Health, wellbeing and productivity in offices

The next chapter for green building
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% private sector
  - $2,074 per employee
- 4% public sector
  - $2,502 per employee

**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:
- $7 billion per year (estimate)
While the cost of ‘presenteeism’:
- $26 billion (estimate)
Background to the project

Can we reliably quantify the human benefits of green buildings?
Three main aims

- Gather evidence
- Propose common metrics
- Reach a broader, non-technical audience
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Indoor air quality and ventilation</td>
<td>8% 11% productivity improvements are common</td>
</tr>
<tr>
<td>Thermal comfort</td>
<td>and personal control can yield single digit improvements</td>
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<tr>
<td>Daylighting and lighting</td>
<td>(and views of nature) bring productivity gains</td>
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<tr>
<td>Views and biophilia</td>
<td>– a growing understanding of biophilic design and impacts</td>
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<tr>
<td>Acoustics</td>
<td>noise is a major source of workplace dissatisfaction and distraction</td>
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<tr>
<td>Layout</td>
<td>diverse spaces enable concentration, collaboration, confidentiality, and creativity</td>
</tr>
<tr>
<td>Look and feel</td>
<td>shapes, colours, spatial forms, and proportions are all important</td>
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<td>Active design</td>
<td>is a guaranteed route to better health</td>
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<tr>
<td>Location and amenities</td>
<td>– availability of services are increasingly important to occupiers</td>
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</tbody>
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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

Physical

Perceptual

Worker attitudes and financial outcomes

Financial

Physical conditions and worker attitudes

Physical conditions and financial outcomes
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

?
Practical application at Skanska

Artificial lighting levels

Air quality – significant effect

- Ambient noise from equipment
- Ambient noise from colleagues
- Interior design and layout
- Space per employee
- Provision/availability of meeting rooms
A replicable approach?

- Potential collaboration
- ‘Buy-in’ from global organisations
The issue goes beyond buildings …
and rubs up against other trends ...
with significant disruptive potential.
www.worldgbc.org/activities/health-wellbeing-productivity-offices