

Corporate Sustainability Strategies: Sustainability Profiles and Maturity Levels

Rupert J. Baumgartner^{1*} and Daniela Ebner²

¹*Åbo Akademi University, Åbo/Turku, Finland; University of Leoben, Austria*

²*ALPLA Werke GmbH, Hard, Austria*

ABSTRACT

Although many companies investigate sustainability management and publish sustainability reports, their main focus in this endeavour remains unclear. Often, it seems that sustainability issues are pursued more coincidentally than with a clear strategy.

On one hand, research is done for the identification and determination of distinct aspects concerning economic, ecological and social dimensions of sustainability. Guidelines to develop a sustainability report are popular examples of this. On the other hand, scientific effort is recognizable regarding the establishment of specific sustainability strategies, e.g. strategies that focus on internal/external orientation of sustainability commitment. Strategies should be designed to work to improve performance in terms of the issues identified, but in many cases the link between aspects and sustainability strategies is missing in practice.

This paper aims to narrow this gap by developing specific aspect profiles for sustainability strategies. Relating to the characteristics of various sustainability strategies, key sustainability issues are determined, which have to be implemented in order to reach defined sustainability goals efficiently.

The paper helps companies that already commit to sustainability to verify whether they are consistent in the implementation of a distinct sustainability strategy. Copyright © 2010 John Wiley & Sons, Ltd and ERP Environment.

Received 18 June 2009; revised 24 November 2009; accepted 8 December 2009

Keywords: corporate sustainability; strategy; CSR; ecological dimension; economic dimension; social dimension; sustainability strategy; strategic sustainable development

Introduction

BESIDES MANY EFFORTS AND ACTIVITIES BY NGOS, AUTHORITIES AND GOVERNMENTS, CORPORATIONS ALSO SEEM TO show an increasing commitment to a more sustainable behaviour. However, in many cases this is still done simply on the basis of a changed rhetoric, of green-washing (Laufer, 2003; Ramus, 2005). One reason for green-washing could be that corporations do not really know how they can integrate

*Correspondence to: Dr. Rupert J. Baumgartner, Åbo Akademi University, Biskopsgatan 8, 20500 Åbo/Turku, Finland.
E-mail: rbaumgar@abo.fi

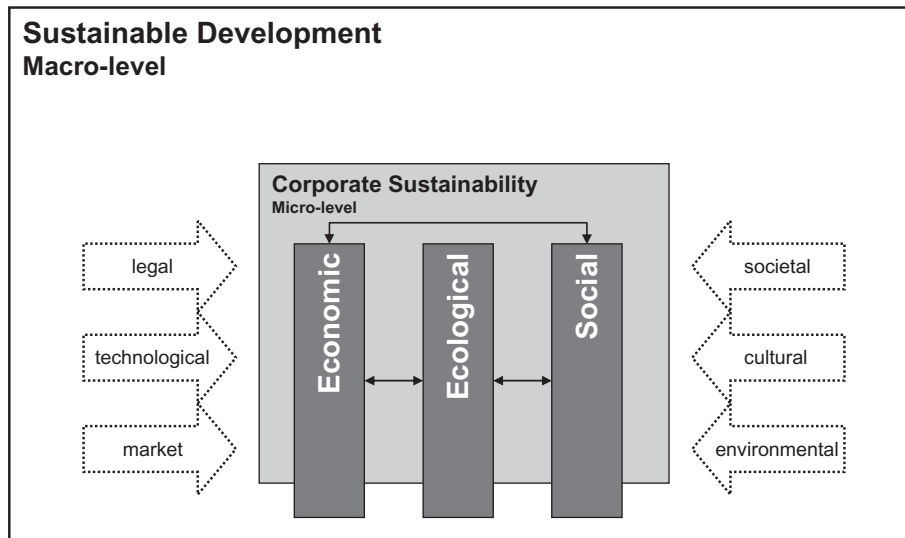


Figure 1. Corporate sustainability and its interdependences (based on the work of Ebner and Baumgartner (2006), p. 13)

sustainability issues into their business routines and their strategies. It seems that sustainability issues are pursued more coincidentally than with a clear strategy. With this paper we try to combine two aspects in order to clarify the relation between business activities and the integration of sustainability aspects. These aspects are on one hand the identification and determination of distinct issues concerning economic, ecological and social dimensions of sustainability. On the other hand, scientific effort is recognizable regarding the establishment of specific sustainability strategies, e.g. strategies that focus on internal/external orientation of sustainability commitment.

Corporate Sustainability

Sustainable development became popular with the definition of the Brundtland Report (World Commission on Environment and Development, 1987). It represents an ethical concept concerning fighting poverty while protecting the environment on a macro-level. Sustainable Development is the process to reach the goal of sustainability, which can be characterized by four sustainability conditions (Robèrt *et al.*, 2002, p. 199).

Sustainable development is defined on the macro-level of societies. Figure 1 illustrates the link between sustainable development and corporate sustainability. Sustainable development when incorporated by the organization is called corporate sustainability and it contains, like sustainable development, all three pillars: economic, ecological and social. These three dimensions interact (Ebner and Baumgartner, 2006, p. 13).

For a comprehensive corporate sustainability strategy, it is necessary to consider all dimensions, their impacts and their interrelations. External influences also affect the corporate orientation on sustainability. Moreover, corporate sustainability also has positive effects on society in the long term; this is indicated by the grey columns, which reach into the white area of the macro-level in Figure 1.

Corporate Sustainability Strategies

In this section corporate sustainability strategies are discussed (see also Baumgartner, 2009). There are different types of sustainability strategy (Dyllick, 2000; Hardtke and Prehn, 2001; Schaltegger *et al.*, 2002; Baumgartner, 2005, p. 61).

- Introverted – risk mitigation strategy: focus on legal and other external standards concerning environmental and social aspects in order to avoid risks for the company
- Extroverted – legitimating strategy: focus on external relationships, license to operate
- Conservative – efficiency strategy: focus on eco-efficiency and cleaner production
- Visionary – holistic sustainability strategy: focus on sustainability issues within all business activities; competitive advantages are derived from differentiation and innovation, offering customers and stakeholders' unique advantages.

These strategy types describe generic possibilities to deal with the challenge of sustainability, e.g. with different environmental and social aspects of business activities according to the sustainability principles of Robèrt *et al.* (2002).

In an offensive way an extroverted 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 (Baumgartner, 2005, p. 62).

Visionary strategies occur in two different forms: in a conventional way and in a systemic way (Baumgartner and Biedermann, 2007). Conventional visionary strategies are based on market opportunities in an opportunistic manner. As long as sustainability issues lead to market advantages, they are part of the strategic management of conventional visionary oriented companies, so the focus is outside-in: inputs for the strategy formulation are derived from the market perspective. Systemic visionary strategies combine this view with an inside-out perspective, the market based view is supplemented with a resource based view and sustainable development is deep seated in the normative level of the company.

Sustainability Aspects

In order to develop sustainability strategies representing distinct sustainability profiles it is necessary to be aware of the range of sustainability issues that have to be regarded and also designed in such a strategy. Therefore, in a first step, such issues are determined. In sustainability literature, various terms are used to describe issues of CSR (Ebner, 2008, p. 105). Konrad *et al.* (2006) use the term issue itself, whereas for Perrini *et al.* (2007) factors of CSR apply. Two terms are principally used in sustainability discussion: aspect (see, for instance, GRI, 2006; Welford, 2005; von Geibler *et al.*, 2006) or criterion (see, e.g., DJSI, 2007; FTSE, 2006; Labuschagne and Brent, 2006). The terminology in this paper is based on international standards; hence, the term (sustainability) aspect is used in keeping with the GRI guidelines.

For corporate sustainability, various approaches that determine sustainability aspects already exist. In order to define a consistent sustainability framework, the sustainability aspects are based on popular concepts and papers of sustainability (GRI, 2006; DJSI, 2007; FTSE, 2006; Labuschagne and Brent, 2006). In the following, most relevant sustainability aspects are briefly discussed, but are divided into three subgroups according to the three dimensions of sustainable development.

Economic Dimension of Corporate Sustainability

The economic dimension of corporate sustainability is often discussed as the 'generic dimension' (Baedeker *et al.*, 2002; DJSI, 2007). Economic sustainability embraces general aspects of an organization that have to be respected – next to environmental and social aspects – in order to remain in the market for long time.

The use of such generic aspects seems meaningful, as good results in these aspects are likely to lead to good financial and sustainability results of the company. Thus the management should regard such aspects in order to obtain economic success rather than concentrating on aspects that show only financial results. Hence, the aspects of the economic dimension of corporate sustainability are 'innovation and technology', 'collaboration', 'knowledge management', 'processes', 'purchase' and 'sustainability reporting'. In Table 1 every aspect is explained in detail.

Innovation and technology	Effort in sustainability related R&D in order to reduce environmental impacts in new products and in business activities. Use of BAT (best available techniques) and integrated environmental technologies, concentration on cleaner production and zero-emission technologies.
Collaboration	Good cooperation and active collaboration with various business partners (e.g. suppliers, R&D institutions, universities,...). Working in common programmes and networks on innovative products and technologies. Exchange of information and knowledge.
Knowledge management	Activities and approaches to keep sustainability related knowledge in the organization. Methods to plan, develop, organize, maintain, transfer, apply and measure specific knowledge and to improve the organizational knowledge base.
Processes	Clear processes and roles are defined so that business activities are efficiently conducted and that every employee knows what the organization expects from him or her (also concerning sustainability). Adaptation of process management on sustainability necessities to implement corporate sustainability systematically. Integration of sustainability into daily business life.
Purchase	Consideration of sustainability issues in purchase. Awareness and consideration of sustainability related issues in the organization as well as alongside the supply chain. Relationship with suppliers focusing also on sustainability.
Sustainability reporting	Consideration and reporting of sustainability issues within company reports, either in a separate sustainability report or integrated into the corporate one.

Table 1. Economic aspects of corporate sustainability

Ecological Dimension of Corporate Sustainability

This dimension deals with environmental impacts due to corporate activities. There exist several publications about the most relevant ecological aspects (GRI, 2006; Labuschagne *et al.*, 2005; DJSI, 2007; FTSE, 2006). These environmental impacts are caused by resource use, and emissions into air, into water or into ground, as well as waste and hazardous waste. Additionally, the impact on biodiversity and environmental issues of the product over the life cycle are of importance (see Table 2). This dimension is mainly measured by impacts, but within corporate sustainability strategies the focus has to be laid on the effects causing these impacts, e.g., the higher the maturity levels are the more it has to be concentrated on causes rather than on effects (see Table 6).

Resources (materials, energy) including recycling	Use of renewable and non-renewable resources and energy through the company including recycled resources
Emissions into the air	Emissions into the air due to corporate activities
Emissions into the water	Emissions into the water due to corporate activities
Emissions into the ground	Emissions into the ground due to corporate activities
Waste and hazardous waste	Waste and hazardous waste due to corporate activities
Biodiversity	Impact on biodiversity due to corporate activities
Environmental issues of the product	Environmental aspects of the product over the whole life cycle

Table 2. Ecological aspects of corporate sustainability

Social Dimension of Corporate Sustainability

It depends on the definition of social sustainability which aspects are considered to be elements of this dimension and which are not. Social sustainability of an organization ‘...is the consciousness of responsibility for its own actions as well as an authentic and credible commitment (mostly long term) in all business activities and more,

aiming to stay successfully in the market for a long time. Social sustainability is aimed to positively influence all present and future relationships with stakeholders. Furthermore, the fulfilment of their needs is focused on for assuring stakeholders' loyalty for the company' (Ebner, 2008, p. 28). In the following, important aspects for social sustainability are briefly discussed (see details in Ebner, 2008). The aspects are based on and similar to those of DJSI (2007), FTSE (2006), Labuschagne and Brent (2006), Welford (2005), Kok *et al.* (2001) and GRI (2006) and are grouped into internal (see Table 3) and external (see Table 4) aspects.

Corporate governance	Transparency in all its activities in order to ameliorate relationship towards its stakeholders. Giving insight into all relevant data; following rules of (stock)markets on corporate governance and defining responsibilities and behaviour of the board.
Motivation and incentives	Active involvement and exemplary function of management on sustainability topics for employees. Awareness of needs, claims and motivation factors of employees in order to implement sustainability sufficiently into the organization due to support of management for acting in sustainable way (e.g. time, money, resources). Development of incentives and reward systems (monetary, non-monetary).
Health and safety	Guarantee that no health and safety risks occur when working in/for the organization. No negative impact of employees' physical health at any time. Operation of programmes for employees to prevent dangers and to stay generally fit and healthy (e.g. in developing countries).
Human capital development	Development of human capital for sustainability related issues through specific programmes such as permanent education, mentoring or training. Broad cross-working education (job enrichment, job enlargement) in order to become aware of the different challenges and issues of corporate sustainability.

Table 3. Internal social aspects of corporate sustainability

Ethical behaviour and human rights	Ethical behaviour towards sustainability consisting of well established, basic assumptions and principles relating the cooperation within an organization and the behaviour towards (external) stakeholders. Regarding sustainability, important elements are a culture of respect, fair rules and behaviour within an organization (and between its subsidiaries) and fair wealth/profit allocation, as well as serious consideration of stakeholders' ideals and needs. No harm of employees, either concerning their religious belief, gender, nationality or colour or concerning people who are handicapped or aged.
No controversial activities	No holding of shares on organizations that are mostly defined as not sustainable (e.g. uranium mining). No use or sale of own assets and goods for non-sustainable activities.
No corruption and cartel	Behaving fairly on the market and avoiding manipulating business practices. This includes no rule-breaking, no price-fixing or joining a cartel and no corruption for gaining advantage.
Corporate citizenship	Being a good corporate citizen on a national level; conservation of subsidiaries in the country and establishment of economic power of a country as well as an increase in society's lifestyle. Support of stakeholders (and others) and their issues on regional level; participation or creation of sustainability related activities for the local community. Orientation on future generations without exploiting the present (or nature).

Table 4. External social aspects of corporate sustainability

Profiles of Corporate Sustainability Strategies

The sustainability strategies discussed demonstrate the variety of sustainability approaches and deliver a first orientation for how companies can focus on corporate sustainability. Nevertheless, the typology of such strategies does not provide distinct recommendations of design and action regarding corporate sustainability. The aim of this section is to develop specific strategy profiles – based on the sustainability strategies and the previously discussed sustainability aspects. The focus is on providing a scheme that supports the development, establishment and persecution of a sustainability strategy for a company. Therefore, it will first be discussed how differently (in its maturity) each sustainability aspect can occur in a firm. For such a presentation, a four-level maturity grid is used: level 1 stands for a rudimentary level, maybe beginning consideration of the sustainability aspect in the company, which means that – if existing – only mandatory rules and laws are respected. Maturity level 2 marks that an elementary integration of this aspect is focused on compliance with sustainability-related laws but going slightly further (e.g. due to environmental technology, reduction and consideration of impacts of their business activities). Level 3 represents a satisfying consideration and maturity of the specific sustainability aspect (often above the industry average). Sophisticated maturity is defined by level 4, which implicates an outstanding effort towards sustainability.

In Tables 5–8 the various sustainability aspects with the here defined, reachable maturities are demonstrated.

The variety of the aspects and their definition, as well as the determination of their maturities is from a generic perspective and not industry specific. In a next step, it will be analysed whether

- specific aspects are proportionately important for each sustainability strategy and/or whether
- sustainability strategies have to (due to their definition) focus on a specific maturity level over all sustainability aspects.

Every aspect and the suggested maturity level for the sustainability strategy will be individually screened. Finally, the profiles of all sustainability strategies will be shown in Figure 2.

Introverted Strategy (Risk Mitigation)

The comparison of introverted strategy and sustainability aspects makes it visible that this strategy focuses on a very low standard of sustainability. A company following the introverted strategy concentrates on the essentials such as conformity and compliance with sustainability-related rules and guidelines; it does not go deeper into the sustainability issue. No specific sustainability aspect can be determined to be proportionately important for this strategy, whereas the profile of the sustainability strategy is mostly based on the poor maturity level of sustainability aspects.

Extroverted Strategy (Legitimization)

Within the extroverted strategy we can differentiate between the conventional and the transformative approach. Due to their different focuses it seems meaningful to discuss them separately.

Conventional Extroverted Strategy

A company focusing on the conventional extroverted strategy aims at communicating its sustainability commitment to society in order to differentiate itself from the competitors and to increase its credibility. Therefore, it seems meaningful to engage more in sustainability that it is obliged to do by law – meaning level 2 as the appropriate level. Nevertheless, in the extroverted strategy, the responsibility for corporate sustainability is often located in the PR or communication department, which increases the risk of green-washing in the case of limited cooperation between the communication department and other corporate functions and processes. As this strategy is focused on external presentation of sustainability, these aspects are especially important (level 3 of sustainability

Aspect	Innovation& technology	Collaboration	Knowledge management	Processes	Purchase	Sustainability reporting
Beginning	Conformity with laws and regulations regarding technology (BAT).	The company is not an active partner in networks.	No systematic approach towards KM.	Sustainability issues are not respected in process definitions.	Sustainability oriented purchase is not considered.	No consideration of sustainability issues either in a distinct sustainability report or in the annual report.
Elementary	First effort in sustainability related R&D. Conformity with laws and regulations regarding technology (BAT) exists. Integrated environmental technology is partially used.	Communication and collaboration with most relevant business partners (supplier, customer).	Specific sustainability related KM activities (e.g. IT based KM activities: databases, IT infrastructure) are conducted in order to generate transfer and to save sustainability related knowledge.	Most relevant sustainability issues are respected in relevant business processes.	Social and environmental criteria (based e.g. on human rights) are defined, which are considered in direct purchase (direct suppliers).	Most relevant sustainability issues are respected in corporate communication channels (one-way communication) or in a distinct sustainability/ annual report.
Satisfying	Higher effort in sustainability related R&D than industry average. The company invests proactively in technology (BAT) and uses integrated environmental technologies and/or cleaner production.	Communication and collaboration with stakeholders (business partner, NGOs, R&D institutions,...) regarding sustainability issues.	Broad approach and activities towards sustainability related KM, integrating intangible assets (resource: human capital). Various activities are set regarding organizational learning.	Relevant sustainability issues are respected in business and support processes.	Definition of social and environmental criteria (based e.g. on human rights), which are considered in the whole supply chain.	Sustainability issues are considered in corporate communication channels (one-way communication) and in a distinct sustainability/ annual report. Additionally, goals and measures are defined and communicated.
Sophisticated/ outstanding	Significantly higher effort in sustainability related R&D than industry average. BAT is proactively used, also integrated environmental technologies, cleaner production and zero emission.	Consequent communication and collaboration with stakeholders (business partner, NGOs, R&D institutions,...) is conducted. The company has a proactive and leading role in creating these networks relating sustainability.	A systematic and comprehensive approach and activities towards sustainability related KM (from planning to improve) is implemented. Focus is laid on organizational learning.	Sustainability issues are respected in business and support processes sufficiently. Roles and responsibilities are defined.	Social and environmental criteria (based e.g. on human rights) are defined which are considered and actively verified within the whole supply chain.	Sustainability issues in corporate communication channels (two-way-communication) and in a distinct sustainability/ annual report are considered. Additionally, goals and measures are defined and communicated.

Table 5. Maturity levels of economic sustainability aspects

Aspect	Resources (materials, energy) including recycling	Emissions into the air, water or ground	Waste and hazardous waste	Biodiversity	Environmental issues of the product
Beginning	For the use of resources only economic and technical criteria are considered.	Conformity with laws and regulations regarding emissions into the air, water or ground (e.g. BAT).	Conformity with laws and regulations regarding (hazardous) waste (e.g. BAT).	Conformity with laws and regulations regarding bio-diversity.	Not considered or only in conformity with laws and regulations.
Elementary	For the use of resources economic, technical and/or environmental/social criteria are partially considered. Resource efficiency is measured for some business processes.	Conformity with laws and regulations regarding emissions into the air, water or ground (e.g. BAT). Definition of reduction goals for major emissions.	Conformity with laws and regulations regarding (hazardous) waste (e.g. BAT). Definition of reduction goals for major waste flows.	Conformity with laws and regulations regarding bio-diversity. Most relevant impacts on bio-diversity are identified and considered.	Identification of environmental impacts and their reduction for certain products.
Satisfying	For the use of resources economic, technical and/or environmental/social criteria are considered. Resource efficiency is measured for business processes; goals for resources management are defined. Sustainability principles are partly considered.	Conformity with laws and regulations regarding emissions into the air, water or ground (e.g. BAT). Reduction goals for most emissions are defined. Cleaner production technologies are used.	Conformity with laws and regulations regarding (hazardous) waste (e.g. BAT). Reduction goals for most emissions are defined. Cleaner production technologies are used.	Bio-diversity and the organizational impact on it in strategy, policy and processes are considered.	Environmental impacts and their reduction for the majority of products are identified.
Sophisticated/ outstanding	For the use of resources a combination of economic, technical, environmental and social criteria are considered. Resource efficiency is controlled for all processes. Long-term resource management strategy is aligned with the sustainability principles.	Conformity with laws and regulations regarding emissions into the air, water or ground (e.g. BAT). Ambitious reduction goals for air emissions are defined. Emissions due to zero emission activities are avoided.	Conformity with laws and regulations regarding (hazardous) waste (e.g. BAT). Ambitious reduction goals for waste flows are defined. (Hazardous) waste is avoided due to zero-emission activities.	Outstanding activities and approach in order to diminish the organizational impact on bio-diversity are implemented.	Identification of environmental impacts and their reduction for all products. Optimization of the environmental performance of the products within the supply chain (also in collaboration with business partners).

Table 6. Maturity levels of ecological sustainability aspects

Aspect	Corporate governance	Motivation and incentives	Health and safety	Human capital development
Beginning	Mandatory frameworks towards corporate governance are focused on.	Motivation of employees in order to achieve sustainability goals is not focused on or has a dysfunctional impact on sustainability.	Health and safety is respected to the extent of legal obligation; it is not actively focused on.	No specific human capital development measures are set regarding sustainability.
Elementary	Mandatory and voluntary frameworks towards corporate governance are focused on.	In several areas of the organization, incentive measures to improve motivation are set regarding sustainability.	Health and safety is respected to the extent of legal obligation. Measures towards health and safety are set, when specific dangerous situations or accidents occur. Deployment is more of reactive character rather than systematically planned.	Certain human capital development measures are set regarding sustainability.
Satisfying	Mandatory and voluntary frameworks towards corporate governance are focused on. Further measures to ensure corporate transparency are set.	In most areas of the organization, incentive measures to improve motivation are set regarding sustainability. Top management has an exemplary function regarding sustainability issues.	Health and safety is systematically planned and deployed in most areas of the company. Activities are set to avoid health and safety risks in long term.	Various education programs and measures are offered. Most employees are trained regarding sustainability issues.
Sophisticated/ outstanding	Mandatory and voluntary frameworks towards corporate governance are focused on. Further measures to ensure corporate transparency are set. Proactive commitment respective stronger rules are given.	Top management has an exemplary function regarding sustainability issues. Employees are efficiently supported by appropriate (monetary and non-monetary) motivation and incentives. Due to these, sustainability principles are internalized and change behavior.	Health and safety approach supports organizational goals towards sustainability. It is systematically planned and deployed throughout the company. Activities are set to avoid health and safety risks in long-term and are consequently improved.	Various education programs and measures are offered. Every employee is trained regarding sustainability issues.

Table 7. Maturity levels of internal social sustainability aspects

maturity), which supports the increase of credibility in society such as corporate citizenship, no corruption or cartel, health and safety and also collaboration to improve the relationship and working together with stakeholders on related sustainability issues.

Transformative Extroverted Strategy

The general orientation of transformative extroverted strategy is the same as that of conventional extroverted strategy. However, it aims at positively influencing the basic conditions of corporate sustainability. A company following this strategy is a driver for corporate sustainability in society and gains therefore much higher credibility. On the other hand, it is also necessary to assure through the implementation of sustainability a high maturity in internal sustainability aspects. The maturity level over all aspects is generally one level higher than in the conventional extroverted strategy. Again, most important are society-related aspects (those that have major impact (positive) on society and those for which society reacts sensitively to whether they are fulfilled or not).

Aspect	Ethical behavior and human rights	No controversial activities	No corruption and cartel	Corporate citizenship
Beginning	Human rights are generally respected, but no codes and guidelines exist as well as no corporate common behavior/ within the organization.	No declaration against controversial activities exists.	Conformity with laws and regulations regarding corruption and cartel exists.	Corporate citizenship is not focused on in the organization.
Elementary	Human rights are respected. Principal rules how to behave within the organization are defined.	Firm declares itself to be aware of to whom it sells its goods.	Compliance with laws and regulation; most important impacts regarding corrupt practices are identified.	Certain corporate citizenship projects are initiated or supported (mostly in monetary terms). The link between CC projects and the corporate business is rarely given.
Satisfying	Definition of corporate codes and guidelines regarding (internal) behavior throughout the whole organization exist.	Organization is aware to whom it sells its goods and sets measures to reduce controversial activities.	Impacts regarding corrupt practices are fully identified and measures set to avoid them.	Corporate citizenship is systematically planned and conducted (monetary and non-monetary commitment). The link between CC projects and the corporate business is mostly given.
Sophisticated/ outstanding	Corporate codes and guidelines regarding (internal) behavior throughout the whole organization are defined. Controlling and proactive improvement of these codes.	Organization is known as non-controversial acting firm. It shows credibility in that it offers and follows possibilities to avoid negative use of its products, based on stakeholder requirements.	Impacts regarding corrupt practices are fully identified. Distinct rules exist to demonstrate all kinds and (internal) consequences of corrupt practices and measures set to avoid them at all.	Corporate citizenship is systematically planned and conducted (monetary and non-monetary commitment) and focused on long-term-commitment. Most employees are integrated into the process. The link between CC projects and the corporate business is mostly given.

Table 8. Maturity levels of external social sustainability aspects

Conservative Strategy (Efficiency)

Conservative strategy is oriented mostly towards internal measures, focusing on cost efficiency and very well defined processes. Therefore, the sustainability aspect 'processes' is the most important within this strategy and should represent an outstanding maturity. Within this strategy, commitment is especially crucial in the investment in appropriate technology, sophisticated health and safety for employees and above all ecological sustainability. Also, the measures have to be derived in order to analyse and to increase the processes and to assess, based on appropriate measures, corporate sustainability. Other sustainability aspects are not much focused on in conservative strategy; in particular, society-related issues are less important.

Visionary Strategy (Holistic)

Visionary strategies can be divided into conventional and systemic strategies. Visionary strategies show a highly developed sustainability commitment in order to become a market leader in sustainability issues. The two strategies are similar; they differ from each other in the question of motivation and orientation. The conventional visionary strategy is very much oriented towards its impact on the market, whereas the systemic visionary strategy combines outside-in and inside-out perspectives in order to achieve a unique competitive position, but based on an internalization and continuous improvement of sustainability issues inside the company.

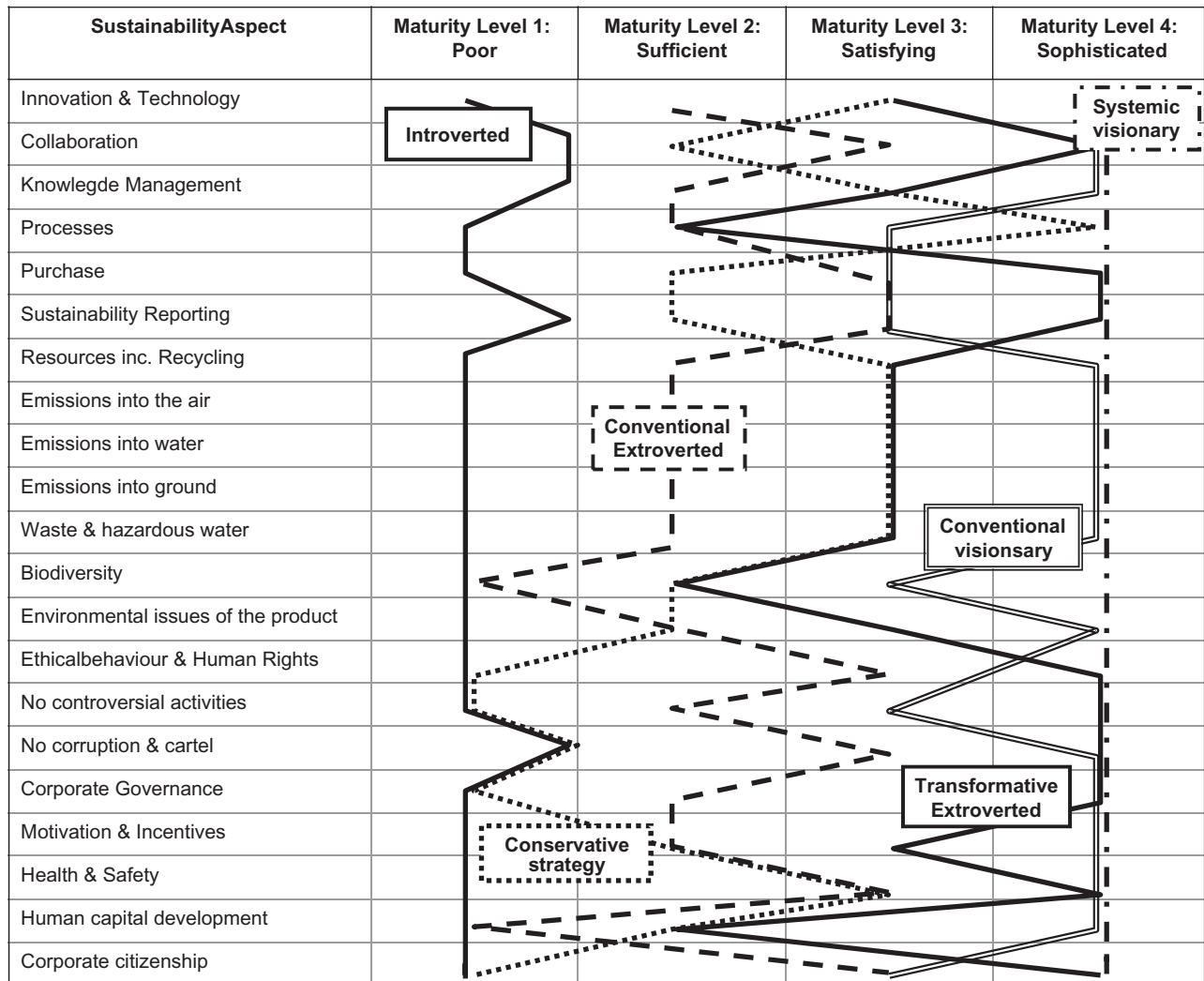


Figure 2. Profiles of sustainability strategies

Conventional Visionary Strategy

As already mentioned, the level of sustainability maturity of visionary strategies is very high, mostly on a high sophisticated level. Only for some aspects does a lower level (3) seem to be sufficient, too, as in processes and purchase, in no controversial activities or in corporate citizenship, as these have not enough direct impact to affect the situation in the market as sustainability leader.

Systemic Visionary Strategy

In contrast to the conventional strategy, for companies following the systemic visionary strategy it is important to show in all sustainability aspects very good results, as the company has to show stakeholders and market its sustainability commitment, and moreover to be active in changing positively basic conditions towards sustainability (effort).

In conclusion, Figure 2 shows all sustainability strategies and their occurrence in maturity. It becomes obvious that each maturity level stands more or less for a specific sustainability strategy. Nevertheless, depending on the

sustainability strategy, specific aspects can also be identified that are crucial for the implementation of the strategy. It is important to mention that the profiles show the minimum standard to follow a specific strategy. It is nevertheless possible to increase the sustainability commitment to higher levels where it is appropriate in the specific situation of a company.

It may occur that, depending on the industry, on the size of the company or on other basic conditions, some sustainability aspects are more important than others so that the sustainability profile changes towards these aspects, or that further sustainability issues are relevant, which have to be focused on (e.g. pharmaceuticals: ethics in production, the harm to animals). For these, maturity levels can also be defined and finally assigned to the distinct sustainability strategy to complete its profile.

Fit Between Sustainability Strategies and Corporate Competitive Strategies

An important point in the discussion of corporate sustainability strategies is the fit between sustainability strategy and corporate competitive strategy. Porter developed the model of generic competitive strategies (Porter, 1980, 1985). This model explains that there are two generic possibilities for a company to be successful in the market: either the company can deliver unique products and services (product differentiation) or the company can deliver products and services with the lowest price (cost leadership). Trying to do both equally is in Porter's view risky and will lead to significantly lower performance than other strategies. According to this model every company has to decide how it will try to be successful. The model is based on an outside-in view, as the strategy is formulated based on an investigation of market opportunities, e.g. low price or special features of the product/service, and is therefore also known as a market based view. The concept of hybrid strategies goes beyond Porter's model of generic strategies. In contrast to Porter's model, a company can use differentiation and cost leadership simultaneously (Ostendorf, 2000, p. 28; Thornhill and White, 2007).

To analyse the relation between sustainability and competitive strategies two criteria are used: the costs caused by the sustainability strategy and the addressee or the receiver of the benefits due to the corporate sustainability strategy.

Concerning the cost effects a sustainability strategy can lead to decreased, increased or constant cost. Sustainability activities can be beneficial either for society in general (for instance fewer emissions) or the customer (for instance less energy demand of the product). We use these criteria to analyse the relation between corporate sustainability and competitive strategies (see Table 9) on the basis of four levels: force, pressure, option and forbidden.

'Force' means that the sustainability strategy is supportive and essential for the corporate competitive strategy (for instance, decreased costs due to the sustainability strategy are also essential for the cost leadership strategy). 'Pressure' indicates that the sustainability strategy is very helpful for the competitive strategy and 'option' indicates that the sustainability strategy is one possibility for the company, whereas 'forbidden' shows that there are conflicting goals between the sustainability and competitive strategy (for instance increased costs due to the sustainability strategy for cost leadership strategies).

Introverted strategies are independent of benefit and cost effects, as these strategies are executed due to external pressure on the company. For all other types of sustainability strategy, the relationship to the corporate competitive strategy is as presented in Table 9. This table can be used as instrument in the process of strategy planning and strategy deployment, as it reveals the comparability between sustainability and competitive strategies.

Conclusion

In this paper we discuss the relation between corporate sustainability strategies, corporate competitive strategies and sustainability aspects. In doing so, we think we can support a company in becoming a sustainable corporation. Profiles and maturity levels for corporate sustainability strategies are developed. They are based on maturity levels and divided into introverted, conservative, extroverted and visionary sustainability strategies. The relationship of

Costs*	Sustainability strategy				Benefits for
	Introverted	Extroverted	Conservative	Visionary	
lower	I	III	V	VII	society
	force for CL	force for CL	force for CL	force for CL	
	force for DI	pressure for DI	pressure for DI	pressure for DI	
	force for HS	force for HS	force for HS	force for HS	
	II	IV	VI	VIII	customer
	force for CL	force for CL	force for CL	force for CL	
	force for DI	pressure for DI	pressure for DI	pressure for DI	
	force for HS	force for HS	force for HS	force for HS	
equal	IX	XI	XIII	XV	society
	force for CL	option for CL	pressure for CL	pressure for CL	
	force for DI	pressure for DI	option for DI	pressure for DI	
	force for HS	pressure for HS	option for HS	pressure for HS	
	X	XII	XIV	XVI	customer
	force for CL	pressure for CL	force for CL	force for CL	
	force for DI	force for DI	pressure for DI	force for DI	
	force for HS	force for HS	pressure for HS	force for HS	
higher	XVII	IXX	XXI	XXIII	society
	force for CL	forbidden for CL	forbidden for CL	forbidden for CL	
	force for DI	option for DI	forbidden for DI	option for DI	
	force for HS	option for HS	forbidden for HS	option for HS	
	XVIII	XX	XXII	XXIV	customer
	force for CL	forbidden for CL	forbidden for CL	forbidden for CL	
	force for DI	option for DI	forbidden for DI	option for DI	
	force for HS	option for HS	forbidden for HS	option for HS	

Table 9. Fit between competitive strategy and corporate sustainability strategy

*Cost effects due to the implementation of the sustainability strategy.

CL = cost leadership strategy, DI = product differentiation strategy, HS = hybrid strategy.

these strategies to competitive strategies of cost leadership, of product differentiation or of hybrid strategies is analysed. The maturity levels of corporate sustainability strategies and their relation to competitive strategies are both helpful in the process of strategy planning and strategy deployment in the case of developing a sustainable corporation. Taking them simultaneously into account, it can be assured that a sustainability strategy fits in an appropriate way to the general strategic orientation of the firm.

References

- Baedeker C, Haeuer P, Klemisch H, Rohn H. 2002. *Handbuch zur Anwendung von SAFE – Sustainability Assessment for Enterprises*. Wuppertal Institut für Klima, Umwelt, Energie GmbH: Wuppertal. http://www.wupperinst.org/uploads/tx_wibeitrag/ws25.pdf [7 January 2008].
- Baumgartner RJ. 2005. Sustainable business management: Grundlagen, Strategien und Instrumente einer nachhaltigen Unternehmensführung. In *Wertsteigerung durch Nachhaltigkeit*, Baumgartner RJ *et al.* (eds). Rainer Hampp: Munich; 51–72.
- Baumgartner RJ. 2009. Organizational culture and leadership: preconditions for the development of a sustainable corporation. *Sustainable Development* 17: 102–113.
- Baumgartner RJ, Biedermann H. 2007. Organisationskultur und Nachhaltigkeitsmanagement: Erlaubt die Organisationskultur ambitionierte Nachhaltigkeitsstrategien? In *Unternehmenspraxis und Nachhaltigkeit*, Baumgartner RJ *et al.* (eds). Rainer Hampp: Munich; 37–52.
- Dow Jones Sustainability Indexes (DJSI). 2007. *Dow Jones Sustainability World Indexes Guide*. http://www.sustainability-index.com/djsi_pdf/publications/Guidebooks/DJSI_World_Guidebook_90.pdf [7 January 2008].
- Dyllick T. 2000. Strategischer Einsatz von Umweltmanagementsystemen. *Umweltwirtschaftsforum* 8(3): 64–68.

- Ebner D. 2008. *Assessing Corporate Social Responsibility in Industrial Firms: the CSR-Assessment*. Montanuniversität Leoben.
- Ebner D, Baumgartner RJ. 2006. *The Relationship Between Sustainable Development and Corporate Social Responsibility*. www.crrconference.org [17 September 2007].
- FTSE. 2006. *FTSE 4 Good Index Series – Inclusion Criteria*. http://www.ftse.com/Indices/FTSE4Good_Index_Series/Downloads/FTSE4Good_Inclusion_Criteria_Brochure_Feb_06.pdf [7 January 2008].
- GRI. 2006. *Sustainability Reporting Guidelines – G3*. GRI: Amsterdam. http://www.globalreporting.org/NR/rdonlyres/ED9E9B36-AB54-4DE1-BFF2-5F735235CA44/o/G3_GuidelinesENU.pdf [7 January 2008].
- Hardtke A, Prehn M. 2001. *Perspektiven der Nachhaltigkeit* 1. Gabler: Wiesbaden.
- Kok P, van der Wiele T, McKenna R, Brown A. 2001. A corporate social responsibility audit within a quality management framework. *Journal of Business Ethics* 31(4): 285–297.
- Konrad A, Steuerer R, Langer ME, Martinuzzi A. 2006. Empirical findings on business–society relations in Europe. *Journal of Business Ethics* 63(1): 89–105.
- Labuschagne C, Brent AC. 2006. Social indicators for sustainable project and technology life cycle management in the process industry. *International Journal of Life-Cycle Assessment* 11(1): 3–15.
- Labuschagne C, Brent AC, van Erck R. 2005. Assessing the sustainability performance of industries. *Journal of Cleaner Production* 13(4): 373–385.
- Laufer WS. 2003. Social accountability and corporate greenwashing. *Journal of Business Ethics* 43(3): 253–261.
- Ostendorf RJ. 2000. *Dynamische Ökologieführerschaft: eine Wettbewerbsstrategie gewinnorientierter Unternehmen – theoretische Darstellung und praktische Überprüfung am Beispiel der Automobilindustrie*. Wissenschaft und Praxis: Sternenfels.
- Perrini F, Russo A, Tencati A. 2007. CSR strategies of SMEs and large firms. Evidence from Italy. *Journal of Business Ethics* 74(3): 285–300.
- Porter ME. 1980. *Competitive Strategy*. Free Press: New York.
- Porter ME. 1985. *Competitive Advantage: Creating and Sustaining Superior Performance*. Free Press: New York.
- Ramus CA. 2005. When are corporate environmental policies a form of greenwashing? *Business and Society* 44(4): 377–414.
- Robert K-H, Schmidt-Bleck B, Aloisi de Laderel J, Basile G, Jansen JL, Kuehr R, Price Thomas P, Suzuki M, Hawken P, Wackernagel M. 2002. Strategic sustainable development – selection, design and synergies of applied tools. *Journal of Cleaner Production* 10(3): 197–214.
- Schaltegger S, Dyllick T. 2002. *Nachhaltig managen mit der Balanced Scorecard*. Gabler: Wiesbaden.
- Thornhill S, White RE. 2007. Strategic purity: a multi-industry evaluation of pure vs. hybrid business strategies. *Strategic Management Journal* 28(5): 553–561.
- von Geibler J, Liedtke C, Wallbaum H, Schaller S. 2006. Accounting for the social dimension of sustainability: experiences from the biotechnology industry. *Business Strategy and the Environment* 15(5): 334–346.
- Welford R. 2005. Corporate social responsibility in Europe, North America and Asia. 2004 survey results. *The Journal of Corporate Citizenship* 17: 33–52.
- World Commission on Environment and Development. 1987. *Our Common Future*. Oxford University Press: Oxford.