Concrete example --

Measuring the Sustainable Value.

With the Sustainable Value scientists have developed a key figure for assessing a company's sustainable performance.

Can you measure how sustainably a company operates? Can you assess quantitatively and express in monetary terms the use of social and ecological factors? If sustainability is to be integrated into company processes, you need answers to these questions: for you can only manage what you can measure. That is why the BMW Group is involved in the research project of Dr. Frank Figge, Economist at the Sustainability Research Institute of the School of Earth & Environment, Leeds University, and Dr. Tobias Hahn, Environmental Scientist at the Institute for Future Studies and Technology Assessment (IZT), Berlin. With the Sustainable Value the two scientists have developed an approach, which measures the sustainable use of ecological, social and economic resources. In doing so, they take their bearings from well-known methods of company assessment. Together with the BMW Group they have calculated the Sustainable Value for the Company and adapted the method for corporate use.

From an economic point of view, companies are assessed on the basis of their business figures, such as are found in the financial statements. These figures, for example the operating profit or return on equity, can be used to draw comparisons with other companies in the same or in another industry. Not so with sustainability. Here comparisons have always been more difficult because the ecological, social and economic dimensions cannot be linked and uniformly presented with the established instruments. Clearly defined, monetary figures on the sustainable use of resources are not available. However, the Sustainable Value provides information on the value – in monetary terms – a company generates by using ecological, social and economic resources. Since the Sustainable Value considers the resources' contribution to value, it departs from the burden-oriented models, which have prevailed so far and only assess the harmfulness of the resources used. "In order to calculate the Sustainable Value generated in the course of a year," Tobias Hahn explains, "we consider the use of economic, ecological and social resources in relation to the operating profit – at both company and industry level."

An example: The two scientists consider the input of water within a year in relation to the operating profit. Thus, in 2003 the BMW Group generated a profit of around euro 923 per cubic metre of water used. However, in order to determine whether or not this is a positive contribution to value, this figure has to be compared with the industry average. This is calculated as a balanced average from the data published by 16 automobile manufacturers: BMW Group, Daihatsu, DaimlerChrysler, Ford, Fiat Auto, General Motors, Honda, Hyundai, Isuzu, Mitsubishi, Nissan, PSA, Renault, Suzuki, Toyota and Volkswagen Group. In 2003, the industry-average operating profit per cubic metre of water used amounted to euro 96. The difference of euro 827 shows the additional value created by the input of one cubic metre of water at the BMW Group. If you multiply this additional value by the BMW Group's water input, you get the contribution to value achieved by the more efficient use of resources. These monetary comparative values are determined for all indicators and calculated for all the resources used within a year. "Sustainable Value is created", Frank Figge summarises, "when a company uses economic, ecological and social resources more efficiently than the industry average."

Calculation of the Sustainable Value using the example of the BMW Group's water input in 2003

	BMW Group	Automobile industry
Profit earned per cubic meter of water used (euro/m^3 water)	923	96
Value spread (euro/m^3 water)	827	
	x	
Water input (m^3)	3,633,135	
	=	
Value created (euro million)	3,006	

Sources: Annual Report BMW AG 2003 and reports of other automobile manufacturers 2003, own calculations

The following figures are used to calculate the Sustainable Value:
- emissions of carbon dioxide (CO_2), nitrogen oxides (NO_x) and sulphur oxides (SO_x), as well as volatile organic compounds (VOC), the total volume of waste and water consumption,
- the number of accidents at work and the number of employees,
- the capital input.

These indicators are chosen because of their importance for sustainable development, and because relevant data are both quantifiable and available.

The Sustainable Value shows which resources in the company are used most or least effectively to create value. So far the Sustainable Value does not consider influences outside the company, such as the extent to which suppliers produce in a sustainable and efficient way, or product-related aspects. However, the range of factors for consideration could be increased if reliable data are available. The Sustainable Value does not cover social projects as the value of social commitment can be neither quantified nor expressed in monetary terms. The primary objective of the Sustainable Value approach is thus not to express a company's sustainability in a single figure. The importance and attractiveness of the approach in practice lies in the new scientific method which builds a bridge between value orientation and sustainability. The main advantage for companies is that the Sustainable Value presents sustainability success like economic success. This also helps, for example, SRI (Socially Responsible Investment) investors in their analysis. In the medium to long term, the Sustainable Value could become the basic element of a sustainability audit.
www.sustainablevalue.com

01 -- The main building of Leeds University. This is where scientific ideas are developed for corporate practice.
02 -- Historic reading room of Leeds University Library

01

02