Turning the generic concept of « Green Value » into action

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Green Value in Use Group
Valeur verte en pratique
Wishes & Facts

• There should be a link between sustainable performance of buildings and asset value.

• Today, markets and valuers only partially account for sustainability due to:
  – Lack widespread market feed-back.
  – No anticipation of future impacts.
Benefits et beneficiaries of sustainable building performance

Benefits

- Sustainable building design & structure
- Operation & maintenance performance
- Comfort & Health Wellbeing

Total cost of occupation

End-user Productivity

Asset Value

Beneficiaries

- Investors, property owners, asset managers
- Corporate Real Estate and in house FM
- CEO
- Human resources
- Core business

Indirect link
The rise of energy certificates as a common indicator for the housing market

ICF housing stock by energy classes
Status 2007 (sample of 3,000 units) and current targets for 2020

Average 2007: 218 kWh/m².a
Average 2020: 138 kWh/m².a

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The impact of energy prices on long-term attractiveness and profitability of dwellings

Overcost of occupation compared to low energy retrofit

Composition of occupation cost
Year 25 - Energy @ +5%/year

- Rent minus housing allowances
- Other charges
- Energy

Y 25 / +10%/year  Y 25 / +5%/year  Year 1
Assessing the green value of energy performance in housing

An insurance against future risks:
- Rise of energy costs with high impact on cost of occupation
- Vacancy and non payment
- Impossibility to apply maximum rent raises each year
- Political and customers pressure to retrofit ahead of time
- Loss of value on the market (sale)
- Greening of taxes

- Parameters of profitability
  - Rate of non payment and vacancy
  - Loss of value on the market
  - Duration of amortisation of next retrofit
  - Evolution rate of tax levels
  - Evolution rate of rents / legal rates

- Other things being equal…
- Quantification is hard for low energy buildings…
- But it is obvious for obsolete buildings!
A first attempt to adapt financial models (50 years term for social housing)

<table>
<thead>
<tr>
<th>Energy class</th>
<th>Energy consumptions</th>
<th>Vacancy and non payment</th>
<th>Retrofit / amortisation in years</th>
<th>Sale value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0-50 kWh/m².a</td>
<td>1,00%</td>
<td>30</td>
<td>80%</td>
</tr>
<tr>
<td>B</td>
<td>51-90 kWh/m².a</td>
<td>1,50%</td>
<td>28</td>
<td>75%</td>
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<tr>
<td>C</td>
<td>91-150 kWh/m².a</td>
<td>2,00%</td>
<td>26</td>
<td>70%</td>
</tr>
<tr>
<td>D</td>
<td>151-250 kWh/m².a</td>
<td>2,50%</td>
<td>24</td>
<td>65%</td>
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<tr>
<td>E</td>
<td>251-350 kWh/m².a</td>
<td>3,00%</td>
<td>22</td>
<td>60%</td>
</tr>
<tr>
<td>F</td>
<td>351-450 kWh/m².a</td>
<td>3,50%</td>
<td>20</td>
<td>55%</td>
</tr>
<tr>
<td>G</td>
<td>&gt; 450 + kWh/m².a</td>
<td>4,00%</td>
<td>18</td>
<td>50%</td>
</tr>
</tbody>
</table>
Other sustainable criteria have an impact on Green Value and should be assessed

- Non renewable energy consumption and CO₂ emissions
- Access to mass transit infrastructures
- Health and comfort conditions (Indoor air quality, lighting, acoustics)
- Soils permeability and land use
- Waste and effluents
- Water consumption
- Operations and maintenance
- Adaptability and flexibility of buildings and space
How sustainability impacts market value of real estate

- Changes in tenants expectations (+)
- Lower share of operating costs (+)
- Lower costs of fittings (+)
- Lower costs for maintenance and servicing activities (-)
- Lower investments to sustain building at market level (-)
- Lower rent waivers (-)

\[
\text{Market value} = \frac{\text{net operating income (market rent – owner’s operating costs)}}{\text{Cape rate (risk free rate + risk premium – growth + depreciation)}}
\]

- More cash flow (-)
- Improved marketability (-)
- Shorter vacancy periods (-)
- Competitiveness (+)
- Rising energy costs (+)
- Sustainability hype (+)
- Longer life span (-)
- Longer compliance with increasingly stringent legislation (-)

From Dr. David Lorenz, MRICS
Green Value also depends on operation & use (specifically in office buildings)

Building intrinsic sustainable quality provides a potential for performance

Operation & use transform it into tangible effective results
Towards new contractual relationships

- Investors
- Property Manager
- Joint Environmental Commitment
- Tenant(s)
- Facility Manager(s)
- (Green) Lease
- Building Management contract
- FM Contract
- Third Party Assessment with common rating tools
Our major recommendations

**What we need to do:**

- Set up a recognised shared and hands-on rating tool to assess both *intrinsic* and *actual* environmental performance of buildings in use
- Provide to key players and valuers common *objective indicators*
- Establish and strengthen *correlation* between environmental and financial performance of real estate
- Develop *joint environmental commitments* and shared improvement plans between stakeholders (investors, tenants, facility managers). For more objectivity, these commitments should be measured and/or verified by an independent *third party* body.

**Why ?**

- Green Value will gain credibility if it is associated with tangible benefits during building operation and use

➢ Going towards guaranteed environmental performances for sustainable buildings in use ?
Green Value working group

Individuals member of the working group:

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More on: www.immobilierdurable.eu