

Real Estate Banking



2007 | 2008

Real Estate Banking –
Committed to Professionalism
Facts and Figures



**VERBAND DEUTSCHER
PFANDBRIEFBANKEN**

Association of German Pfandbrief Banks

Mitgliedsinstitute des vdp

 Acreal Bank	 Bayern LB	 Berlin Hyp	 COREALCREDIT	 „DekaBank
 DEUTSCHE HYPO <small>Deutsche Hypothekendarlehen AG (aktien-Gesellschaft)</small>	 Deutsche Genossenschaftsbank Hypothekenbank	 Deutsche Schiffsbank	 DEXIA <small>Kommunalkreditbank Deutschland</small>	 Düsseldorfer Hypothekenbank
 EURO HYPO	 Haspa* <small>Hamburger Sparkasse</small>	 Helaba  <small>Landesbank Hessen-Thüringen</small>	 HSH NORDBANK	 Hypo Real Estate <small>BANK</small>
 Hypo Real Estate <small>BANK INTERNATIONAL</small>	 Hypo Real Estate <small>HOLDING</small>	 HYPOTHEKENBANK IN ESSEN AG	 HypoVereinsbank	 IKB <small>Deutsche Industriebank</small>
 Kreissparkasse Köln	 LB BW <small>Landesbank Baden-Württemberg</small>	 M.M. WARBURG & CO. HYPOTHEKENBAN	 Münchener Hypothekendarlehenbank eG	 NORD/LB
 Sachsen LB	 SEB	 Sparkasse Köln-Lönn	 VALOVIS BANK <small>PFANDBREITFRANK</small>	 Westdeutsche ImmobilienBank
 WestLB	 WL BANK	 wüstenrot <small>Wüstenrot Bank AG Pfandbriefbank</small>		

The **Association of German Pfandbrief Banks (vdp)** succeeded the Association of German Mortgage Banks (VDH) in early summer 2005. The vdp currently represents 33 members. As the representative of its member institutions the vdp looks after the interests of the Pfandbrief Banks vis-à-vis national and European decision-making bodies as well as a broad professional public. Moreover, the vdp in its capacity as the umbrella organization of the German Pfandbrief Banks supports its members with highly specialized business solutions.

The expertise of the vdp is tailored to the specific requirements of Pfandbrief Banks – the Pfandbrief and generation of eligible assets as cover. The vdp promotes the economic concerns of its member institutions focusing on lobbying activities in capital market and tax policy as well as in all other political areas relevant to Pfandbrief issuing activity. In addition, it assists its member institutions in regulatory issues and represents them vis-à-vis the national supervisory bodies. Information and experience from member institutions are exchanged, prepared and developed into market standards in the Association's bodies within the scope of group governance. In addition, the vdp provides its members with business solutions that benefit the specific lending and issuing business conducted by Pfandbrief Banks. The business activities of the vdp members profit from the vdp's recognized expertise, its extensive network and well-established communications instruments.

Contents

Real Estate Banking – Committed to Professionalism

- 4 Preface**
HENNING RASCHE | PRESIDENT OF THE ASSOCIATION OF GERMAN PFANDBRIEF BANKS
- 6 Use of Derivatives as Innovative Instruments on the International Property Market**
BERND KNOBLOCH | EUROHYPO AG
- 12 Property Credit Market and Capital Market are Growing Together**
CLAUDIO LAGEMANN | HSH NORDBANK AG
- 17 The Current Situation on the German Property Market**
BERND MORGENSCHWEIS | BERLIN-HANNOVERSCHE HYPOTHEKENBANK AG
- 24 The Professionalization of the Housing Sector from the Banks’ Viewpoint**
DR. EDGAR ZOLLER | BAYERNLB
- 28 Market Economics and Competition in the Housing Business – Horror Vision or Shaping-up Therapy?**
THOMAS ZINNÖCKER | GSW IMMOBILIEN GMBH
- 36 Economization of the Housing Sector from the Tenant’s Perspective**
DR. FRANZ-GEORG RIPS | GERMAN TENANTS’ FEDERATION
- 41 Germany’s Need to Catch Up on Public Private Partnerships**
PROF. DR. MICHAEL HÜTHER, DR. MICHAEL VOIGTLÄNDER |
COLOGNE INSTITUTE FOR ECONOMIC RESEARCH (IW KÖLN)
- 50 The Statistical Recording of Property Price Developments in Germany Using the vdp Transaction Database**
DR. FRANZ EILERS | HVB EXPERTISE GMBH
THOMAS HOFER | ASSOCIATION OF GERMAN PFANDBRIEF BANKS
- 58 “Green Buildings” – just environmentally sound or also economical and a stable investment?**
PROF. DR. THOMAS LÜTZKENDORF, DR. DAVID LORENZ MRICS |
UNIVERSITY OF KARLSRUHE (TH)

“Green Buildings” – just Environmentally Sound or also Economical and a Stable Investment?

The planning, building and systematic maintenance of “green” or “sustainable” buildings, i. e. buildings which are energy-efficient, sparing in their consumption of resources, environmentally sound, healthy to spend time in, cost-effective and meet high quality standards in terms of their technical infrastructure, functionality, architectural design and integration into the urban environment, is seen by politicians, academics and large sections of the public as a substantial contribution towards sustainable development. Questions, however, arise in connection with the potential benchmarks for such buildings, the implications thereof for their current and future valuation, and the way in which and extent to which sustainability credentials impact ratings, risk analyses as well as lending decisions. Will “non-sustainability” become a new risk in the property business? Will “sustainable” buildings packaged in suitable investment products become attractive for certain investor groups seeking sustainable investments for their socially responsible investment (SRI) portfolio? What makes a building “green” or “sustainable”? The following investigates these issues.

PROF. DR. THOMAS LÜTZKENDORF, DR. DAVID LORENZ MRICS |
University of Karlsruhe (TH)

The debate on the economic advantages delivered by “green buildings” has now come to the attention of investors, bankers and rating agencies in Germany. Centering on the economic advantages offered by buildings with substantially less energy and water consumption, lower operating costs, better air quality and, as a consequence thereof, a higher level of user satisfaction and user productivity, the intensive airing which this issue has enjoyed in the English-speaking world has raised the question how “green buildings” should be treated for purposes of property valuation and investment financing. Before exploring this matter it should be recalled that Germany’s existing starting point with regard to energy efficiency, resource conservation and health benefit considerations during the planning, construction and operation stage is in some respects considerably higher than elsewhere and that scientists, planners, construction companies and, more specifically, the public sector already have both a strong interest and also extensive practical experience in this respect. However, the absence of a standard set of definitions along with the lack of a uniform nomenclature in this field renders any evaluation and systematization of this existing body of experience for the purposes of valuation, rating or risk assessment more difficult.

What Makes a Building a “Green Building”?

There are no limits to the imaginative creativity used in developing market and marketing terms to describe a building’s main characteristics and features. In the field of energy-efficient buildings alone, the use of descriptors such as low-carbon, ultra-low carbon, passive, zero energy, solar, energy-autonomous, positive energy, etc. leads to confusion. Originally developed and built in response to the oil crisis with a view to conserving resources, in today’s broader context of a preventive strategy to curb global warming, buildings are increasingly expected to deliver lower energy consumption and consequently lower CO₂ emissions. The outcome sought by more recent building concepts is therefore the “*zero-emission building*”, but what is generally meant here is low-emission or zero-emission heating and/or use, but not (or not yet) environmentally responsible production, construction and maintenance. Moreover, the matter of evaluating energy efficiency in office buildings – which are the focus of this paper – will become significantly more complex following the implementation of the EU Directive on the Energy Performance of Buildings, advances in the ongoing work on the calculation principles, Germany’s amended energy efficiency legislation (EnEV) and the introduction of energy performance certificates, including an obligation to display these publicly in the case of certain types of buildings. Alongside the energy needed for heating, warming water and operating pumps and ventilation devices, the calculations will also need to take account of air conditioning and lighting. The EU is currently pushing ahead a “GreenBuilding” Initiative for the energy-related refurbishment of non-residential buildings, and is being supported in this work by, among others, the Deutsche Energie-Agentur (dena). However, it should be noted that usage of the term “GreenBuilding” in the context of this initiative and the concept underpinning it, with its exclusive focus on energy efficiency, are not synonymous with the broader notions used in this discussion on “*green buildings*”.

Nowadays, the term “*green building*” is associated with a host of different ideas. This can be explained by the fact that it emerged from the conflating of various concepts and schools of thought (e.g. *design for environment*, *design for deconstruction*, *the healthy-living building*, *site preservation*). In the German-speaking world, these concepts were influenced by schools of thought embracing not only ecological but also biological aspects of buildings and in some cases therefore amount to strategies for buildings which are conceived of, built and operated in an energy-efficient, environmentally sound and conducive to human health.

A building meeting these criteria goes far beyond the narrower concept of lowering a building's energy consumption and thereby its impact on the environment during its service life. The parameters here include the entire life cycle of the building and thus also the various phases in the production of the building materials and systems, the construction processes and the building's maintenance. Wherever possible, the building's deconstruction and recyclability are also fed into the evaluation of processes taking place at the end of its service life.

Despite major differences in the use and weighting of descriptors and evaluation criteria, the following attributes can be assumed, especially at international level, to be relevant to analysis and assessment in the "*green buildings*" context: suitability of site and impact of site selection on the neighbourhood, the environment and infrastructure, energy consumption, water consumption, volume of waste and waste water generated, depletion impact on resources in the production and deployment of building materials, impact on the global and local environment, indoor air quality, user comfort, etc.

The requirements in these respects are not only formulated in terms of quality (e.g. preference for building materials made from renewable commodities and for energy from renewable sources) but are also quantified with reference to eco-auditing (e.g. primary energy input, global warming potential) and checked for compliance with applicable critical limits.

... or is perhaps "*Sustainable Buildings*" the Better Term?

In the English-speaking world in particular, buildings are still designated as "*green buildings*" even though they fully meet the concepts and specifications qualifying them for designation as "*sustainable buildings*". When sustainable buildings are planned, constructed and operated, the expectation is that they will offer high quality in terms of urban integration, architectural design, functionality and technical infrastructure whilst simultaneously responding, with equal priority, to economic, environmental and social requirements. Sustainable buildings therefore strive to achieve the following:

- Sound use of the (justified) space requirement in both quantitative and qualitative terms
- Minimization of life-cycle costs
- Preservation of tangible assets
- Conservation of resources
- Conservation of the environment and climate
- Avoidance of risks to the environment and health
- Safeguarding the health, comfort and safety of users and neighbours
- Preservation of cultural assets (e.g. in the case of listed monuments)

Whereas "*green buildings*" thus concentrate mainly on environmental considerations and sometimes also on the health, convenience and satisfaction of the users, sustainability evaluations explicitly include economic considerations (in this case the life-cycle costs incurred: construction costs, operating costs and the costs of deconstruction and disposal). Furthermore, the debate has shown that a building is more likely to contribute to sustainable development

if the functionality, adaptability, durability and resilience package it offers is sufficient to help prolong its service life and protect it against being unoccupied. Criteria such as functionality and serviceability, which have hitherto been used for assessing “performance based buildings”, are now being included for the purpose of analysing building sustainability. As climate change gathers pace, moreover, increasing importance has also been attached to characteristics and features which determine a building’s response and resilience to climate change (e.g. improved protection against summer overheating, ability to withstand storms, hail and other extreme weather events, ability to withstand inundation).

Costs and Benefits – Which Can Be Quantified?

It is frequently assumed that sustainable buildings or energy-efficient, environmentally sound and healthy buildings entail substantially higher investment costs. This is indeed usually the case if the building already has a basic plan and improvements are added incrementally. If, however, the project adheres to the principles of integral planning, whereby the construction is based on an already finalized overall concept, a building can achieve high quality at only small additional cost and in some cases the total construction cost may even be reduced. A number of energy-optimized office buildings from the SolarBau:MONITOR programme demonstrate that high-quality, energy-efficient office buildings can be constructed at a cost equal to that typical of conventional office buildings of average to high quality.

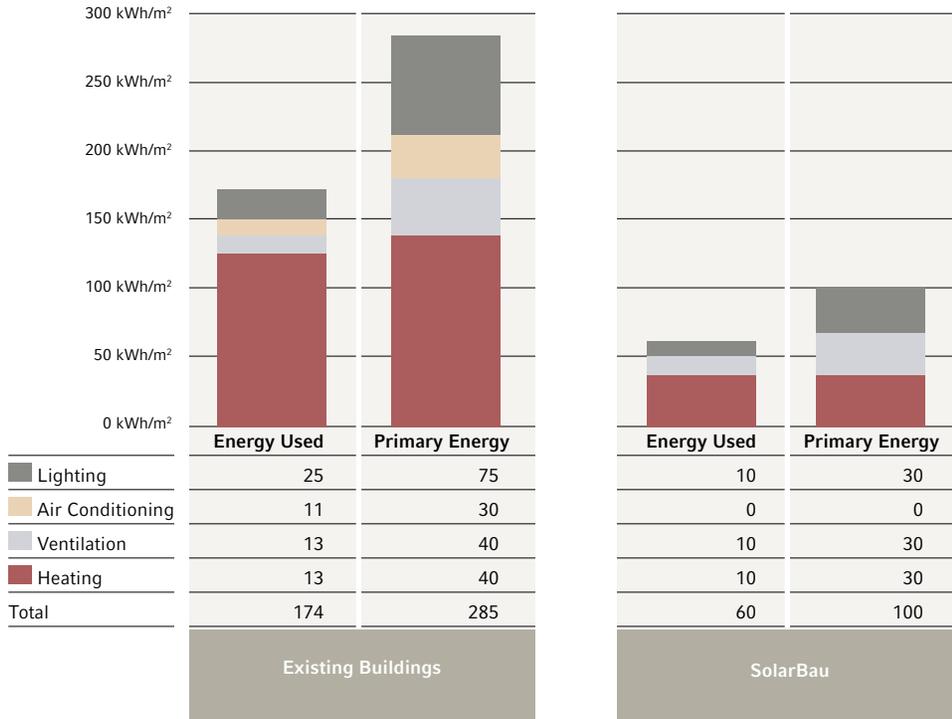
A decisive factor in this context is the assessment of the costs of operating and using the building. The energy required for space heating, water heating, lighting and air conditioning and thus the total energy-related operating costs can be estimated during the planning stage on the basis of the calculation principles set out in the Energy Efficiency Regulation and the DIN standard on evaluating the energy efficiency of buildings. The “requirement certificate” associated with the energy performance certificate specifies this information in the form of a calculated energy input requirement (e.g. electricity, gas, oil).

The estimate of an energy-efficient building’s energy requirement can be used to quantify the savings obtained via lower operating costs, a lower depletion impact on resources (lower demand for non-renewable primary energy) and a lower impact on the global and local environment (CO₂ emissions). Reduced emissions of air pollutants with a local impact in turn has a direct quality-enhancing effect on the location as such.

The following figure shows that energy-efficiency concepts implemented in energy-optimized office buildings can lower the primary energy requirement for heating, ventilation, air conditioning and lighting by approximately 65 % compared with the corresponding requirement of average existing building stock. The savings in terms of energy costs are of a similar order of magnitude.

Opting for durable and high-quality construction concepts can lead to lower maintenance costs. For buildings with a highly sophisticated technical infrastructure, it must be expected that servicing, maintenance and building facilities management costs may increase.

**COMPARISON OF THE ENERGY CONSUMPTION OF ENERGY-OPTIMATED
VS. AVERAGE EXISTING OFFICE BUILDINGS**



Target figures for an energy-optimized building constructed in compliance with the SolarBau:Minitor grant-aid programme in comparison with consumption figures for existing office building stock. All figures relate to the net floor space.

Source: Voss, K. et. al. Bürogebäude mit Zukunft, TÜV-Verlag, Cologne 2005

The effects achieved by sustainable planning, construction and operation are varied, but not all can be quantified in terms of cost differentials. An attractively designed sustainable building, especially one which has been awarded a quality seal or other compliance certificate, is likely to benefit from an enhanced image – a factor of relevance to both investors and users. Alongside their enhanced energy efficiency credentials, ecological or sustainable buildings also have a positive impact on user health, comfort and satisfaction – a feature which is particularly appreciated in the USA. These factors have a direct impact on workforce productivity. The benefit of this impact to the user is quantifiable in economic terms; for the investors or operators, it translates into a lower risk of the building being unoccupied.

The merits of sustainable buildings can be expressed in a statement of their economic advantages. The categories for this, depending on the perspective and interests of the respective player, being lower usage costs and life-cycle costs, stability in asset value performance, enhanced marketability and letting prospects and lower risks. The risk reduction aspects are set out in the following table:

Characteristics and features of sustainable buildings	Impact on property-specific risks
Flexibility and adaptability in response to changing user requirements	Lower risk from changes in the market and at the same time enhanced re-selling prospects
Use of building materials compatible with human health and the environment	Lower litigation and liability risk because undesired impacts on the local environment and the health of users, visitors and neighbours are avoided; this in turn lowers the risk of the building being unoccupied
Compliance or overcompliance with statutory requirements regarding energy efficiency, environmental protection and human health	Lower risk of changes in the value of the asset because modernization and costly retrofitting risks to comply with statutory requirements are avoided; lower risk from amendments to legislation
Energy efficiency and potential for cost savings on potable water	Lower risk from tariff changes for energy and water supply and disposal
High-quality planning and execution of technical infrastructure, systematic maintenance	Lower risk of changes in the value of the asset because build-up of a maintenance backlog is avoided
Functionality, agreeable surroundings	Lower risk of the building being unoccupied because of high degree of user satisfaction
High-quality design in association with a positive image	Lower risk of reputation erosion and thus also of the building being unoccupied

Implications for Property Valuation and Financing

The following information and recommendations are intended to facilitate integration of the above-mentioned aspects into property valuation and financing:

1. Improved description/Documentation of properties and transactions

Conventionally, some important characteristics and features of buildings which are key parameters for assessing their environmental and health-related soundness and evaluating their contribution to sustainable development have not been adequately described and documented. However, empirical evidence of the economic advantages of ecological or sustainable buildings (i.e. enhanced market value and letting prospects, lower probability of default, enhanced stability in asset value, etc.) obviously hinges on the availability of a body of well documented information and data. Such fundamental information and data (e.g. in the form

of tables of bonus/malus points) is also needed by experts for making necessary adjustments to the parameters governing property valuation. It thus has implications for purchase price records, transaction databases, etc. Against this backdrop, it is urgently recommended that additional groups of building characteristics be recognized and that this be advocated in dealings with the relevant expert committees.

The following table illustrates various types of building descriptors:

Type	Explanation	Examples
1 Characteristics-based description	Statement on existence, number, age and scale of certain characteristics of the building and its fixtures and fittings	Number of rooms, usable floor space, central heating, flexible partition walls, suspended ceilings, etc.
2 Experience-based description	Subjective and usually non-quantitative assessment of the quality of the building	"Good" building quality: robust structure, no maintenance backlog, convenient layout, etc.
3 Feature-based description	Assessment or score based on quantifiable technical and/or physical features of the building	Thermal insulation, sound-proofing, energy efficiency, percentage of renewables-based building materials, etc.
4 Performance-based description	Measurement of direct impact and effects emanating from the technical and physical properties of the building	Environmental quality (consumption of resources and environmental impact), life-cycle costs, user satisfaction, etc.

The building descriptions found in existing purchase price records and transaction databases both in Germany and across the world are usually of types 1 and 2 above. This fact explains the difficulty currently encountered in trying to empirically establish a correlation between sustainability-related features and observed property prices.

A discussion is therefore needed on how feature-based and performance-based descriptions can be added to existing purchase price records and transaction databases and how the relevant data can be captured quickly and cost-effectively. It is recommended that the financial intermediaries should contribute more actively than hitherto to the current discussion on the structure of and data to be contained in building certificates and that they should articulate their demands regarding genuinely meaningful property descriptions and characterizations. Such building certificates could provide a robust set of data on which individual valuations could be based.

2. Addressing the valuation/certification of sustainable buildings

Any assessment of a building's contribution to sustainable development should be undertaken on the basis of robust data, i.e. be able to rely on scientific and other expertise, certificates, etc. Although Germany has so far not had a generally recognized system for valuing and certifying environmentally sound and healthy buildings and/or sustainable buildings, the matter is currently being pursued with some urgency, and it can be assumed that corresponding valuation principles will be available at national level within the next few months. The

energy-efficiency merits of a building can already be documented in an energy performance certificate, and certificates and inspection reports also exist with regard to compliance with low-energy and passive building standards. An additional source of guidance for assessing the sustainability of buildings is the manual entitled “Nachhaltiges Bauen”, published by the Federal Ministry of Transport, Construction and Urban Development which is currently being updated.

The description and evaluation of a building’s contribution to sustainable development is currently being addressed, with special reference to environmental quality, by both international and European standard setters.

A large number of different systems exist within Europe and worldwide for valuing and certifying environmentally sound and healthy buildings and/or sustainable buildings. They differ sometimes considerably in the criteria they select, the respective weighting of such criteria, and in the manner in which their findings are documented. Action at international level in particular would presuppose a thorough analysis of the existing concepts, their interpretability and their robustness in providing guidance.

In Germany, the energy performance certificate which has now become mandatory will henceforth serve as a reference for future assessment of a building’s energy efficiency. For valuation purposes, prime importance should be attached to the (calculated) energy consumption data and, in the case of existing buildings, efforts should be made to obtain the actual (and weather-adjusted) consumption data. The following table shows where valuation-relevant data can be found in the certificate.

ENERGIEAUSWEIS für Nichtwohngebäude

gemäß den §§ 16 ff. Energieeffizienzverordnung (EiEV)

Berechneter Energiebedarf des Gebäudes 2

Primärenergiebedarf „Gesamteffizienz“

Dieses Gebäude: CO₂-Emissionen ¹⁾ kg/(m²·a)

kWh/(m²·a)

↑ EiEV-Anforderungswert Neubaus (Vielgeschossent)
↑ EiEV-Anforderungswert modernisierter Altbaus (Vielgeschossent)

Nachweis der Einhaltung des § 4 oder § 9 Abs. 1 EiEV ²⁾

Passivhausstandard	Anforderungswert des Gebäudes
Gebäude isoliert <input type="checkbox"/>	Gebäude isoliert ¹⁾ <input type="checkbox"/>
EiEV-Anforderungswert <input type="checkbox"/> kWh/(m ² ·a) 1	EiEV-Anforderungswert ¹⁾ <input type="checkbox"/> kWh/(m ² ·a) 2

Endenergiebedarf

Energieart	Heizung	Warmwasser	Gebäudebeleuchtung	Lüftung	Kühlung einsch. Gebäudetechnik	Gebäudeklimaanlage

Jährlicher Endenergiebedarf in kWh/(m²·a) für 3

Aufteilung Energiebedarf

[kWh/(m ² ·a)]	Heizung	Warmwasser	Gebäudebeleuchtung	Lüftung	Kühlung einsch. Gebäudetechnik	Gebäudeklimaanlage

Sonstige Angaben

Einbauelemente alternativer Energiesorgungssysteme

☐ nach § 5 EiEV vor Baubeginn geplant

Alternativ-Energiesorgungssysteme werden genutzt für:

☐ Heizung ☐ Warmwasser ☐ Gebäudebeleuchtung

☐ Lüftung ☐ Kühlung

Lüftungskonzept

Die Lüftung erfolgt durch:

☐ Hauszentrale ☐ Lüftungsanlage ohne Wärmerückgewinnung

☐ Gebäudetechnik ☐ Lüftungsanlage mit Wärmerückgewinnung

Gebäudezonen

Nr.	Zone	Fläche (m ²)	Anteil (%)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			

☐ weitere Zonen in Anlage

Erläuterungen zum Berechnungsverfahren

Das verwendete Berechnungsverfahren ist durch die Energieeffizienzverordnung vorgegeben. Insbesondere zeigen standardisierte Randbedingungen eindeutige die angegebenen Werte keine Rückschlüsse auf den tatsächlichen Energieverbrauch. Die ausgewiesenen Bauteilwerte sind spanische Werte nach der EN15003 pro Quadratmeter Nettogrundfläche. Die über die EN15003-Anforderungen bestimmten Anforderungen der EiEV sind nur im Falle des Neubaus und der Modernisierung nach § 9 Abs. 1 EiEV bindend.

1) freiwillige Angabe 2) nur im Falle des Neubaus und der Modernisierung auszufüllen

- 1 describes degree of conformity with the Energy Efficiency Regulation (e.g. as %)
- 2 describes energy-efficiency standard of the external envelope
- 3 describes the calculated energy input requirement (e.g. gas, electricity, ..)

Members of the banking community are increasingly attending scientific conferences on the various aspects of sustainable buildings. Such conferences are progressively turning to the issues of the valuation and financing of sustainable buildings (e.g. the global series of conferences on Sustainable Building SB07).

3. Integration of sustainability criteria into rating and valuation procedures

There is currently evidence on both the national and the international property markets that market players are giving increasing preference to sustainable buildings. It is therefore both necessary and expedient to pay due attention to sustainability aspects in the valuation process – failure to do so will incur the danger of inaccurate price forecasts. The same applies with regard to property rating and risk analysis. From a number of existing rating concepts it has transpired that some of the data required for property valuation or risk analysis purposes concurs with that which is being used to assess building sustainability. The data concerned includes, inter alia:

- Location / micro-location
 - Quality of the location – particularly air quality, which may even be impacted by the user himself
- Quality of the building
 - Quality of the architecture / design
 - Functionality, flexibility and adaptability
 - Quality of the building materials used (with reference to the environment and human health)
 - Quality of the in-house technical infrastructure
 - Energy efficiency
- Cashflow
 - Operating costs

In future, property rating and valuation documents should state whether sustainability considerations were incorporated into the planning, construction and operation of the project and, if so, what considerations they were and in how far they help to mitigate risks and/or enhance asset value. In the case of property ratings, this can be achieved by more detailed differentiation and definition of the criteria and benchmarks used which can then be documented in the form of sub-ratings awarded for each individual criterion.

The situation is different, however, in the case of the procedures governing property valuation. For the reader of an expert opinion, it is not always immediately apparent to what extent subjective assessments by the expert concerned may have influenced the valuation parameters. Given the shortcomings described above, it may well take several years before property descriptions can draw upon empirically substantiated data on the correlation between sustainability-related features and observed property prices so that the reasoning underpinning bonus/malus points for the various valuation criteria becomes more transparent. Because, however, changing attitudes among market players suggest that the need to take sustainability aspects into account for property valuation purposes already exists today, it is recommended

that valuation expertises be expanded to include a description of any extant sustainability-related characteristics and features as follows:

- Expertise drawn up by a court-appointed expert on the advantages of such characteristics and features for the building’s users and owners or, where appropriate, the risks incurred in the absence of such characteristics and features;
- Opinion of the expert regarding the implications of such advantages or risks for the estimated value of the property (including disclosure of adjustments made to input parameters).

In more general terms, the incorporation of sustainability aspects in property valuations requires that the uncertainties associated with any valuation and subjective assessments by the expert be disclosed in greater detail and documented in a meaningful manner for the reader of the expertise. Only thus can the valuation be credible and transparent.

4. Establishing a link between ratings and lending terms

If financial intermediaries acknowledge the economic impact of above-average ecological quality, such acknowledgment will be credible in the longer term only if the demonstrable sustainability of a building (e.g. lower life cycle costs, lower economic risks or enhanced economic prospects) is reflected in the lending terms. Test runs with available property ratings have shown that buildings which meet sustainability and other criteria are seen to represent a lower risk in financing instruments developed by banks. Some banks are already offering special lending terms for energy-efficient, environmentally sound and/or sustainable buildings. However, there is a need to verify whether this is the result of marketing activities or certain grants-in-aid, or whether it is owed to a better understanding of the correlation between risk assessment and lending terms. Only in the last case would this represent a breakthrough with wide-ranging implications.

Market Potential for Investment in Sustainable Buildings

The possibility of planning and constructing buildings which meet sustainability criteria and also evidence this through a disclosure of their sustainability credentials opens up new opportunities for the introduction of novel property investment products. The market potential for investment in sustainable buildings is considerable: In the constantly expanding market for socially responsible investment (SRI), property as an investment class is currently virtually non-existent. The launch of the very first property investment funds and REITs which offer investors a professionally managed property portfolio specializing in sustainable buildings only took place very recently and is mainly limited to the US and Australia. A portfolio switch to property investments by only 10 % of the assets currently attributed to the SRI market would signify a potential market volume for investment products specializing in sustainable buildings of over US\$ 330 billion. This figure approximately equals half of the market capitalization of the *FTSE EPRA/NAREIT global listed real estate index*, which stood at US\$ 686 billion at the end of 2006.

Outlook

In response to the discussion on climate change, attention is currently focusing on concepts which initially aim to minimize both the energy expended on heating and the associated emissions. Zero-energy or zero-emission buildings achieve this aim partly by means of offsetting procedures involving feed-ins to the power grid or credits. In the final analysis, however, because these concepts also strive to minimize life-cycle costs and maximize user convenience, the buildings they underpin are far more than “just” energy-efficient and environmentally sound. A transition from “*green buildings*” to “*sustainable buildings*” entailing the inclusion of calculated usage and life-cycle costs and an assessment of user satisfaction will not only respond to the necessarily more complex evaluation requirements but also support the banks in carrying out valuations. The terms used to describe the various building concepts will continue to evolve in response to changing circumstances (“sustainable building” remains a somewhat cumbersome term), but no one can today deny that buildings which are energy-efficient and cost-effective, make sparing use of resources, offer health benefits along with high quality in terms of their technical infrastructure, functionality, architectural design and integration into the urban environment, backed up by systematic management and appropriate user conduct, deliver economically quantifiable advantages in the form of more stable asset value performance.

Publisher:

Association of German Pfandbrief Banks
Georgenstrasse 21, Germany
10117 Berlin
Telefon: +49 30 20915-100
Telefax: +49 30 20915-419
e-mail: info@pfandbrief.de
Internet: www.pfandbrief.org

Mailing address:
P.O. Box 64 01 36
10047 Berlin, Germany

Design:
Bert Klemp Corporate Design
Frankfurt am Main

6th edition, Berlin 2007

© Association of German Pfandbrief Banks, Berlin
Content effective September 2007
Real Estate Banking ISSN 1610-9783

All rights reserved. Extracts from
the Fact Book may be reproduced
if the source is named.

The present English version
of the Fact Book and the articles
presented herein were translated from
the original German version and carefully
reviewed. However, in case of doubt,
the original German draft applies.

Head Office

Association of German
Pfandbrief Banks
Georgenstrasse 21
10117 Berlin, Germany
Telephone: +49 30 20915-100
Telefax: +49 30 20915-101
e-mail: info@pfandbrief.de
www.pfandbrief.org

Brussels Office

Association of German
Pfandbrief Banks
Av. Michel Ange 13
1000 Bruxelles, Belgium
Telephone: +32 2 7324-638
Telefax: +32 2 7324-802
e-mail: info@pfandbrief.de

Liaison Office in Tokyo

Association of German
Pfandbrief Banks
c/o International Financial
Consulting K.K. (IFC)
The Prudential Tower, 21st Floor
2-13-10 Nagatacho, Chiyoda-ku
Tokyo 100-0014, Japan
Telephone: +81 3 5532-8057
Telefax: +81 3 5532-8367
e-mail: h.takee@pr-liaison.com

Liaison Office in New York

Association of German
Pfandbrief Banks
c/o Makovsky & Company, Inc.
575 Lexington Avenue, 15th Floor
New York, NY 10022, USA
Telephone: +1 212 508-9677
Telefax: +1 212 751-9710
e-mail: pfandbrief@makovsky.com



**VERBAND DEUTSCHER
PFANDBRIEFBANKEN**
Association of German Pfandbrief Banks