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Corporate Sustainability: Developing the business case

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Introduction

A lot of research has been done regarding the questions of "What should corporations do for Sustainable Development?" and "How could corporations change theoretically towards Sustainable Development?". But there is less work regarding the question of "How could corporations incorporate sustainability principles in their business practically"; which methodologies, instruments and frameworks can practitioners use for this task? It is necessary to identify the specific context of sustainability issues for a company in order to ensure their successful integration into corporate strategies, planning and action. But it is essential not only to say what corporations should not do (responsibilities like not to pollute the environment or improve eco efficiency or social efficiency), but also to explore the opportunities provided by a sustainable transition. This paper presents a practicable framework for this task. Starting with a general discussion about Sustainable Development and the role of corporations a framework for the development of sustainability business case will be derived.

Sustainable Development and Business Management

Sustainable Development emerged as political concept during the eighties, most popular due to the definition given by the Brundtland Report:[1]

"Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within two key concepts: the concepts of "needs", in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs. Thus the goals of economic and social development must be defined in terms of sustainability in all countries developed or developing."

This definition of Sustainable Development is an ethical standard, which has to be translated into a manageable standard. The concept of Sustainable Development consists of ecological, social and economic sustainability. Ecological sustainability

[1] World Commission on Environment and Development (1987)

deals with the mechanism and conditions that natural life sustaining systems can be maintained and their destruction can be prevented. Social sustainability means to meet human needs within the limits set by the conditions for ecological sustainability. Economic sustainability describes the important role of economy in order to meet ecological and social sustainability.[2]

The objective of Sustainable Development is sustainability, which can be characterized by four principles:[3]

- Eliminate contribution to systematic increase in concentrations of substances from the earth's crust. This means substituting certain minerals that are scare in nature with others that are more abundant, using all mined minerals efficiently, and systematically reducing dependence on fossil fuels.
- Eliminate contribution to systematic increases in concentrations of substances produced by society. This means to systematically substitute certain persistent and unnatural compounds for ones that are normally abundant or break down more easily in nature, and to make efficient use of all substances produced by society.
- Eliminate contribution to the systematic physical degradation of nature through over-harvesting, introductions and other forms of modification. This means drawing resources only from well-managed eco-systems, systematically pursuing the most productive and efficient use of resources and land, and exercising caution in all kinds of modification of nature.
- Contribute as much as we can to the meeting of human needs in our society and worldwide, over and above all measures taken in meeting the first three objectives. This means using all of our resources efficiently, fairly and responsibly so that the needs of all people we have an impact on, and the future needs of people who are not yet born, stand the best chance of being met.

These four principles list the objective of the Brundtland–Definition of Sustainable Development in detail. To meet these principles two general mechanisms - dematerialization and substitution - can be used. Dematerialization deals either with resource productivity or reduction of waste. Substitution differs from system condition to system condition. For condition 1 and 2 substitution means using more abundant materials from the earth's crust or compounds that are occurring naturally. For system condition 3 the substitution of certain activities, which are identified as nature destructing, is the task. And condition 4 includes health aspects through ecological pollution, availability and distribution of resources.[4]

It is clear that business can contribute to these fundamental goals. In order to translate them into manageable goals, it is necessary to review the ongoing discussion of scientists and practitioners.

In business management research, Sustainable Development is seen as an extension of environmental management.[5] One core aspect of environmental management deals with the efficient use of energy and materials (eco-efficiency). The concept of Sustainable Development complements environmental management with social aspects of needs, and environmental aspects of conservation of natural functions. In economics, three interpretations of Sustainable Development can be found:[6] an innovation-based, a normative and a rational interpretation.

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[2] Baumgartner (2003)
[3] Robert et al (2002)
[4] Robert et al (2002)
[5] Müller-Christ et al (2003), p. 266; for the next paragraph see also Baumgartner (2004)
[6] Müller-Christ et al (2003), p 266

An *innovation-based interpretation* of Sustainable Development can be seen as a derivation of the eco-efficiency concept. Sustainable Development is interpreted as a concept for cost reduction through increased efficiency using materials and energy. Sustainable Development and innovation have a causal relationship: "Sustainable Development requires an open and transparent innovation process within society, politics and economy supported by instruments of a free market economy. This will lead to competitiveness and innovation, new jobs and prosperity, efficient use of resources and ecological compatibility".[7] Economy and ecology are combined as win-win-concept, ecological innovations are carried out in case of simultaneous economic advantages.[8]

A *normative interpretation* of Sustainable Development has aspects of justness and equity in focus. According to the Brundtland definition the needs of present and future generations have to be satisfied. But on a global scale, the industrialized countries are currently using most of the resources and are producing most emissions. Sustainable Development is seen as a concept solving the mismatch of massive energy and resource consumption in industrialized countries in order to allow developing countries an economic development within ecological carrying capacity. For business management, this approach leads to the concept of stakeholders. Requirements of stakeholders like society, non-governmental organizations, worker unions, customers or others have to be recognized and fulfilled according to the business strategy. Additionally, organization can manage the relationship to stakeholders in an active way.[9]

A *rational interpretation* of Sustainable Development has the focus on the sustainable use of resources; this interpretation corresponds to the concept of strong sustainability.[10] Organizational activities must secure the availability of all types of resources – therefore sustainability can be defined as extended economic principle and is an extension of the resource-based view of strategic management.[11] In particular, Hart pointed out this interpretation and suggested several propositions underlining the extended resource based view he named "natural resource based view of the firm".[12]

For strategic management, the following points are extracted from these interpretations: Firstly, innovation is recognized as an essential element for corporate sustainability. Secondly, stakeholder requirements and demands have to be detected and actively managed. And thirdly, the rational approach focuses on the effectiveness of business activities.[13]

The individual business case for Sustainable Development depends on the specific situation of a company, but according to the four general principles of sustainability and the interpretations of Sustainable Development, the following general statements describe aspects and possible measures:[14]

- Companies have to manage flows of material and energy. The objective has to be an absolute and relative reduction of these components.
- Companies have to develop and construct their products and services in a way, which allows an eco-efficient process of usage and disposal. Products

[7] Müller-Christ et al (2003), p 267 and www.ecosense.de
[8] Blättel-Mink (2001), p. 122
[9] Müller-Christ et al (2003), p. 269 and their cited literature
[10] Neumayer (2003)
[11] Müller-Christ et al (2003)
[12] Hart (1995)
[13] Baumgartner (2004)
[14] Baumgartner (2002)

have to be energy and material extensive, and easily be reused or recycled within the economy.
- Companies have to redefine their business – the focus has to be on the solution for the customer, not the product or its technical characteristics. In addition the solutions provided by the company have to be sustainable.
- Companies have to respect social principles within the company, the society and the world.
- Companies have to be competitive and secure/increase their corporative value.

The role of business regarding Sustainable Development has usually been discussed as "responsibility" to society, whereby responsibility is defined as need to eliminate negative effects of business.[15] This is a defensive approach. It is also important to ask, how can business contribute to the goals of Sustainable Development actively, to link responsibility with opportunity. In this case, Sustainable Development will be a source of value creation – for the company and society. It is clear, that responsibility has to be the basis for opportunity. But approaches focusing on responsibility alone are only successful over a certain period of time: for instance eco-efficiency as aspect of environmental sustainability gains usually big saves in the starting phase; in the following years it becomes harder and harder to find further improvements.[16]
Concluding this discussion, business sustainability can be defined as the adoption of business strategies and activities that meet the needs of the enterprise and its stakeholders today while protecting, sustaining and enhancing the human and natural resources that will be needed in the future.[17] The needs of the enterprise contain especially these opportunities.

Framework for identifying the corporate sustainability business case

There are several frameworks and processes for strategic planning, business cases and business models.[18] The aim of this section is not to develop and discuss theoretically an additional methodology, but to combine useful and essential elements in order to gain a practicable framework. It is clear that there will be different approaches to this task, but this framework covers all relevant aspects. Developing business cases, in the sense of how to do business, requires analyzing internal and external organizational aspects, developing scenarios and anticipating possible developments, strategy formulation and strategy implementation.
Figure 1 shows the framework, which consists of three phases. The starting point is the analyzing phase, here all relevant aspects for corporate sustainability have to be identified. On this basis within the strategy development phase the corporate sustainability strategy can be developed and goals and measures be defined. It can be necessary to close a feedback loop to the analyzing phase if missing data or aspects while defining the corporate sustainability strategy occur. This phase is followed by the implementation phase. Here the plans have to be put in practice, the progress has to be controlled and continuous improvement has to be enabled. Again it might be necessary to close feedback loops to the other phases. In the following sections these phases are described in detail.

[15] Carpenter et al (2004) p. 2-52
[16] Carpenter et al (2004), p. 2-54
[17] Labuschagne et al (2005), p. 373
[18] Dyllick et al (2002), Salzmann et al (2005), Timberlake et al (2002), Carpenter et al (2004)

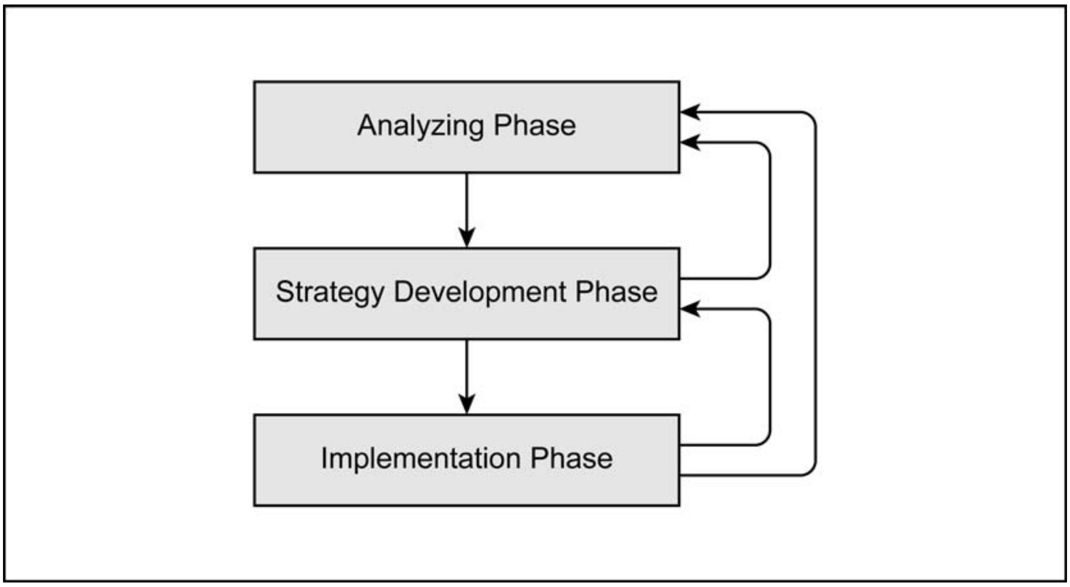

Figure 1: Defining the business case for corporate sustainability: framework with phases

Before starting a project to develop the corporate sustainability business case, it has to be clarified if there is commitment of top-management level.

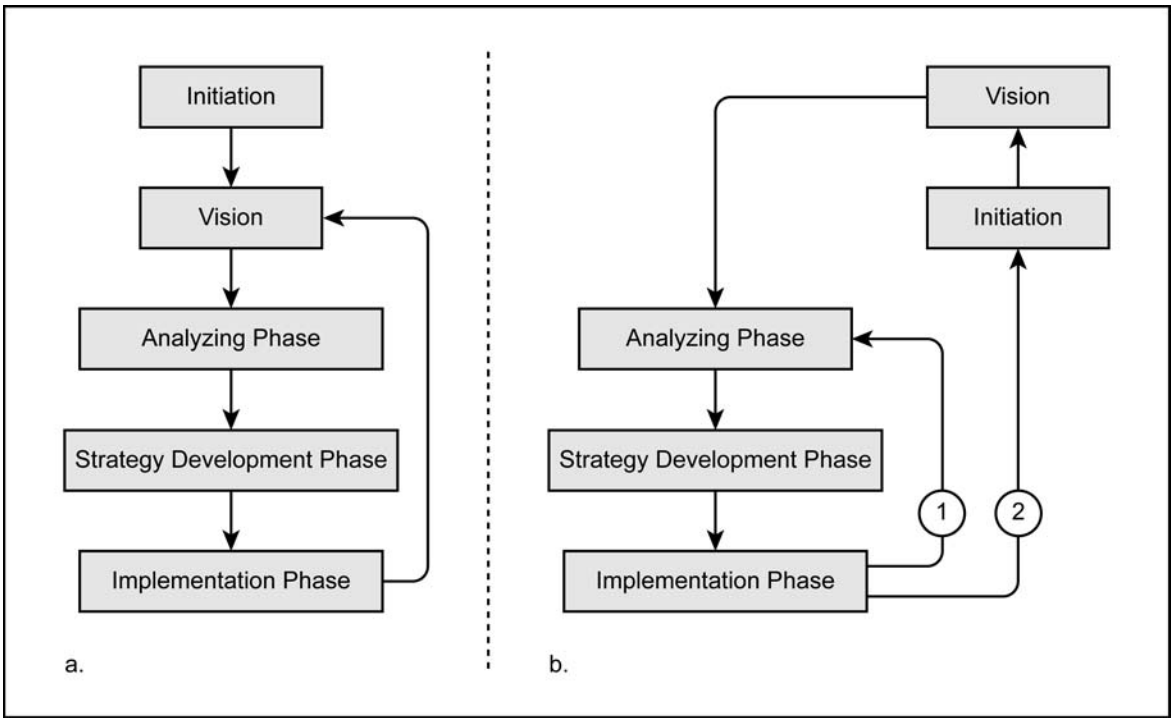

Figure 2: Project design depending on commitment of top-management[19]

In case there is commitment the project can be designed as usual, starting with the initiation and the development of a vision. Vision can be described firstly as an imagined projected future where valued principles are preserved and secondly as a mental model of the way in which the organization will organize for its survival and

[19] adapted from Stone (2006b), p. 28

success.[20] Experience suggests that it will not be possible to gain entry at a top management level for all organizations. The facilitator needs to use his/her knowledge of the organization to make a strategic decision on where best to gain entry. On the identified level, an iterative cycle of the process in a pilot section (see route 1 in Figure 2) could be used strategically to notch up support to the point where defining the vision could become possible (see route 2 in Figure 2). An obvious issue in this task is the competence of the facilitator. In order to facilitate the implementation of the framework, practitioners need to be educated on the importance of organizational factors and they need to develop the skills necessary to facilitate change and learning.[21]

Analyzing phase

The analyzing phase is the starting point for the development of the business case for corporate sustainability. Similar to proven methodologies for developing business strategies, the starting point is to analyze all relevant external and internal aspects. The aim is to understand the current position of the company in the light of Sustainable Development: Does the company contribute to the basic goals of Sustainable Development? Are the needs of stakeholders and the company being met?
Figure 3 shows relevant aspects for the corporate sustainability business case which have to be taken in account.

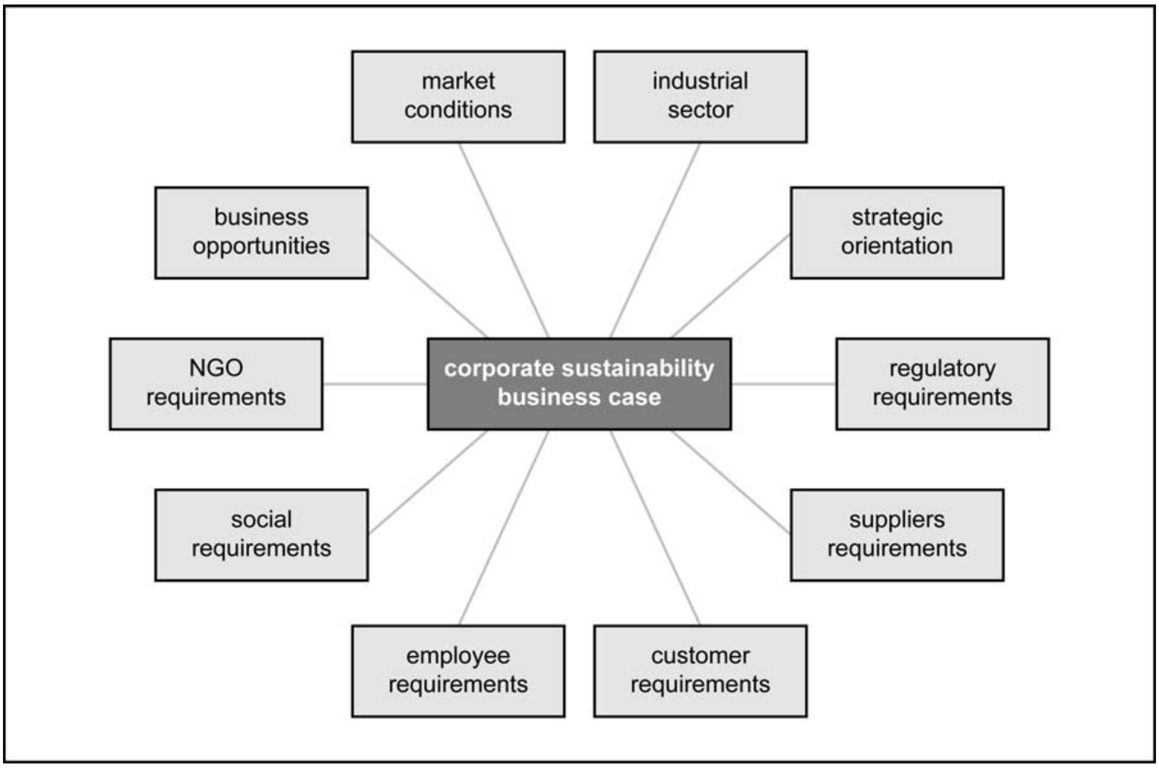

Figure 3: Relevant aspects for corporate sustainability business case

External aspects to analyze are sector and market conditions, external stakeholder requirements and legal requirements. Internal aspects are strategic position, internal stakeholder requirements, organizational culture or managerial capacity.

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[21] Stone (2006b), p. 28 and their cited literature

Tools to support this process are the shareholder/stakeholder value maps or the SWOT analysis. The classic SWOT analysis expresses the fact that a sound strategy should match firm's strength (S) and weaknesses (W) to the opportunities (O) and threats (T) encountered in the firm's environment.[22] In the analyzing phase, the internal strengths and weaknesses as well as the external opportunities and threats have to be explored. In the strategy development phase, the SWOT analysis is finished together with the general strategic positioning of the company. Apart from the classical aspects like market conditions the stakeholder expectations and legal requirements hereby play an important role.
As a central tool Laszlo suggests the shareholder/stakeholder value map (see Figure 4). Only companies operating in the upper right quadrant, which are delivering value to their shareholders without transferring it from other stakeholders, have a truly sustainable business. Companies can place their businesses (by product, process, business unit or geographic area (A,B,C,D,E in Figure 4)) on this map if they have an understanding of shareholder performance and stakeholder performance.[23]

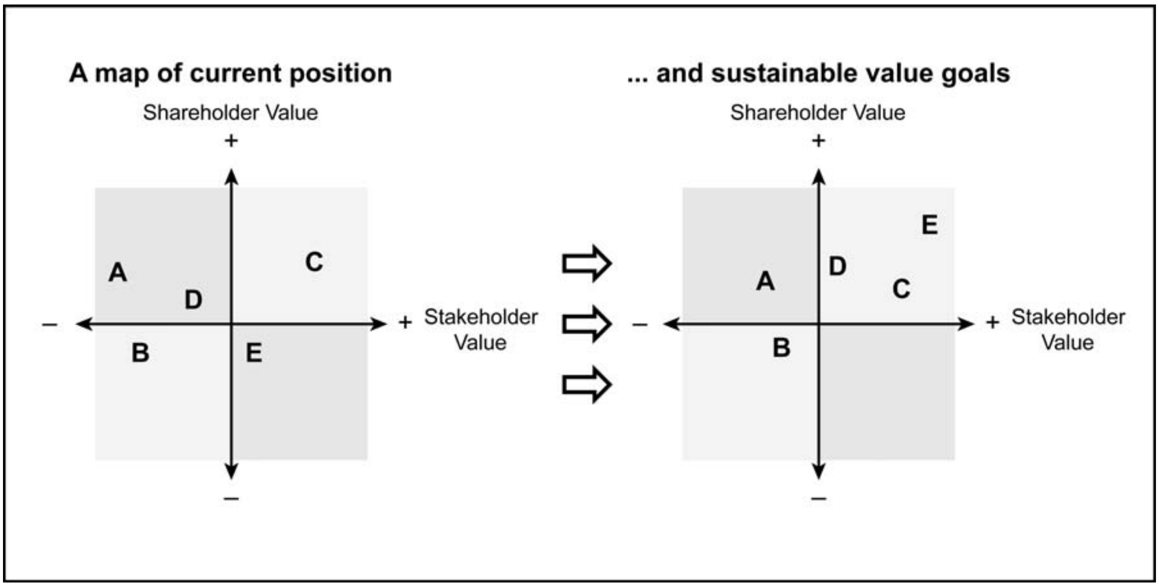

Figure 4: Shareholder/stakeholder value map: Setting Sustainable Value Goals[24]

This tool is particularly useful in tracking changes over a certain period of time and in comparing business options in the strategy development phase.
To assess stakeholder impacts, data from internal management systems, compliance-based regulatory measures and direct stakeholder input can be used. Additionally, the direct dialogue with stakeholders in a variety of forms like advisory panels is an important source of data.[25] The challenge for companies is to develop a balanced process for determining what is important for their stakeholders. There is no one-size-fits-all approach and stakeholder value is therefore best assessed using a tailored set of measures that fit the company's unique business situation and circumstances. The following aspects have to be regarded in assessing stakeholder impacts: [26]

[22] De Wit et al (1998), p. 245
[23] Laszlo (2003), pp. 125
[24] Laszlo (2003), p. 143
[25] Laszlo (2003), p. 129
[26] Laszlo (2003), pp. 131

- Severity and types of impacts: Environmental (water, air, natural resources, climate change,…) and social ones (wages, communities, employee safety, …), customers, suppliers and business partners
- Location of impacts
- Implications of impacts: Business (fines, business risks, reputation), ethical standards
- Causes of impacts: policies, practices, processes, products
- Business opportunities and risks: wasted products, wasted inputs, unnecessary indirect costs
- Social challenges and opportunities within the operating environment and business scope

When defining the axis for the stakeholder value it is important to consider the impacts of corporate activities relative to absolute standards and relative to peers. Absolute standards would be the basic goals for Sustainable Development (see section "Sustainable Development and Business Management"). It is possible that stakeholder impacts are insufficient in an absolute sense but superior to peers; in this case they can create shareholder and relative stakeholder value.[27]

Planning and strategy development phase

Based on the analyzing phase, the corporate sustainability strategy has to be developed. This phase consists of specific steps such as scenarios, strategy formulation, goal setting and quantifying the business case.

Scenarios
The business environment is characterized by discontinuous, novel changes. This makes strategic planning and forecasting more difficult and it is therefore essential to deal with this uncertainty. This means managing uncertainty and complexity in a proper manner and the ability to be flexible.[28] Besides the organizational capability for flexibility it is necessary to anticipate future developments and expectations. The result of the analyzing phase is like a baseline: all relevant internal and external aspects are evaluated and more or less well known. The central question for this stage is: "What might change?"[29] For this task, scenarios can be used.
The ability to anticipate and to create organization's future by thinking generatively is essential for sustainable strategic management. Scenario building is a forecasting technique that creates a climate that fosters more generative, out-of-the-box learning within the strategic management team. Multiple scenario analysis is a forecasting tool that allows strategic managers the flexibility to develop several paths to the future. A scenario is a flowing narrative that depicts the general direction of change, where each scenario describes a possible path to the future – scenarios are mental models of the future.[30] The types of strategies that are developed from the scenario-building process will depend on the degree of risk taken by strategic managers and the amount of resources that the organization can commit to the process. A robust strategy performs well over a variety of future outcomes irrespective of actual outcomes – but this single strategy is risk adverse in nature and conservative.

[27] Laszlo (2003), p. 132
[28] for flexibility management see Baumgartner (2005a)
[29] Laszlo (2003) p. 134
[30] Stead et al (2004) p. 74

Flexible strategies can give the opportunity to keep options open until the future situation becomes clearer. A multiple-coverage strategy contains specific strategies developed for each possible scenario.[31]

Strategy formulation

As presented above, Sustainable Development can be defined with four principles. Two general actions are possible to serve these principles: dematerialization and substitution. Substitution and dematerialization by themselves are not business strategies; they have to be combined with the general aims of the company in order to build an integrated sustainable business strategy.

Following general types of sustainability strategies can be distinguished:[32]

- Introverted
- Extroverted / Transformative
- Conservative
- Visionary

An *Introverted strategy* is characterized by one central question: Is action for Sustainable Development necessary and useful for the company? Focus of all activities is on legal compliance. Action in the light of Sustainable Development will only be taken if new market or legal standards force an organizational answer. An example of this type of strategy is the substitution of certain materials forced by legislation.

An *Extroverted strategy* focuses on the external relationship of a company. The focus lies on public acceptance and the so-called “license to operate and grow”. Stakeholders are informed about all relevant activities in order to generate a trustful relationship. Those companies create ambitious environmental programs, but effort and progress in the light of Sustainable Development is still minimal. In many cases there seems to be more “green” communication than real activeness. Examples of this strategy are the publication of environmental or sustainability reports.

In an offensive way this strategy can be *transformative*. A transformative strategy interacts with the market and tries to change market conditions actively. This strategy aims to create new market opportunities in the light of Sustainable Development, including elements of the conservative and visionary strategy.[33]

A *Conservative strategy* focuses on eco-efficiency. Products and services are provided with low costs and low consumption of materials and energy. Emissions and waste are avoided. Efficient production processes lead to competitive advantages while environmental impacts are reduced. Frequently cleaner production activities are aligned with a conservative strategy. Opportunities due to Sustainable Development are detected systematically. This strategy has a strong internal orientation.

A *Visionary strategy* focuses on sustainability issues within all business activities. The number of companies dealing with this strategy is small at the moment; they incorporate Sustainable Development in vision and strategy. Competitive advantages are derived from differentiation and innovation, offering stakeholders unique advantages. For example new “product to service solutions” can be mentioned here.

Management board has to choose the relevant strategy type and to develop the corporate sustainability strategy. This depends on the results of the analyzing phase

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31 Stead et al (2004) p. 76

32 Hardtke et al (2001), pp. 93, Schaltegger et al (2002), Dyllick (2000),

33 Baumgartner (2005b), p. 62

and the scenarios about future developments. It is essential to explore both, the responsibilities and the opportunities due to Sustainable Development.
Additionally, strategies can be characterized due to their level of strategic focus:[34]

- Risk mitigation - compliance-oriented management of risks:
  This corresponds to an introverted strategy.
- Processes - reducing energy, waste or other process costs and improving service quality:
  This corresponds to a conservative strategy.
- Products - product differentiation to meet customer needs for social and environmental attributes:
  This level can be important both for extroverted and visionary strategies.
- Market – penetrating new markets and developing new businesses based on sustainability:
  This level is important for visionary strategies.
- Brand and Culture – growing revenues, market share and stock price with a sustainability culture and brand identity:
  This level is important for transformative and visionary strategies.
- Business context – working to change regulatory environment, industry practices or other rules of game:
  This is the central point for transformative strategies.

Many companies have made great strides in risk mitigation and cost reduction, but relatively few have focused on top-line growth based on product or brand differentiation (level 3 and 5). Even fewer have used stakeholder value creation as a way to drive new markets and business context change (level 4 and 6).[35]
On the basis of the chosen corporate sustainability strategy and the level of strategic focus the goals and measures have to be set.

Goal setting
Making sustainability issues measurable and setting goals for all organizational levels is the task for this phase of strategic planning. It is essential, to translate the general strategy into measurable goals for every part of the corporation. Instruments supporting this process are the MbO-methodology (management by objectives) or balanced scorecards.[36] Goals are formulated like a pyramid – strategic goals on the top-level of the corporation are the starting point for more operational goals on detailed organizational levels.

Quantifying the business case
On the basis of the developed strategy and the formulated goals, they have to be quantified where possible. This means to

- project the costs and benefits, considering the timing and complexity implementation
- assign a monetary value of each initiative (if possible) including the impact of stakeholder value on shareholder value
- obtain input and buy-in from the line managers who will ultimately be accountable for delivering the results.[37]

[34] Laszlo (2003), pp. 139
[35] Laszlo (2003), p. 139
[36] Humble (1972), Kaplan et al (1992), Kaplan et al (1993)
[37] Laszlo (2003), p. 150

Laszlo suggests the combination of two tools for the financial framework to quantify the business case for corporate sustainability. The first tool are the six levels of strategic focus, the second tool are the six drivers of shareholder value (see Figure 5).[38]

The drivers show the key elements of shareholder value. The top four value drivers are the classic drivers of economic value added.[39] The other two drivers are strategic value and market confidence.

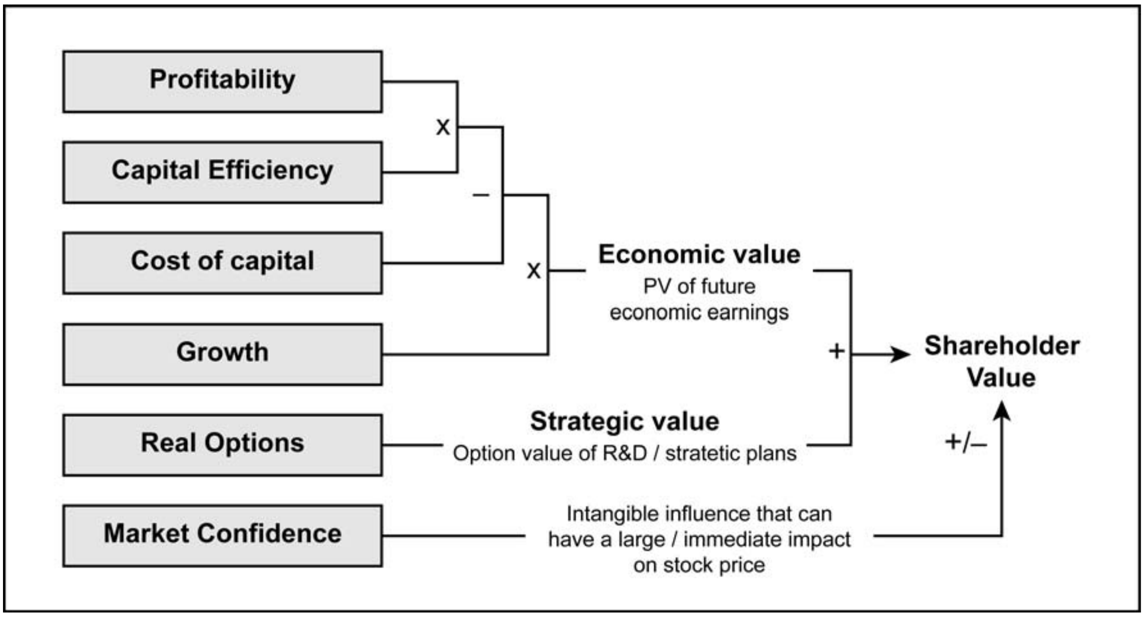

Figure 5: Quantifying the business case through shareholder value[40]

Assessing the *strategic value* means to quantify all activities that shall lead to strategic advantages. Examples are R&D programs, strategic plans or product portfolios. Real options can be used as instrument especially because it makes future uncertainties manageable. In particular, real options enable companies to incorporate low-probability, high-impact scenarios into their value assessment. *Market confidence* is an intangible influence that can have large and immediate impact on share price or corporate value. Market confidence is to a significant degree a factor that reflects management integrity.[41]

The six drivers of shareholder value can be combined with the six levels of strategic focus to create a sustainable value matrix. Figure 6 shows an example created by Laszlo for a heavy-industry company.

[38] Laszlo (2003), p. 151
[39] Stewart (1991), Stewart (1994)
[40] Laszlo (2003), p. 151
[41] Laszlo (2003), p. 152; Figge (2001)

CO2 reduction example: Value Drivers

Level of Strategic Focus	Strategic Options	Capital Efficiency	Cost of Capital	Growth	Real Options	Market Confidence
Business Context	Influence regulators to cost-effectively meet Kyoto targets					
Brand / Culture			Attraction of socially responsible investors			
Market				Sale of CO2 credits		
Product					Research into new less-energy intensive products	
Process	Savings in fuel costs and in productions costs	Fewer assets required for same level of production				CO2 leadership is indicator of management quality
Risk	Avoid the costs and negative publicity of shareholder initiatives	Better capital investment decisions that include future carbon taxes and market values			Flexibility to move quickly if regulations are more severe than expected	

Figure 6: Identification of all sources of value through value matrix[42]

Implementation phase

Within the implementation phase, the strategy has to be put into praxis. Implementing the sustainability strategy requires goals, resources and commitment in all organizational levels. Essential elements are accompanying controlling and continuous improvement. Coordination off all sustainability activities and communication with all internal and external stakeholders is also a prerequisite for a successful implementation.
For the controlling process periodical audits and management reviews are essential. It is necessary to regularly assess the actual progress in achieving targets defined in the strategy development phase.[43]
Continuous improvement means to make the business case itself enduring in the organization. Therefore essential elements are the development of organizational culture towards Sustainable Development, improvement of management skills and organizational learning.
Each group or human society has different mechanisms to coordinate the individual actions of their members. Beyond this, other social mechanisms play an important role for social systems which are based on shared ways of thinking, feeling or doing. Common assumptions, shared values and norms, same understanding of symbols, same ways of interpretation and rules of communication operate as social adhesives in human organizations.[44] All these phenomena are subsumed in the concept of organizational culture, which seems to be one of the most complex fields in the science of economics.

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[42] Laszlo (2003), p. 153
[43] Laszlo (2003), p. 157
[44] Weik et al (2001), p. 203

Schein proposes a model which appears to be the most popular in literature. In this concept, culture is structured into three levels representing different levels of cultural evidences. These levels range from the very tangible manifestation to the deeply embedded, unconscious basic assumptions:[45]

- Artifacts: visible organizational structures and processes (hard to decipher)
- Espoused values: Strategies, goals, philosophies (espoused justifications)
- Assumptions: unconscious, taken-for-granted beliefs, perceptions, thoughts and feelings (ultimate source of values and action)

Organizational culture is a sample of shared basic assumptions and manifests itself at the level of observable artifacts and shared espoused values, norms and rules of behavior. To understand a specific organizational culture, shared basic assumptions have to be identified and a learning process on how such basic assumptions can be developed has to be identified.[46]

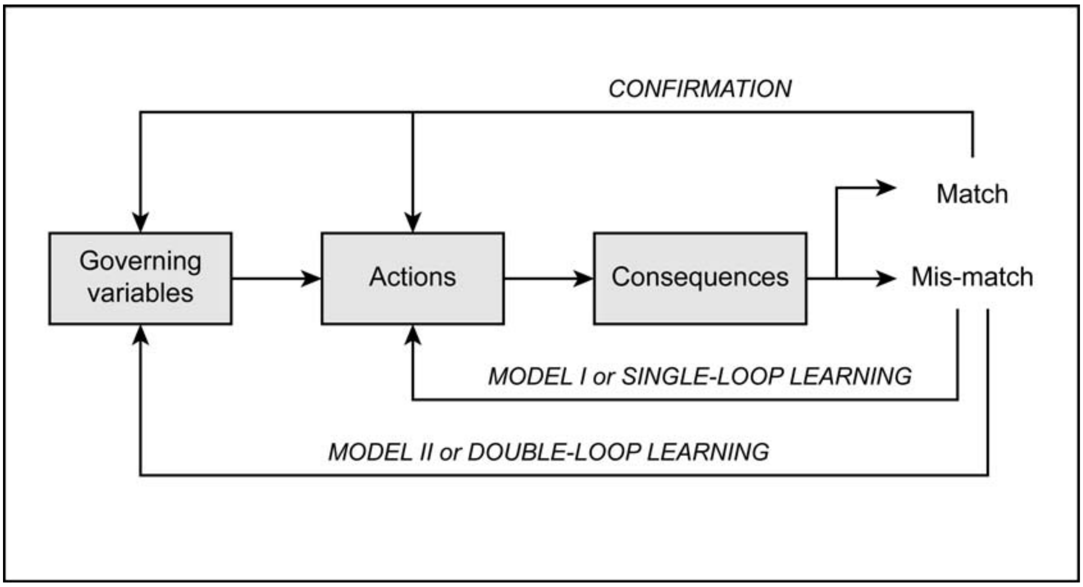

Figure 7: Organizational learning: single-loop and double-loop learning[47]

For really sustainable organizations which want to implement ambitious sustainability strategies it is necessary to develop all three levels of organizational culture towards Sustainable Development. This means that the basic ideas and goals of Sustainable Development must become part of espoused values and basic assumptions.[48]
Along with the development of organizational culture the management skills regarding sustainability issues have to be improved. This means initiating learning processes within the organization regarding Sustainable Development and the role of the company. According to Argyris and Schön, who worked on the learning behavior of individuals and organizations, there are two sources of learning: the creation of a “match” between intention and effect and the detection and correction of a “mis-match” (see Figure 7). A match between intention and effects serves to confirm governing variables, which is synonymous with Schein’s basic assumptions. A mis-match has two possible outcomes: learning that serves to change behavior or

[45] Schein (1997), p. 16
[46] Schein (1997), p. 26
[47] Stone (2006a), p. 9 and Argyris (1999)
[48] Baumgartner et al (2004)

learning that serves to change the theories that underlie behavior.[49] Essential is the developed model of single-loop and double-loop learning. Single-loop learning is described as learning that leads to a change in theories-of-action without changing theories-of-use, while double-loop learning leads to changes to the latter (see Figure 7).Theories-of-use govern actions, they include assumptions and the relationship between action, consequence and situation.[50] This is compatible to Schein's model and means that these theories-of-use are the intrinsic basis of actions. It is clear that a deep grounding of the idea of Sustainable Development within the organization requires double-loop learning.

Conclusion and Outlook

This framework has been developed on the basis of several projects with Austrian companies regarding sustainability issues.[51] In an ongoing cooperation with a producer of heating systems we are using this framework as basis for the project management. Currently we find ourselves in the analyzing phase. Commitment of top management board is given; at the moment it is crucial to anticipate the expectations of distribution companies and customers. The overall goal is to maximize the value for customers and the company in a sustainable way. Regarding responsibilities this means a maximized eco- and social-efficiency, but also exploring opportunities both for customers and company through sustainable heating systems. They are defined as efficient and effective systems with outstanding performance parameters compared to systems of relevant competitors. The focus is both, on a sustainable production and on a sustainable product.

Corporate sustainability can be a source of competitiveness if the chances and possibilities for corporate Sustainable Development can be identified in a proper manner. This paper shows a practicable framework for this task, which consists of three phases. The general methodology presented can be used for every organizational transition towards Sustainable Development as it combines proven management instruments with the basic goals and strategies for Sustainable Development. Nevertheless, corporate sustainability will always be specific for each organization.

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[49] Stone (2006a), p. 9 and their cited literature
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