

# Redesign of the real estate market by legal regulation: Impacts on the condominium market by EAVG and EAVG 2012

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## Abstract

This paper shows how the real estate market is influenced by the new Energy Performance Certificate Template-law 2012, focused on condominium market in Vienna. The purpose of the following study was to analyze the changed role of real estate agents and to show their reactions towards the new market situation. Therefore it was decided to observe the advertisement market carefully. The observation concentrated on the following two questions:

1. Changed role of the real estate agent?
2. Changes on the condominium advertisement market until December 1st, 2012?

Since November 17th, 2012 until December 22nd, 2012, 1474 advertisements of the Viennese condominium market, listed in the IMMO Kurier were analyzed. The IMMO Kurier is a supplement of a well-known Austrian daily newspaper, which appears every Saturday. Due to the investigations it could be identified that the total amount of advertisements decreased whereas the quantity of advertisements including the calculated heating demand increased. Therefore real estate agents are fulfilling the legal requirements of EAVG 2012 and do not risk penal provisions. In conclusion the real estate market was redesigned by EAVG 2012 and the impacts have to be observed and analyzed.

**Keywords** Energy Certificate Template Law 2012, Condominium market, Advertisements of condominium market, Real estate agents, Calculated heating demand

## 1. Introduction

The purpose of this paper is to show influences on the real estate market by Energy Performance Certificate Template-law of 2006 and 2012, with a focus on condominium market in Vienna.

After a short overview of the legal situation until December 1<sup>st</sup>, 2012, the condominium market in Vienna is analyzed. The impact of the new Energy Certificate Template law – 2012 is illustrated and the resulting and observed changes on the real estate market by new regulations are presented.

## 2. View back to the legal situation until December 1st, 2012

In August 3<sup>rd</sup> 2006 the Energy Performance Certificate Template-law – EAVG was edited. For buildings with an issued building permit after December 31<sup>th</sup>, 2005, an energy certificate should have been calculated until January 1<sup>st</sup>, 2008. For buildings with an issued building permit before January 1<sup>st</sup>, 2006 an energy certificate should

have been calculated until January 1<sup>st</sup>, 2009. As a result every property buyer and tenant should have been informed about the energy consumption of objects since January 1<sup>st</sup>, 2009. The information should have been given to the customers during the buying or at least contracting process. In this phase of transaction customers should have been informed about the calculated energy performance of the offered building (EAVG, 3.08.2006).

However, the legal consequences for missing energy certificates were weak. If the seller or landlord did not submit an energy certificate until the buyer or tenant has given a contractual notice, appropriate energy performance was agreed. Summing up, there was the possibility to substitute the need of an energy certificate by informing customers that the energy certificate is still missing and the object has a typical heating demand according to its age and type of construction (§5, EAVG, 03.08.2006).

### **3. Changes of the Viennese condominium market**

The private Viennese real estate market is determined by apartments. During the housing census 2001, 910,745 [1] apartments were counted. 475,423 [2] apartments were private owned. Only 87,741 [1] apartments are situated in buildings with one or two flats. The purpose of the following calculation was to investigate if market prices, of condominiums located in Vienna, are already influenced by energy performance of buildings. It was assumed that brand new buildings have to fulfill the new building code 2007 (OIB Richtlinie 6, 2007) and therefore have a good energy performance. Used condominiums were not regulated by law. Therefore the energy performance of used objects is generally speaking bad. If a good energy performance is a market driver it can be estimated that this results in an increasing demand for brand new condominiums. In this case a higher rise in prices for brand new condominiums can be expected in comparison to used condominiums.

Since 2000 the Austrian Chamber of Commerce - Federation of Real Estate Professionals collects average prices of real estates all over Austria. The prices are collected on district level with different rating criteria. All member companies of the Federation of Real Estate Professionals were invited to participate to the market study by using a data collection sheet. The given data show a statistically calculated average of the, in the previous year, achieved prices, based on individual objects. In practice, higher and lower prices for single objects can be achieved. Extreme values were eliminated from the analysis of the surveys. [3] For the calculation of the Viennese condominium market the categories brand new and used condominiums were chosen. Both categories represent three rooms' apartments of 70 m<sup>2</sup> without parking lot. Both condominium categories are divided into the following subcategories:

**Table 1.** Selected subcategories for brand new and used condominiums.  
(Immobilienpreisspiegel, 2012)

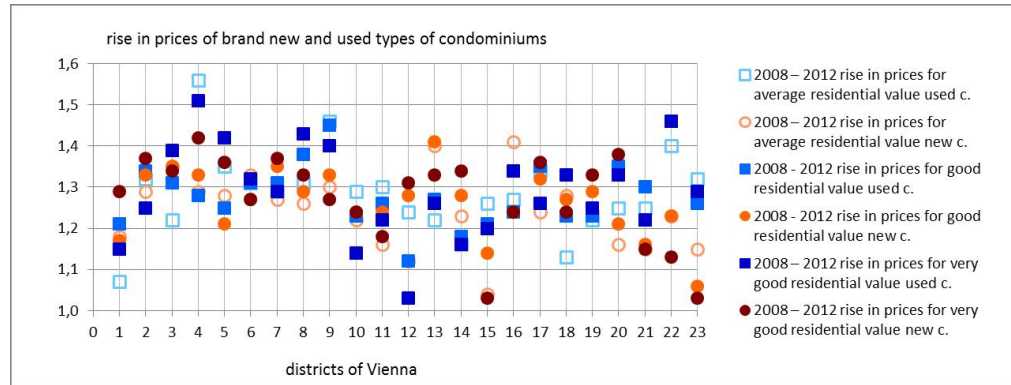
brand new condominiums		
average residential value	good residential value	very good residential value
mixed - built residential area, normal transport infrastructure, minimum equipment (carpet, tiles in the washrooms), unambitious architecture	good residential area, standard equipment made of a better quality, balcony, loggia, common spaces, attractive architecture	very good residential area (villa district, nice view), high quality equipment (parquet floor, modern bathrooms), large balcony, terrace, representative architecture, modern heating technology
used condominiums*		
average residential value	good residential value	very good residential value
Bathroom, toilet, windows of compound glass, central heating, normal transport infrastructure, mixed – built residential area, a good building stock	Modern bathroom, toilet, central heating, windows made of insulated glass, balcony, eventually an elevator, good residential area, no immediate need for modernization	Modern bathroom and toilet, central heating, parquet floor, balcony elevator, very good residential area, modern heating technology

\*For used condominiums there is also a subcategory of simple residential value available. As there is no possibility to compare this subcategory to an equivalent subcategory of brand new condominiums, it was not considered in the calculations.

The following calculations were done on the basis of the collected data. An agreement for using these data was given by the Austrian Chamber of Commerce - Federation of Real Estate Professionals.

The data of the two Viennese categories: brand new and used condominiums collected from 2007 and 2011, were taken. The data of 2007 were published in the year 2008 and the data of 2011 were published in the year 2012. In this paper the calculated period will refer to the publishing date and is called 2008 until 2012. For this period rises in prices for all 23 Viennese districts were calculated. The calculated values are shown in figure1. Rise in prices of different types of condominiums located in Vienna:

**Figure 1.** Rise in prices of brand new and used types of condominiums are compared to another. The graph shows results for every district of Vienna



No typical higher rate of rise in prices for new condominiums can be seen. There are some districts in Vienna, which already show that new condominiums have a higher rise in prices compared to used ones. But there are also some districts, where used condominiums have a higher rise in prices compared to brand new ones. The graph shows a very indifferent picture of the Viennese condominium market. This can be a result of the lacking in transparency of the energy performance of buildings, which slows down proper reaction of the real estate market towards energy conscious sales processes. However, it has to be considered that also additional parameters may influence the condominium market in various ways. Further investigations have to be done in order to determine the influence of energy performance of buildings to the price system of condominiums. The new legal situation in Austria will force the market to give more transparency of the energy performance of buildings.

#### 4. New legal situation of Austria EAVG 2012

Because of the lack of information of the energy performance of buildings, a new version of the Energy Performance Certificate Template-law – EAVG 2012 was edited on April 20th 2012. Several paragraphs were changed to enhance the preparation of energy certificates for offered buildings. The following items can be seen as the most relevant changes of the new edition of the Energy Performance Certificate Template-law – EAVG 2012. It shows the following adaptations.

First, it starts with the concretion of content. The new regulation of this paragraph results in an obligation of mentioning the following parameters of the energy certificate in all real estate advertisements. This obligation is valid from December 1st, 2012. (§1, §10 (1), EAVG 2012, 20.04.2012)

1. The demand of heating [HWB]. This parameter shows the calculated heating demand in order to condition the indoor air during the heating period. (OIB Richtlinie 6, 2011)
2. The total energy performance factor. This parameter is a non-dimensional value, which compares the actual energy performance value of the concrete

building with the theoretically requested energy performance value of the building code. If the parameter is less than 1 it shows that the offered building is better than the minimum requirements of the building code. Otherwise, if the parameter is more than 1, this building does not match the required minimum criteria of the building code (Hüttler, 2012). For those buildings, which have already been certified during the last years, a transitional arrangement exists in the Energy Performance Certificate Template-law – EAVG 2012. In this case the energy certificate is still valid according to the Energy Performance Certificate Template-law – EAVG (§ 10(2), EAVG 2012, 20.04.2012).

In case of missing information on required parameters in advertisements, penal provisions of about 1450 EUR can be charged. As a matter of a fact, real estate agents are from December 1st, 2012 forced to show the results of the energy certificates in their advertisements. Only if the real estate agent has fulfilled the warning and notification duty of the necessity of submission of energy certificates, he/she cannot be shamed for not marketing the required parameters of the energy certificate anymore (§ 9(1), EAVG 2012, 20.04.2012).

Subsequently, the presentation and submission obligation has to be fulfilled before the buyer or tenant has given a contractual notice. A copy of the energy certificate has to be handed over to the customer fourteen days after signing the contract (§4, EAVG 2012, 20.04.2012).

Furthermore the exceptions of the Energy Performance Certificate Template-law – EAVG 2012 are strictly defined:

1. Buildings, which are only kept frost-free;
2. Buildings, which are ready for demolition. In this case the contract says buyers have to break down the building within the next three years;
3. Buildings that are only used for worship or religious purposes;
4. Temporary Buildings, which are only built for a use phase of two years;
5. Industrial sites, workshops and agricultural buildings, in case that the main part of the used energy to condition the indoor air is taken from waste heat in the building;
6. Residential buildings that are only used for a limited period over a year. But only if the short use phase results in a reduced energy demand to less than 25% in comparison to a continuous use;
7. Free standing buildings with a total floor space of less than 50 square meters (§5, EAVG 2012, 20.04.2012).

In conclusion there are only few exceptions. Even old, as monuments protected, buildings have to have an energy certificate (OIB Richtlinie 6, 2011).

## 5. Resulting and observed changes by new legal regulations

### 5.1 *Changed role of the real estate agent*

Comparing the Energy Performance Certificate Template-law – EAVG to the Energy Performance Certificate Template-law – EAVG 2012 the following changes for future activities on the real estate market can be seen. Until November 31<sup>th</sup>, 2012 the exchange of the energy certificate was an act between seller and buyer or landlord and tenant. The role of the real estate agent was only a minor one during the submission process. Since December 1<sup>st</sup>, 2012 the role of the real estate agent changed. From now on real estate agents are responsible for advertising real estates in an energy-conscious way. They are the first contact partners for customers and therefore they will have to explain the differences of the illustrated energy parameters. As a result customers want to get more information about the condition of the building stock during the real estate sales process. Therefore real estate agents will have to play an educative role during the sales process. They have to explain to customers on the one hand the differences between the required parameters and on the other hand the results of different values of these parameters. From today's point of view many real estate agents will have to inform customers of the advantages and also disadvantages of buildings in the light of a good or bad energy performance. Their job profile will change more and more to a real estate consultant. Especially as they have to point out that the demand of heating energy is also depending on individual needs and not only on buildings. Energy costs also depend on the installed type of heating system e.g. cockle stove, floor gas heating system, oil fired central heating system, heat from a district heating network (waste incineration and woodchips), electric heating system (photovoltaic, wind, water, nuclear power), solar heating system etc. The long list of heating technologies shows the variety of building services. This makes it difficult to explain how the values of the required parameters are going to influence the amount of the energy bill in the future. The quality of information given during the sales process to customers will be crucial for customers' satisfaction during the use phase. Satisfied customers are the best recommendation for real estate agents.

In addition to the technical requirements and issues, the issue of pricing energy efficient buildings will play a key role in the future. Otto Bammer and Christian Brunner already created various methodologies for the valuation of energy efficient buildings (Bammer and Brunner, 2012). In theory it is possible to calculate the value of energy efficient buildings in a proper way. However, the unknown factor is still the reaction of customers to the transparency of energy performance of buildings.

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Generally speaking the following reactions can be expected:

1. Energy efficiency is seen as a social responsibility and customers like to pay even more for energy efficient housings than it is expected from a technical point of view;
2. The energy parameters are taken as an indicator for the condition of the building stock and customers pay just as much as it is expected from a technical point of view;
3. It is also possible that customers pay more attention to additional parameters of the real estate market and therefore the energy performance of housings is playing a minor role during sales processes.

Realistically it can be assumed that customers will use the energy parameters for further price negotiations. At the moment the location and the age of building are the main aspects of negotiations. As the EAVG 2012 requires more transparency of the energy performance of buildings, the fulfillment of §3 EAVG 2012, 20.04.2012 forces real estate agents to deliver customers further information for negotiations. In fact, it will be difficult to argue best prices for buildings with bad energy performance.

### *5.2 Changes on the condominium advertisement market until December 1<sup>st</sup>, 2012*

Due to the fact that the information of bad energy performance of a building can be taken as a disadvantage of the offered building it was assumed that real estate agents will hesitate to fulfill the requirements of the EAVG 2012. Therefore it was decided to observe the advertisement market carefully. The observation focused on the following two questions:

1. Are the real estate agents willing to accept the new legal regulations or not?
2. How many real estate agents will ignore the new duties and will risk a penalty of about 1450 EUR?

Again Viennese condominium market is an interesting market – place for investigations. In November 2012 the internet services were evaluated. It became obviously that several advertisements are still not referring to the energy performance of buildings. Sometimes the parameters were mentioned in the description of the object and sometimes the parameters were filled in in the offered template of the platform. However, it turned out that the results are poor and the work impact is high. One reason for the high work impact was that internet service systems are constantly changing. Some real estate agents changed their advertisements several times a week in order to keep their advertisements on a high level of actuality. Therefore all collected advertisements have to be saved on the computer or at least printed out. For these reasons it was decided to change the methodology by using a printed version of real estate advertisements. The idea was to get more solidity into the study. For printed real estate advertisements, real estate agents have to stick to fixed delivery

dates and after that, changes of the advertisements are not possible. It was decided to take the printed version of the IMMO Kurier for further research activities. The IMMO Kurier is a supplement of a well-known Austrian daily newspaper, which appears every Saturday. From November 17<sup>th</sup>, 2012 until December 22<sup>nd</sup>, 2012 the advertisements of the IMMO Kurier were evaluated. The following supplements were selected: IMMO Kurier of November 17<sup>th</sup>, 2012, IMMO Kurier of November 24<sup>th</sup>, 2012, IMMO Kurier of December 1<sup>st</sup>, 2012, IMMO Kurier of December 8<sup>th</sup>, 2012, IMMO Kurier of December 15<sup>th</sup>, 2012 and IMMO Kurier of December 22<sup>nd</sup>, 2012. In total 1474 advertisements of condominiums were analyzed.

**Table 2.** The total amount of advertisements and the amount of advertisements including the energy parameters for every supplement

date of IMMO Kurier	total amount of advertised condominiums	advertisements including calculated heating demand	advertisements including calculated heating demand in%
17.11.2012	341	1	0,3
24.11.2012	334	13	4
01.12.2012	260	150	58
08.12.2012	238	190	80
15.12.2012	200	171	85,5
22.12.2012	101	87	86
<b>TOTAL</b>	<b>1474</b>		

The next graph in figure2 is showing two trend lines, one of the total amount of advertisements and one of the amount of advertisements including the calculated heating demand. It can be clearly seen that with the validation of the Energy Certificate Template law 2012 on December 1<sup>st</sup>, 2012 the total amount of advertisements was reduced and the quantity of advertisements including the energy parameters increased.



**Figure 2.** The increasing number of illustrated energy parameters

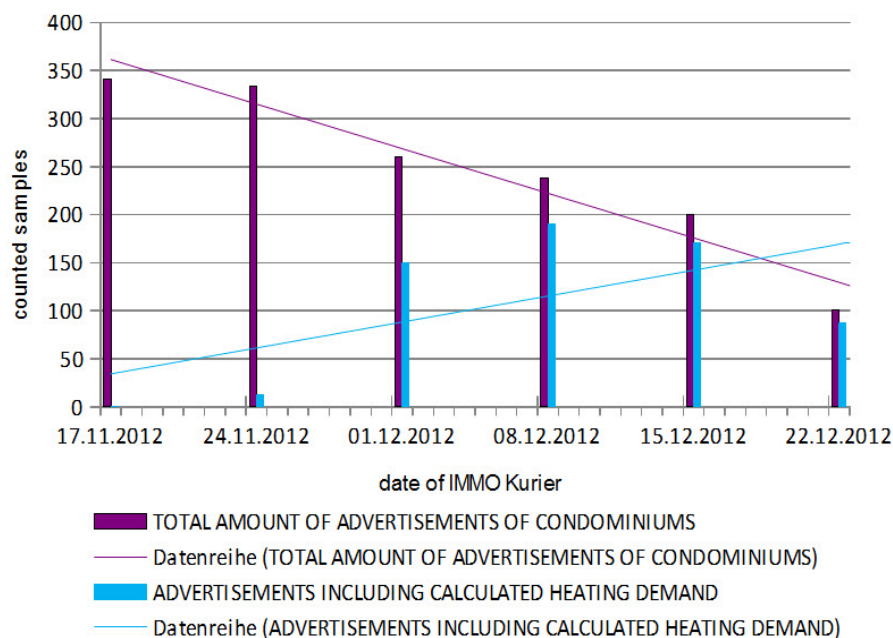


Figure 2 illustrates that real estate agents are willing to fulfill the legal requirements of EAVG 2012. They do not risk a penal provision of 1450 EUR. In parallel it is noticed that the amount of advertisements has decreased. The seasonal influence (just around Christmas) may play a minor role for the reduction of advertisements. It turns out that real estate agents hesitate to publish advertisements without calculated heating demand. On January 10<sup>th</sup>, 2013 these results were confirmed by a statement of a well-known real estate website. In this statement the platform informs customers that there has been a reduction of advertisements since December 1<sup>st</sup>, 2012 of about 15%. This reduction is attributed towards the new legal situation. (...) It is very likely that the demand of energy efficient housings will be increasing. This is very interesting for landlords and sellers as these objects are expected to achieve higher prices on the market in the future [4].

## 6. Conclusion

The investigation of the advertisement market for the period November 17<sup>th</sup>, 2012 until December 22<sup>nd</sup>, 2012 have shown that real estate agents are willing to fulfill the new legal requirements. On November 17<sup>th</sup>, 2012 only 0,3% of advertisements illustrated energy parameters. This was really surprising, as even for new buildings no energy conscious marketing existed. The situation changed until December 22<sup>nd</sup>, 2012 rapidly. In this supplement already 86% of the advertisements of the Viennese condominium market illustrated the calculated heating demand of buildings. As a result a new market transparency of energy performance of buildings has been created. Up to now it cannot be said how customers will react towards this new

transparency in the future. Generally speaking the following reactions can be expected:

1. Energy efficiency is seen as a social responsibility and customers like to pay even more for energy efficient housings than it is expected from a technical point of view;
2. The energy parameters are taken as an indicator for the condition of the building stock and customers pay just as much as it is expected from a technical point of view;
3. It is also possible that customers pay more attention to additional parameters of the real estate market and therefore the energy performance of housings is playing a minor role during sales processes.

Realistically it can be assumed that customers will use energy parameters for further price negotiations. But will customers also refuse to buy or rent buildings without a good energy performance? For these reasons it is planned to repeat the investigations in February/March 2013. It can be estimated that further results will be available for determination of the development of the Viennese condominium market.

Summing up due to the implementation of EAVG 2012 the real estate market was redesigned. Ongoing research activities will observe the new market in order to predict further trends of the real estate market.

### Notes

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