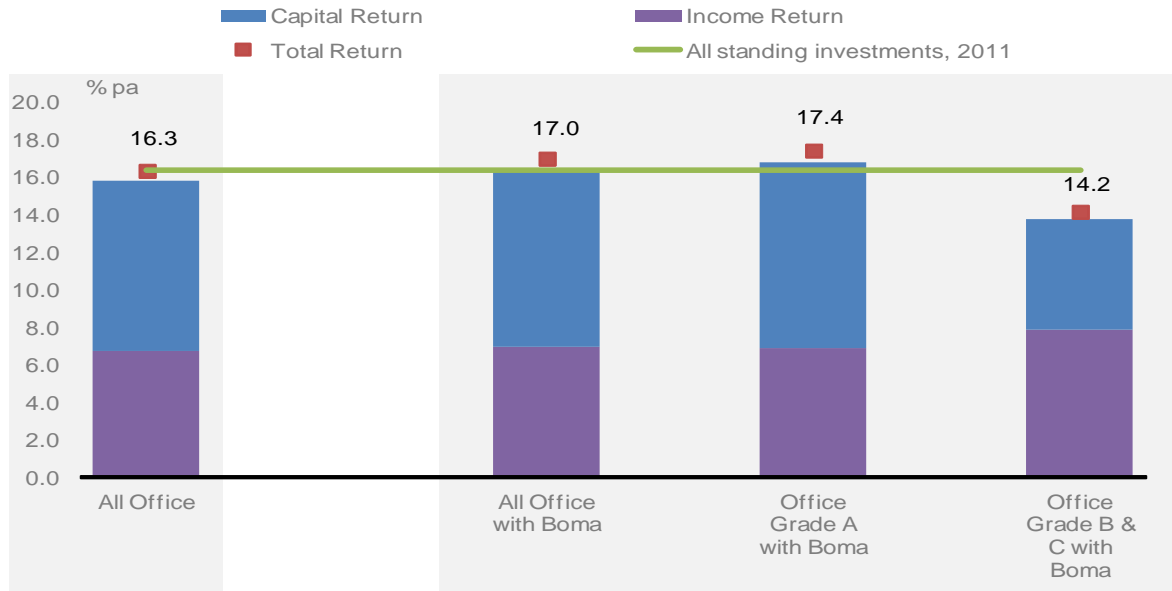


IPD Australia Green Property Index *(continued)*



IPD Canada

- Collecting BOMA BEST and LEED ratings on the majority of properties in their database
- Started discussions about the creation of a sustainability index/indicator for Canada – an industry-based sustainability committee is currently being set up to steer the direction of the index



Given the small sample size and the fact that sustainability factors have not yet been priced into the market valuations in Canada, anything we note in the most recent performance numbers must be treated with a high degree of caution

Source: IPD Canada



IPD Rest of the World

France Green Building Indicator

- Latest results – IPD France Green Building Indicator 2011, in partnership with Certivéa and sponsored by CBRE
- Includes a comparison between the financial performance of green buildings (certified HQE), non-green properties and a sub-sample of non-green high-end buildings that possess similar technical characteristics to green buildings
- The results for 2011 reveal that green buildings achieved a total return of 7.4%, 110 bps above that of non-green high-end buildings (6.3%)
- Although the analysis reveals a slight financial outperformance by the more sustainable properties, IPD is unable to conclude that the outperformance is due to sustainability reasons – the sample size of 56 green buildings relative to 2,922 non-green buildings is too small (although growing) and like most countries, sustainability factors have not yet been taken into account in France

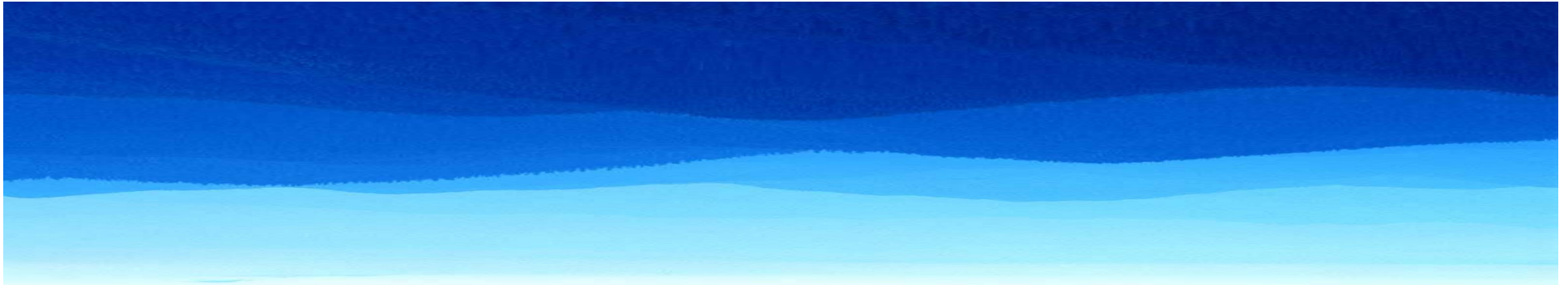
Germany, Denmark, Netherlands

- Collecting Energy Performance Certificates (EPCs) on each asset in their database
- Providing analysis for clients, as well as sponsored research reports, on the relationship between energy efficiency and investment performance



Conclusions...

- Until recently, the measurement of sustainable property investment performance has not been considered essential. However, as investors need a better understanding of these impacts and the potential environmental risks within their portfolios, the demand for this kind of measurement has grown significantly
 - increased regulation and legislation in this area has made it even more vital for investors
- More importantly, investors are expected, not only as part of their social responsibilities, but primarily as a result of their fiduciary duties, to understand how environmental issues impact on portfolio performance and investment value
- Appraisers are coming under increasing pressure to take environmental factors into account in their appraisals; managing agents are being requested to implement environmental best practice; Occupiers are more concerned with environmental efficiencies than ever before; and Governments are creating more legislation around the environment and real estate
- While IPD has only developed sustainability services in certain business units, the products that have been developed are thought to have global relevance and in time will most likely be adapted to suit other markets



Financing Energy Efficiency



www.newresourcebank.com



New Resource Bank: A Radical Idea

Our mission is to promote sustainable living in our community with everything we do.

Where Does Your Money Spend The Night?





Old Economy

- ❖ Shareholder focus
- ❖ Unconscious
- ❖ Unsustainable

New Economy

- ❖ Stakeholder focus
- ❖ Conscious Capitalism
- ❖ Sustainable Leadership

Change the way people think about Banking!



Client Sustainability Assessment

Competency

High
↑
Low



Low → High

Commitment



Energy Efficiency Improvements

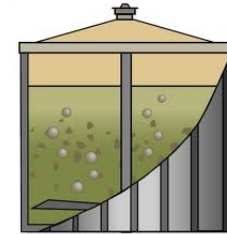
Energy
Reduction



Water
Reduction



Alternative
Energy



Usage
Optimization



Co-generation



Challenges



Split Incentives



Capital Requirements

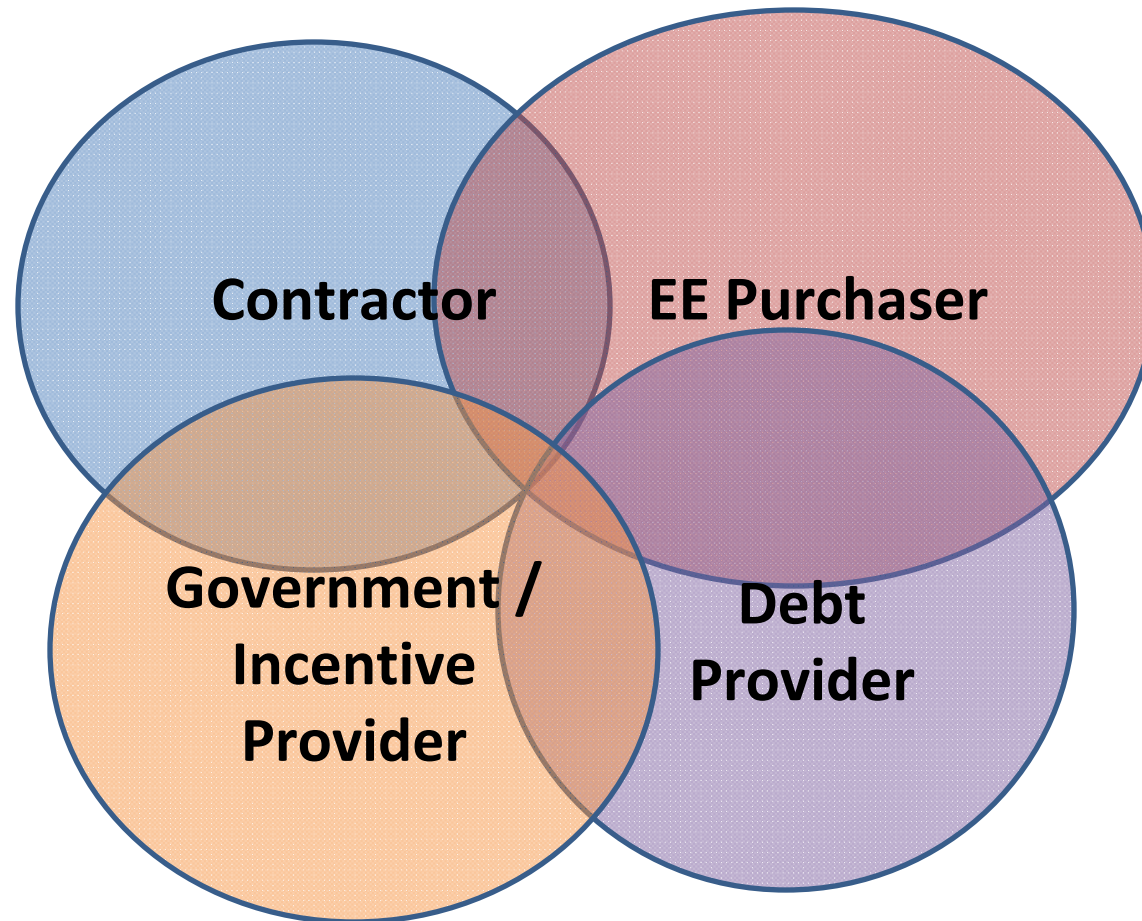


Payback - IRR



Financing

Aligning Interests



Concerns

Contractor Concerns:

- System Performance
- Warranties

Purchaser Concerns:

- Cost savings
- Reliability

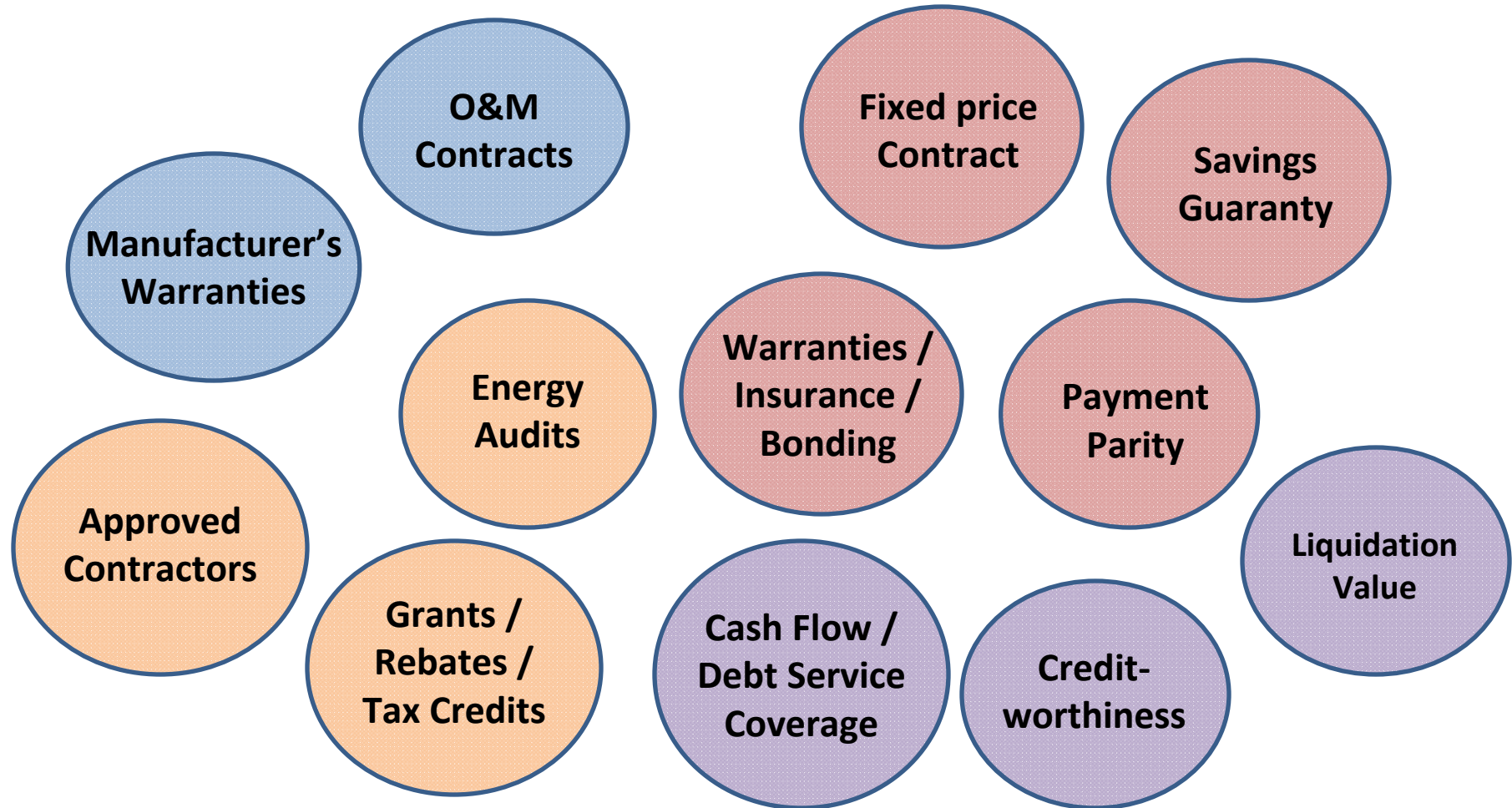
Government Concerns:

- Energy Reduction
- Incentives

Lender Concerns:

- Loan Repayment
- Collateral

Mitigating Risks



Credit Enhancements

- Equipment Subsidies
- Tax Incentives/Grants
- Utility Power Purchase Agreements
- Loan Guarantees
- On-Bill Financing (Utilities)
- Loan Reserves
- PACE (Property Assessed Clean Energy)



Current Banking Environment

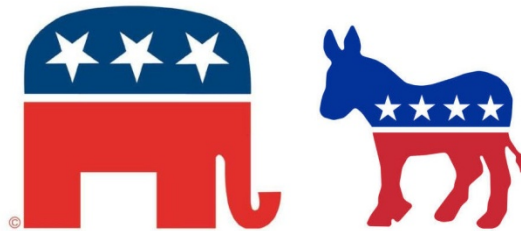


Regulatory



Economic

Tight Credit



Political

Public



If You Qualify, You Don't Need a Loan



*"O.K., folks, let's move along. I'm sure you've all seen
someone qualify for a loan before."*

© The New Yorker Collection 1992 Tom Cheney from cartoonbank.com. All Rights Reserved.

Corporate Perspectives on Sustainability

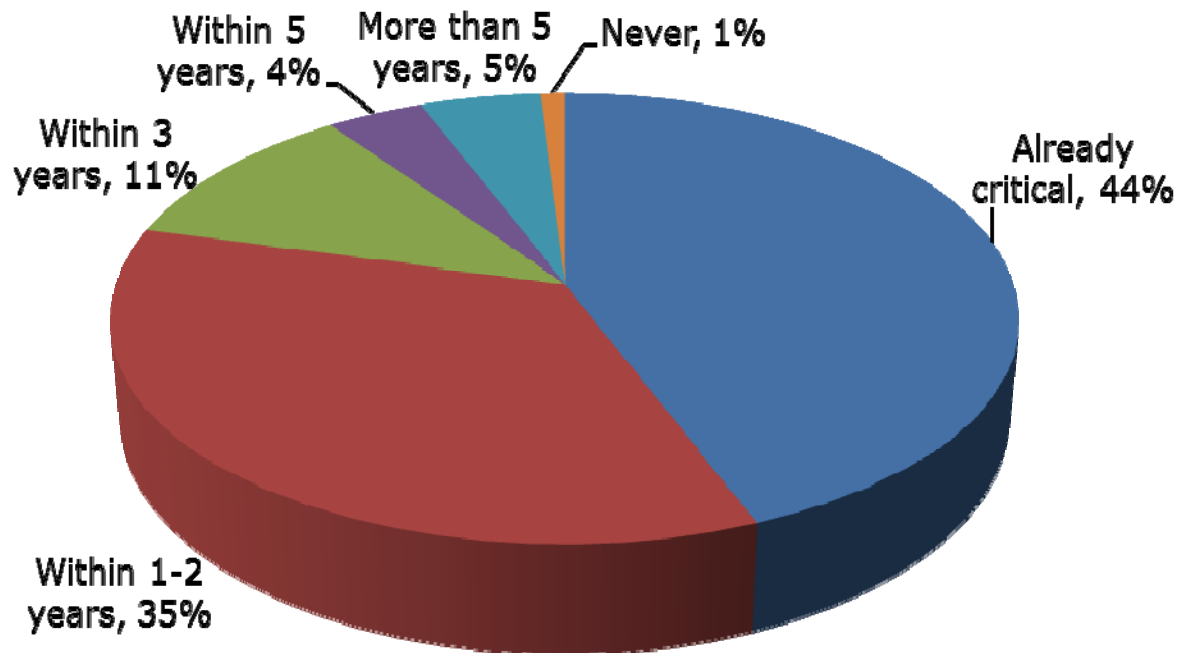
A 2008 global survey of over 400 building occupiers prepared by Jones Lang LaSalle and CoreNet shows that 90% of corporate occupiers surveyed consider sustainability a near-term critical business issue

Most major corporations have now developed public sustainability policy statements
Sustainability has become part of the corporate vernacular and remains a high priority

- 2009 CoreNet study shows 42% of real estate execs prepared to pay a premium (up to 5%) to lease green space; 53% willing to pay premium to retrofit owned property

Global Trends in Sustainable Real Estate: An Occupier's Perspective. Jones Lang LaSalle/CoreNet, Feb 2008; BOMA Kingsley Quarterly, 2007; 2009 State of the Corporate Real Estate Industry Report. CoreNet Global, Mar 2009

When will sustainability become a critical business issue?



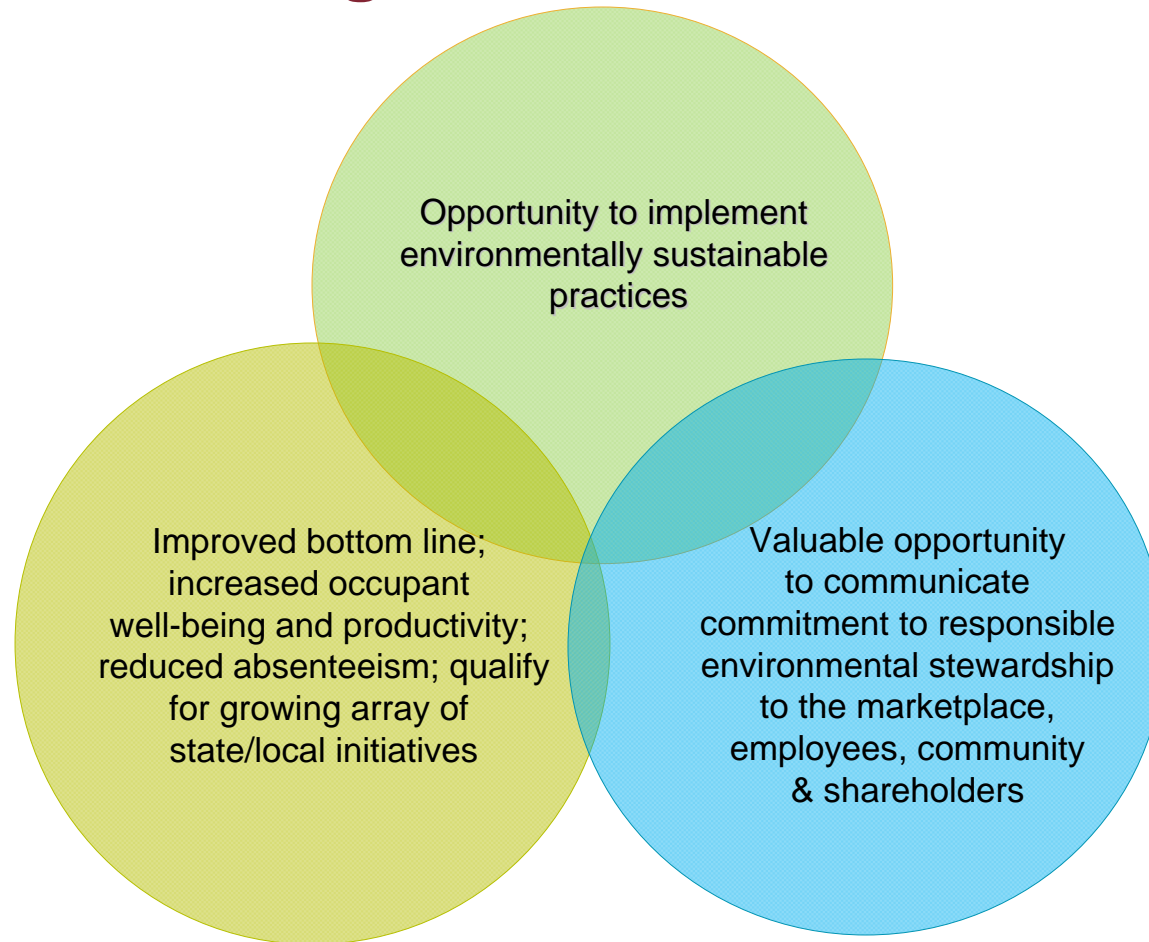
Commitment Remains Through Downturn

2011 report prepared by MIT and Boston Consulting Group; 4,000 property managers; 113 countries

- **70%** = sustainability permanently on management agenda
- **66%** = sustainability necessary to remaining competitive
- **68%** = commitment has increased over the last year
- **72%** = plan to increase commitment to sustainability

2011 Sustainability & Innovation Global Executive Study and Research Report, MIT Sloan Management Review & Boston Consulting Group, 2011

Why green building?



Implementation

For many corporations, sustainability is an area far removed from its core business

Many corporations implementing a variety of environmental initiatives – energy saving, waste management, alternative transportation – in an effort to meet announced corporate sustainability goals

Green leases provide corporations that are tenants with a valuable opportunity to implement sustainability goals and to communicate that achievement to the market through LEED certification



Client Case Study

- Input received from all members of the client transaction team
- Developed a unique green lease program that integrates sustainability in a holistic way starting with site selection and continuing through RFP, LOI and lease
- Differentiator: Lease tracks LEED-ID&C requirements so that lease itself facilitates certification of the premises on a stand-alone basis (regardless of typically uncertified status of building)
- Client has adopted new green lease forms and pursuit of LEED certification is now default assumption for new leases



Client Case Study *(continued)*

- Assignment was to “green” standard multi-tenant lease form for Fortune 100 company with 22 million sq. ft portfolio (56% owned, 44% leased)
- No “green” tenant leases existed
- Not simply a matter of plugging in a few green provisions into the lease form (“green washing”)
- Requires identification and communication of sustainability goals from very start of building selection and lease negotiation processes



Elements of Green Leasing Program

1. **Development of sustainability goals**
2. **Communication of goals to team**
3. **Site selection guidelines** (informed by LEED reqs)
4. **Request for Proposal** (include LEED questionnaire)
5. **Letter of Intent** (include a sustainability standards exhibit)
6. **Lease** (incorporate green lease terms that track LEED-ID&C requirements)



Conclusion

- Issues likely to be of most relevance to banks
 - Globalisation of real estate and continued drive to cut carbon emissions
 - Awareness of the benefits, financial or otherwise, of “being green”
 - Being commercial and creative in documenting "green issues" in commercial agreements and utilising green technologies.
 - “Green banking products”



Any Questions?



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