What is sustainable development?
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In the wake of the current economic situation and the Copenhagen Climate Summit, more attention is again being given to the guiding principle of sustainable development. If discussions are today focusing on economics and politics and social development, then the concept of sustainability is not far off. Against this background, this article examines the salient features of the guiding principle and its economic relevance.

The three dimensions of sustainable development
According to the famous definition of the World Commission on Environment and Development (WCED), sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Its purpose is therefore to promote intra- and inter-generational justice. The report of the WCED – also named Brundtland Commission after its chairwoman – has triggered contemporary debate on sustainability. From the outset, a key criterion for this debate was that development and environmental issues be systematically considered together. Bearing this in mind, it is also clear that sustainability always involves at least three dimensions: social, ecological and economic (see Diagram 1). This is sometimes referred to as the “magic triangle” – not because of the harmonious relationship between the three dimensions but because, on the contrary, they are often not compatible and a balance between the three dimensions requires prudent consideration. This is required at both the social and political levels, and in decisions taken by businesses and private individuals.

Chart 1:
Three dimensions of sustainable development

<table>
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<tr>
<th>Economic dimension: economic goals (e.g. price stability, high rate of employment)</th>
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<td>Ecological dimension: Protecting natural resources</td>
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<td>Social dimension: intra- and inter-generational justice</td>
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A brief history of sustainability
The concept of sustainability has its origins in forest management. A forest is sustainably managed when the number of felled trees does not exceed that of the young trees that will replace them. This is an ecological tenet: one should not consume the capital but ensure that it is preserved. This fundamental concept has for some years now also been applied to “natural capital”. The proponents of “weak sustainability” – which for example include Robert Solow, winner of the Nobel Prize for Economics – believe that natural capital can be replaced by man-made capital and therefore hold that the preservation of total capital stock – natural and economic capital – would be sufficient for sustainable development. From the viewpoint of “strong sustainability” – which is for example advocated by the school of Ecological Economics – this is not a sensible strategy because the basic functions of natural systems cannot be replaced by technology, and neither technical progress nor capital accumulation are of any help if vital reserves of natural capital are irreversibly destroyed. Sustainable development requires the preservation of this natural capital, even if additional economic capital is accumulated.

The issue of the operationalisation of sustainability has for a long time been a focal point in the contemporary debate on sustainability. Since the aforementioned publication of the Brundtland Report in 1987, the topic has preoccupied a number of conferences (for example in Rio de Janeiro in 1992 and in Johannesburg in 2002) and numerous publications (such as “Sustainable Europe”, a study published by Friends of the Earth, or the Stern Review on the Economics of Climate Change). In this context, the significance of sustainable development has grown from a peripheral issue focusing on ecology to a generally accepted guiding principle in society: everyone advocates sustainable development – there are today virtually no leading personalities or institutions who/which are not committed to sustainability.

On the one hand, this recognition, like the extension of the guiding principle to various problem areas, is a success for the concept of sustainability. On the other hand, the concept is also being watered down by this development. “Sustainability” is today applied to virtually every social topic and different players are interpreting the concept in different ways. The economic crisis that began in 2008 has shown us in vivid terms that sustainability is not merely an ecological issue but rather something which is of fundamental economic and social interest. Many see this crisis as a crisis of non-sustainability.

The question of decoupling
A key problem of (non-)sustainability lies in the tension between ecological and economic goals. It is widely accepted that the way of life and “economic style” of industrial nations cannot be generalised at a global level. If everyone in the world were to have the same ecological footprint as that of an average US American, then this would without doubt lead to an ecological catastrophe. A look at the climate issue, in particular, (but not this factor alone) shows that the ecological footprint of the wealthy nations must be re-
duced dramatically if the objective is sustainable development. This is necessary especially because developing countries are laying claim to substantial “catching-up requirements”, both in economic terms and through the use of resources. China and India serve as vivid examples.

At the same time, however, the economic objective of “GDP growth” is hardly questioned. Whether in Austria, Germany or at a European level: everywhere, a commitment to sustainability is accompanied by an ardent commitment to growth targets. How can this be? The answer is: to opt for decoupling. The prevalent view is that technical innovations and structural change permit the consumption of natural resources to be decoupled from economic growth. The problem is that there has been a “relative decoupling” of these parameters to date (GDP is growing faster than the consumption of natural resources), but no “absolute decoupling” – but this absolute reduction of the use of resources is indispensable for sustainable development. Today, one can see that while GDP is growing and has decoupled itself from the consumption of natural resources, an absolute reduction of this consumption has still not been achieved.

**Chart 2: Relative decoupling of economic growth from the use of resources in Austria 1980 to 2006**

Diagram 2 shows that the intensity of resources, i.e. the resources required for one unit of value added, has diminished significantly in Austria between 1980 and 2006. In other words, resource productivity increased because comparatively more GDP was generated with the use of resources. In light of economic growth, this positive development has however not resulted in an absolute decline in the consumption of natural resources. While progress in productivity has led to a lower resource intensity, this improvement has been offset by economic expansion.

The fact that progress in resource intensity is being absorbed by GDP growth is a key problem in the search for sustainable development paths. Given the existing imbalances between industrial nations and developing countries, it would be particularly true to say that the aforementioned “catching-up requirement” of developing countries makes an absolute decoupling of economic growth from the consumption of natural resources in the industrial nations indispensable. Economic growth therefore makes it more difficult to reduce the ecological footprint. This tension between sustainability objectives and growth objectives has so far not been resolved.

This is why the number of those calling for growth objectives to be fundamentally reconsidered is growing. A major conference entitled “Growth in Transition” will be taking place in Vienna at the end of January 2010 and will focus on this very issue; participants will include several Austrian government ministries. The view that sustainability and economic growth are compatible is of course still held by most. In this debate, a different form of decoupling, which has for some years been attracting the growing attention of scientists, needs to be taken into account: the decoupling of the quality of life from economic growth. In the wealthy countries, empirical evidence clearly shows that once a certain standard of living has been achieved, GDP growth no longer helps to improve the subjective quality of life. In simple terms, when consumption of material goods has reached a certain level, issues such as political participation and the quality of the environment become more important than an increase in the goods and services offered. The interaction of economic growth, environmental pollution and quality of life have a long time ago prompted the US economist Herman E. Daly to assert that the wealthy countries are experiencing “uneconomic growth”: a growth whose costs outweigh the benefits, and which for that reason alone is senseless according to strict economic logic.

**Conclusion: welcome to the 21st century**

Sustainable development reminds us that the economic crisis is not the only problem of social relevance – and that in the longer term it may not even be the main problem. Human-induced climate change, the persistent increase in the consumption of natural resources and massive poverty worldwide are the main challenges for sustainable development. Whether the situation of non-sustainability today can develop into sustainability largely depends on economic factors. At the macroeconomic level decisive factors in this regard are the compatibility of traditional economic objectives such as economic growth with environmental objectives. And at the business level the main question is how business success can be reconciled with social responsibility.