Green Building Business Case
Perspective in Germany

Dr. Christine Lemaitre
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The association for sustainable building in the building and real estate sectors

- Non-profit and non-governmental organization, founded 2007
- Independent community of experts with more than 1200 member organizations
- Approximately 500 volunteers in DGNB Working Groups and Committees
- National and international knowledge platform
Mission and Implementation

**Mission**
- The mission of the DGNB is to promote solutions in the planning, construction and operation of buildings which realize the goals of sustainable building

**Implementation**
- Ongoing development of the DGNB Certification System and awarding of DGNB Certificates
- Knowledge transfer to a broad professional audience through:
  - The DGNB Academy
  - The DGNB Navigator
- Public Events
DGNB at the international level

DGNB is deeply involved in leading global networks.

- World Green Building Council (WorldGBC)
  - Board of Directors
  - Rating Tool Committee
  - Council Development Committee
  - Education Task Force and Europe Policy Task Force

- Sustainable Building Alliance (SBA)
  - Board member

- EU R&D programs
  - OpenHouse
  - Construction21
Selected DGNB members...
SUSTAINABLE is MORE than Green
Build Healthy

- Design
- Flexible

Preserve Resources

- Accomplish
- Quality

Plan Comfort

Insure Security

- Lower Operation Costs
- Encourage Creativity
The DGNB System –
A holistic approach

- Environmental quality: 22.5%
- Economic quality: 22.5%
- Sociocultural and functional quality: 22.5%
- Technical quality: 22.5%
- Process quality: 10%
- Site quality
The DGNB Evaluation Graph

- 5 Qualities
- 40 Criteria
- 3 certification levels (Gold, Silver, Bronze)
New DGNB Certification systematic → Implementation of Platinum

### Old

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<thead>
<tr>
<th>Total Performance Index</th>
<th>Minimum Performance Index</th>
<th>Awards</th>
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<tbody>
<tr>
<td>from 35 %</td>
<td>— %</td>
<td>Certified*</td>
</tr>
<tr>
<td>from 50 %</td>
<td>35 %</td>
<td>Bronze</td>
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* Only existing buildings and operation
How the DGNB System Compares Internationally

The DGNB System delivers a comprehensive quality perspective

© Drees & Sommer Advanced Building Technologies, Dr. Peter Mösle
How the DGNB System Compares Internationally

The only system which emphasises economic sustainability!
2nd Generation Certification System

**Embedded LCA** (Life Cycle Assessment)
- Systematic analysis of the environmental impact of products during their entire life-cycle. Harmonized by international standards (ISO 14040 / 14044)

**Emphasis on LCC** (Life Cycle Costing)
- Total cost throughout the entire life-cycle incl. selected construction, operation and maintenance costs directly attributable to owing or using the asset

**Oriented towards performance and targets**
- Assessment of the building as a whole, not individual measures following unified boundary conditions

**Independent conformity check for each project**
- Through the verification process DGNB certified buildings will be comparable to each other.
DGNB Partners worldwide
New Urban Districts

Maidar Eco City
DGfB City District Certificate in Gold
New Urban Districts

Carlsberg City District, Copenhagen
DGNB Pre-Certificate in Silver
New Office and Administrative Buildings

Istanbul Liqueur Project, Istanbul
DGNB Pre-certificate in Gold
New Hotels

Hafenspitze (Hotel-Bauteil A), Düsseldorf
DGNB Certificate in Silver
New assembly buildings

Kongresshaus Kap Europa, Frankfurt am Main
DGtNt Pre-certificate in Gold
New Educational Facilities

Neubau VHV Kindergarten, Hannover
DGNB Certificate in Gold
DGNB certified projects and awards

DGNB Certifications

(Status May 2015)

Awards: Buildings/districts can achieve a pre-certificate as well as a certificate
Projects: The current award of a project
Green Buildings in Germany in %

- **BREEAM**: 2014: 15.9, 2013: 14.0
- **LEED**: 2014: 15.5, 2013: 14.9
- **DGNB** (incl. BNB, Hafencity): 2014: 68.7, 2013: 71.0
Sustainable Building is Worth It!

Roland Berger: “Sustainability in Real Estate Management”, 2010
- Up to 4% higher rents
- Proportion of certified buildings in real estate portfolios will grow by 18% in the coming years
- Building certification will become more and more important as a value driver in the coming years

- Erection costs in the “Structure” and “Building Systems” cost groups lie well below those of uncertified buildings
Sustainable Building is Worth It!

**Drees + Sommer Report: “Additional Costs of Certified Buildings”**
- Only about 0 to 4% additional construction costs for DGNB Certified buildings (LEED: up to 7%)
- Less than 0.5% additional planning and consulting costs for DGNB Certified buildings

**Jones Lang LaSalle: „Offices 2020“**
- 83% of real-estate professionals think sustainability is a top priority for office real estate over the next decade

→ Sustainable Building is a value driver – not a cost driver!
Focus on the building life cycle
Residential Buildings

Okal Musterhaus, Mülheim-Kärlich
New small Residential Buildings
DGNB Certificate in Silver
Industrial Locations

VOLKSWAGEN Motorenwerk, Chemnitz
New Industrial Locations
DGNB Certificate in Silver
Shape the future today!