DISILIPI Substitute iansform



Drowning in sustainability



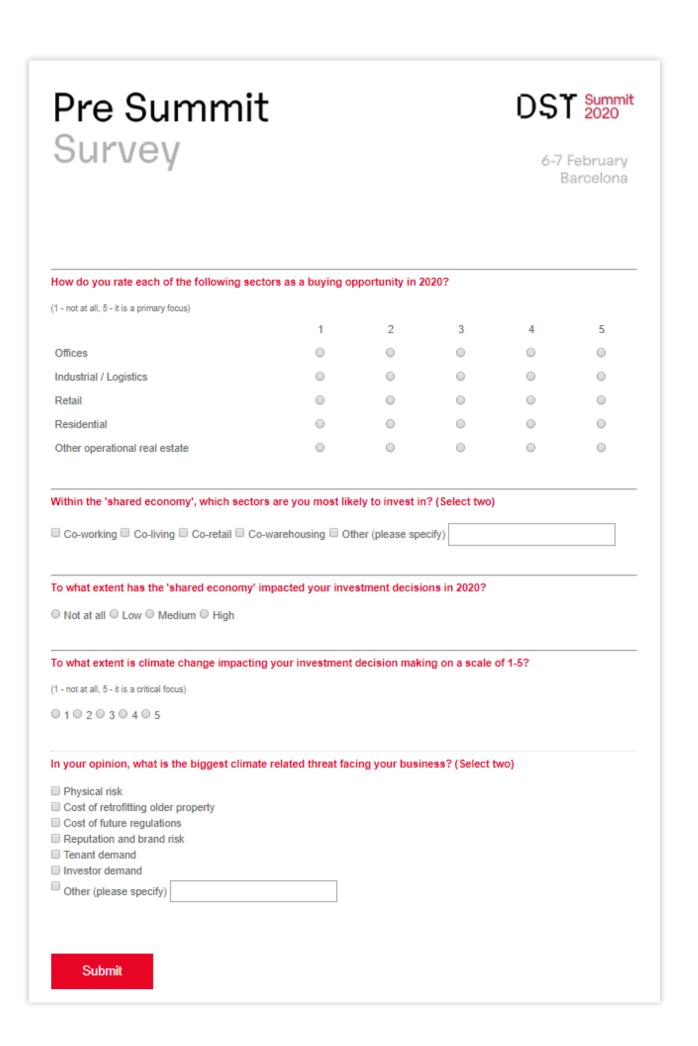
What you thought

01

To what extent is climate change impacting your investment decision making?

02

What is the biggest climate related threat facing your business?

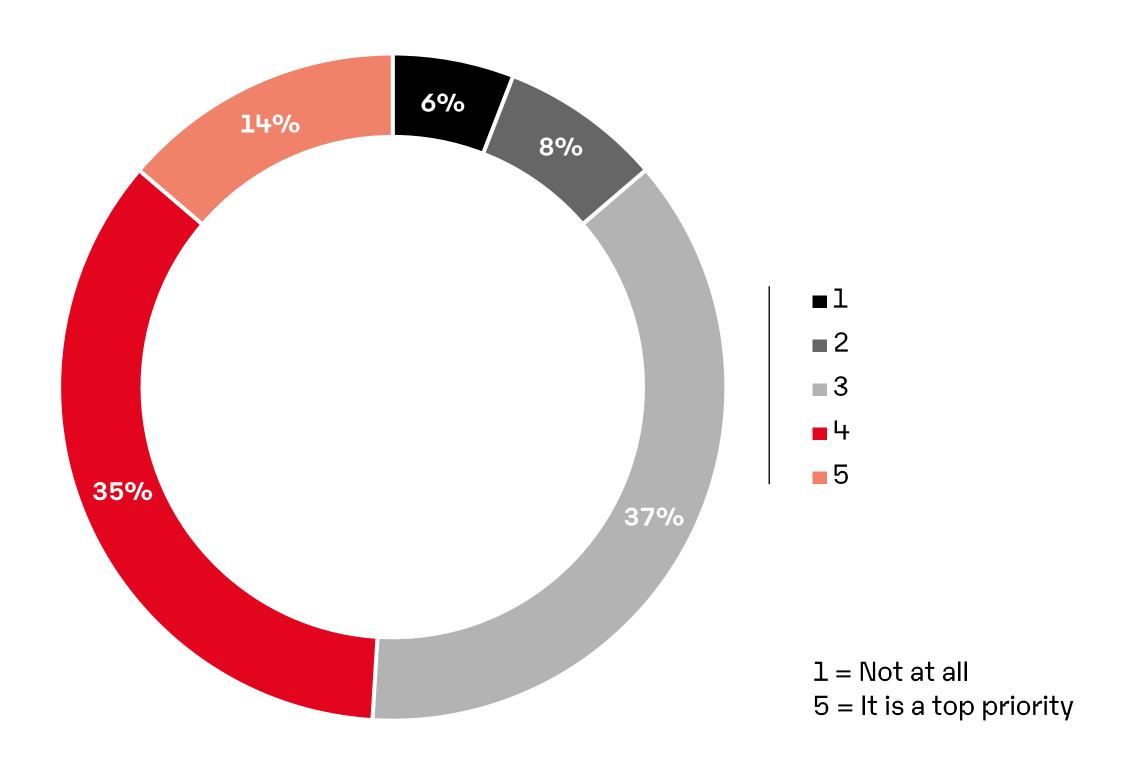




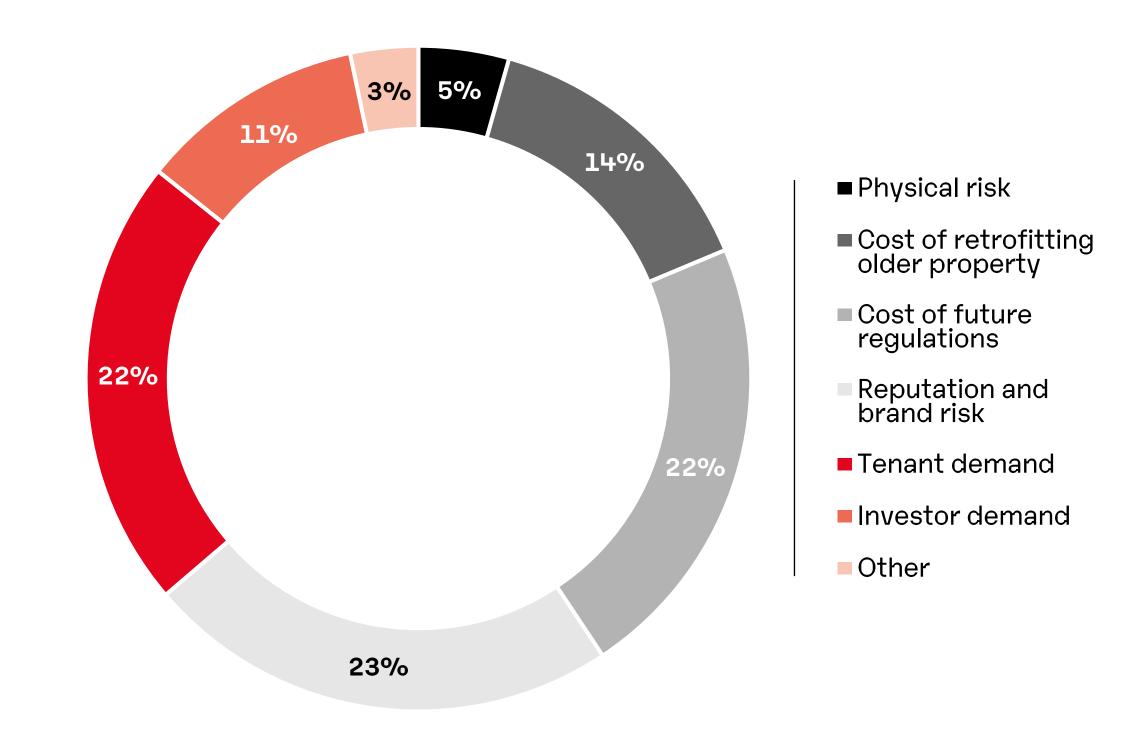


What you thought

To what extent is climate change impacting your investment decision making?



What is the biggest climate related threat facing your business?







Can you 'green' real estate?











What will drive us to act?



The regulators

Building energy performance requirements

Targets for carbon neutrality by countries, cities and companies

Action on recycling and resource use

Changing practices to mitigate climate risk – e.g. coastal defences, land use

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Action on air and water quality – e.g. congestion zones

Planning – e.g. rights to light, floodplains

Tax - e.g. Climate Change Levy in the UK

Human rights - e.g. 150,000 premature deaths globally due to climate change (UN).



Technology

Greater energy and resource efficiency

New sources of energy

Reducing / capturing carbon, methane and other emissions and pollutants

Transportation

Material technology and building design

Food production.



The occupier

Demographic change – what do millennials want?

Changing social attitudes

Corporate change

Bankable covenants.





Sustainable, low-carbon real estate: theory into practice

Eric Lounsbury Director – Ventures The Carbon Trust



An economy fit for the planet









Case studies



£100m

Over £100 million has been invested through our Offshore Wind Accelerator into projects targeting specific needs, challenges and opportunities.





Galaxy

40%

We have certified that the Samsung Galaxy S9 has a carbon footprint almost 40% lower than the Samsung Galaxy S4, released just five years before.



€500m

We provided the methodology and assurance for Barclays' €500 million green bond, the first issuance from a UK bank used to fund domestic assets.







92%

We helped Carlsberg set an ambitious science-based target. By 2030 Carlsberg will reduce emissions from its operations by 92% compared to 2015 levels.







"Climate change has become a defining factor in companies' long-term prospects...we are on the edge of a fundamental reshaping of finance."

Larry Fink

BlackRock







Real estate has a big challenge Ambition vs reality



Ambition

EU climate neutral by 2050

Net zero carbon (NZC) buildings.





Reality

Modest cuts in last 30 years, but 100% cut in next 30 years

Most 2050 buildings already built

~1% refurbishment rate / year

Radical energy targets for NZC

Persistent 'performance gap'

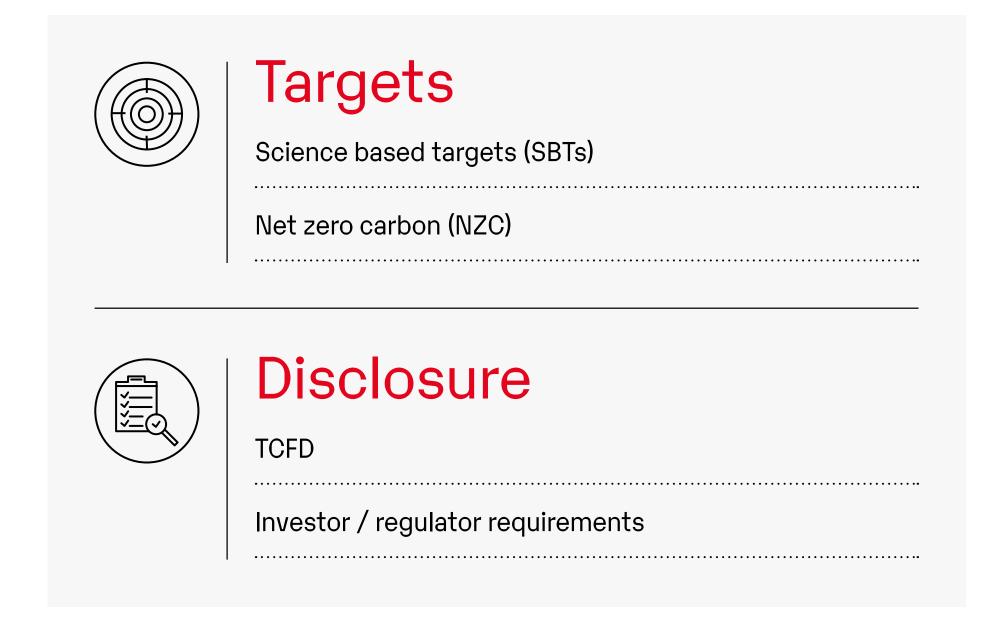
Investors want returns and 'impact'.

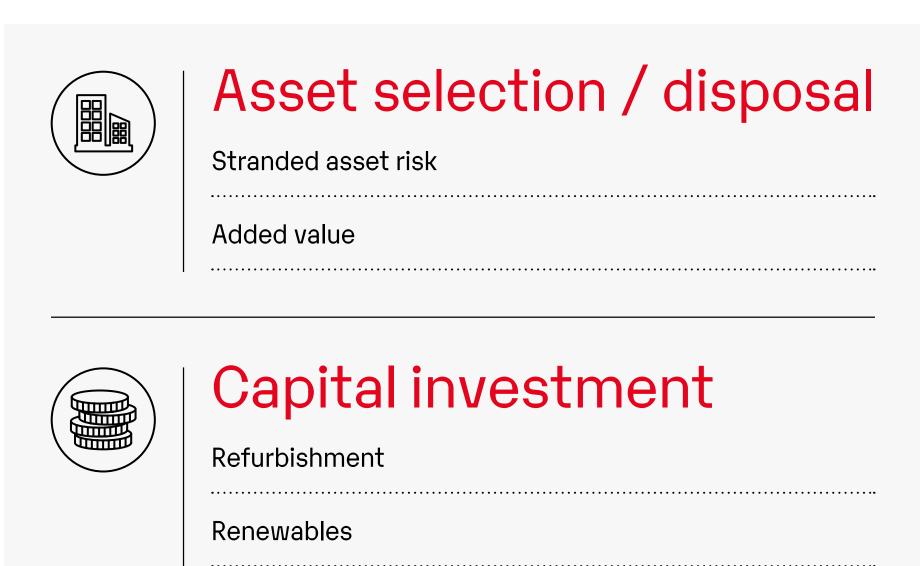




Solutions









Active management

Close the 'performance gap'

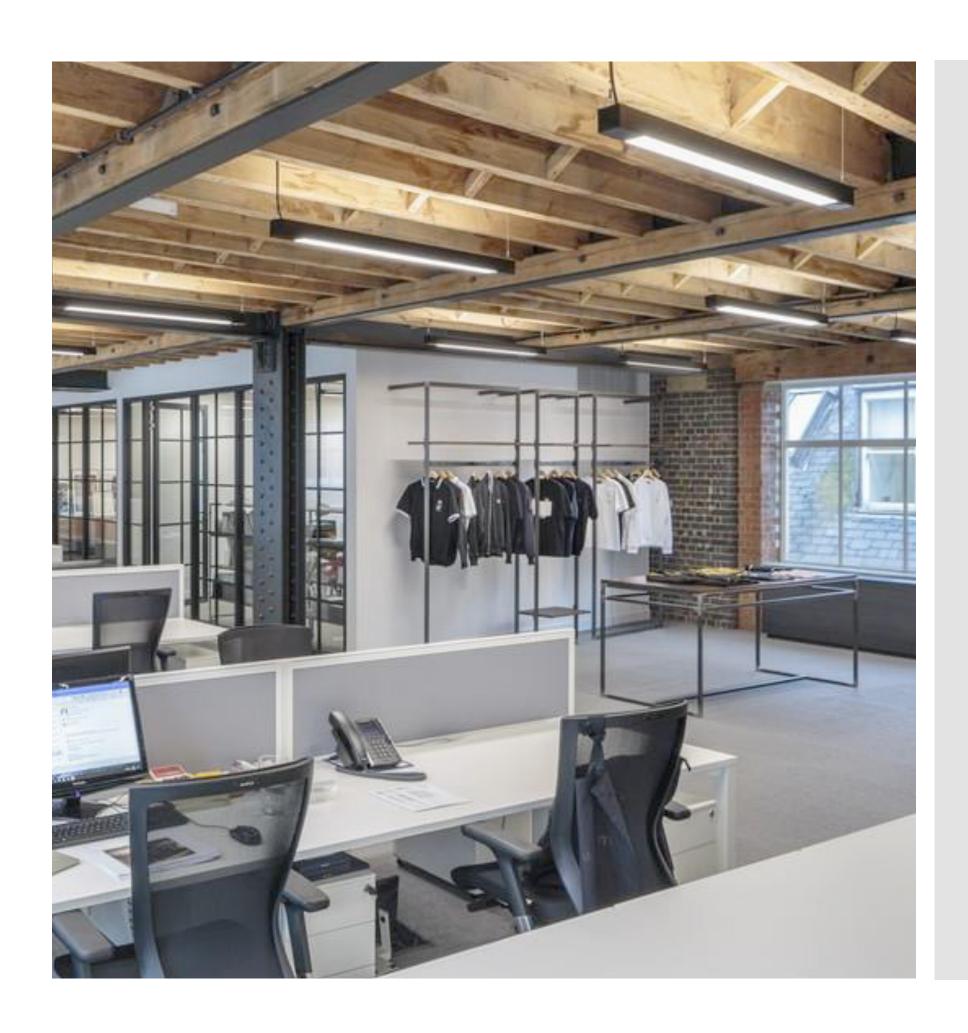
Own the tenant energy challenge





Low Carbon Workplace fund





The Low Carbon Workplace

fund builds on these principles

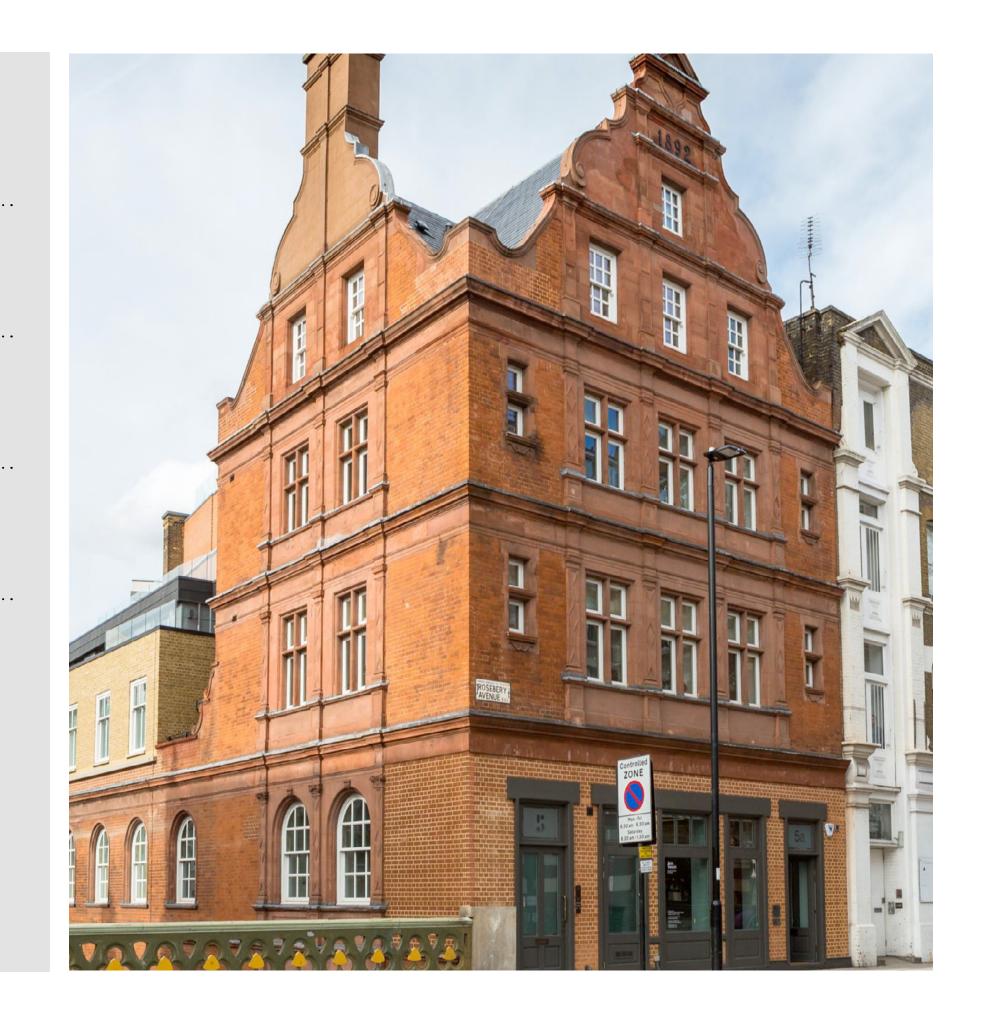
Case study: ~100-year old asset

Big commercial and environmental repositioning

Prelet as Fred Perry headquarters

Great results...and many lessons!





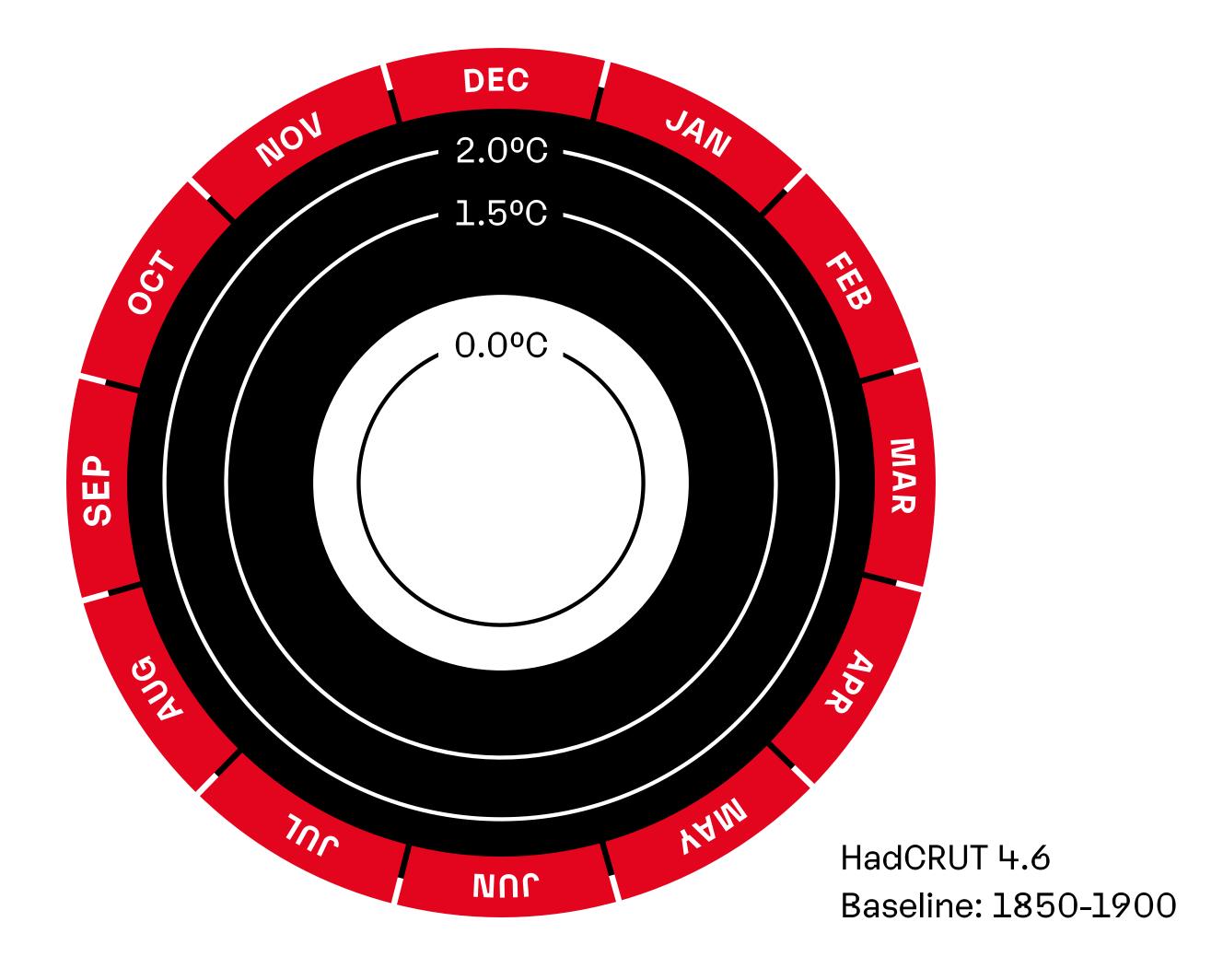




Global temperature change

C A R B O N T R U S T

(1850-2019)







How do we 'green' real estate?

Elsbeth Quispel

Head of Strategic
Consultancy & Sustainability



Future proof your real estate portfolio

Understand your risks and take a strategic approach

An integral sustainability approach

Integrating sustainability in portfolio management at different levels:

• Portfolio risk assessment – ensure you meet local regulatory requirements and provide insight into KPIs (energy, GHG, water and waste data)



• Measure KPIs – get full insight into KPIs (energy, GHG, water and waste data)



• Sustainability strategy – develop a real estate sustainability strategy aligned with (financial) performance objectives, combined with a pragmatic action plan.

Sustainability is integrated in all aspects

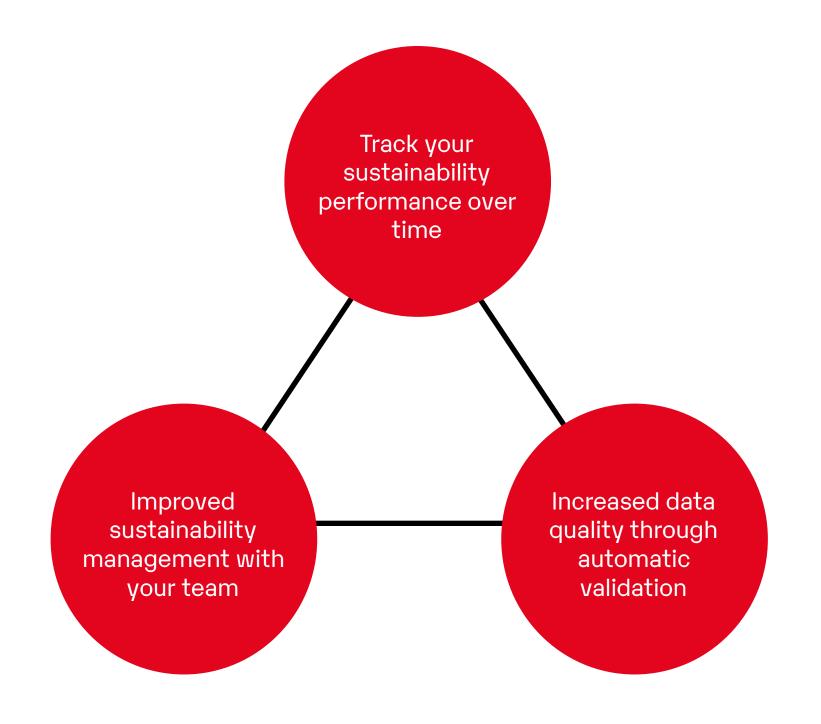






Sustainability score

CWing sustainability – a portfolio analysis tool



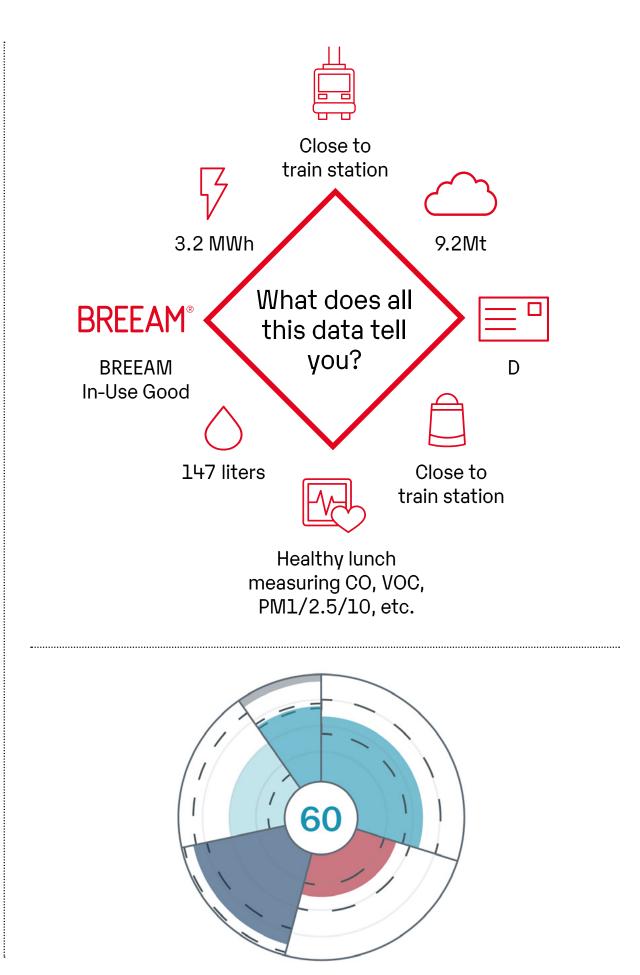
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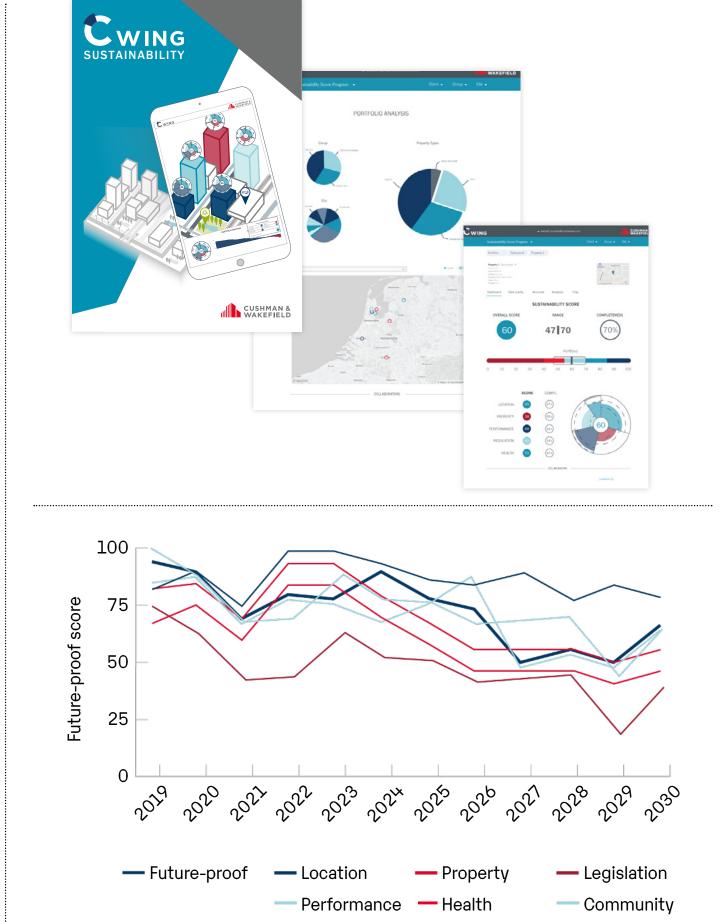
Improve insight and management of your sustainability performance

2

Set targets and track your performance over time 3.

Know your sustainability score based on an algorithm



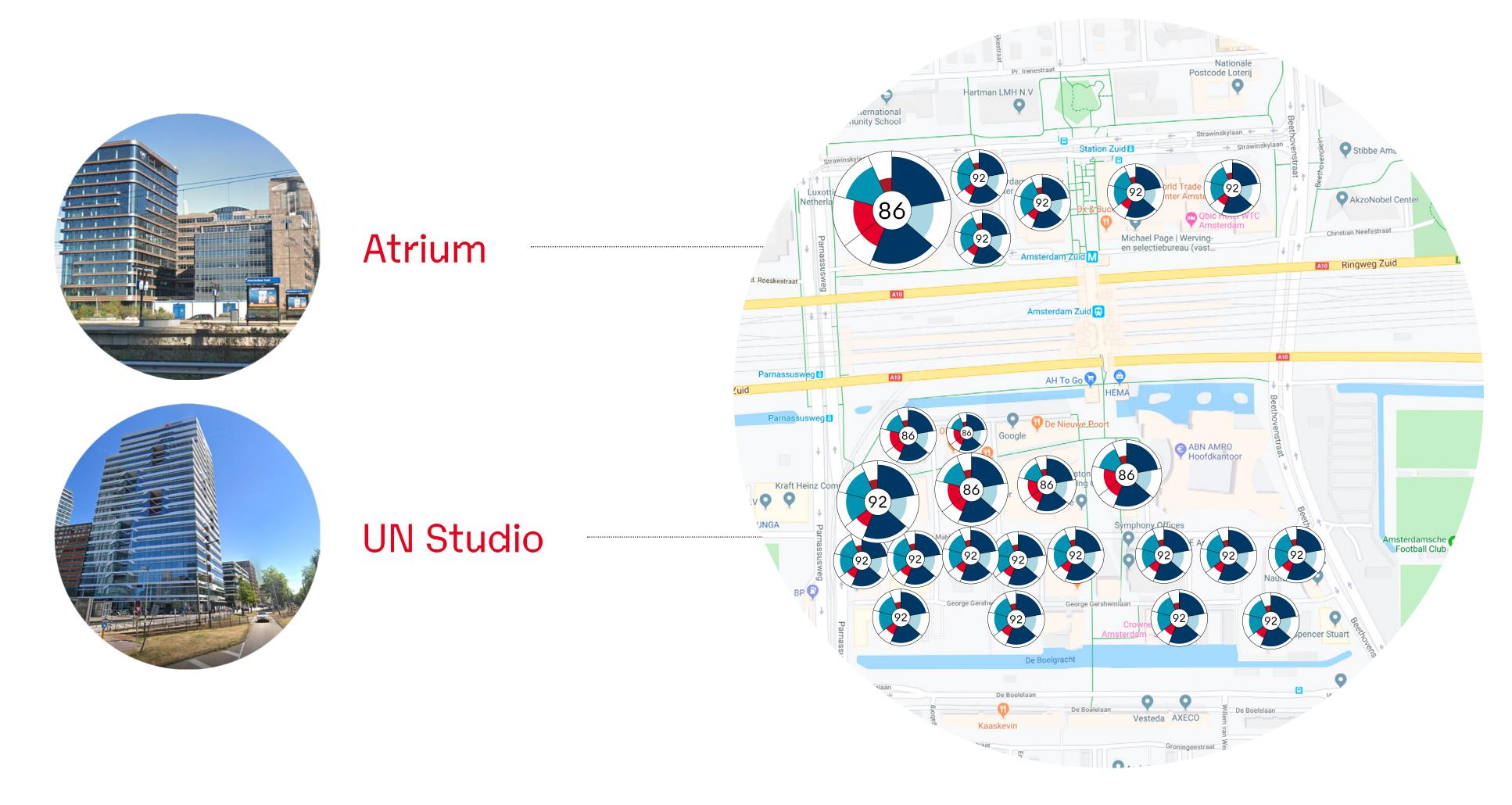






Sustainability score

CWing sustainability – a portfolio analysis tool







Impact of sustainability on asset value

Research study outcomes



Key findings

- Sustainability indicators: energy efficiency, building certifications and energy rates to be compared against 'brown' buildings
- Greener buildings lead to price premiums, although this 'green' premium is usually not that significant
- 'Brown' discounts are observed: buildings that do not have sustainable measures are often sold or rented on lower values
- The market is currently not advanced enough to quickly recognise greener buildings and focuses merely on visible indications, such as glazing, as well as certificates and ratings
- Changing environmental laws and regulations will change the impact that sustainability measures have on asset value.

Empirical research on office buildings in Milan

- Premium price, especially for high levels of sustainability
- The rate of absorption of certified assets reflects a preference for green properties (2x absorption rate, 4x for the pre-let segment)
- Better certifications show higher returns on investment and lower operating costs over the life of the property
- Significant premium price for properties certified at the highest levels (Gold and Platinum) with price differentials of 7% and 11% respectively.

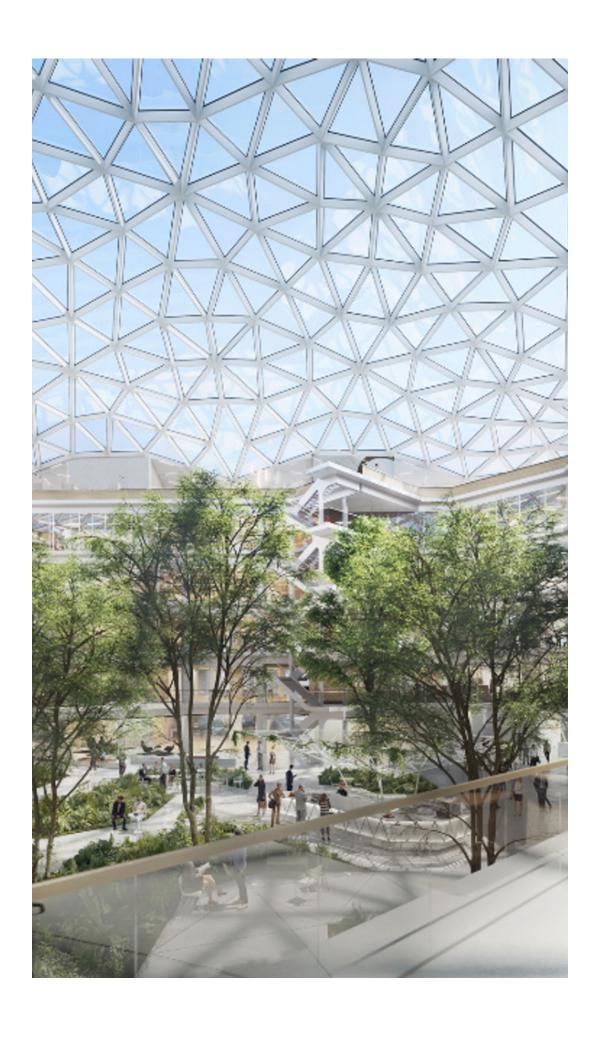
'Green buildings benefit from a significant increase in market value and provide benefits to the community and to the environment.'





Pricing implications

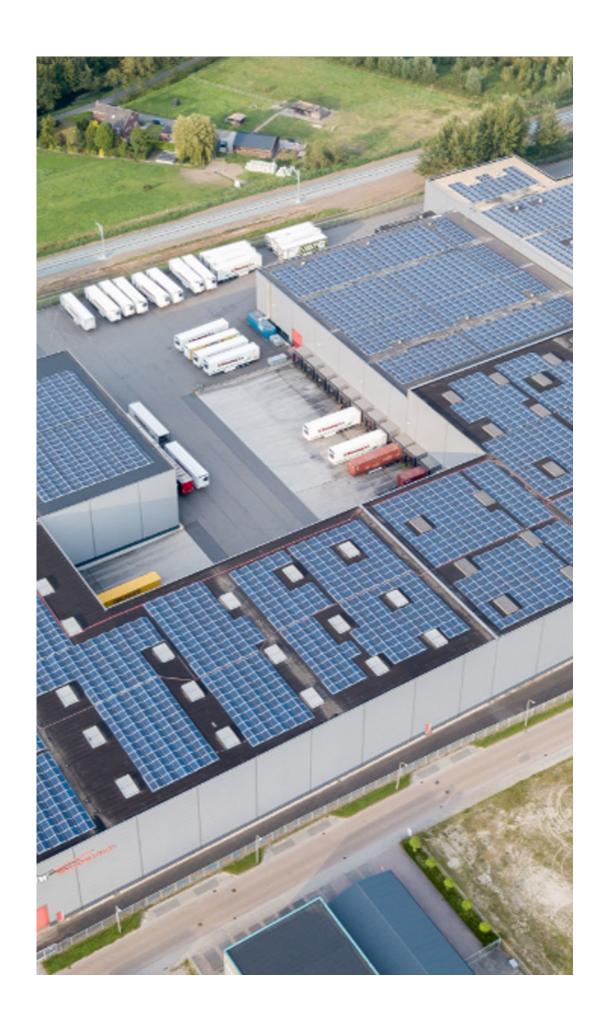
Case studies from a valuation and business case perspective



EDGE Sloterdijk, Amsterdam

- 48,000 sq m re-development of an office building from 1970
- Cutting-edge and sustainable building, meeting the highest standards for sustainability, technology and health & wellbeing
- Energy label A, BREEAM 'Outstanding'
- EDGE Technologies sold the building to Hana Alternative Asset Management in 2019
- Rent level increased from €140 to €225 / sq m

Improved leaseability, valued by buyers, preconditioning for financing, improved interest rates.



Solar panels on a logistics asset

- Recent logistic asset > 45,000 sq m LFA
- 13,000 solar panels installed in 2017 and 2018 (€2,664,000 investment by owner)
- Estimated annual energy production: 2,900,000 kWh
- Direct value impact:
 - €3,881,211 (lease period of 14 years)
 - Investment: €2,664,000 = 'profit' for the owner: €1,217,221
- Indirect value impact:
 - Complex due to lack of market evidence
 - However, positive (better financing terms due to sustainability measures)
 - Assuming increased returns of 0.10%, impact = €240,000.

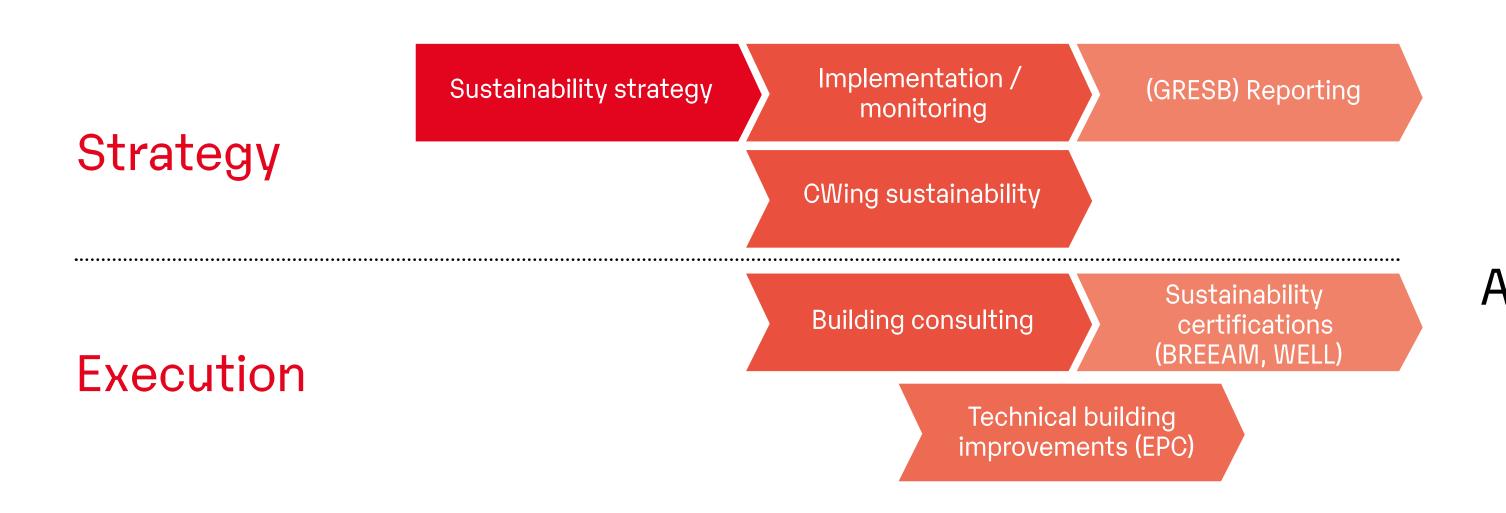


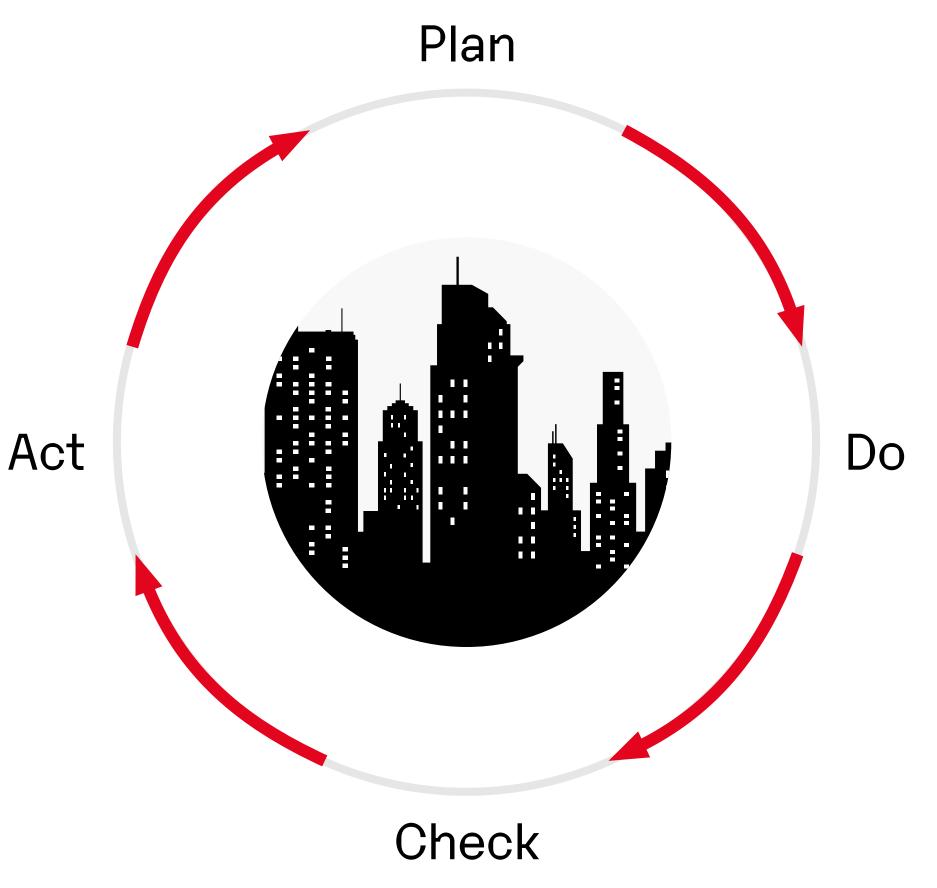


Strategy and execution

Our recommended way forward

We use our in depth sustainability knowledge and expertise, as well as our digital and technical capabilities, to support our investor, banking and occupier clients to set targets, implement required actions, manage, benchmark and value the sustainability performance of their portfolio.









How to act?

David
Hutchings
Head of Investment Strategy
EMEA Capital Markets



Argie
Taylor
Head of APAC
Capital Flows



How to act

The theory



Stop flying



Reduce meat consumption



Walk to work



Plant a tree



Take out insurance

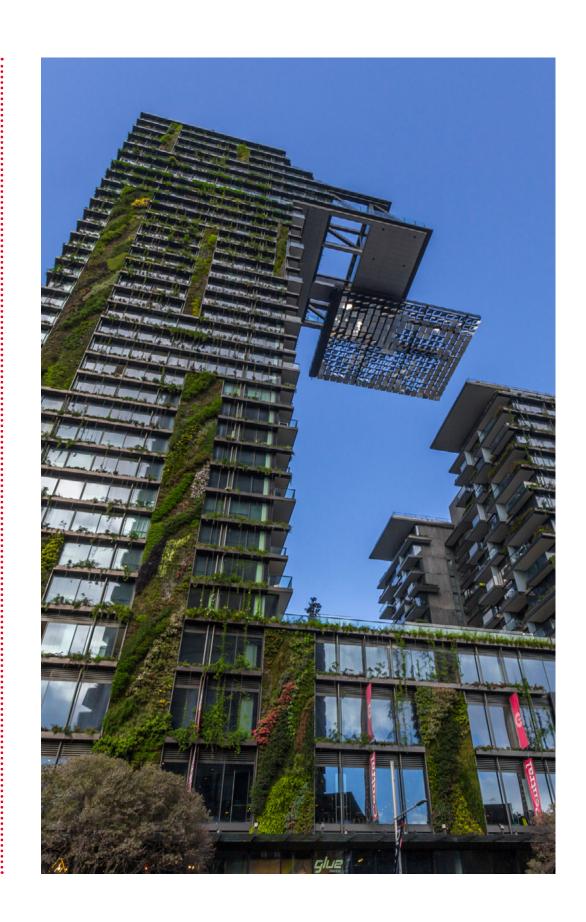




How to act

Anticipate your market

HOW SPECIFICATION IS CHANGING: A TYPICAL GRADE A OFFICE	WAS	IS	WILL BE		
Identity	Business	Technology	Appeal to talent		
Location	In CBD	Proximate to CBD	Accessible to CBD		
Transport	Car and public transport	Local public transport	Local and long-distance public transport		
Connectivity	Fixed	Fixed and mobile	Fixed, mobile and constant		
Internal specification	Institutional standard	Occupier standard	Flexible and connected		
Environmental quality	Nice to have	Certificated	Measured air, water, wellness and carbon negative		
Construction	Meets building standards	Meets building standards	Focus on embedded carbon		
Tenant	Single - AA	Weighted average - A	Multi-let, varying expiries		
Key staff facilities	Parking	Showers, bike rack	F&B and wellbeing		
Climate risk		Catered for in building specification	Strategy and building specification		







Cost to act

Raising your property to meet occupier demands

OFFICE GRADE*	EPC RATING	POTENTIAL REFURB COSTS (£ / SQ FT)					
		STANDARD	B EPC %	B EPC RATE / SQ FT	WELLNESS	SMART BUILDING	
1 Over 50 years old, heating only	E	£165-240	14.1%	£23-34	£5 / sq ft	£5/sqft	
2 Mid 1990s, partly glazed	G	£125-180	37.3%	£47-67	£5 / sq ft	£5/sqft	
3 Mid 2000s, fully glazed	F	£115-150	44.7%	£51-67	£5 / sq ft	£5/sqft	
4 Mid 2010s, at market standard	Е	£95-150	45.7%	£43-69	£5/sqft	£5 / sq ft	

^{*}A hypothetical scenario for a London office building





How to act? Our conclusions

New purchases will be impacted in the typical hold period

Legacy portfolios need to be safeguarded or sold – fix it or sell it

'Brown discount', not a 'green premium'

But represents a profit opportunity not just a cost

Reputational impact must be considered

Be ready to define the new 'prime'.





Workshop breakouts

01

To what extent do you agree that now is the time to act?

02

What are the top three areas of action that can be taken in 2020?







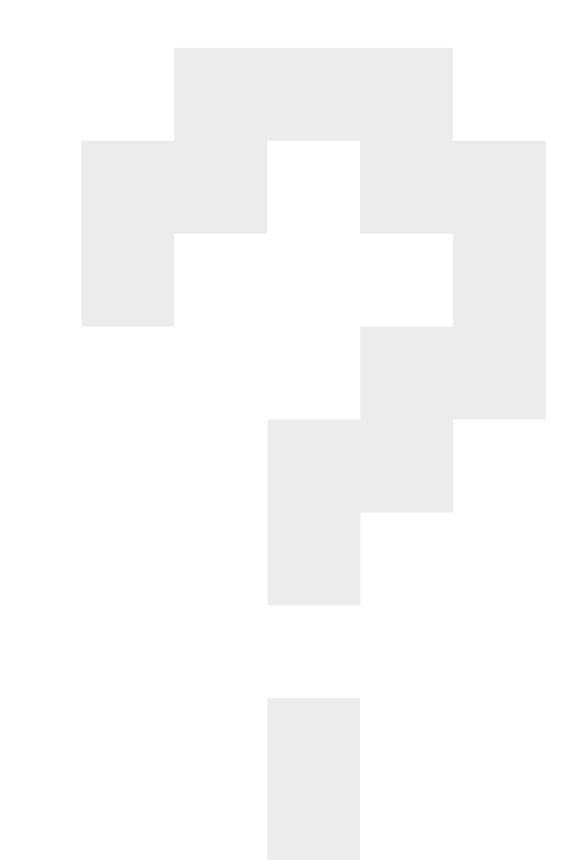
Workshop feedback

01

To what extent do you agree that now is the time to act?

02

What are the top three areas of action that can be taken in 2020?







Thank you!

Lunch will be served at 12:45 in Lokal & Terraza.

Please now make your way to the restaurant.





Disrupt Substitute Transform



