

# Nouveaux seuils de performance durable pour générer de la valeur en investissement immobilier

**Frank HOVORKA**

mrics,

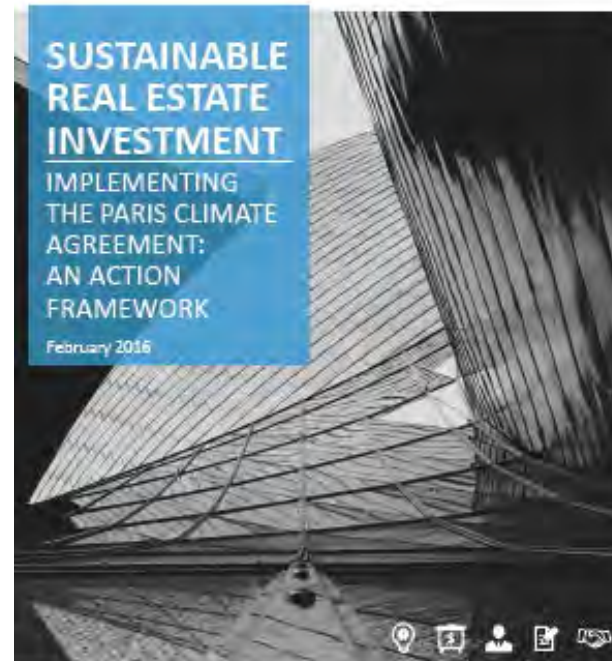
UNEP FI Investment Commission: co-chair,

REHVA ( european HVAC federation) : Vice president,

Sustainable Building Alliance: Chairman,

# INVESTISSEMENT DURABLE EN IMMOBILIER

## Mise en œuvre de l'Accord de Paris: un cadre d'action



# INVESTISSEMENT DURABLE EN IMMOBILIER



# APRES PARIS, LE TEMPS DE L'ACTION

- A Paris, les gouvernements se sont engagés à limiter la hausse des températures à 2° C, éventuellement 1,5° C, et éliminer les combustibles fossiles d'ici la fin du siècle.
- Pour le secteur des bâtiments afin de se conformer à cela, il a besoin de réduire ses émissions de CO2 de 77% par rapport aux niveaux actuels.
- Le rôle du secteur privé a été reconnu dans l'accord final



# The agreement will enter into force once the 55/55 threshold has been reached

## SIGNING CEREMONY

The agreement will open for signature in New York on April 22 with a signing ceremony



## FLEXIBLE TRANSPOSITION

The agreement will be accepted by national governments through instruments of ratification, acceptance, approval or accession



## The 55/55 threshold

The agreement will enter into force once at least 55 countries representing 55% of global emissions have deposited their instruments

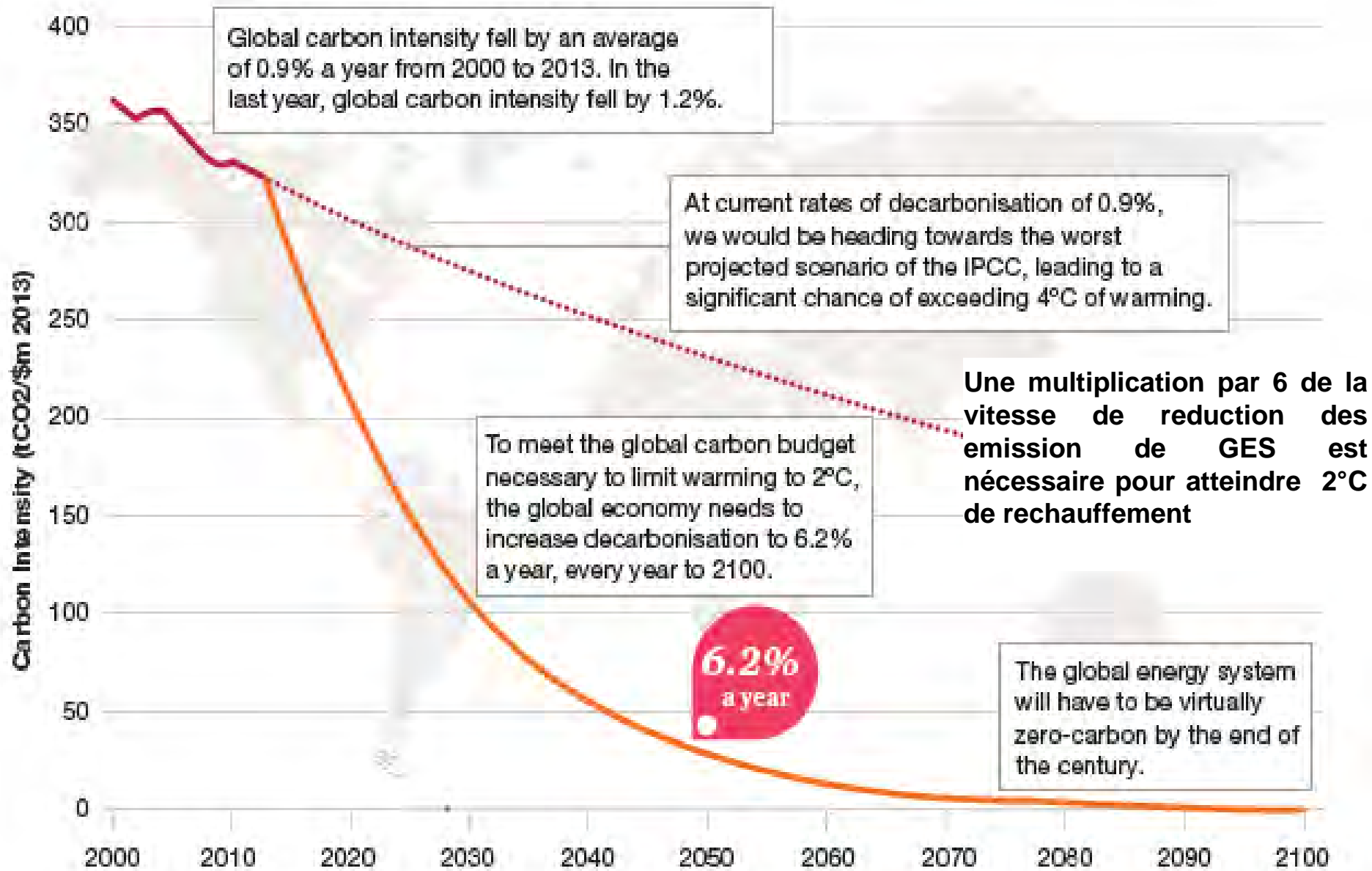


## WHAT WILL HAPPEN IN THE US?

Ensuring presidential acceptance before Nov election



## Pathway to two degrees



# Quelle suite pour les investisseurs et les entreprises?



UNEP  
FINANCE  
INITIATIVE



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[www.hermes-investment.com](http://www.hermes-investment.com) | 19



Investor Network on  
CLIMATE RISK  
a project of Ceres



Global Alliance  
for Buildings and  
Construction



Principles for  
Responsible  
Investment



RICS

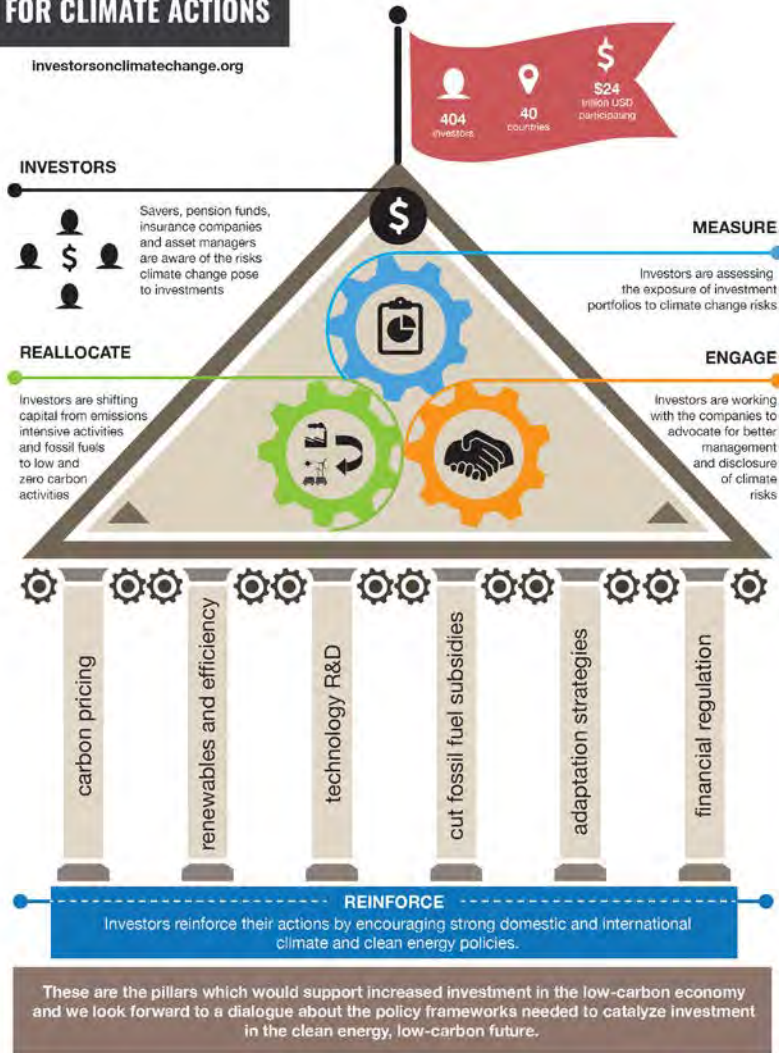


FINANCE  
INITIATIVE

# Plateforme investisseurs pour des actions climat

## INVESTOR PLATFORM FOR CLIMATE ACTIONS

Investorsonclimatechange.org



## INVESTOR PLATFORM FOR CLIMATE ACTIONS

Investorsonclimatechange.org

### MEASURE

Montreal Carbon Pledge

118 signatories  
18 countries  
\$10.3 Participating AUM (trillion USD)\*

Measurement is assessing the exposure of investment portfolios to climate risks. Signatories to the Montreal Pledge commit to measure and disclose the carbon footprint of their portfolios.



### ENGAGE

Collaborative engagement

300+ investors  
25 countries  
\$22 trillion USD participating  
9 initiatives

Investors engage collaboratively with companies to influence long-term sustainable business strategies and advocate for improvements in management and disclosure of climate risks.



### REALLOCATE

Portfolio Decarbonisation Coalition

25 investors  
11 countries  
\$600 Billion USD Committed

Members of the Coalition commit to reducing the carbon-intensity of their investment portfolios through engagement, divestment, 'green investing', and 'carbon-fitting'.



Low Carbon Registry

53 investors  
12 countries  
\$50 Billion USD Committed

Investors make low carbon investments and other actions to reduce emissions and record them in the Registry – a voluntary, public online database of low carbon and clean energy investments.



### REINFORCE

Global Investor Statement on Climate Change

404 investors  
40 countries  
\$24 trillion USD participating

The Statement sets out steps that investors can take to address climate change, and calls on governments to support a new global agreement on climate change by 2015, in addition to national and regional policy measures.



\*Total assets under management of signatories to the Pledge, not the total amount being footprinted.



# Après Paris...

- Les changements réglementaires affectant les investisseurs sont susceptibles d'augmenter.
- Les impacts physiques du changement climatique continuent de constituer des risques à l'immobilier

## LES EVÈNEMENTS MÉTÉOROLOGIQUES

En 2070, 150 millions de personnes dans les grandes villes portuaires du monde seront menacés par les inondations côtières, ainsi que 35 milliards de dollars de biens (- 9% du PIB mondial).

## TENDANCES RÉGLEMENTAIRES

- **En Europe**, la directive de l'information non financière de l'UE sur la divulgation de l'information non financière et de la diversité
- **En Australie**, SASB/DGSDE envisage un monde où une compréhension partagée de la performance en matière de durabilité
- **Au Japon**, le Code de gouvernance d'entreprise exige que les entreprises prennent des mesures appropriées pour résoudre les problèmes de durabilité.

## LES RISQUES FINANCIERS

**Les pertes directes mondiales de l'immobilier et de l'infrastructure par les entreprises de réassurance étaient de 150 milliards par an entre 2002 et 2012.**



# Des opportunités à saisir

- Améliorer la performance des investissements par une meilleure sécurité
- Productivité et avantages socio-économique, pour la société, y compris l'emploi et la croissance

Une étude de l'UE a constaté que les avantages pour la santé et l'amélioration de l'efficacité énergétique dans les bâtiments pourrait représenter une valeur de 40-80 Mds € par an.

## des preuves croissantes raccorde "l'immobilier vert" positivement avec les fondamentaux d'investissement:

- Augmentation de la demande des clients, une plus grande liquidité, des durées inférieures d'occupation, des taux réduits d'amortissement, des coûts d'exploitation plus faibles
- Risque plus faible de défaut de paiements hypothécaires pour les bâtiments énergétiquement performant et les bureaux et logements certifiés par rapport aux propriétés non certifiées.

L'opportunité d'investissement dans l'efficacité énergétique des bâtiments, est globalement autour de 300 milliards de \$ par an d'ici 2020.



# DEVOIR FIDUCIAIRE

*«Tous les propriétaires d'immobilier actifs, investisseurs et parties prenantes doivent maintenant reconnaître qu'ils ont une obligation fiduciaire claire à comprendre et à gérer activement les aspects environnementaux, social, gouvernance (ESG) et les risques liés au climat comme une composante de routine de leurs pratiques et processus de gestion.»*

## C'EST LE MOMENT D'AGIR


les investisseurs, les régulateurs, les autres intervenants et les occupants doivent imposer des stratégies pour freiner la consommation d'énergie et les émissions de gaz à effet de serre.



Peu importe où, chaque organisation est « sur le chemin » pour répondre à ces risques, le moment est venu de faire évoluer les programmes et les pratiques actuelles d'investissement.

Le réalignement des objectifs environnementaux et financier est générateur de valeurs pour toutes les parties prenantes



## LE CADRE D'ACTION

- Etape par étape
- [clear signposts for action](#) to “flip the switch”
- la cartographie de l'outil donne un sens a l'abondance des outils, des ressources et des informations publiées au cours des 5 dernières années
- Comment commencer  à partir de quoi en fonction de mes pratiques

Et comment mettre en place ces actions en différenciant les actions indispensables  et possibles 

### Public concerné:



Les propriétaires d'actifs, fiduciaires et les conseillers en placement,



Les gestionnaires de placements immobiliers, les entreprises et leurs Consultants Immobilier,

Les fonds d'investissement ainsi que les REITS, les investisseurs en obligations et dettes ainsi que leurs conseillers financier .



## LE CADRE D'ACTION

Compilé et écrit par des professionnels du secteur et coordonné par le groupe de travail, Initiative financière du PNUE

### *Les auteurs principaux*

*Tatiana Bosteels, chef de l'investissement responsable de la propriété, Hermes,*

*Peter Sweatman, chef de la direction et fondateur, Stratégie Climat & Partners*

### **Les membres de l'équipe du projects**

Ari Frankel (Deutsche Asset Management), James Gray-Donald (Bentall Kennedy), Rowan Griffin (Lend Lease), Frank Hovorka (Caisse des Depots), Yona Kamelgarn (Certivea), David Lorenz (Institut de technologie de Karlsruhe), Nina Reid (M&G Real Estate), Andrew Szyman (BMO Real Estate Partners), Natasha Buckley (PRI)

### **Les partenaires du projet :**



# Pourquoi utiliser ce 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.



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.



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.



# SUSTAINABLE REAL ESTATE INVESTMENT.

IMPLEMENTING THE PARIS CLIMATE AGREEMENT : AN ACTION FRAMEWORK .

**Audiences**  
Real Estate Investors



Owners & Advisers



Direct Investor



Equity, Bonds, Debt



All



# Stratégie: Développer une stratégie ESG & Climat

STEPS



Set ESG and Climate  
targets at all levels of  
the investment process  
and across the supply  
chain.

## Asset owners & their advisors

### 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.





# Stratégie: Développer une stratégie ESG & Climat

## Recommended resources, excerpt

**"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.

**"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.

**"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.

**"Investing through an adaptation lens"**, IIGCC 2015

**"Assessing climate change risks and opportunities for investors - Property and Construction Sector"**

IIGCC 2013, Australia



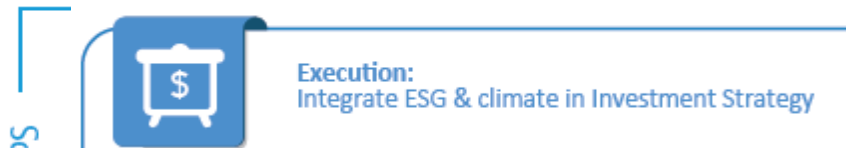
The later guide provides practical insights on how investors can and should be investing through an adaptation lens.

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.




# Mise en oeuvre: Intégrer les critères ESG & climat dans la stratégie d'investissement



## Asset owners & their advisors

**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.

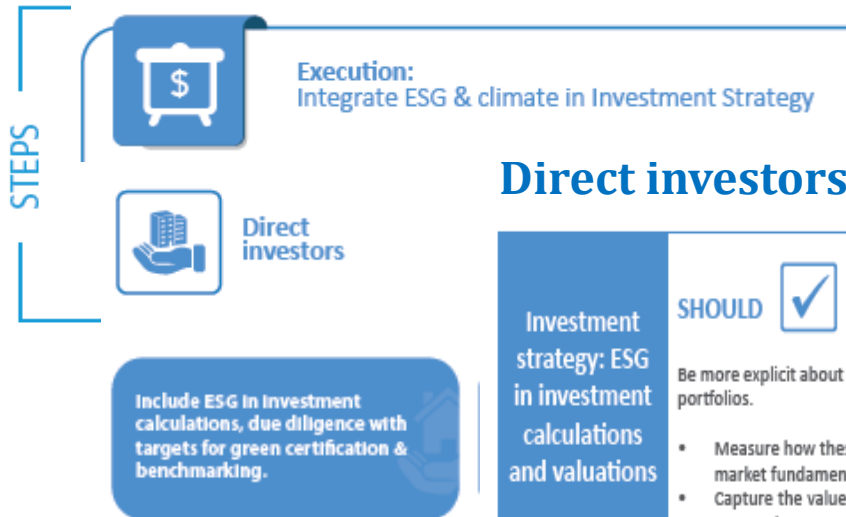
**COULD** 

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.




# Mise en oeuvre: Intégrer les critères ESG & climat dans la stratégie d'investissement




## Direct investors

**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.



# Mise en oeuvre: Intégrer les critères ESG & climat dans la stratégie d'investissement

STEPS





**Execution:**  
Integrate ESG & climate in Investment Strategy



Equity  
Bonds  
Debt

Debt: Integrate ESG in due diligence at transaction, valuation assessment and include in loan documentation.

## Equity, bond & debt investors

Debt Portfolios	<p><b>SHOULD</b> </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.</p> <p>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><b>COULD</b> </p> <ul style="list-style-type: none"> <li>Review existing loan portfolios for ESG and climate risk.</li> <li>Require ESG and climate risk data from issues of all existing loan portfolios.</li> <li>Consider divestment from issuers with "worst in class ESG and climate performance".</li> </ul>



# Mise en oeuvre: Intégrer les critères ESG & climat dans la stratégie d'investissement

## Recommended resources, excerpt

**"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"**

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.

**"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.

**"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: processus de selection des conseillers et assistants



## Equity, bond & debt investors

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.



# Alignment: processus de selection des conseillers et assistants

## Recommended resources, excerpt – Equity, bond & debt 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.

**"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 &

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# Monitoring & reporting



## Asset owners & their advisors

### Monitoring Process

SHOULD



Include ESG and climate risk-related expectations in manager monitoring requirements against investment strategies and quantitative ESG and climate risk performance targets:

(See step 1 "Define ESG and climate policy and strategy").

- 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.

COULD



- 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.





# Monitoring & reporting

## Recommended resources – asset owners

"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.



# La transparence sur le marché



## Asset owners Direct investors Equity, bond and debt investors

### 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.

## Recommended resource

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



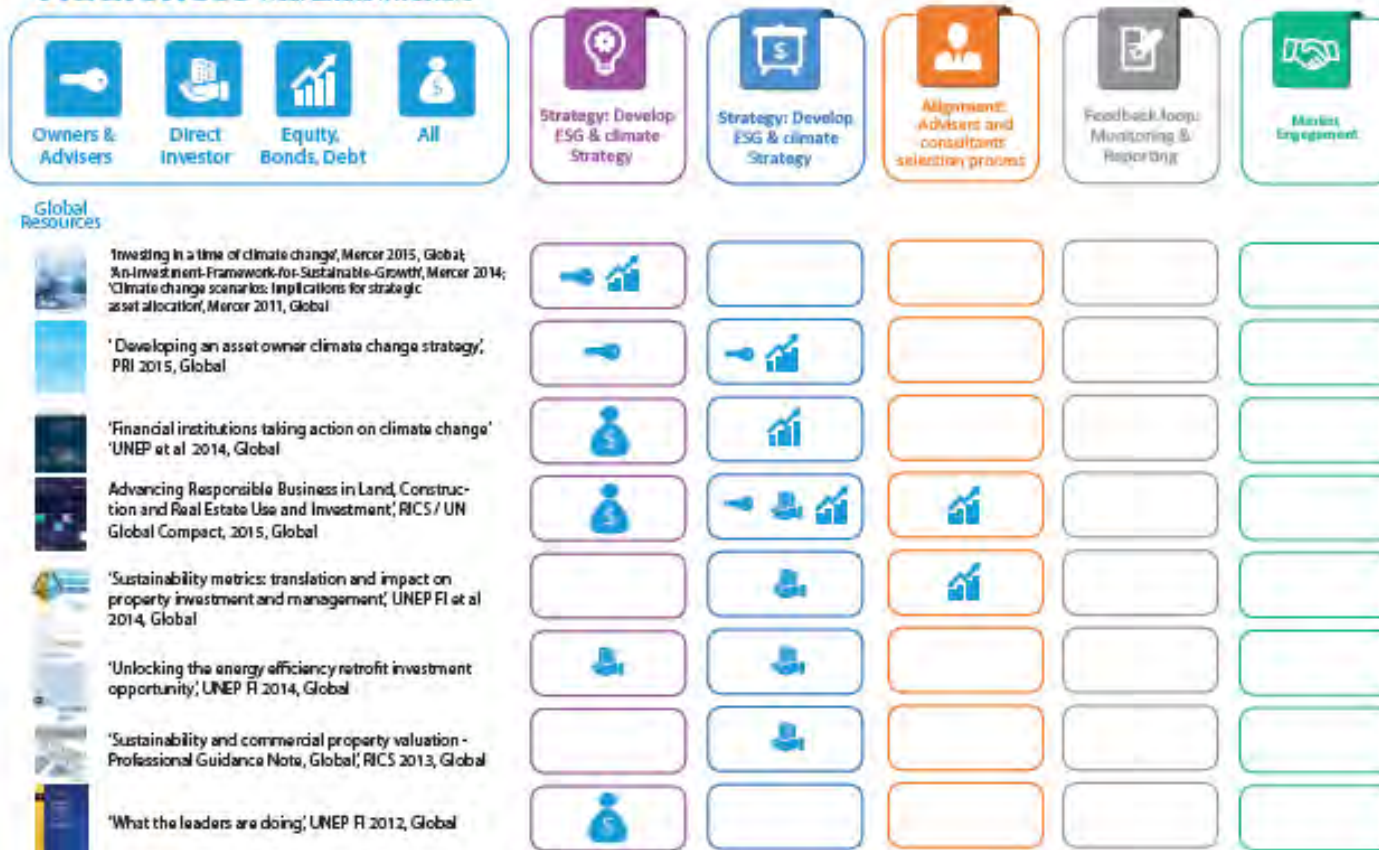
This PRI policy framework shows why public policy engagement is essential for long-term investors, provides examples of investor engagement in public policy, lessons learned, and offers practical recommendations for better integration of ESG factors in the public policy-making process.



# Tool mapping of selected resources

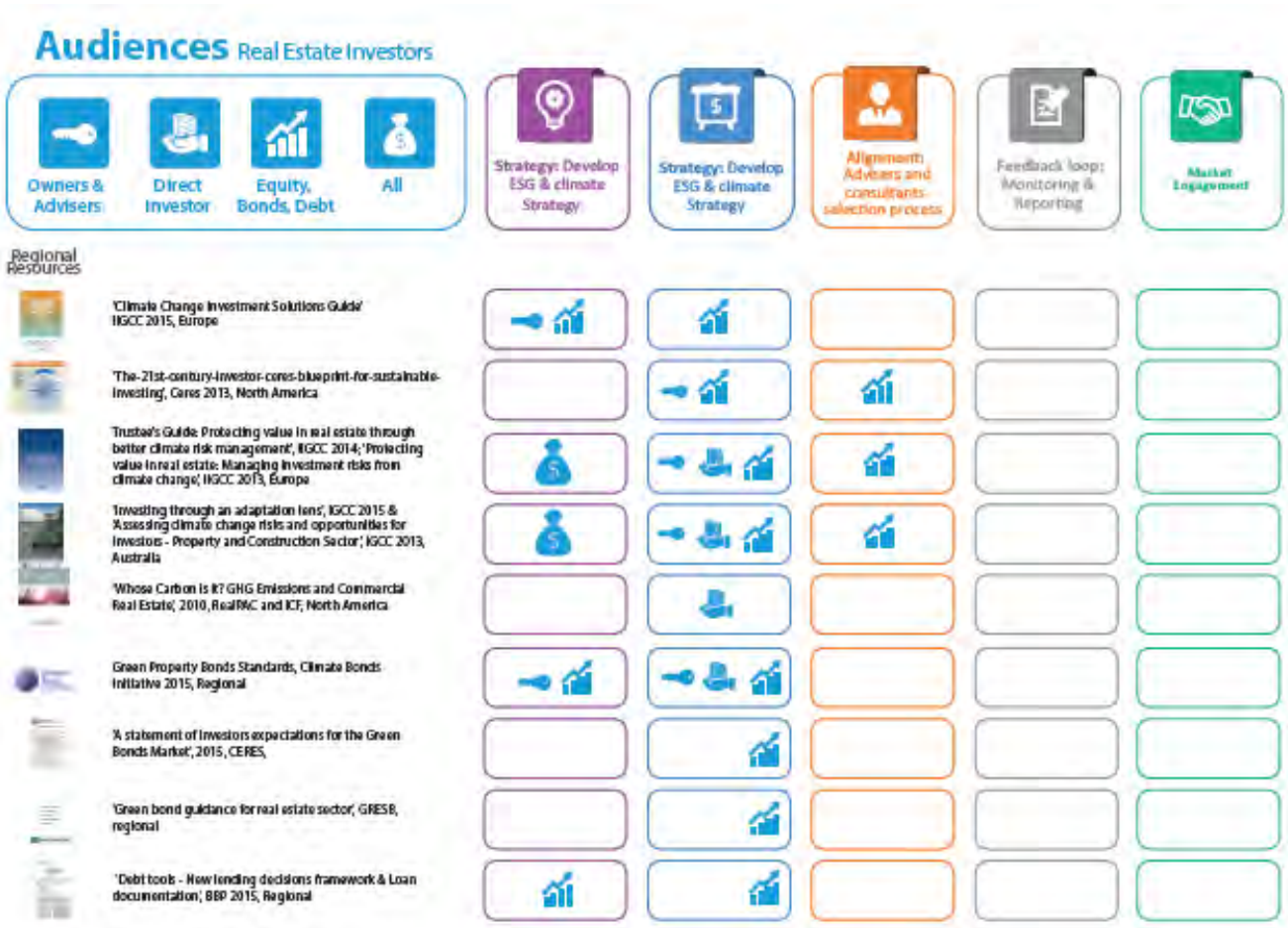
In order to visualise the wealth of evidence and publications covering these issues, the 'Tool mapping' graph below helps categorise each publication by relevance to each audience and each step of the investor framework.

## Audiences Real Estate Investors



# Tool mapping of selected resources

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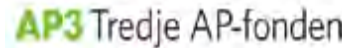
# G20 Principe d'investissement sur l'efficacité énergétique

Alors que notre contribution aux travaux du Groupe de travail sur l'efficacité énergétique des finances du G20, les gestionnaires et les investisseurs, nous partageons une vision commune des avantages économiques et sociaux. Afin de veiller à ce que nos activités favorisent l'efficacité énergétique, et en tenant compte de notre responsabilité fiduciaire. Nous reconnaissons la nécessité d'intégrer pleinement l'efficacité énergétique dans notre processus d'investissement, nous nous engageons à :

- Intégrer les considérations matériels de l'efficacité énergétique dans la façon dont nous évaluons les entreprises;
- Inclure l'efficacité énergétique comme une zone de mise au point lorsque nous nous engageons avec les entreprises;
- Prendre en considération les performances de l'efficacité énergétique, en rapport avec la proposition envisagée, lorsque nous votons sur les propositions d'actionnaires.
- Dans la mesure correspondante, intégrer l'énergie des considérations de placement de l'efficacité lorsque nous choisissons les gestionnaires;
- Évaluez vos actifs et les gestionnaires immobiliers existants, surveiller et de rendre compte sur leur performance en matière d'efficacité énergétique;
- Rechercher des occasions appropriées pour accroître les investissements en matière d'efficacité énergétique dans nos portefeuilles .



# Investors managing close to USD 4 trillion support the G20 Energy Efficiency Investor Statement



Sjätte AP-fonden



Handelsbanken Asset Management



EEFIG's work  
has benefited  
from:

The Energy Efficiency Financial Institution Group (“EEFIG”) was established to determine how to overcome the well documented challenges to obtaining long-term financing for **energy efficiency**

Active input of some 120 expert  
participants (8,000 hours)

40% of the EEFIG participants  
either work for, or represent  
the views of, financial  
institutions. Participation from  
financial institutions, policy  
makers, finance users  
(buildings, industry or SME)  
and energy efficiency experts

## EEFIG's Mandate

- 1 What are the most imminent challenges that must be overcome?
- 2 Who would be the right party to address them?
- 3 What should the European Commission/ EU do?

# Energy Efficiency is Europe's First Fuel



One of the most cost effective ways to enhance the security of its energy supply

Energy Efficiency has been described as the EU's largest energy resource

One of the most cost effective ways decrease the emissions of greenhouse gases and other pollutants

EE investment is the most cost effective manner to reduce the EU's reliance, and expenditure, on energy imports costing over €400 billion a year

## Energy Efficiency Investments

Characterized by their **MULTIPLE BENEFITS**

Direct energy returns

Additional value streams to private owners and asset operators

Significant Public Benefits

Increased employment

Lower emissions

Increased energy security and reduced dependence on foreign imports

Improvements to a country's fiscal balance



# Increasing Energy Efficiency Investment is a Strategic Priority

## 2014 Ceres Global:

Projects global annual investment need (2010-2020) to limit global temperature rises to a 2°C scenario:

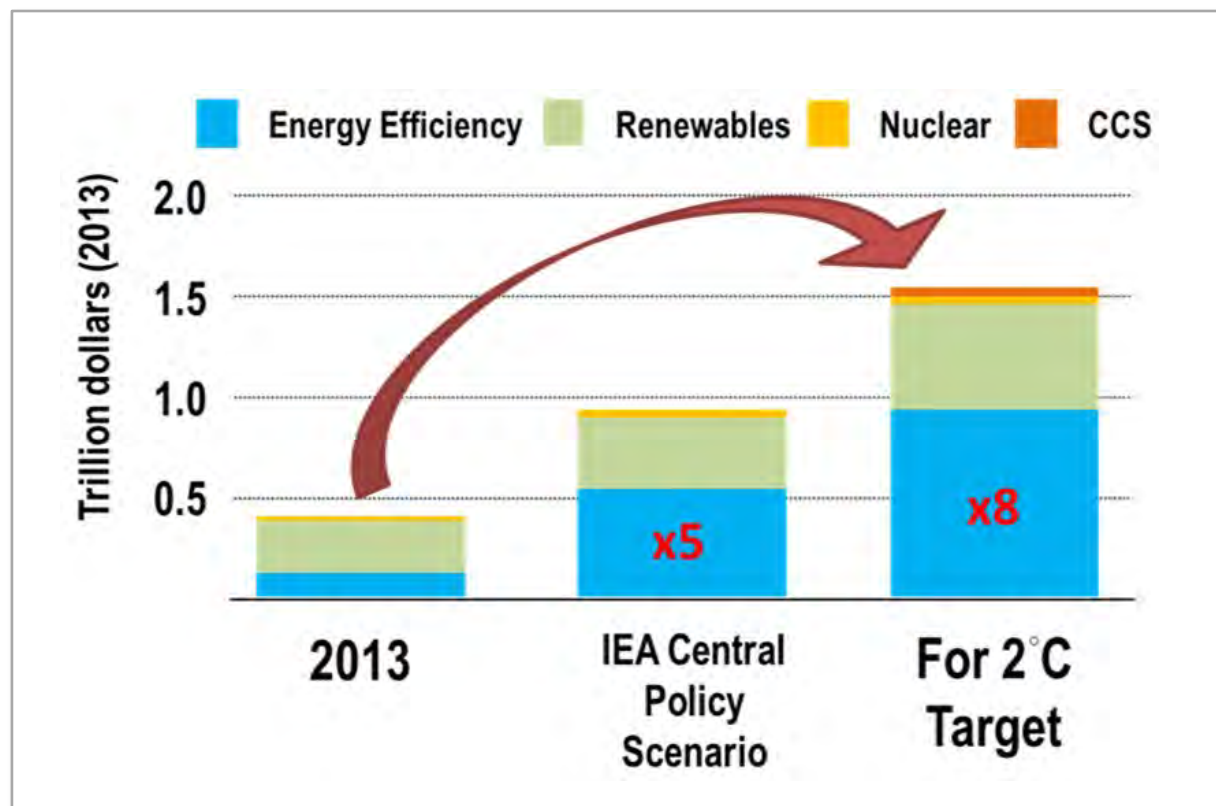
- \$300 billion in buildings' energy systems
- \$30 billion in industry

## EU needs to invest:

(for 2°C scenario, IEA)

- \$1.3 trillion in energy efficiency in buildings from 2014-2035
- \$154 billion in energy efficiency in industry

Global Annual Investment Need (2010-2020, IEA)



# Policy and Markets-led Approaches to Stimulate Energy Efficiency Investments in Buildings

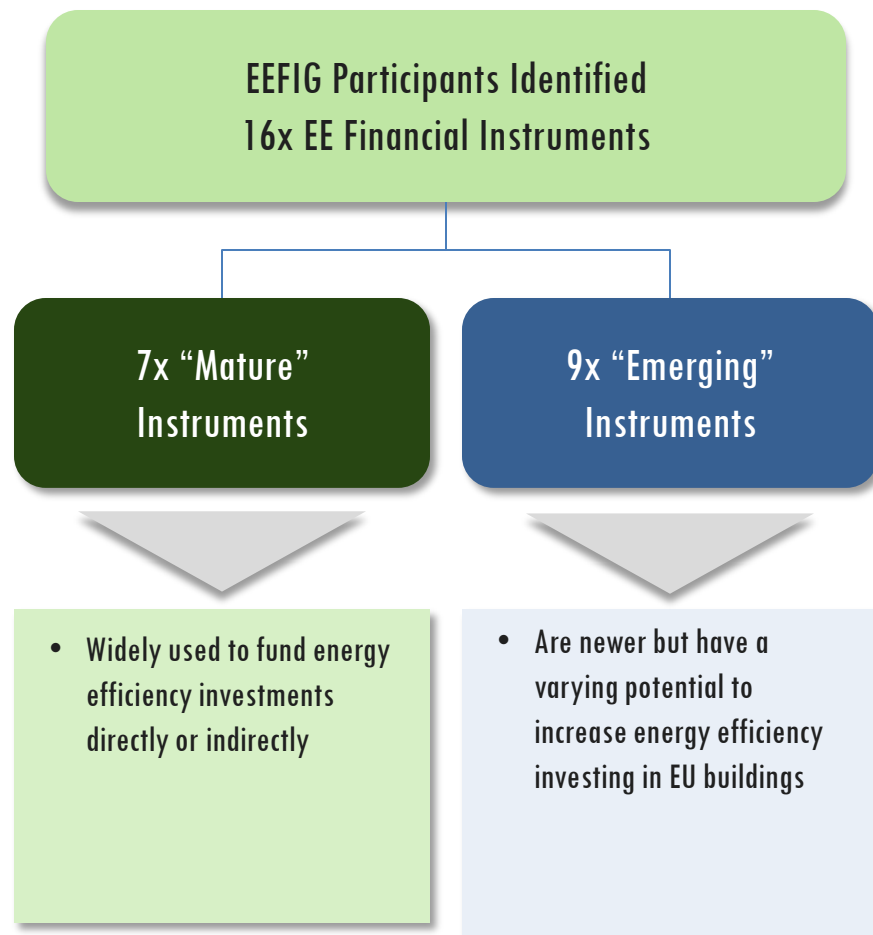
## Policy-led Approaches

- Optimize Use of EU Structural and Investment Funds for Energy Efficiency Investments in Buildings
- Standardization and Improvement of Buildings Certification and Energy Performance
- Open Source EU Buildings Energy Database
- Industry and Finance supported National Buildings Renovation Roadmaps

## Market-led Approaches

- Common Underwriting and Investment Procedures
- More Proactive Engagement and Continuous Improvement and Usage of Energy Performance Certificates (EPCs) from Financial Institutions
- “Operational” Energy Performance Database
- Project Ratings
- Linking impact of building energy performance with investment performance
- Life cycle portfolio-wide sustainability programmes

# EEFIG's Assessment of Financial Instruments for Energy Efficiency Investment in EU Buildings



## Highlights from EEFIG's Survey, Working Group & Discussions

1. Dedicated credit lines have the widest applicability in all buildings segments
2. Energy Performance Contracting is growing in commercial and public buildings
3. Risk-sharing facilities are proving very useful
4. EE investing through direct and equity investments in real estate and infrastructure is important
5. Subordinated loans and leasing are presently "niche" instruments for buildings EE
6. Good potential for on-bill repayment and on-tax finance (PACE)
7. EE funds and Energy Service Agreements show good potential only in commercial and public buildings

# EEFIG Recommendations for Buildings Sector

## To Institutional investors

- Existing Buildings Regulations to be fully implemented, harmonised and consistently enforced across EU Member States
- Future Regulatory Pathways for EU Buildings should provide concerted and consistent regulatory pressure to improve the EE of buildings
- High quality decisions and low transaction costs can only be delivered by easily accessible data and standard procedures
- Reporting, accounting and procurement procedures must facilitate, and not hinder, appropriate energy efficiency investments in public buildings
- Reach “at-scale” energy efficiency upgrade of residential buildings by addressing specific investment demand & supply drivers of this segment plus the engagement and alignment of retail distribution channels
- To address of EE investment supply and technical assistance through the smart deployment of ESIFs 2014-2020 and Horizon 2020 into risk sharing mechanisms and project development assistance, working with partners with an successful track-record

## To Market Participants

- Engage key decision makers with a clear business case that raises their awareness of the multiple benefits of buildings’ EE refurbishments with evidence
- Make it easy to get the right data to the right decision makers
- Improve the Processes and Standards for Buildings Labels, Energy Performance Certificates and Energy Codes
- Standards should be developed for each element in the energy efficiency investment process
- Leverage of private sector finance through appropriate use of ESIFs and Member States funds

# EEFIG Recommendations most relevant to Investors

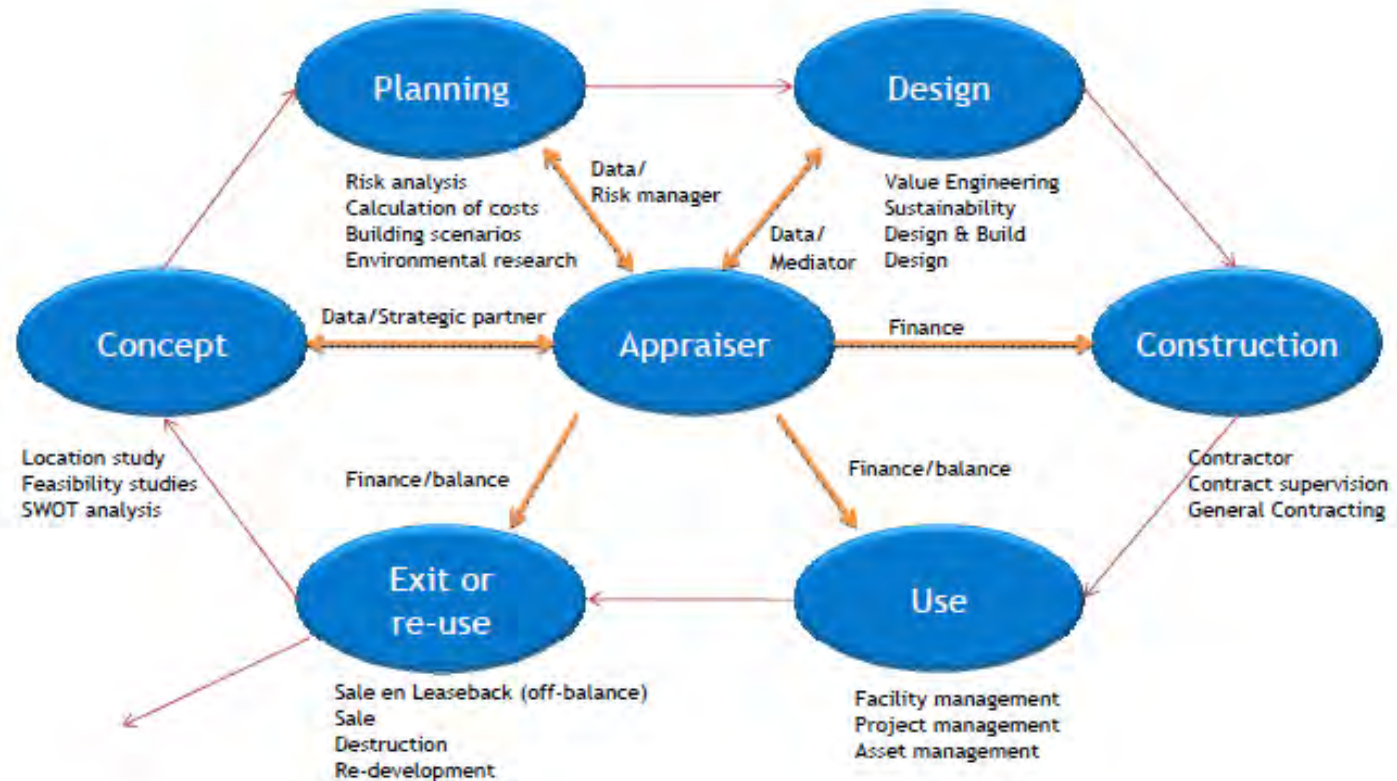
## Investment models

- To add volume to the energy efficiency investment market and lower its costs of finance and transaction costs require: The standardisation and adoption of best practice, standard national models for: Legal contracts, underwriting processes, procurement procedures, adjudication, measurement, verification, reporting, energy performance (contracts and certificates) and insurance;
- To facilitate the bundling of investments for recycling to the bond market: the use of standardised MRV and legal documentation is particularly important – creating a route to significant volumes of capital market finance. It would mutually reinforce the process of data collation and can also lead to national or regional “public knowledge centres” and experience hubs.
- The data structures must clearly enable the connection and validation of value increases (in the broadest sense) with energy efficiency investments. A greater level of trust needs to develop between policy makers, financial institutions and the construction value chain to enable these process challenges and facilitate the mechanisms to expedite the data supply chain.

## Investment models

- Making it easy to get the right data to the right decision makers: For energy efficiency investments in buildings to enter the mainstream, it must be as easy for a key property decision maker to understand and value the benefits of those investments as it is for other comparable decisions. This means that
- Adequate, accessible, dependable and sortable data on buildings and their real, measured and verified energy performance should be identified and made available to facilitate the preparation of energy efficiency investment cases.
- The “at-scale” energy efficiency upgrade of residential buildings can only happen with : The strong alignment of interests among those entities with retail distribution networks (banks, energy companies, local government) along with facilitating mechanisms such as adapted, low cost measurement, reporting & verification and quality assurance, on-bill finance, fiscal benefits and long-term, low cost loans supported with risk-sharing mechanisms and tailored grant support for key communities.

# Le rôle clé de l'évaluation





**RICS**

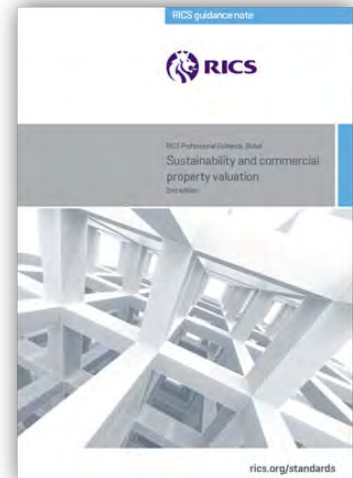
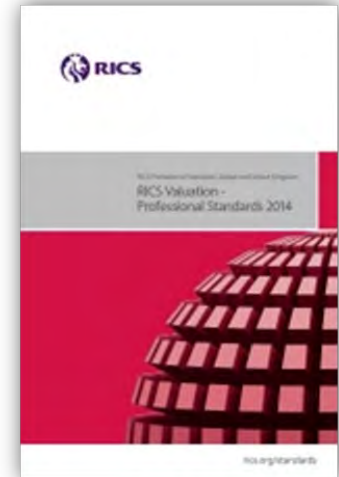
the mark of  
property  
professionalism  
worldwide

**Europe**

Recent alterations to the RICS' Red Book and the accompanying Guidance Note are by far the ***strongest endorsement of sustainability as a potential value driver and risk factor contained in any professional valuation standard***, nationally or globally.

**An important implication arises for clients:**

Whenever a client / owner organisation needs a property valuation performed to RICS standards (e.g. for their accounts), there will be a demand for extended information. This entails the establishment of a properly managed internal information flow and an organised information system.



# Changing the game: the new RICS Red Book 2014

## *Sustainability as a potential value driver and risk factor*

- **RICS Valuation Practice Statement 4:**

“As commercial markets become more sensitised to **sustainability matters**, so they may **begin to complement traditional value drivers**, both in terms of occupier preferences and in terms of purchaser behaviour.”

*RICS, Valuation –Professional Standards, 2014, p. 59*



- **Therefore valuers are advised to:**

“[...] **assess the extent to which the subject property currently meets sustainability criteria and arrive at an informed view on the likelihood of these impacting on value**, i.e. how a well-informed purchaser would take account of them in making a decision as to offer price, [...].”

*RICS, Valuation –Professional Standards, 2014, p. 59*



**RICS**

the mark of  
property  
professionalism  
worldwide

**Europe**





UNEP **Finance Initiative**  
Changing finance, financing change



**RICS**



Principles for  
Responsible  
Investment



Institutional Investors Group on Climate Change

# 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**



UNEP

# 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.

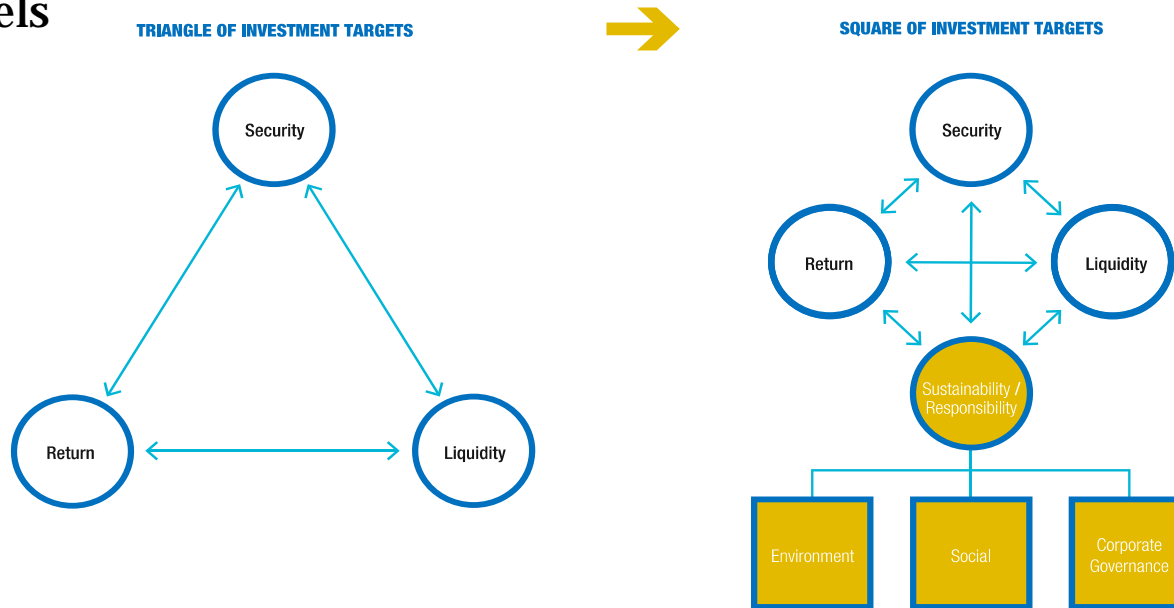
Asset owners and managers are increasingly confused by the ever thickening ‘alphabet soup’ of acronyms relating to building metrics and the organisations behind them.



Link to download the publications  
[www.unepfi.org/publications/property](http://www.unepfi.org/publications/property)

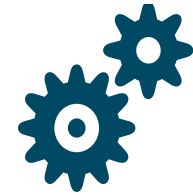
# Needs and options to take action

Sustainability considerations can be embedded within business and decision-making processes at different corporate levels

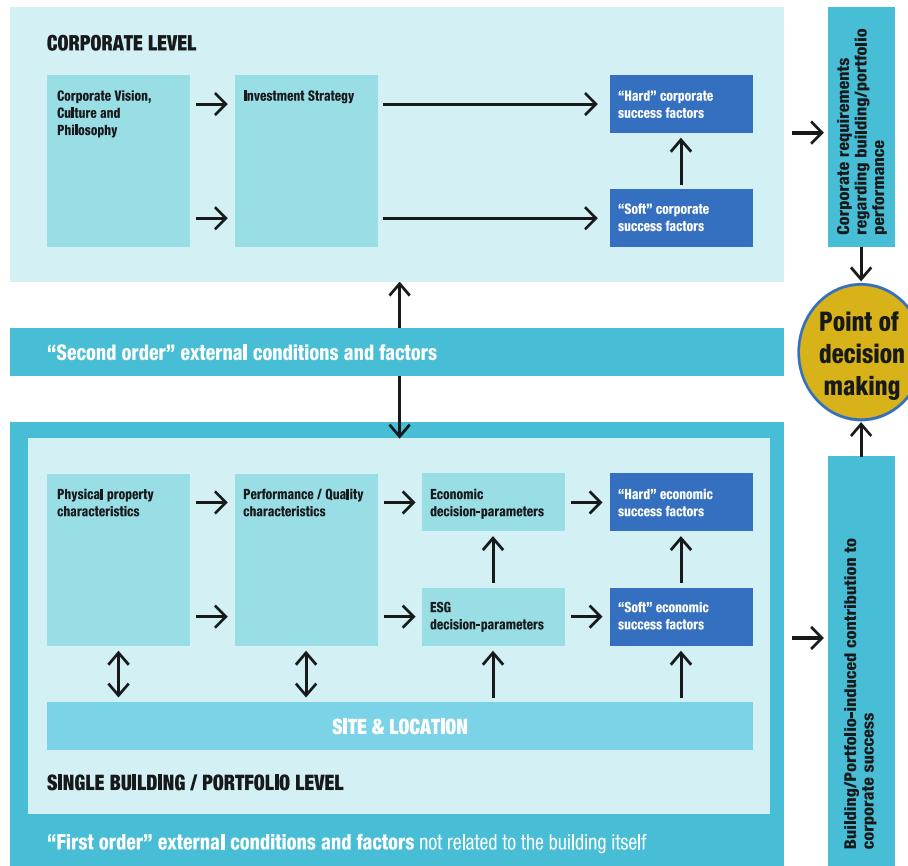


Buildings' sustainability performance will impact on asset and portfolio value, corporate reputation and financial performance

# Translating information for decision-making

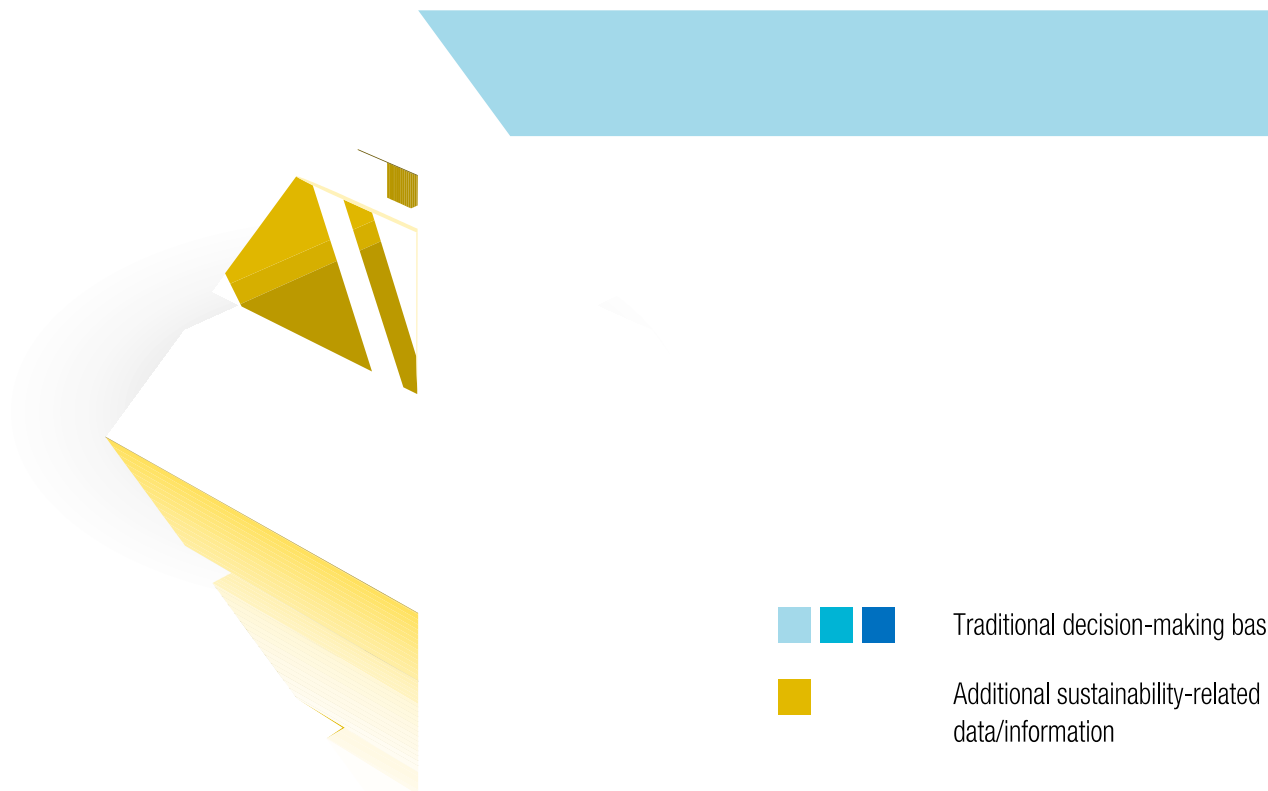


“ From the boiler room to the board room.



# How to get there: A selection of recommendations for best practice

## Recommendations for Best Practices for Corporate Real Estate Sustainability Management (CRESM)



# Quelques résultats empiriques

Différentes études empiriques ont montré des gains en termes de prix de vente, de loyers et de réduction de la vacance.

- Tertiaire

Articles	Certification	Valeur vénale	Valeur locative	Taux d'occupation
Fuerst et McAllister (2008)	LEED, Energy Star (USA)	31-35%	6%	
Wiley et al. (2008)	LEED (USA)	130\$/square foot	15-17%	16-18%
	Energy Star (USA)	30\$ square foort	7%-9%	10%-11%
Miller et al. (2008)	LEED (USA)	10%		
	Energy Star (USA)	6%		
Kok (2008)	LEED , Energy Star (USA)	16%	6%	
Pivo et Fisher (2009)	Energy Star (USA) zones en redéveloppement	6,7%-10,6%	4,8%-5,2%	0,2-1,3%
Eichholtz, P Kok, N. Quigley(2009)	LEED	Non significant		
Fuerst et McAllister (2010)	LEED (USA)			8%
	Energy Star (USA)			3%
Eichholtz al. (2010)	LEED (USA)	11%	6%	
	Energy Star (USA)	13%	7%	
Chegut et al.(2011)	BREEAM (Londres, GB)	26%	21%	
Kok, Newell et MacFarlane (2011)	NABERS 5 stars (Australie)	9%	3%	
	Green Star (Australie)	12%	5%	
Fuerst et McAllister (2011)	LEED (USA)	26%	5%	
	Energy Star (USA)	25%	4%	
Fuerst, Tommasso, McAllister (2012)	LEED (USA) 2007 Q& 2012	Non significant		
	Energy Star (USA) 2007 Q& 2012	4,5%		
Kok, Miller, Morris (2012)	Green retrofits leedEBOM from 2005 2010		7-9%	

# Quelques résultats empiriques

## ■ Résidentiel

Année / Pays	Nom de l'étude	Critères étudiés	Résultats
2009 / Pays Bas	Brounen and Kok (2009) "Energy Performance Certification in the Housing Market"	Classe d'EPC (A, B et C)	Valeur vénale supérieure de 2.8%
2009/ USA (Portland)	Griffin and al (2009)	Bâtiments verts, Energy star ou Leed	Prix de vente : entre + 3 % et + 9,6 % Durée de vente / Durée de vente du marché : - 18 jours
2008 – 2010/ Suisse	Salvi and al (2008, 2010) Etudes de la banque cantonale zurichoise	Label MINERGIE	Maisons individuelles : Valeur vénale + 7 % Logements collectifs : Valeur vénale + 3.5 %, Valeur locative : + 6 %
2010/ Allemagne	Etude de la ville de Darmstadt	Critères énergétiques	+ 0,38 € / m <sup>2</sup> pour conso Ep. < 250 kWh/m <sup>2</sup> .an + 0,50 € / m <sup>2</sup> pour conso Ep. < 175 kWh/m <sup>2</sup> .an
Juin 2011/ Portland (Etats Unis)	Earth Advantage Institute, (2011) "Certified Homes Outperform Non-certified Homes for Fourth Year"	Certifications Energy star, LEED® for Homes, Earth Advantage New Homes	Maisons existantes avec certification : vente moyenne + 30 % Maisons neuves certifiées : vente + 8 %
2011, ADEME, France	Etude micro-économique de l'ADEME, Valeur verte pour le logement (études de cas théoriques)	Critère énergétique BBC neuf et BBC rénovation	Par exemples: Rénovation : + 5 à 22% de la valeur vénale ; Collectif neuf : environ 5.5 % du coût de construction (environ 13 500 € / appartement) Maisons individuelles neuves : + 6 % du coût de construction

# Understanding Impact on Risk & Investment

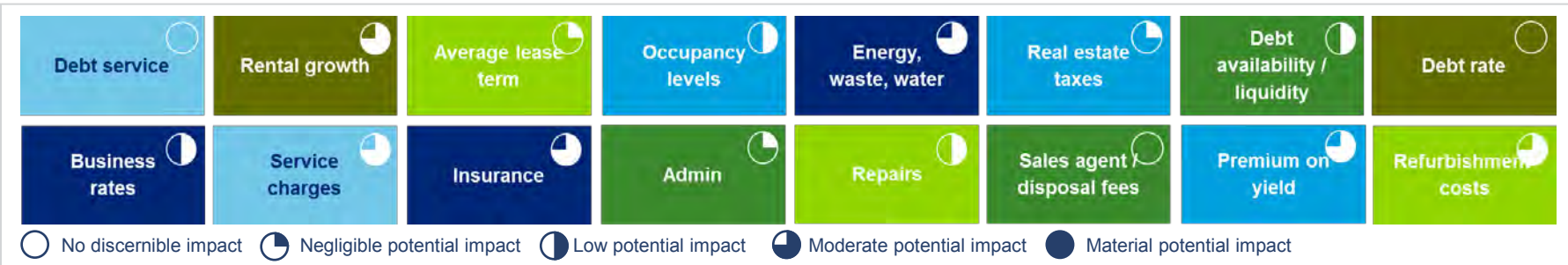
## Manifestation of risk through investment cycle



## Principal goals

- ✓ Enhance portfolio resilience
- ✓ Improve performance
- ✓ Build stronger relationships
- ✓ Fiduciary excellence

## Potential relationship between sustainability and factors affecting value





# Au-delà : Anticiper l'obsolescence ?

OBSOLESCENCE TERRITORIALE

OBSOLESCENCE SOCIOLOGIQUE

OBSOLESCENCE ECONOMIQUE

OBSOLESCENCE ARCHITECTURALE

OBSOLESCENCE TECHNIQUE

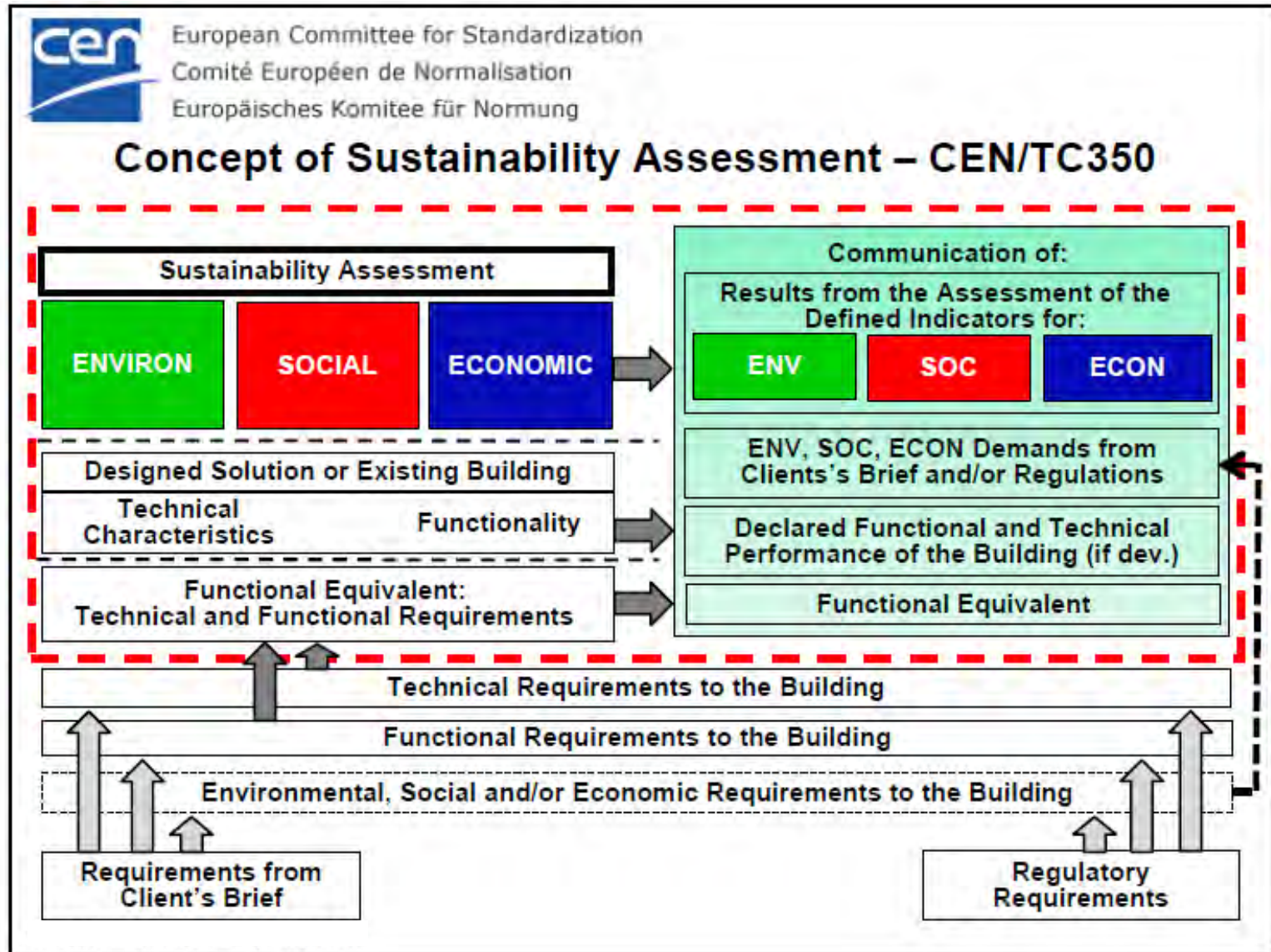
OBSOLESCENCE REGLEMENTAIRE

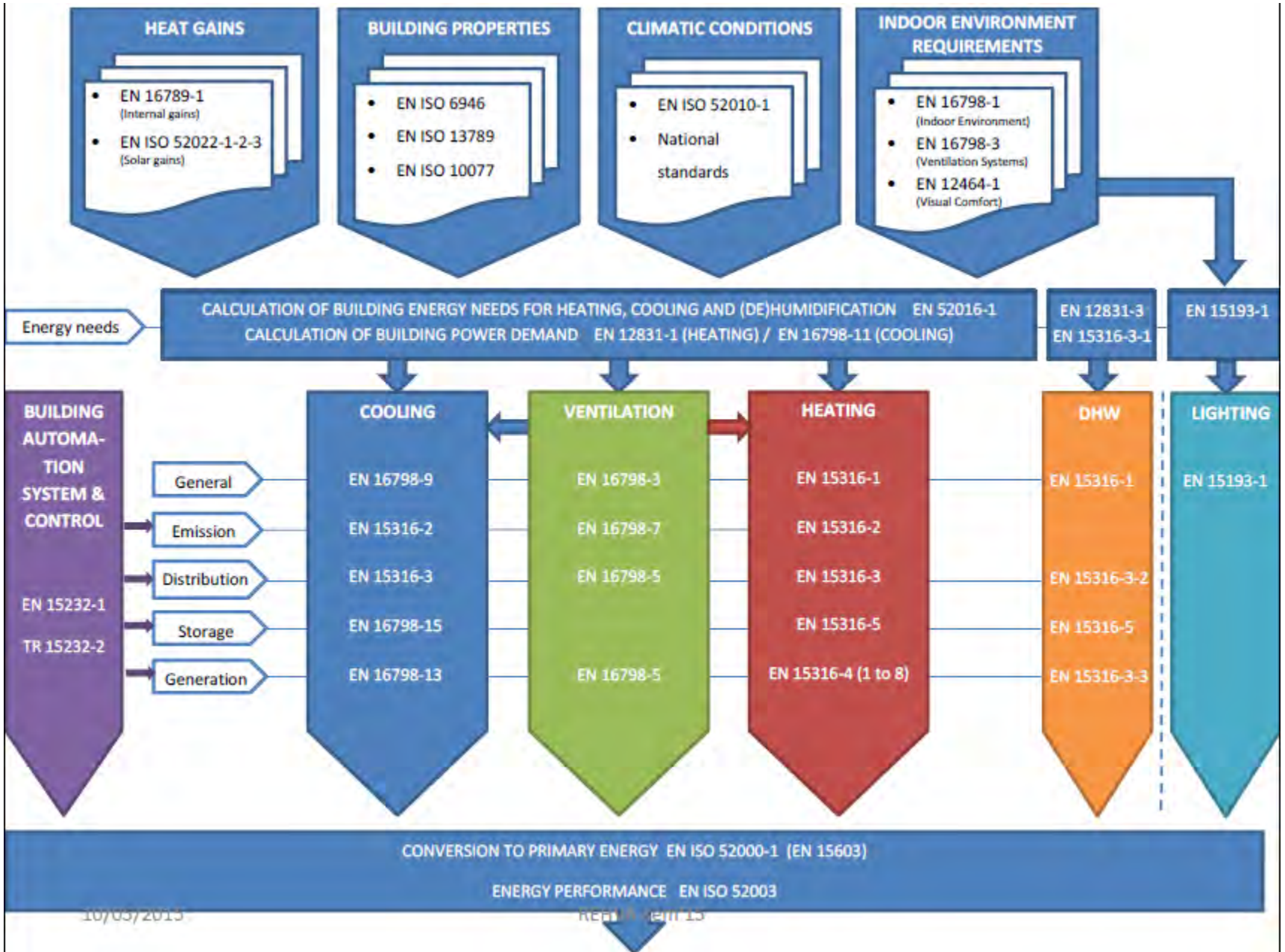
# Enseignements

Aucune évaluation environnementale ne fait la distinction claire entre:

- Les variables environnementales qui attestent de l'engagement du maître d'ouvrage lors de la conception, mais ne seront pas pertinentes dans le temps
- Les futures qualités intrinsèques et environnementales du bâtiment (résistantes dans le temps) qui participeront toujours à l'évaluation par un professionnel = qualité produit = valeur
- La flexibilité du bâtiment ( usages possibles) et sa résistance aux évolutions (climatiques notamment)

# Norme Européenne : travaux du CEN





# Continuity from the product to the system energy performance assessment



JWG ISO TC 163/ISO TC 205

Holistic approach



ISO TC 205 (System TC)

Technical Building Systems,  
bldg environment design  
(System loss calculation)

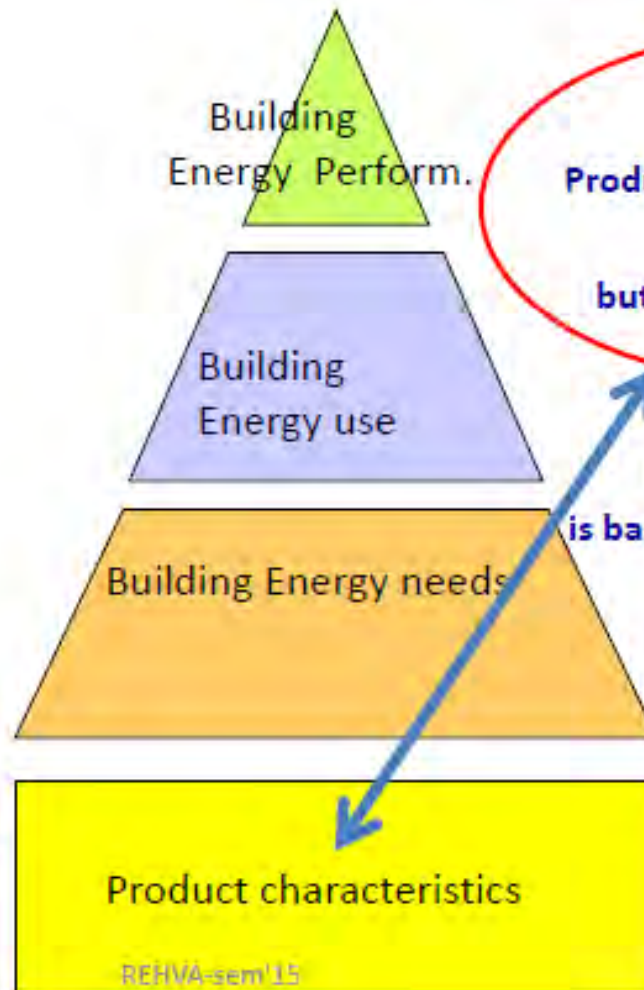


ISO TC 163 (Building TC)

Bldng energy use, envelope  
characteristics, climatic data  
(Building energy use calculation)



**Product TC's like ISO/TC 86;115;117;  
118; etc....(Evaluation of product  
characteristics)**

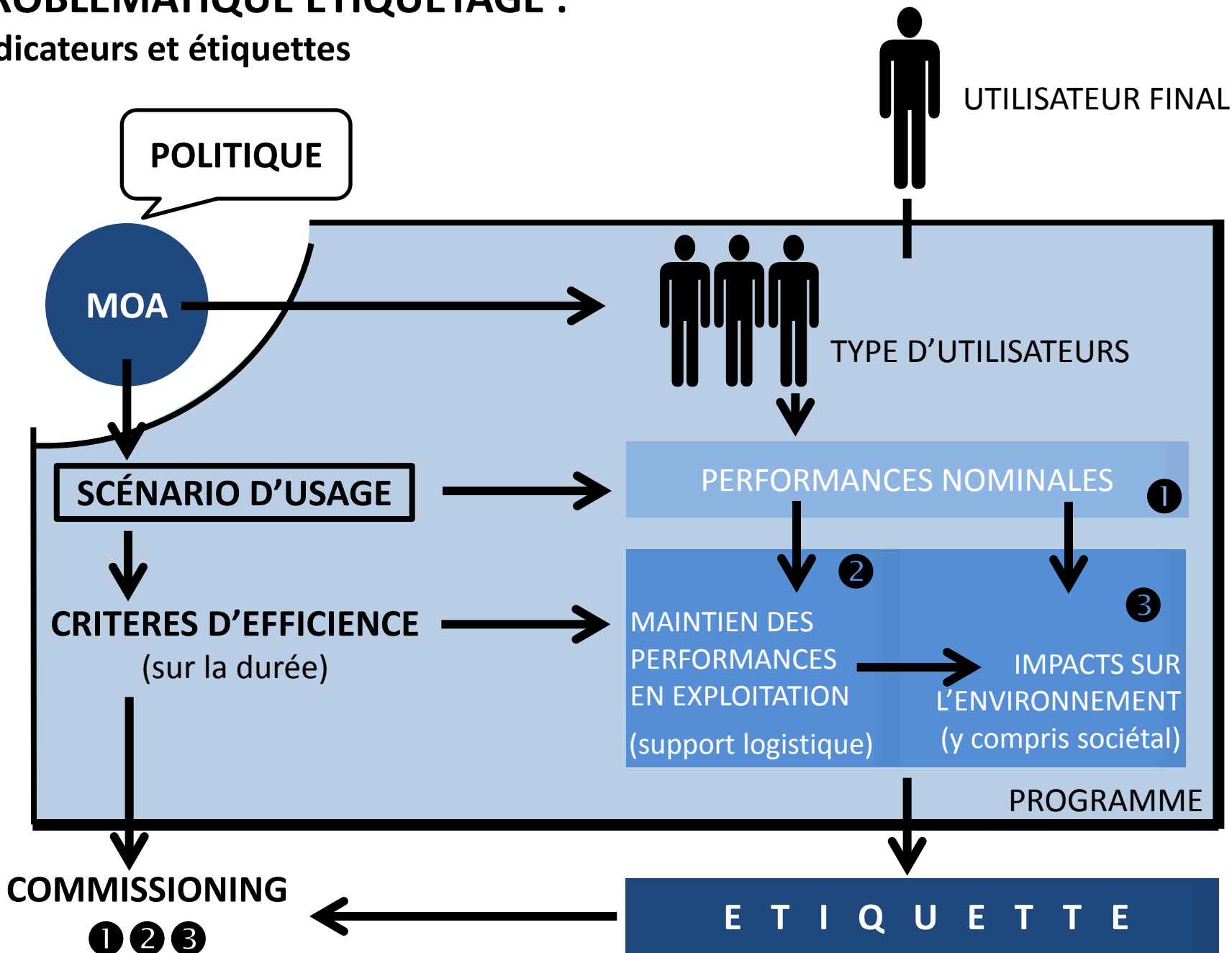


**Product no longer evaluated  
as a product  
but as a part of a system**

**IMPORTANT:  
Holistic approach  
is based on (tested) product  
characteristics**

# PROBLEMATIQUE ETIQUETAGE :

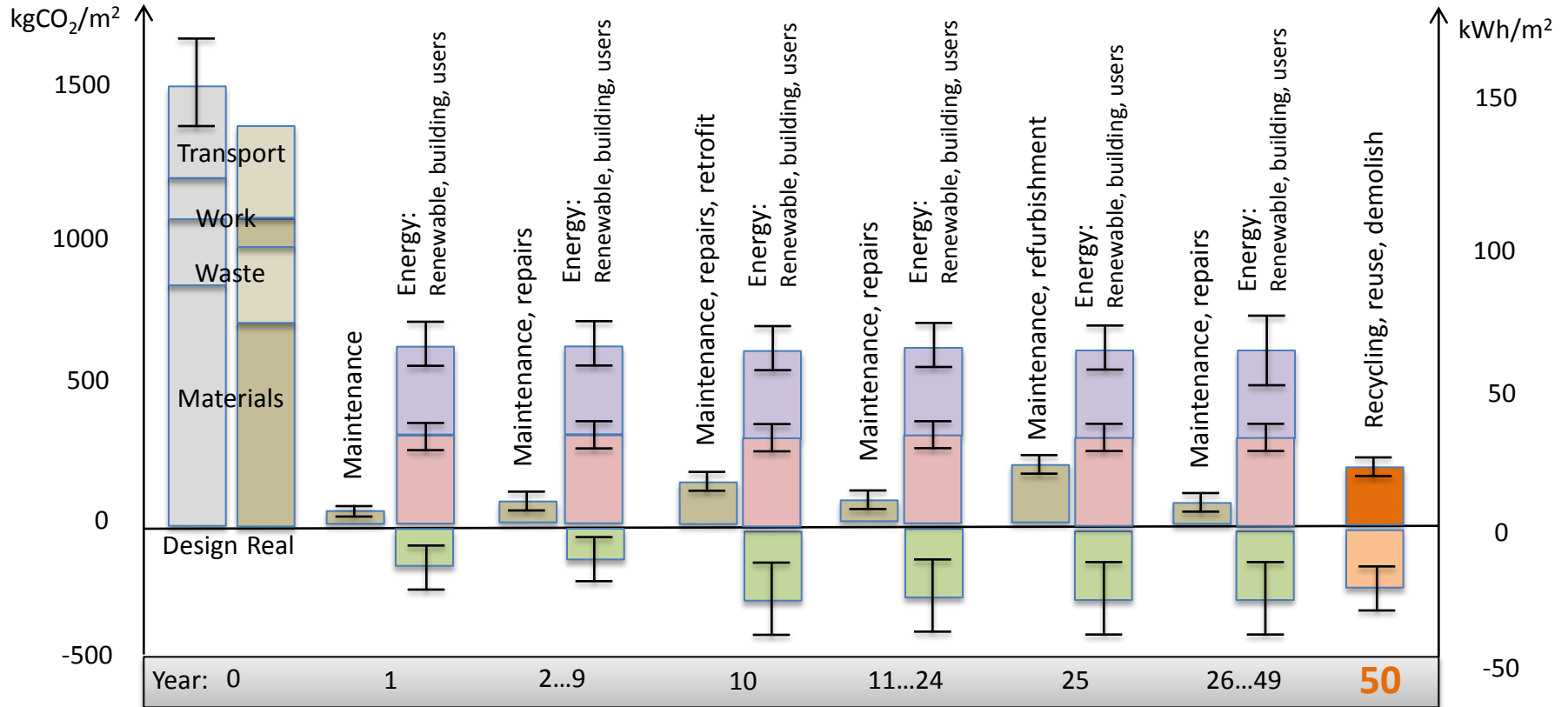
## Indicateurs et étiquettes



# Building Passport

Name:  
 Address:  
 Year of completion:  
 Heated floor area:  
 Number of occupants:

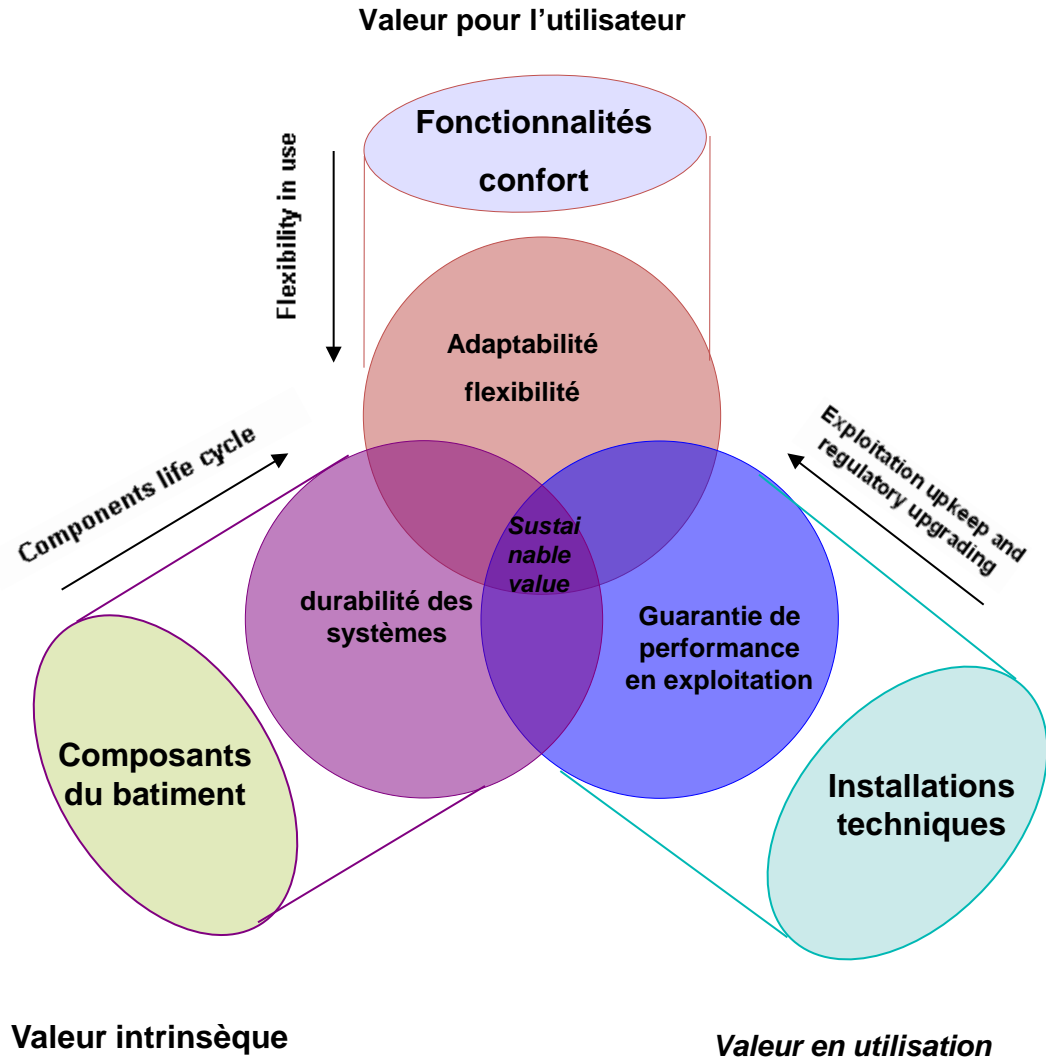
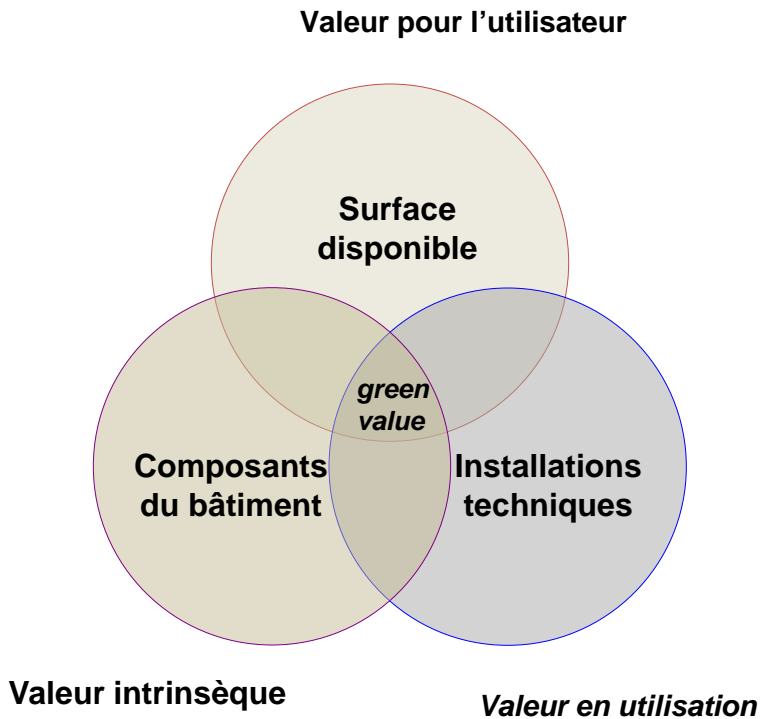
Designed indoor climate class: A/B/C	Measured user satisfaction: %
Indoor Environment Quality	



Primary kWh/m <sup>2</sup>	Embodied: kgCO <sub>2</sub> /m <sup>2</sup>	Operational: kgCO <sub>2</sub> /m <sup>2</sup> ,a	Embodied: kgCO <sub>2</sub> /m <sup>2</sup> ,a	Recycling: kgCO <sub>2</sub> /m <sup>2</sup>	Measured kWh/m <sup>2</sup>	Energy kgCO <sub>2</sub> /pers,a	Travel kgCO <sub>2</sub> /pers,a	Water m <sup>3</sup> /pers,a
Energy Performance Certificate	Designed carbon footprint of building				Display Energy Certificate	Annual Footprint	Recycling of waste %	Landfill waste kg/pers,a

De la photographie noir et blanc...

Au film en couleur





# La traduction financière

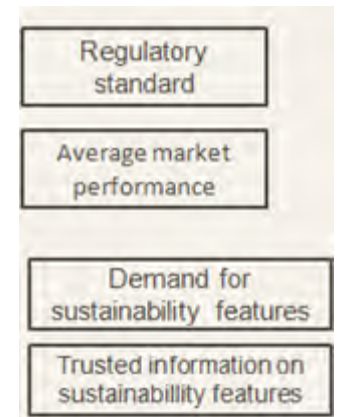
- Collecter massivement les données au plus bas cout possible
- Evaluer la fiabilité/incertitude de ces données
- Traduire en information ( management du risque)



sources: Bozorgi (2012),

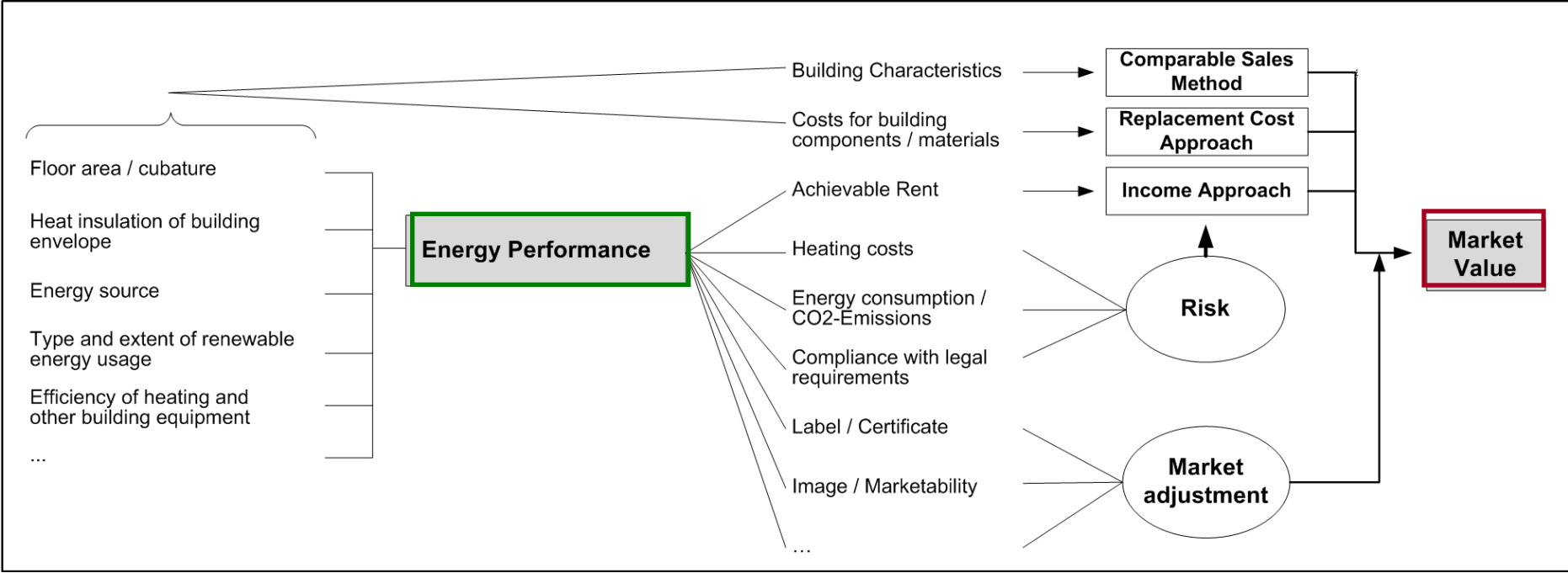
SBA project « sustainable building performance thresholds generating value » (2013)

## Market Response drivers



- Valoriser l'information

# Un exemple de traduction



# Flux d'information et aggregation

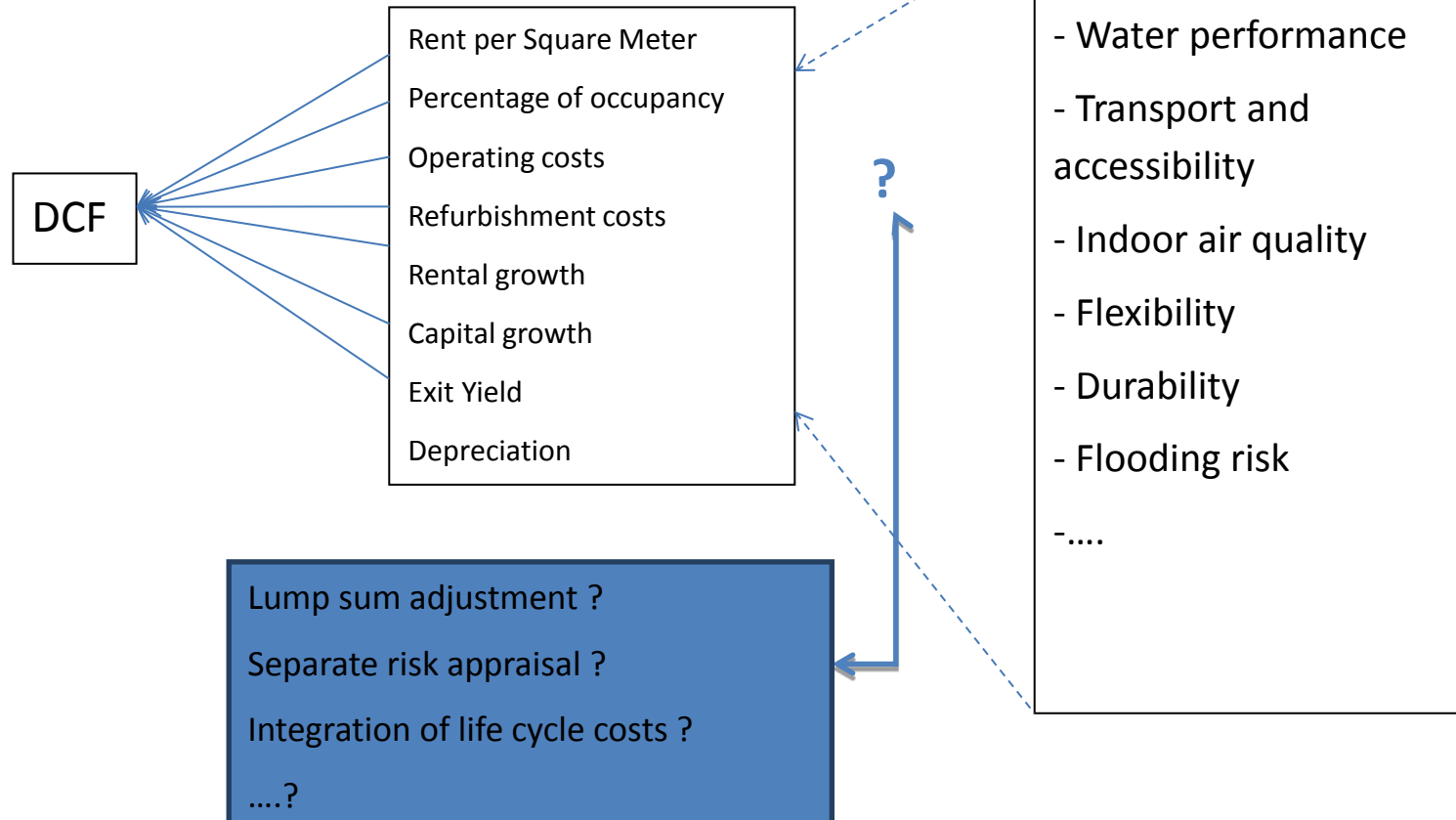
Aggregated  
decision ratio



Disaggregated  
decision  
parameter



Sustainability related  
information list

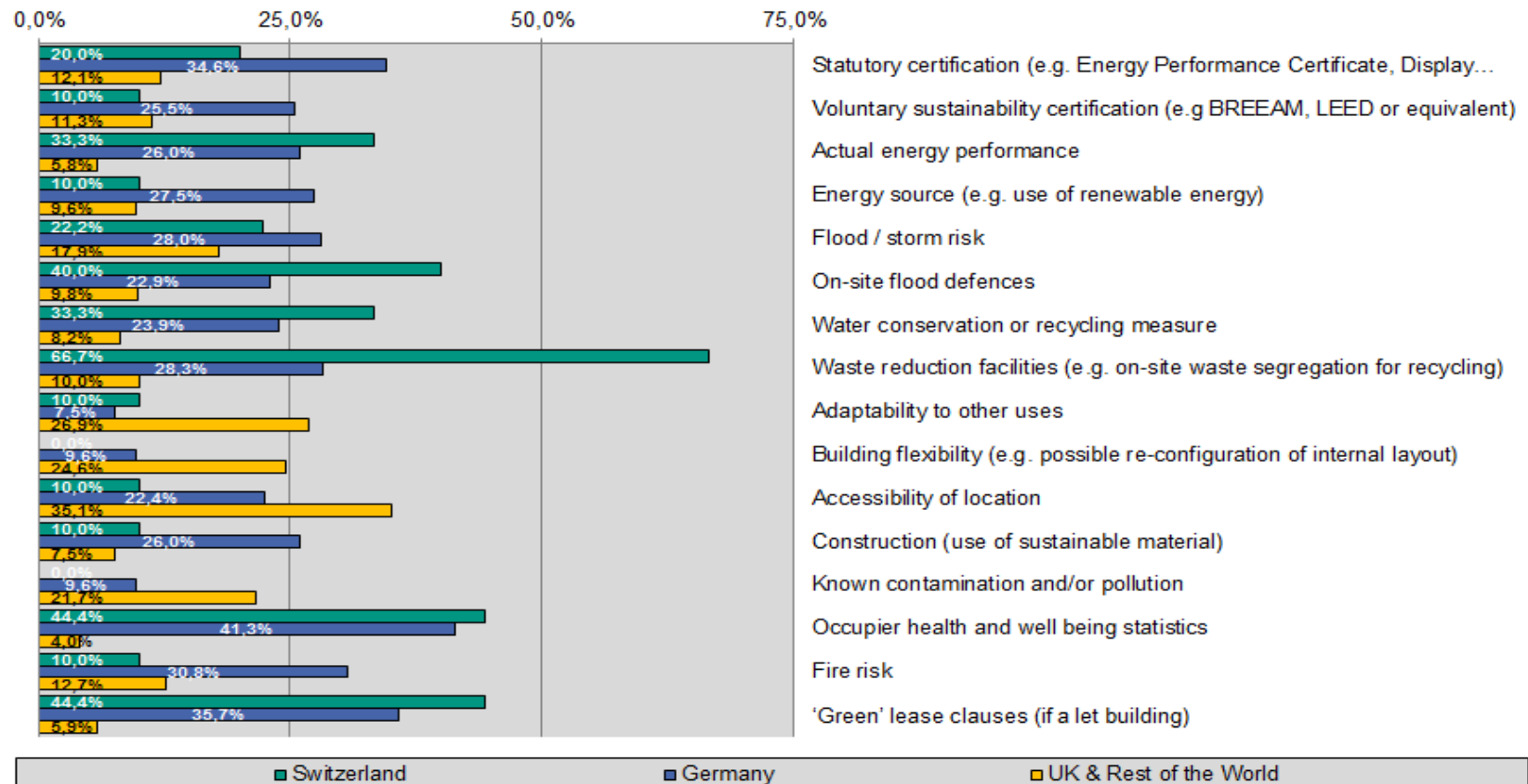


# Sustainability related data perceived by valuers

Although they increasingly collect sustainability-related information, there is no harmonised framework to integrate these data into valuations.

## Sustainability aspects and data collection

Responses: CH (23 of 43 ~53 %) D (54 of 124 ~ 44 %) UK & Others (42 of 138 ~ 45 %)



# Review of current practices

- **Increased sustainability-related data collection**

- Main investors have some form of “sustainability check” in place
- Main sources of information:
  - legal technical documentation
  - EPCs
  - Raw data from meters and invoices
  - Sustainability ratings
  - Sustainability credentials from labels and certifications

=> **High costs of one-off data collection**

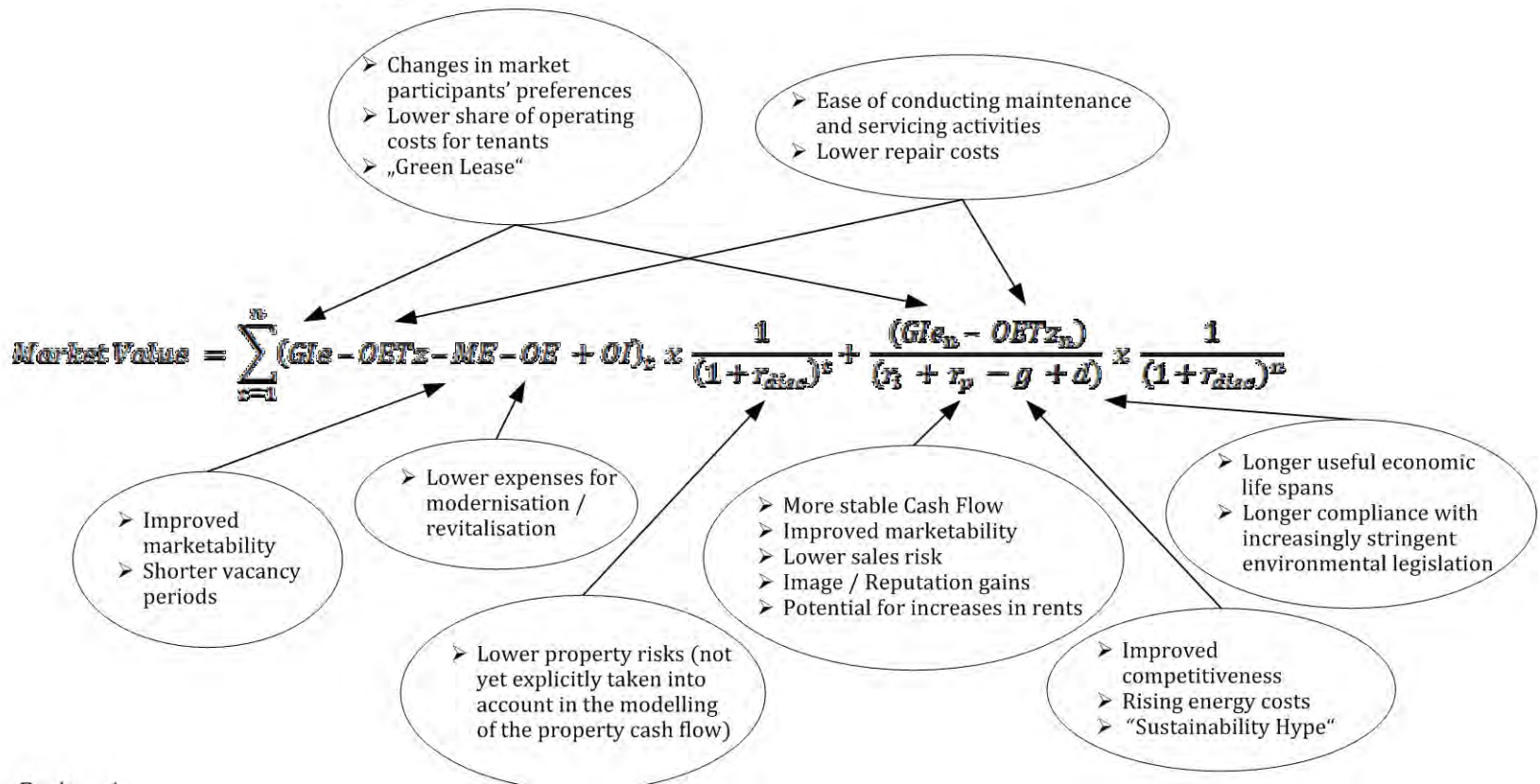
- **Heterogeneous integration into financial calculations**

- No harmonised method of integration with risk of double counting, non accounting for multiple effect
- Presence or absence of a certification schemes with a mere focus on the brand value of certification schemes
- Provision for working costs associated with compliance to building codes (environmental risks, energy)

=> **Short sighted perception of the financial value of sustainability performance**

# Key features of existing initiatives

Using DCF framework to better account for the impact of sustainability-related features on the market value drivers



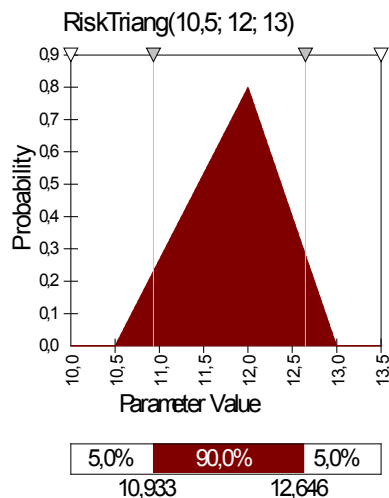
# Monte Carlo simulations

Monte Carlo simulations correspond to an iterative process to compute results from probabilised situations. For each simulation, inputs are randomly selected among a predefined laws of probability to generate an output figure that is recorded. The process is repeated a very large number of times to generate a distribution for the output.

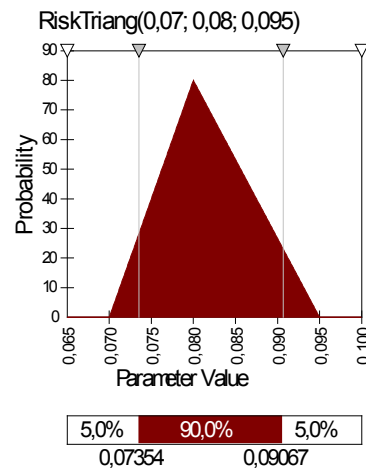
Example: (source: D. Lorenz)

## Distribution assumptions

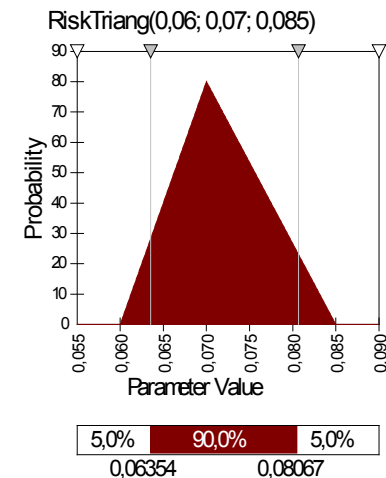
### Market



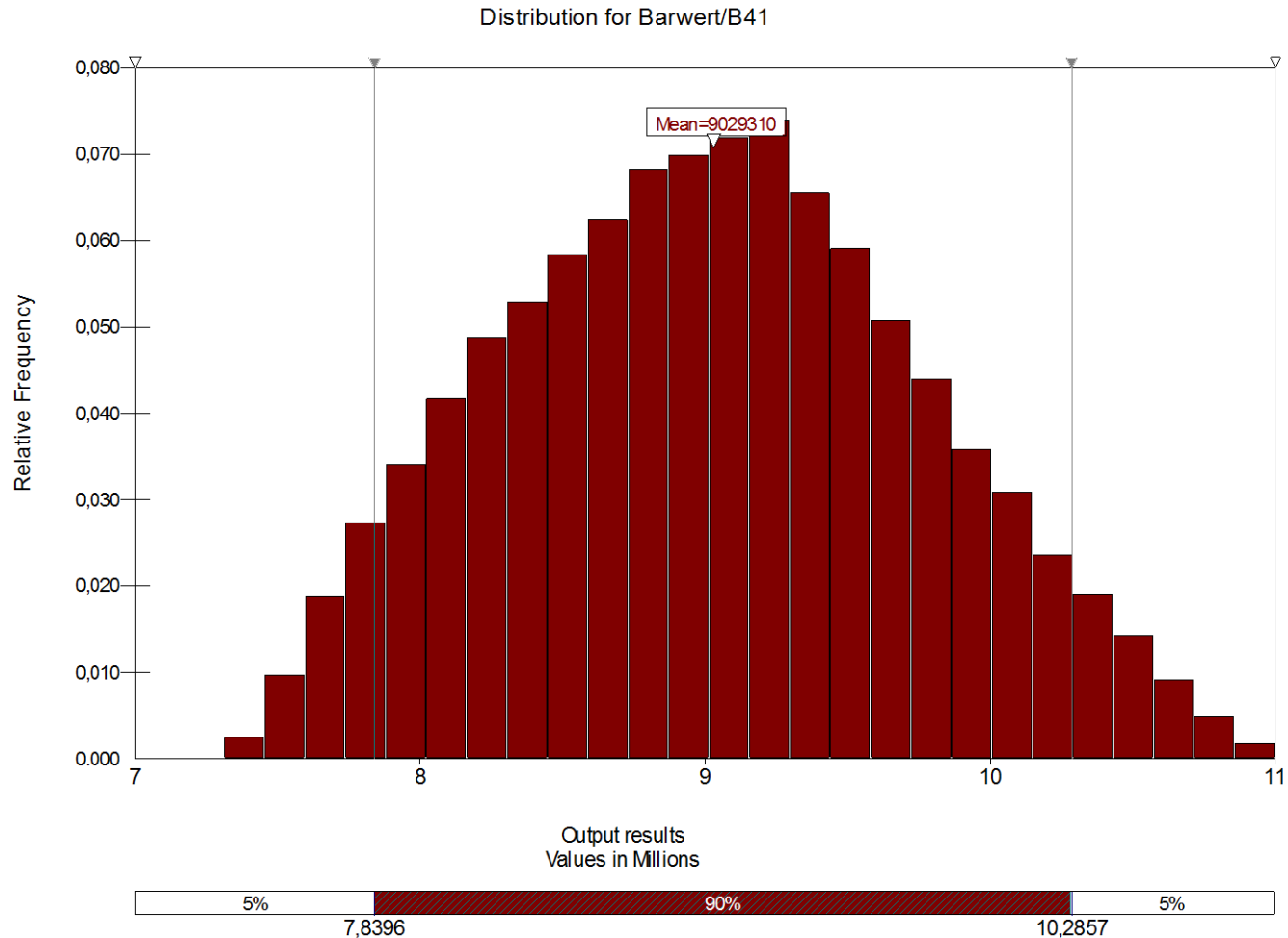
### Discount rate



### Capitalisation rate



# Monte Carlo simulations

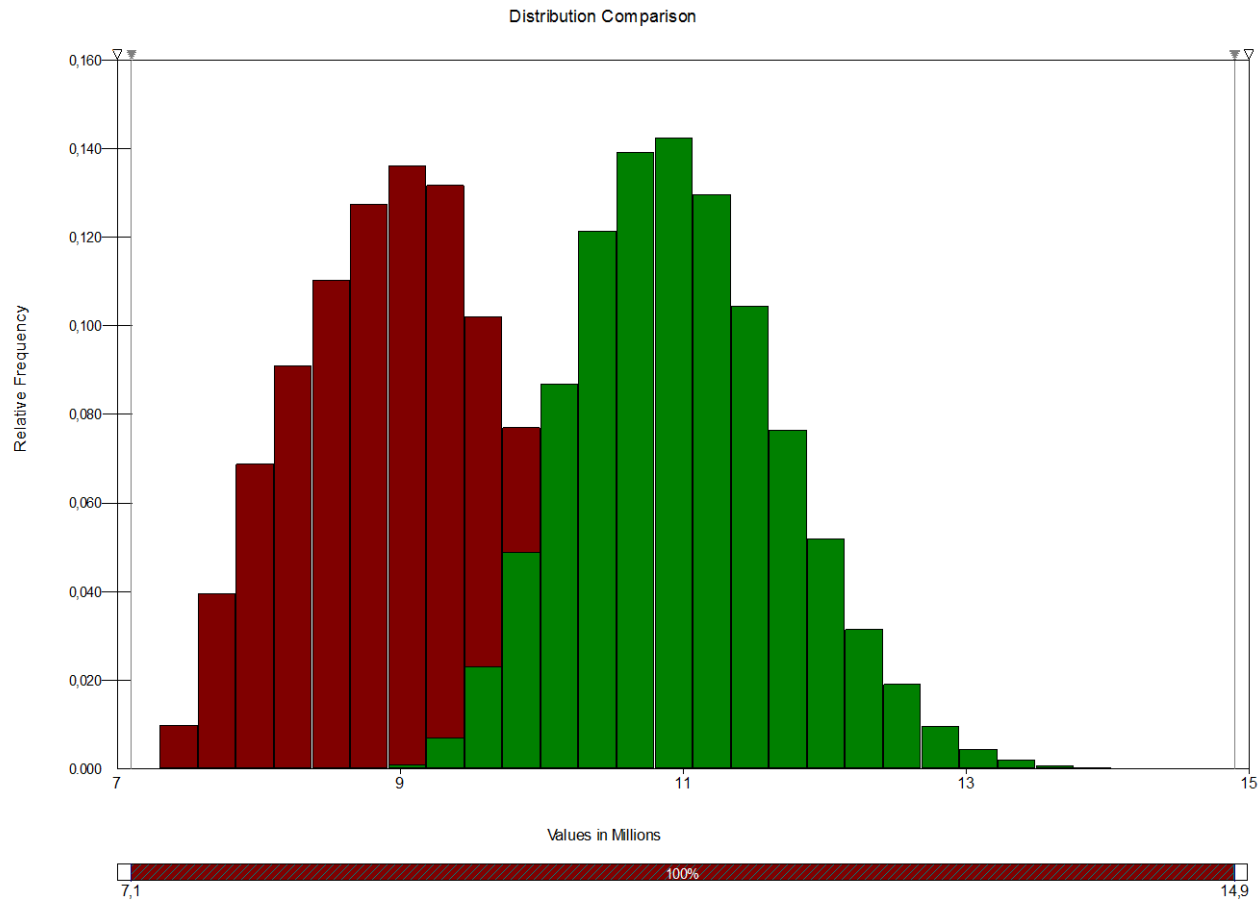


(source: D. Lorenz)



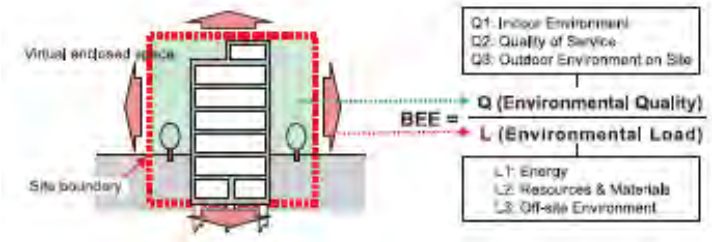
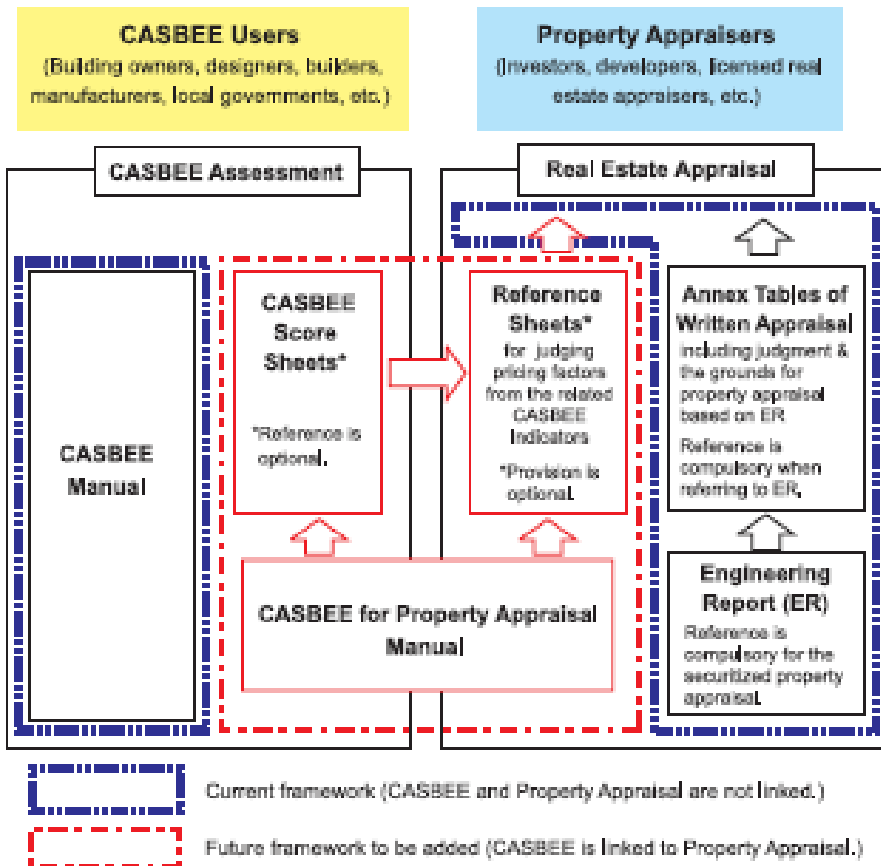
# Monte Carlo simulations

Monte Carlo scenarios can also be used to compare the risk profile of different refurbishment scenarios



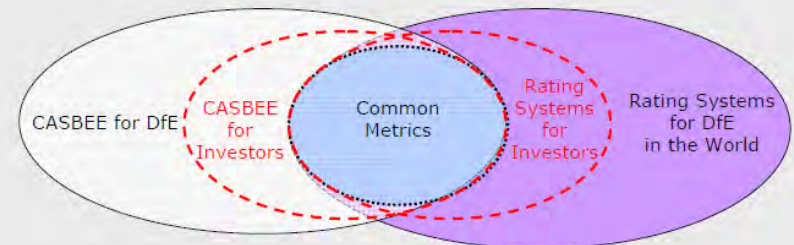
(source: D. Lorenz)

# The Casbee rating proposal



In future, rating systems could be...

- Sharing "Common Metrics"
- Including each country's particular items
- Connecting to property appraisal
- Coexisting of "For DfE" version and "For Investors" version



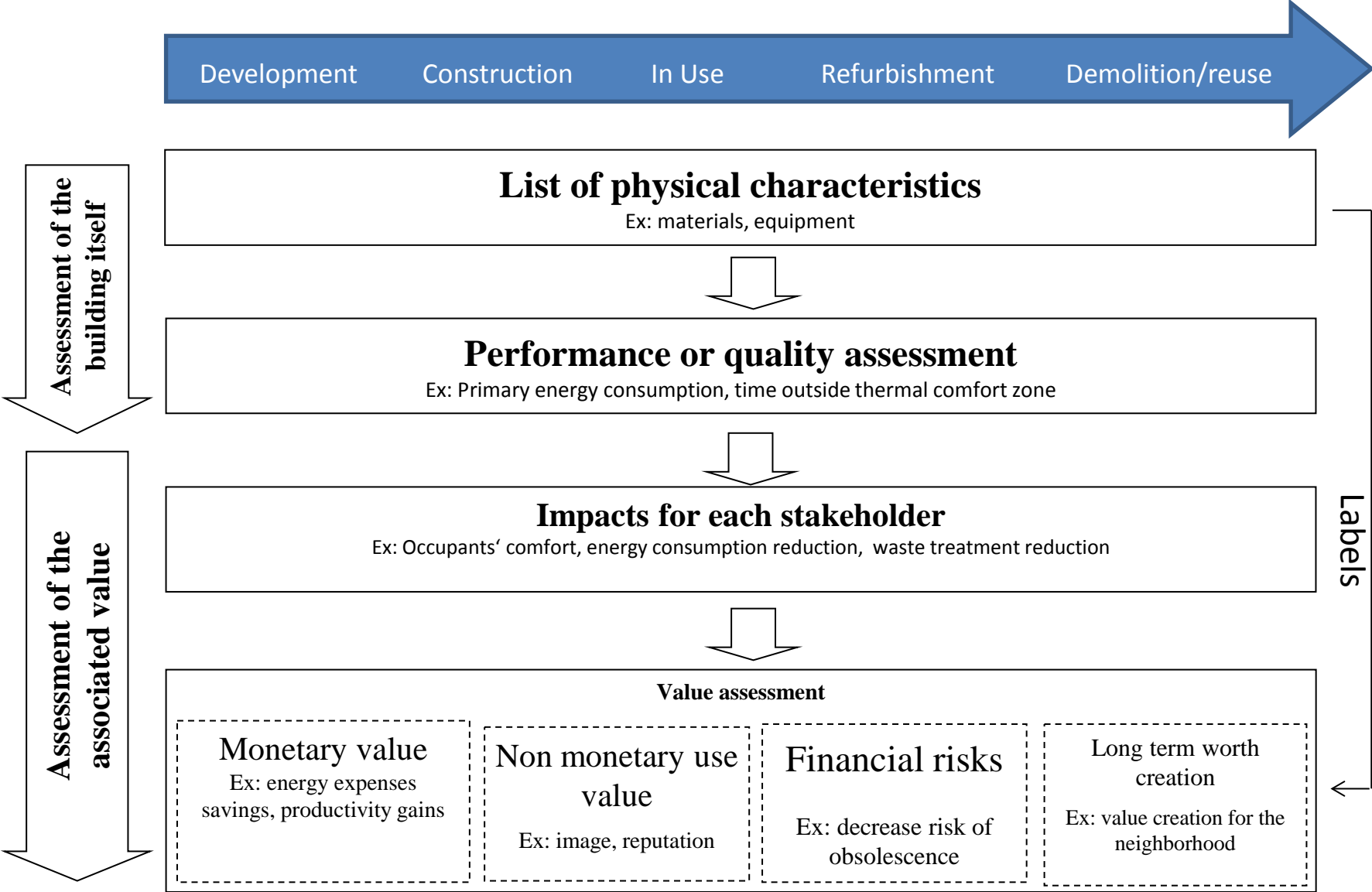
## Examples of initiatives aiming to better integrate sustainability issues into valuation and decision making process.

Project name	Outline
Sustainable Property Appraisal project (UK)	Proposition of methodology. A questionnaire on property future-proofness is used for investors to assess the risks associated to poor sustainability performance. The results are used as inputs to adjust discount factor in a DCF calculation.
Environmental value added (Japan)	Recommendations for the analysis of the added value from sustainability, investigating both the net income and the risk assessment.
Value Beyond Cost Saving (USA)	Suggestions to adapt existing appraisal tools such as DCF to integrate sustainability issues transparently. It advocates valuers to get a deeper understanding of sustainability issues and market uptakes of the
ESI Property Valuation (SWTZ)	Proposition of methodology. A global factor (ESI) is used to adjust the final result of a traditional DCF valuation. The indicator is calculated using a property rating against against five key sustainability criteria. Weight for each criteria are provided thanks to experts' diagnosis on their relative potential impacts on value for different scenarios of future changes in the context.
ImmoValue Project (EU)	Suggestions on how new developments such as EPC and LCC can be used to integrate sustainability issues into property valuation.
Integrating Sustainability and Green Building into the Appraisal Process (USA)	Proposition of a three-step valuation process for real estate valuers. First step consists in assessing the market uptake of sustainability (importance of sustainability topics for the different stakeholders in the market). Second step consists in analyzing the subject property sustainability performance within its market using a sustainability risk matrix. Last step consists in monitoring the evolution of demand and supply of sustainable properties over time.

# Existing initiatives on sustainability integration into valuation and decision making process

Project name	Outline
IPD Eco Pas	Benchmarking service aiming to identify environmental risks for a given property. Data are collected according to a Valuer Sustainability Checklist developed in partnership with the RICS. This checklist is used to complete the risk analysis and compare it with peer thanks to a database with environmental data and capital values for different properties type.
Sustainability and Income- Producing Property Valuation (USA)	Systematic practical procedure for evaluating sustainable property. The underlying principles is that appraisers should systematically collect building information on sustainability as well as market context information on sustainability so as to adjust traditional input parameters. The uncertainty associated with the procedure is thus assessed through a sensitivity analysis using Monte Carlo simulations.
How to calculate and present deep retrofit value (USA)	Guide providing practical guidance for owner-occupiers as to how value deep retrofits beyond the mere costs savings. They define "Deep retrofit value is the net present value of all of the benefits of a deep energy or sustainability investment." Methodologies incorporate risks analysis and considerations to properly avoid double counting.
Renovalue (EU)	Training material for valuation professionals on sustainability features and their impacts on value drivers. (rent, discount rate, capital expenditures, maintenance costs...)

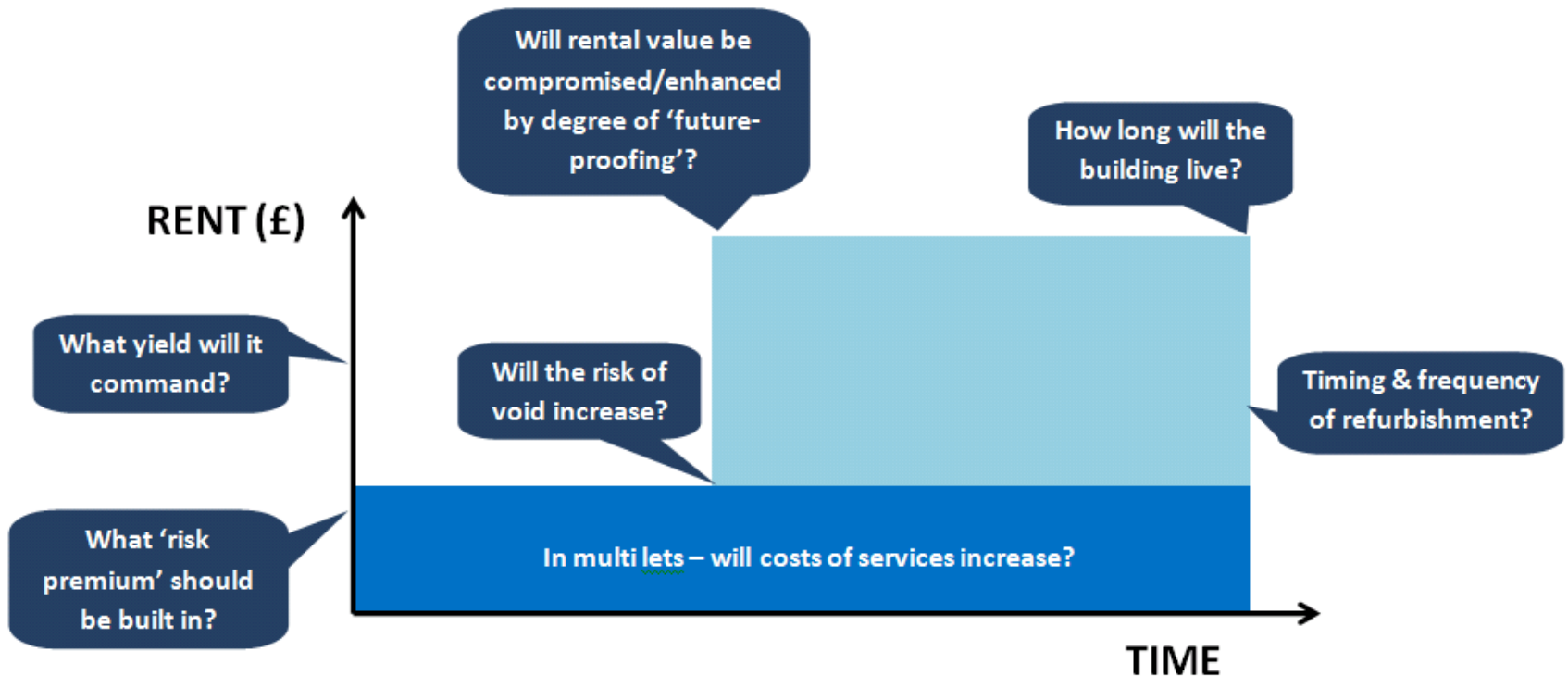
# From building characteristics to value



# Les données existent mais elles sont fragmentées et couteuses à rassembler

- ⇒ Le défi principal consiste à collecter les données de sources variées tout en qualifiant la qualité de l'information afin de pouvoir la traiter en toute transparence
- ⇒ S'appuyer sur toutes les sources disponibles au cout le plus faible (en fonction des besoins) en traitant la complexité par des systèmes d'aggregation de la quantité, des niveaux de détail et de la fiabilité

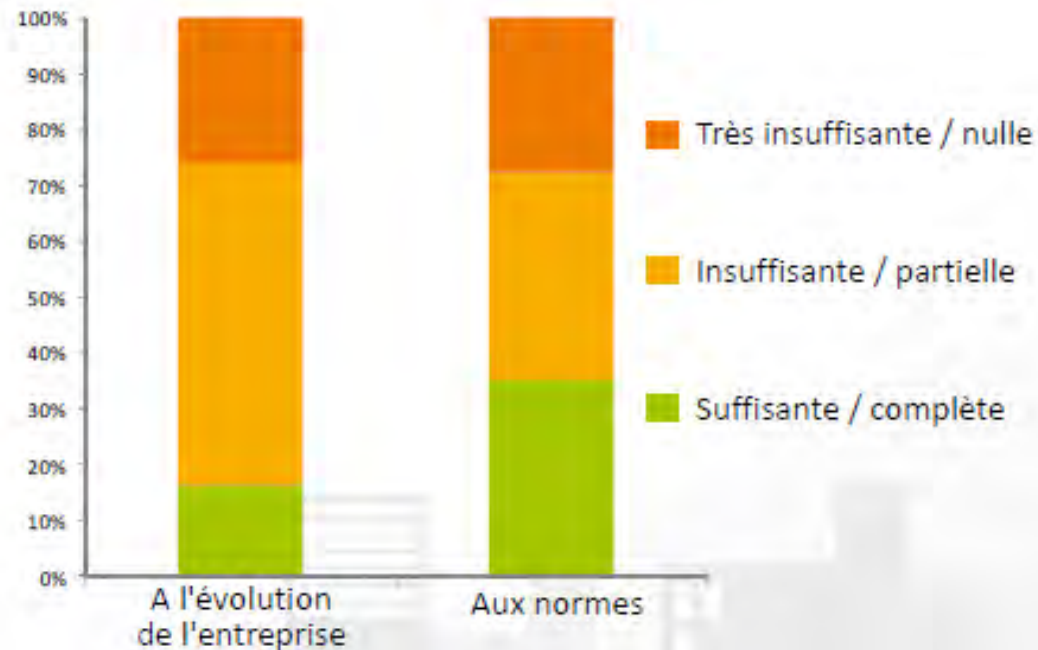
# Et le risque ?



## CAPACITÉ D'ADAPTATION DU SITE

### ► LA DIFFICULTÉ À AFFRONTER L'AVENIR, UNE DES CLÉS DE L'OBSOLESCENCE

- Les sites obsolètes souffrent d'un **fort déficit** en termes de **capacités d'évolution**
- Seuls 16% des entreprises considèrent que leur site dispose d'une capacité suffisante d'adaptation à leur évolution
- Seuls 35% des entreprises jugent possible une remise aux normes complète du site







## L'ensemble des acteurs adopte les indicateurs afin d'affiner leur stratégie immobilière

- Réduire les risques potentiels sur les revenus locatifs, la dépréciation et la liquidité
- Réduire les risques sur l'accès financement futurs
- Réduire les risques liés aux évolutions réglementaires
- Réduire les risques d'image
- Prendre le risque de la création de valeurs à long terme
- Protéger le capital déposé dans les murs

# Remerciements



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# MERCI !

POUR TÉLÉCHARGER UNE COPIE VOUS TROUVEREZ LE LIEN CI-DESSOUS :

<http://www.unepfi.org/work-streams/property/SustainableREI/>

