

# SUSTAINABILITY AND THE ESTIMATE OF THE IMPACT OF ENVIRONMENTAL FACTORS UPON PROPERTIES' VALUES

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**Abstract:** The Law and International Practices in environmental issues target to secure the sustainability of businesses and society, harmonized with nature, in order to preserve the natural resources for the next generations, and imposing a long term consuming pattern. Around the world, valuing human and natural capital became common practice too, not only for economical but also for ethical reasons, these activities contributing to consolidate the positive effects of sustainability. Today, it's fully recognized that environmental factors can, sometimes, have a strong and negative impact to different businesses and assets, diminishing their fair market value. Thus, an important concern of appraiser community is to identify the best practices for estimating the effect of such factors to the market value of properties.

## **Sustainability – Definitions**

Sustainability is a systemic concept regarding the shaping of human civilization in a way that satisfying the society needs and the free express of the potential of its members do not affect the biodiversity and natural ecosystems. It is sure that sustainability is a vital global desiderate, that can influence, positively or negatively, the future of all communities, either a region either the whole planet.

First utilized by a German scientist and mining administrator, Hans Carl von Carlowitz, in the work "*Sylvicultura oeconomica*" (1713), utilized later by French scientists as the way to "*sustain the forestry production*", the term of sustainability was stated once the Brundtland Report was published in 1987. In this document, sustainability was defined as "*the development that satisfies the needs of the present without compromise the chances of future generations to satisfy their own needs*". The final confirmation came along with adopting the concept in United Nations – Agenda 21.

In another well-known expression, sustainability means "*sustainable development*", adopted also in United Nations – Agenda 21. Other expressions with close meaning are "*sustainable prosperity*" and "*authentic sustainable progress*".

In 1995, The World Social Development Summit defined this term as being "*the frame to our efforts to achieve a better life quality for all people*", in which "*economic and social development and environment protection are interdependent component, generating synergy*".

The World Social Development Summit of 2002 extended the previous definition identifying three "*main objectives of sustainable development*": eradicating the poverty, preserving natural resources, changing the unsustainable production and consume patterns.

### **Actual aspects regarding global sustainability**

Four types of national economies were virtually built using an actual concept, related with sustainable development - “creative economy”, based on the government’s attitude towards sustainability.

First group includes USA, Japan and some of developed Asian nations, countries where the infinite growth model and infinite consume model are a common practice and commercial exploitations are continued no matter what ecological costs are involved.

European countries are at the other side of the barricade, putting nature first. Law enforces sustainability in such countries. Great Britain is, somehow, between the two camps. British corporation embrace the American growth model, but, GB is forced, as a UE member, to harmonize its laws with UE’s laws and regulations.

Last group, the most numerous, comprises rural or emergent economies, where is inappropriate to speak about sustainable development.

The main problem is the increasing global competition for all finite resources, race that involves all world economies. At the end, there will be no winners because of the exhausting of natural resources, contamination and climatic disequilibrium’s.

Another concept, essential for sustainable development is “*adaptive management*” (AM). AM’s purpose is to optimize the management of natural environment by applying the concept “*learning by doing*” and understanding the impact brought by incomplete knowledge. An efficient AM brings together management techniques and estimating the impact of economic activities upon environment. By contrary, the appraiser is preoccupied to quantify the impact of environmental factors upon the business value.

“*Co-management*” is a strategy that builds and implements adequate solutions to preserve natural resources and environment. The key of the concept is delegation and the balance of empowerment and responsibilities between governs and local communities. Co-management involves a great complexity because governs are amalgams of political factions and agency interests while communities have divergent interests and perspectives. Co-management needs also an adaptive approach directed towards “*learning by doing yourself*” than through a sophisticated process of power dissipation among different leading levels.

### **Valuing the impact of environmental factors upon owner’s value**

In numerous works, scientists from various economies and cultures showed that reaching the global sustainability is conditioned by common inter-disciplinary efforts. Surprisingly, some economic disciplines did not yet integrate this concept. On this field, yet arid, the valuation, as a scientific discipline situated between science and art, integrated in its techniques the problem of valuing the impact of environmental factors upon the value of assets or businesses.

At international level intense efforts were committed for theoretical solving of this technical problem, with the purpose to provide the international appraisers body with necessary appropriate tools. First of all, we mention the European Guidance Note in valuation: GN 1 Special factors that affect value. This standard requires the consideration by appraisers of factors such as toxic substances impact or land contamination upon the properties’ value.

The environment factors, no matter their positive or negative impact, will be analysed in the preparation stage of the valuation. One must consider also the contractual liabilities regarding the environment, able to influence the market prices.

Technically, the adjustments done by the appraiser will be based on relevant market data, originated from comparable properties, unaffected by adverse environment factors. The relevant environment and contamination factors recommended by the European Standard comprise the following categories:

- Natural elements, in ex. methane, noise, toxic waste, air pollution, radon, etc.
- Chemical contaminants resulted from present or past processing on the properties land or neighbouring land,
- Other contaminants, in ex. electromagnetic fields,
- Existence in the structural components of buildings and technologies of recyclable components,
- Other ecological risk elements.

Generally, it is considered that most sensible properties regarding the impact of environmental factors upon value are the selling properties and the properties used as guaranties in securing bank or bond loans.

The mandatory due – diligence recommendations made in the valuation preparation phase comprise, without limiting at, the following directions:

- Personal inspection, in situ, of the property, doubled by the market research regarding contamination, stigmata, and so on,
- The environmental balance sheet, if such case is needed,
- The level of conformation costs related to different liabilities imposed to the business or property due to environmental factors,
- The visible contamination of the soil, the air, the water around the property, pollution and other disturbances (noise, vibrations, electromagnetic fields, and so on).

One of the essential aspects is to declare to the client one's competence in estimating the impact of environmental factors upon property value, doubled even by the recommendation of additional investigations, performed by environment specialists, if such is the case, in example the need to have an environmental balance sheet or estimating the conformation costs.

In all cases suspected by the possibility to eliminate the pollution sources or repair the effects of a contamination, the valuation must consider the costs of such operations together with other adjacent effects, such as:

- stigmata,
- the lack of capability to fully remediate the negative effects,
- the risk of reiterating the contamination,
- the dynamics of changes in the environmental laws and regulations,
- the eventually diminishing of alternative uses for the valued property,
- the incertitude associated with the success of the remediation actions.

The efforts of The European Group of Valuers' Associations (TEGoVA) to produce a standardized approach of the impact of environmental factors upon properties' value were successfully doubled by The International Valuation Standards Committee (IVSC). And this was done by creating a singular standard of practice in valuation - *GN 7 – Considerations about the dangerous and toxic substances in valuations*. And this is the way to move from approaching the environmental aspects in valuations from a general standard, such as *GN1 Special factors that can affect value* to a standard, fully dedicated to environmental aspects, such is the international one.

Romania adopted, starting from 2004, International valuation Standards, so, in our country, the main standard in estimating the impact of environmental factors upon firms

and properties value is *GN 7 – Considerations about the dangerous and toxic substances in valuations.*

### **Conclusions**

1. The importance of sustainability for the wellbeing of communities and preservation of world natural resources is obvious in the context of a chaotic globalisation process, with powerful negative effects upon natural area.

2. In the last ten years it became a practice in the valuation theory to consider the impact of environmental factors upon the value of businesses and properties.

- At European level, a chapter regarding the environmental factors was developed by The European Group of Valuers' Associations (TEGoVA) within the practical valuation standard *GNI Special factors that can affect value.*

- At international level was adopted, by The International Valuation Standards Committee (IVSC), *The International practical valuation standard GN 7 – Considerations about the dangerous and toxic substances in valuations.*

3. Practical aspects of estimations made by appraisers look, without limiting at, the next factors: the conformation costs, existence of stigmata, the effect of contamination upon neighbouring properties, disturbances in well-function of a property induced by different factors (toxic substances, noise, air pollution, and so on).

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