

IMMO-RATE: GUIDE FOR THE PROPERTY RATING OF SUSTAINABLE BUILDINGS



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Summary

Numerous attempts for the assessment of the sustainability of buildings were developed within the last few years. Those assessment methods are various, define different key fields of sustainable construction and are more or less tricky organised. If you build a sustainable building, you can be decorated with 5 stars, 1,000 points or a simple "excellently". Rating systems for the property rating of buildings are of quite a different nature. Property rating methods point out the sustainability of the investments for buildings, and bankers might define sustainability from a different angle. The concentration on the financial aspects leads to a worse assessment of sustainable buildings in many cases: Higher investment costs, a longer pay-back time and the simple fact, that these buildings aren't established so yet lead to risk assessments. IMMO-RATE, a project of the Austrian Institute for Ecology has been developed together with ERSTE Bank and the RHOMBERG Construction Group., two leading players in the Austrian construction sector and tries to close the gap between sustainable building assessment and conventional property rating of buildings.

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1 Introduction

The project "IMMO-RATE" is intended to develop guidelines and tools for the property rating under special consideration of targets, strategies and technologies of a sustainable building and construction industry. Very often, innovative building projects, for instance low energy buildings or houses with an increased application of renewable raw materials, get a "risk rating" by banks or financial institutions due to their innovation character. This means however, that innovative and/or sustainable building projects, which depend on a high fraction of debt, suffer from increased financing expenses and may therefore often not be realized.

Since several proposals and guidelines referring to “Basel II” have been published by the “Basel Committee on Banking Supervision” [1], the pressure on tougher risk assessment of investments into the property market has been increasing. Since January 1st 2007, the Basel II Framework is mandatory in the European Community. Simplified Basel II asks for a stronger equity capital underlay of investments. The construction sector is one of the sectors with extremely high investments and external financing needs. A lot of buildings have to be financed by the usage of debts. So the property rating (and other rating methods of the financial institutions) becomes a very important instrument for the implementation of sustainability into the construction sector. Buildings without acceptable property ratings can not be realised easily or only with higher financing costs.

Why is this important for the implementation of sustainability into the construction sector? A wide-spread implementation of sustainable buildings is marked by the development and usage of new technologies, new construction materials (mostly using renewable resources) and in comparison to “normal” building by – however – higher investment costs. One of the most important principles of sustainability can be described by the transformation of the construction sector from short term approaches into life cycle assessments. Therefore the life cycle approach includes economic aspects, environmental aspects and also social aspects. If you assess a building this is standing for lifelong environmental impacts (e.g. CO₂-emissions, water demand, indoor air quality), life cycle costs including investments and operation costs (and also cost for the demolition of the building) and social impacts like user awareness. Although this focus gets more acceptances in the building and construction industry at the moment, this isn't applying to the financial world. Experiences like these have been made also with a lot of demonstration projects for sustainable construction in Austria in kind of passive houses, low energy houses, houses consisting of renewable construction materials and so on. Inside the Austrian research program “Building of Tomorrow” [2] more then 20 pilot projects have been built. Asking for their potential on widespread implementation in the Austrian property market the answer is more or less the same: It depends only on the additional amount of investment costs. The argument of lower operating costs than in standard buildings is effective here too briefly. Besides the cost argument, however, there is a decisive other problem. There is a lack on information about the advantages of sustainable buildings outside the “inner circle” of experts in sustainable construction. Also for this reason IMMO-RATE was developed in the framework of the Austrian research program "Building of Tomorrow". The guide informs financial experts about the aims and contents of sustainable construction on the one hand and supports architects and developers at the description and representation of her buildings in the language of the financial world on the other hand. The last sentence is important: IMMO-RATE translates "architect language" into "finance language".

2 Using the language of the financial world

At the beginning of the project there were intensive discussions, whether a new rating instrument is necessary or whether we shall use existing methods. The advantage of new instruments is simply paraphrased: The developers need not to think on existing methods and already established procedures (with all their strengths and weaknesses). The disadvantage is simple, too: New methods need comprehensive measures for their implementation into the existing context. And nobody guarantees the success of new

methods. So the project team decide to implement the most important aspects of sustainable construction into an existing property rating instrument.

Therefore we chose the “TEGoVA” standards. TEGoVA – The European Group of Valuers' Associations – is a European non profit making association composed of 42 valuers' associations from 25 countries representing about 120.000 valuers in Europe. Since the early 80s, TEGoVA has published European Valuation Standards (EVS), at present under the 5th edition, referred to as EVS 2003 [3]. These standards are published in the so called “Blue Book” which is a well-known compendium of standards, guidelines and information sources in the world of property rating. A lot of international banks are working with this instrument (For example: The HYPO Vereinsbank (HVB) in Germany).

The structure of the “TEGoVA” rating system is very simple. It is divided into four principle classes, which are subdivided into five to ten criterions. If you have to assess new buildings (or buildings with large scale renovations), there is an additional section for development criterions (see **Fig. 1**).



Fig. 1 Main sections for a TEGoVA assessment

If you have a first look inside the table (**Fig. 2**), you might be shocked from the “sustainability point of view”: Only in the criteria class “property” the sub-criterion “3.5 Ecological sustainability” is defined. And this criterion is weighted by only 2 percent (TWO percent!) inside the overall scheme! However – This represents the current value of (ecological) sustainability inside the financial world, or better: Inside the world of property rating. Who has expected more is really mistaken. Even if this standard only represents a guideline which can be adopted by their users, environmental aspects takes only a marginal value at the first look!

1. Criteria Class 'Market' (national and regional) – Residential

| Sub-criteria | Weighting | | Criteria class |
|---|---------------|-------------------|------------------|
| | Sub-criterion | National/regional | |
| 1.1 national | | | |
| 1.1.1 Acts of God | 5 % | | |
| 1.1.2 Socio-demographic development | 30 % | | |
| 1.1.3 Overall economic development and international attractiveness | 15 % | 20 % | |
| 1.1.4 Political, legal, taxation and monetary conditions | 10 % | | |
| 1.1.5 Property market retail | 40 % | | |
| 1.2 regional | | | |
| 1.2.1 Acts of God | 5 % | | |
| 1.2.2 Socio-demographic development | 35 % | 80 % | Criteria class 1 |
| 1.2.3 Economic situation and attractiveness | 15 % | | |
| 1.2.4 Property market residential | 45 % | | 20 % |
| RESULT FOR THE MARKET RATING | | 100 % | |

2. Criteria Class 'Location' – Residential

| Sub-criteria | Weighting | | Criteria class |
|---|---------------|--------------|------------------|
| | Sub-criterion | | |
| 2.1 Suitability of the micro location for the property type and target occupiers | 30 % | | |
| 2.2 Image of the quarter and the location | 20 % | | |
| 2.3 Quality of transportation infrastructure of the plot and quarter | 15 % | | Criteria class 2 |
| 2.4 Quality of local supply facilities of the plot and quarter for target occupiers | 15 % | | |
| 2.5 Acts of God | 20 % | | 30 % |
| RESULT FOR THE LOCATION RATING | | 100 % | |

3. Criteria Class 'Property' – Residential

| Sub-criteria | Weighting | | Criteria class |
|---|---------------|--------------|------------------|
| | Sub-criterion | | |
| 3.1 Architecture / type of construction | 20 % | | |
| 3.2 Fitout | 10 % | | |
| 3.3 Structural condition | 15 % | | Criteria class 3 |
| 3.4 Plot situation | 25 % | | |
| 3.5 Ecological sustainability | 10 % | | 20 % |
| 3.6 Profitability of the building concept | 20 % | | |
| RESULT FOR THE PROPERTY RATING | | 100 % | |

4. Criteria Class 'Quality of the property cash flow' – Residential

| Sub-criteria | Weighting | | Criteria class |
|---|---------------|--------------|------------------|
| | Sub-criterion | | |
| 4.1 Tenant / occupier situation | 20 % | | |
| 4.2 Rental growth potential / value growth potential | 30 % | | |
| 4.3 Letting prospects / fungibility | 20 % | | Criteria class 4 |
| 4.4 Vacancy / letting situation | 10 % | | |
| 4.5 Recoverable and non-recoverable operating expenses | 10 % | | 30 % |
| 4.6 Usability by third parties and/or alternative use | 10 % | | |
| RESULT FOR THE RATING OF THE QUALITY OF THE PROPERTY CASH FLOW | | 100 % | |

Fig. 2 TEGoVA criterions

3 The 2nd look: Sustainability is more than ecology!

The project team has recovered from this first shock quickly. And the answer is very simple: Sustainability consists of aspects in economy, environment and social affairs. And sustainable buildings have to fulfill a lot of different aspects beside an extraordinary ecological performance. If you have this 2nd look on the TEGoVA table, the structure offers you a lot of different possibilities for the argumentation of sustainable buildings.

Therefore the definition of “sustainability” in the construction sector has to include the following aspects:

- **Deal within the market’ needs!** Sustainable buildings are designed for the needs of the market! They are looking for the best solutions inside the property market and are working inside the national and/or regional framework of a built environment.
- **Look for the best sites! Take care on your site!** Sustainable buildings are located on sites with good infrastructure conditions! They are in line with the already given neighbourhood and they try to enhance the quality of the site.
- **Your object should be the best in town!** Sustainable buildings are optimised in each possible field of design, architecture AND environmental performance! The environmental performance of your building is the result of “planning for the users’ needs” and includes also practical and aesthetic values on a high level.
- **The cash-flow is given by a perfect life cycle of your building!** Sustainable buildings optimise the cash-flow during the whole life-cycle of the building! Therefore you have to save operation costs and offer a maximum of flexibility for your users. The longer your building can react on new needs of the market, the better the cash-flow will be. This kind of efficiency has to be improved in any case.

The IMMO-RATE project team defines quality criteria, argumentation lines and offers additional information for more or less each of the TEGoVA criteria. So the influence of sustainable construction becomes up to 70 percent in the overall assessment scheme.

With target group oriented preparation of experiences and perceptions from the program line "Building of Tomorrow" for financial services enterprises (rating agencies, banks, investment banks), information is provided, which should substantially lead to a positive evaluation of innovation-oriented buildings. Central to this approach is the profound argumentation of the advantages of sustainable buildings with these quantitative and qualitative criteria, which affect a positive property rating. Crucial in this context is, that the results of "IMMO-RATE" can be introduced directly into the respective rating instruments of the financial institutions. Such an evaluation of sustainable buildings by the project will be possible also for endowment funds as well as both for existing objects and new buildings.

The guide IMMO-RATE is already published and available in German language. (See author’s address).

4 Sidestep: How to assess?

A lot of discussions on methods and scales for the assessment of buildings have been done in the scientific community in the last years. Questions regarding format and scales of assessment have been also important for the definition of international standards for the property rating. TEGoVA defines for the “property and market rating” of buildings a 10-step-scale, starting with “excellent” and ending with “disastrous”. This kind of assessment scale is in line with the most important financial rating systems of international rating agencies as like Moody’s or Standard & Poor’s (S & P).

| | | | | | | | | | | |
|-----------|------------|-----------|------------------------------|--------------------|------------------------------|-------------------------------|---------------------------|-----------|------------|---|
| Aaa | Aa1 Aa2 | Aa3 A1 | A2 A3 | Baa1 to Baa3 | Ba1 to Ba3 | B1 to B3 | Caa1 to Ca | C | | Moody's |
| AAA | AA+ AA | AA- A+ | A A- | BBB+ to BBB- | BB+ to BB- | B+ to B- | CCC CC | SD/D | | S & P's |
| excellent | very good | good | above average | average | below average | poor/ special mentioned | very poor/ substandard | doubtful | loss | Bank |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | property and market rating |
| excellent | Very good | good | slightly above average | average | slightly below average | mediocre | poor | Very poor | disastrous | |

Fig. 3 Rating scales of the financial world

Building assessment systems should notice this fundamental orientation so that they are compatible with the financial systems. If a building assessment system “forgets” this bandwidth (from “excellent” to “disastrous”) it might be difficult to implement the results into a property rating system. TEGoVA includes this kind of scaling in all of the sub-criteria.

In the context of IMMO-RATE recommendations for the definition of quality criteria for all TEGoVA criteria were developed. These recommendations enable both construction experts and financial experts to assess the sustainability of a building. At the same time IMMO-RATE helps construction experts to make powerful documentations for the assessment during a property rating. This necessity may not be seen clearly: In many cases a positive property rating fails due the fact of misunderstanding of the project’s advantages. And unfortunately in this case there is only one guilty person: The planners who couldn’t communicate themselves and their project.

5 Conclusions

A sustainable building involves considerations to the market, qualities of location and optimal object characteristics into the development of a real estate. In this way optimal conditions are secured for the cash-flow of the building. Arranged according to the groups of criteria „market“, „location“, „object“, „cash-flow“ and „development potential“ represents the guide „IMMO-RATE“ for building industry and financial institutions an instrument for the planning, description and evaluation of sustainable buildings in the structure of rating systems. The project includes a documentation of those standards and methods within the area of property rating, which are in particular relevant for innovation-oriented buildings. The results of the program line, which are a central component for real estate evaluation, are documented primarily for the target groups. IMMORATE strengthens the competitiveness of sustainable building projects and promotes the market diffusion of innovative and sustainable technologies of the building sector.

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References

- [1] A short description of the targets and contents of BASEL II is given in: BASEL COMMITTEE ON BANKING SUPERVISION. *International Convergence of Capital Measurement and Capital Standards. A Revised Framework. Comprehensive Version*. Bank for International Settlements, June 2006.
- [2] The Austrian research initiative “Building of Tomorrow” is included in the “Austrian Program on Technologies for Sustainable Development”. It has been developed by the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT). For more information see www.HAUSderZUKUNFT.at.
- [3] Short descriptions of the TEGoVA standards can be obtained from the website www.tegova.org. A published short description of the EVS 2003 is given by the following TEGoVA publication:
TEGOVA (Pub.). *European Property and Market Rating: A Valuer’s Guide*. Comprehensive version in English and German language. TEGoVA, October 2003.

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