



# Health, Wellbeing & Productivity in commercial property



# Agenda

1. To consider the Business Case for Green Buildings drivers
2. To examine the influence of Health, Wellbeing and Productivity as key drivers



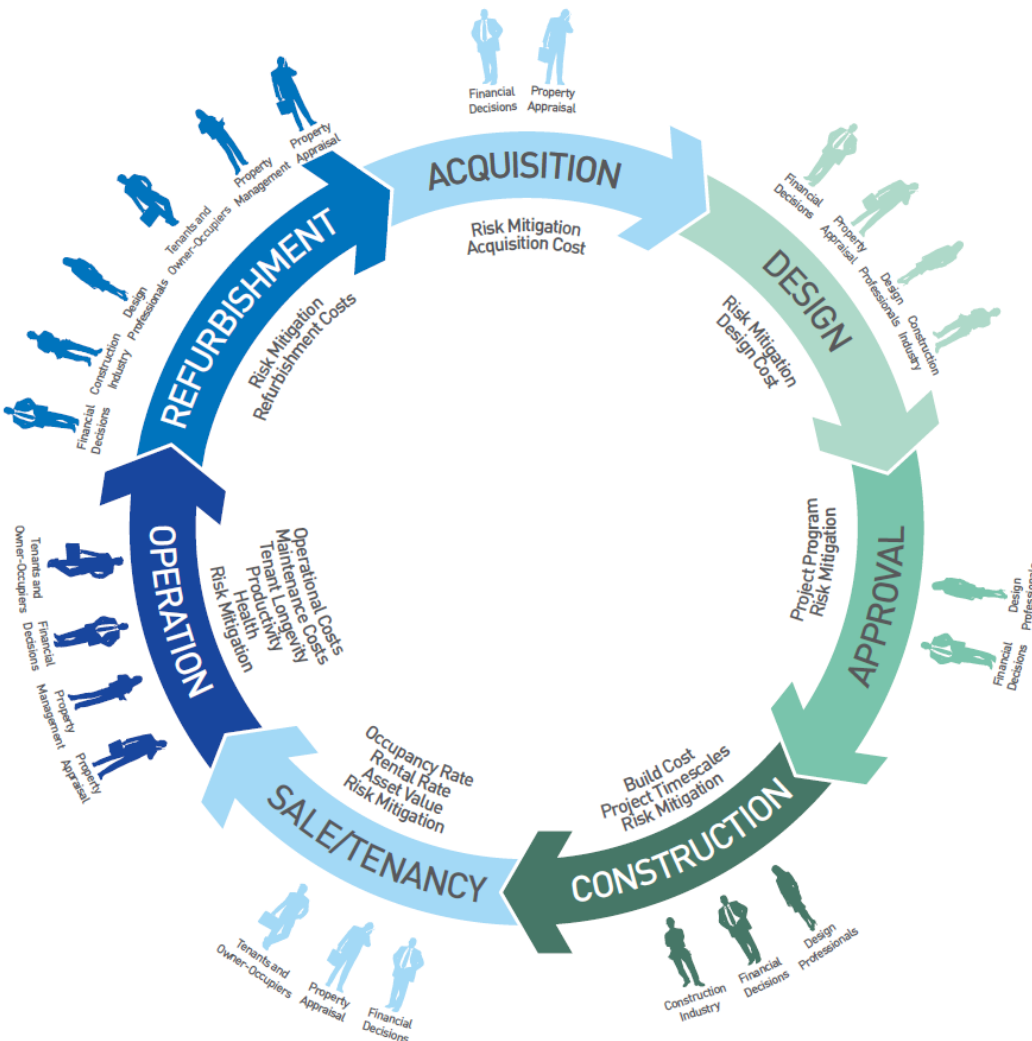
**Health, Wellbeing & Productivity in Offices**  
The next chapter for green building

Sponsors

 **JLL**  **Lend Lease**  **SKANSKA**

 **WORLD GREEN BUILDING COUNCIL**

# Drivers of value in sustainable buildings



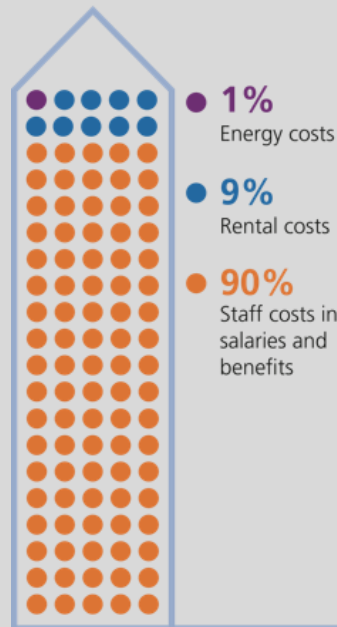
**‘The Business Case for Green Buildings’** (WGBC, 2013) made it clear that the case for green is relevant:

- All around the property lifecycle, and
- To all actors within it.

But in order to be REALLY compelling, we had to explore the issues relating to the main economic driver for buildings:

- The Occupier

# Typical operating costs



## 10% Variation

A 10% variation applied equally to each cost has a far from equal impact

**+/- 0.1%**

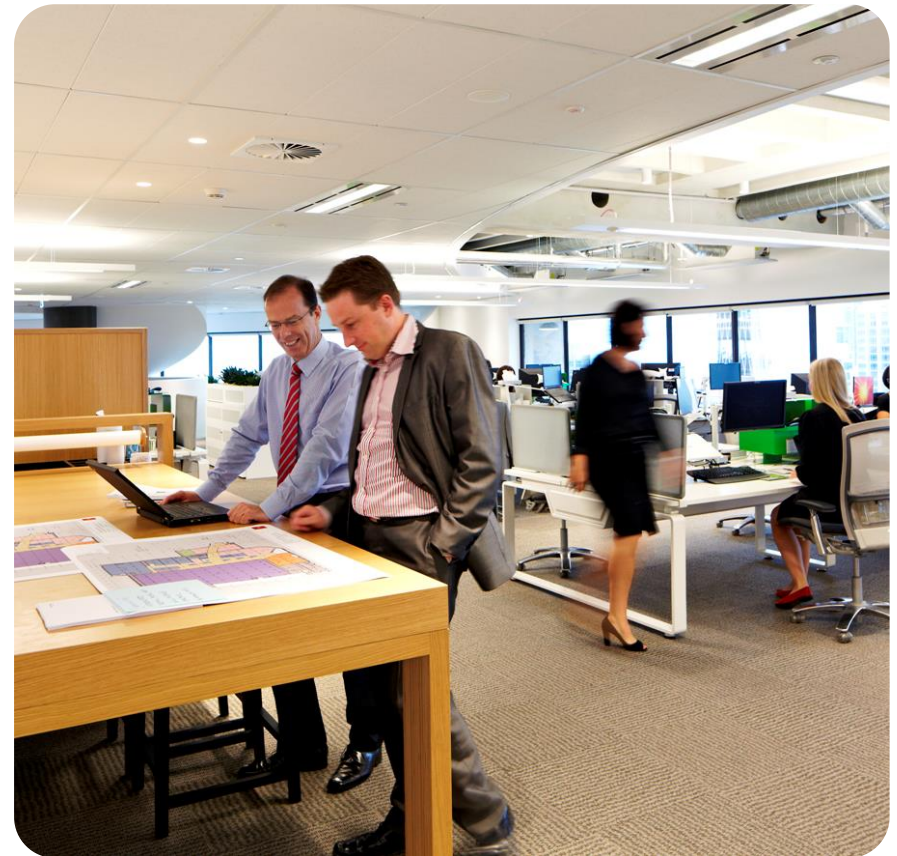
Energy costs

**+/- 0.9%**

Rental costs

**+/- 9.0%**

Staff costs



# Costs of ill-health and absenteeism in UK, US and Australia

## US

Annual absenteeism rate:

- 3% in the private sector
- 4% in the public sector

Costing employers:

- \$2,074** and **\$2,502** per employee per year respectively

## UK

Poor mental health specifically costs UK employers:

**£30 billion** a year through lost production, recruitment and absence

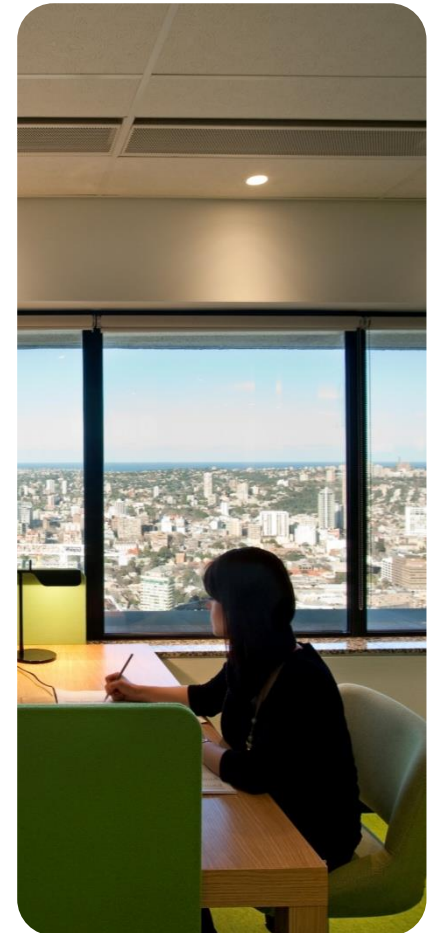
## Australia

The aggregate cost to business of ill-health and absenteeism:

- estimated at **\$7 billion** per year

While the cost of 'presenteeism':

estimated to be **\$26 billion**



## Two main aims in the report

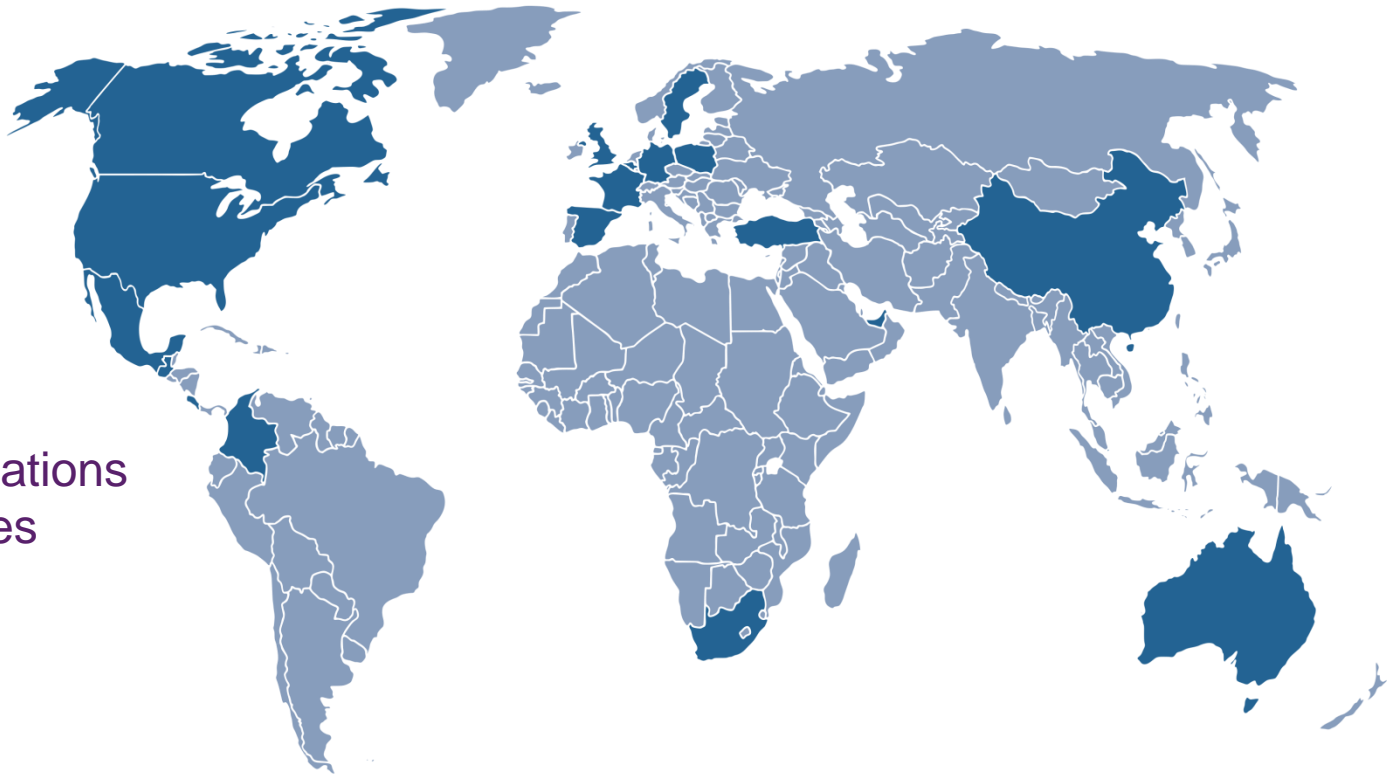


1. Gather and present the most robust evidence
2. Propose common metrics that can inform financial decisions



# A global project

60 people  
40 organisations  
20 countries



# Office buildings impact the health, wellbeing and productivity of their occupants



# Presenting the evidence

Indoor Air Quality & Ventilation

Thermal Comfort  
Daylighting &

Lighting

Noise & Acoustics

Interior Layout &  
Active Design

Views & Biophilia

Look & Feel

Location & Access to  
Amenities

## Location & Access to Amenities



Case study:

### Sagen Head Office

Location: Medellín, Colombia

The utility company Sagen's head office is located in the central business district of Medellín, Colombia. The seven-story office block includes 770 workstations and 45 meeting rooms, common areas and service areas.

On-site facilities include a rooftop terrace with mountain views, a vegetable garden, sauna, gym, café and restaurant. These facilities can be used by every level of worker from cleaning staff to the CEO, as well as their families. The public are given access to the rooftop restaurant and garden. The central location benefits from local restaurants, banks, retail outlets and medical centres.

The office is easily accessible by foot, bus, metro and car. Most people walk or use public transport, due to the office's central location. For those who cycle there is parking for 52 bicycles, showers and changing rooms. Driving is restricted in Medellín through a 'Pico y Placa' scheme, which restricts driving at certain times of the week, depending on the car registration number. While Sagen does have 281 car parking spaces, preference is given to those who car share.

Sagen says the concept and design allow colleagues to build relationships and ensures all workers feel valued.

With thanks to O2 Colombia

### Overview

It is not just the office building itself that has an impact on the health, wellbeing and productivity of its occupants. The surroundings and community context of an office building can affect individual employees' perceptions and behaviour and the overall performance of the organisation.

Many of the areas covered are recognised as aspects of a high quality, mixed use community, as supported by various green rating systems (e.g. LEED Neighbourhood Development, BREEAM, BEAM Plus Neighbourhood and Green Star Communities tools). To date the majority of research has focused on community-wide benefits rather than specific productivity improvements for office workers. Although we can extrapolate from this research, and the associated benefits of health and wellbeing on individuals' working lives are intuitively clear, there is very limited evidence on the direct links between amenity access and productivity at present. This is an area where further research is needed.

Location and amenities-related design strategies can be included in developers' considerations for new communities and precincts, or the regeneration of existing urban fabric. These strategies could equally form part of local authority guidance to developers and owners of existing buildings. Occupiers can use them as a guide for location and building selection criteria and to generate initiatives to counteract a lack of amenity at their existing location.

The amenities and services available to office workers – such as shops, restaurants, healthcare, gyms and entertainment – now rank fourth on the list of location decision-making priorities for office occupants<sup>21</sup>. Whether these amenities are onsite or just nearby, the benefits are fairly consistent.

Transport options have a major impact on whether the daily commute is easy or stressful with ongoing impacts on worker wellbeing and productivity. Walking and cycling are great for improving health and require solutions at both a community and building level. Reducing the length and complexity of daily car and public transport journeys is also beneficial.

The quality of the local public realm plays a part in how an office worker experiences their workplace and surroundings. Aesthetics, standards of maintenance and perceptions of personal security all make a difference to the individual's experience. Access to nature within the public realm can reap benefits in terms of providing space for active recreation and also enhances the biophilia effect (see earlier chapter), improving physical and psychological wellbeing. Lastly, the creation of public spaces conducive to interaction with colleagues (and people from adjacent enterprises) has anecdotally improved collaboration, innovation and engagement, with positive productivity implications.

These issues are grouped together because of the similarities in how the benefits are felt. Many of these features involve the availability of choice for office workers rather than a set of conditions. The resulting experience may result in stress reduction, improved physical and/or mental health, and time-based convenience leading to increased productivity.

One of the key benefits of a high quality location and provision of appropriate amenities is the ability to attract and retain the best employees, which has a clear financial benefit to an employer. Conversely, research has shown that employees may expect additional financial remuneration to move to poorly located and serviced workplaces<sup>22</sup>.

€27 m

Savings associated with absenteeism if more people were encouraged to cycle to work according to a Dutch study.

### Highlights: Key research

Access to all kinds of amenities and services provides benefit to office workers, but perhaps most important is access to childcare facilities, which can have a significant impact on workplace productivity. One study of a major employer found that 68% of parents would have missed work if they had not used the on-site childcare centre, leading to productivity savings of nearly US\$400,000<sup>23</sup>.

Childcare featured alongside green space, bike racks and gyms as key ways for employers to attract and retain staff in the 2012 Colliers International Office Tenant Survey. The survey also found 95% of tenants wanted to occupy a green building, up from 75% just two years previously<sup>24</sup>. Another survey suggested that 95% of respondents (from a large sample of commercial tenants) not only believe access to good open space adds value to commercial property, but are prepared to pay at least 3% more to be in close proximity to it<sup>25</sup>.

A Dutch study found that employees who cycle regularly to work are less frequently ill, with on average more than one day per annum less absenteeism than colleagues who do not cycle to work. The study extrapolated that the Netherlands could save approximately 27 million euros per year associated with absenteeism if more people were encouraged to cycle to work<sup>26</sup>.

There is significant evidence to suggest that the quality of architecture and the public realm has an impact on wellbeing with a Knight Foundation/Gallup survey finding that an area's physical aesthetics is one of the three most important features identified by respondents in terms of creating a sense of attachment to community (and resultant wellbeing)<sup>28</sup>.

### Design strategies: going for green

There are many examples of win-win strategies for both people and planet, when considering location and access to amenities, few of which require lengthy explanation.

Good public transport links and features that enable cycling and walking are some of the most obvious ways to both boost health, wellbeing and productivity and reduce greenhouse gas emissions. Locations close to good public transport networks can allow employees to avoid commuting by car, which has been shown to increase stress and in many cases increases fossil fuel consumption and emissions.

By addressing the 'walkability' of a site, employers can enhance options for fitness and leisure and on-foot amenity access and commuting to work. This will in turn impact wellbeing and productivity, and reduce transport related emissions. The 'walkability' of a location can be assessed through an index such as that available at walkscore.com.

Similarly, as the chapter on biophilia showed, access to green space and biodiversity is hugely beneficial for both office worker and the local environment.

Perhaps less obvious, but just as important, is the role that employers can play in helping workers make healthy and sustainable food choices through the management of on-site "canteen" facilities and location close to a variety of food vendors.



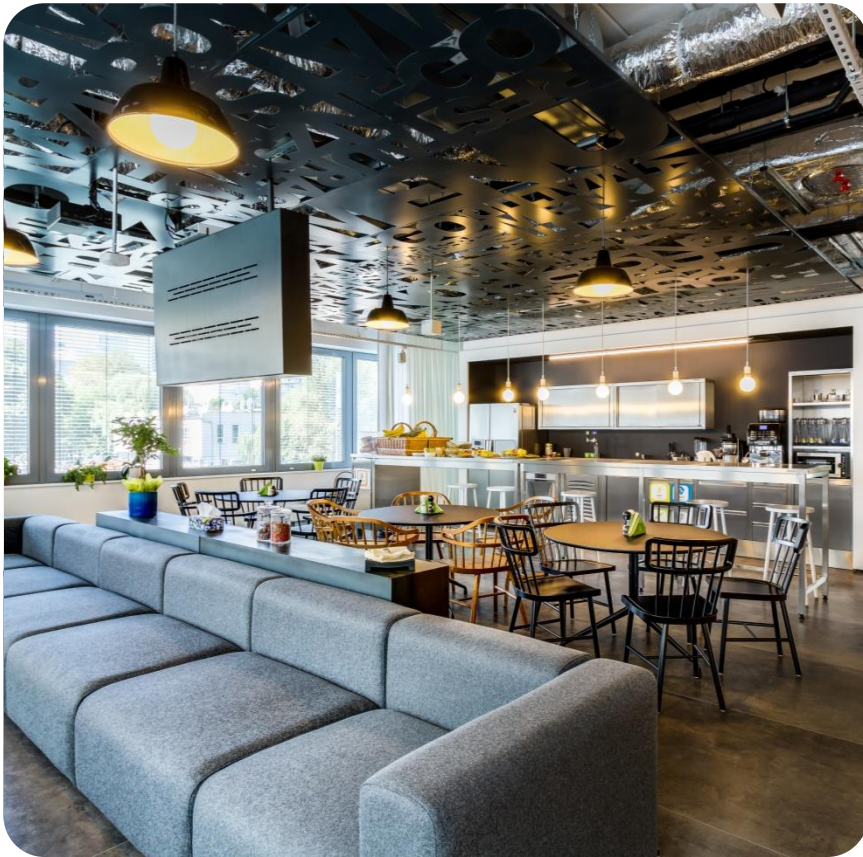
New Street Square, London  
Benetts Architects/Tim Cooper

# Indoor Air Quality and Ventilation

8 –  
11%?



# Thermal comfort



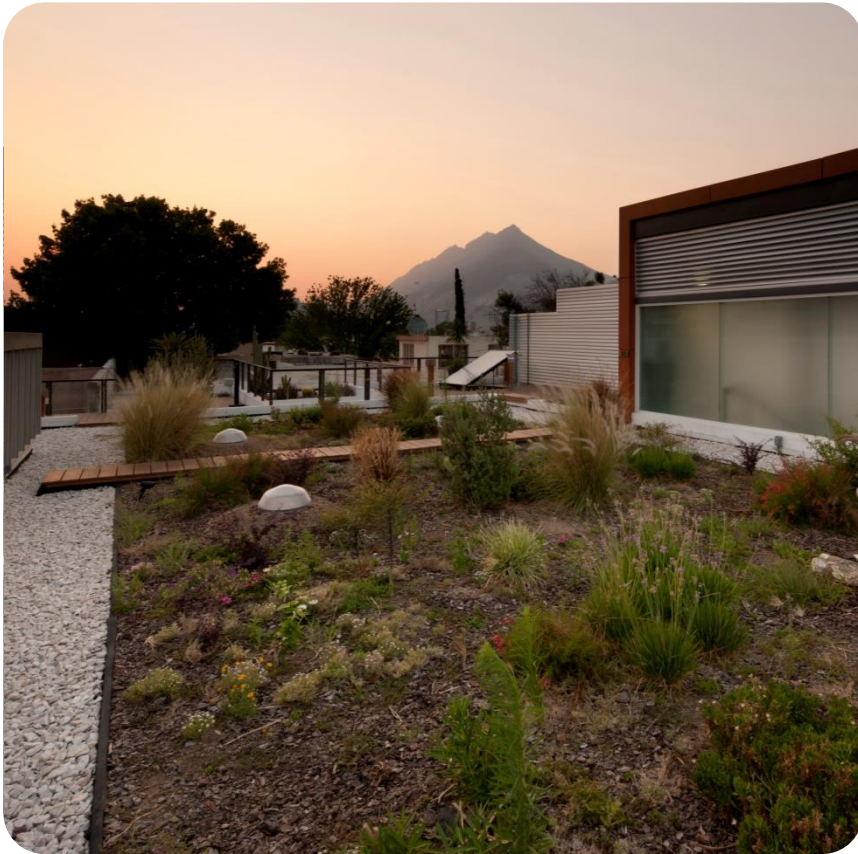
3%+?

# Daylighting and Lighting

46  
minutes!



## Views and Biophilia



7% to  
12%?

# Noise and Acoustics

66%?



# Interior Layout



A diversity of workspaces should enable concentration, collaboration, confidentiality and creativity

## Look and Feel

Shapes, textures, colours, contours, spatial forms and proportions – all are important



# Active Design



Active design is a guaranteed route to better health

## Location and Access to Amenities

Local availability of amenities and services are increasingly recognised as being important for occupiers



# Healthy, productive...*green*?

There is often a virtuous circle of good design that works for people and planet



## Healthy, productive...*green*?



Low carbon and resource efficient buildings are *not automatically* healthier and more productive

# Healthy, productive...*green*?

- Ongoing product innovation is crucial
- Buildings must contribute to grid decarbonisation



# Healthy, productive...*green*?



‘Beyond Green?’

# The question that really matters

How does *my* building impact *my* people?



# Financial (or organisational) metrics



Staff turnover/  
retention

Revenue

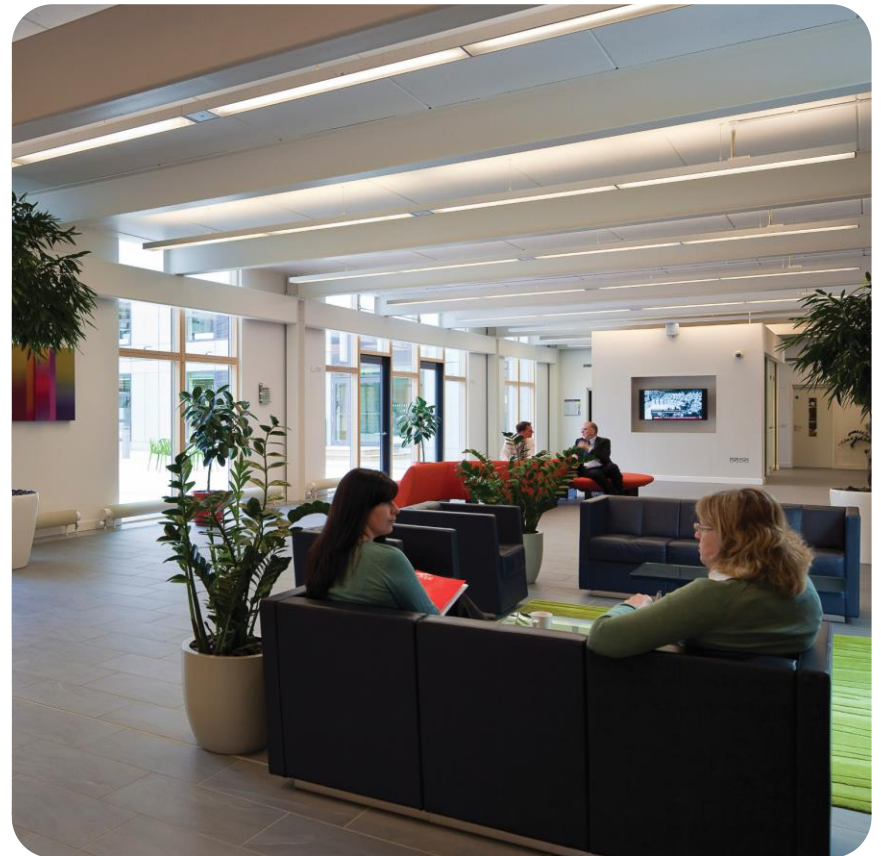
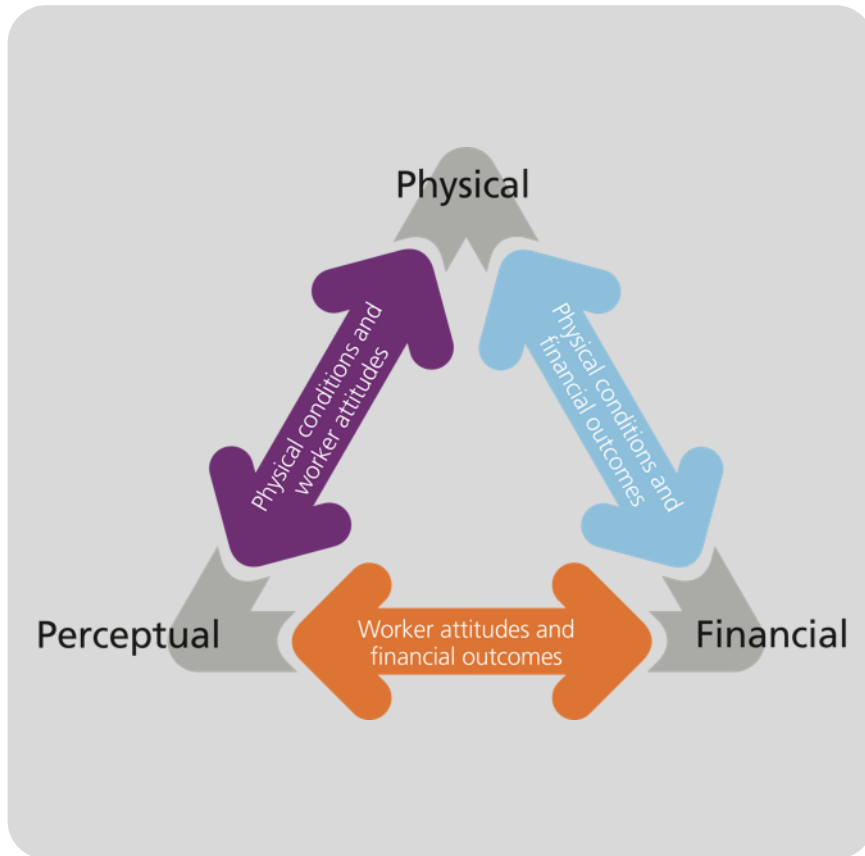
Physical  
complaints

Medical  
complaints

Medical  
Costs

Absenteeism

# Metrics framework



# Healthy, productive...*green*?

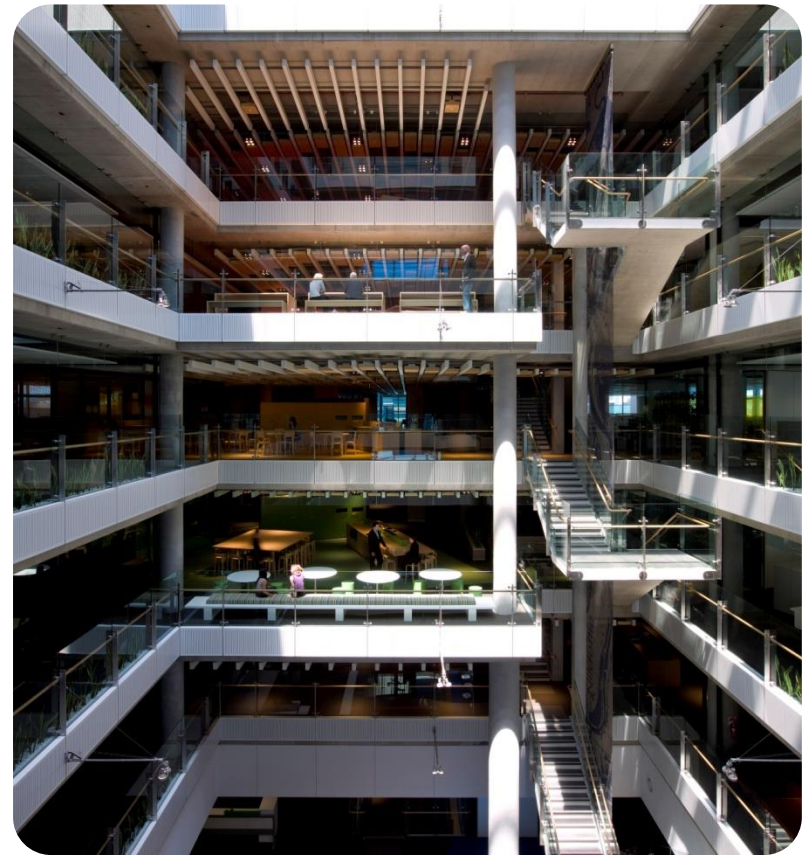


# The business case?

- low cost, high value approach
- prime, currently missed opportunity



A different kind of business case



# Practical application

Due diligence

Rent review

Fit-outs

Insurance negotiations

Future-proofing

?



# Next steps – new global campaign



Collaborations -  
Occupant focus

Support  
data collection  
& sharing

Pilot metrics

Implementation  
guides, case  
studies etc

UK-GBC: retail  
focus

ARUP



LandSecurities

Lend Lease

M&S  
EST. 1884

SAINT-GOBAIN

SKANSKA

uponor



# Health, Wellbeing & Productivity in commercial property



# Examples of deal impact (Minimum Energy Efficiency Standards regulations)

## Rent Review

- Issue for occupier is restriction on sub-letting during tenure
- **Discount on rent** negotiated to account for the risk

## Portfolio Acquisition

- Secondary / tertiary industrial assets with some separate office accommodation
- Wide variation in EPC ratings
- Reliability of EPCs questionable, but taken at face value for the purpose of negotiation
- **Price chip** achieved to reflect capital investment required to alleviate likely MEES (energy efficiency) risk
- Accurate EPCs commissioned but not lodged initially to provide greater investment certainty