



SUSTAINABILITY ACCOUNTING: A SUCCESS FACTOR IN CORPORATE SUSTAINABILITY STRATEGY

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Abstract. Over the past decade the requirements of sustainability were involved into the strategy of many companies. Besides the economic goals they also determine the exemplary social as well as environmental considerations. However, as several empirical researches show that their environmental and social performance only slowly improves. Therefore the application of the appropriate management methods and tools are needed to measure of the economic, social and environmental impacts of the strategic decisions and activities within the organization.

The aim of this paper is to study the interaction between the sustainability strategy and sustainability accounting as its key success factor. First, it starts from the conceptual definition of the sustainability and process of the sustainability strategic management. Then, the article introduces the new approaches for the appraisal of the strategic performance beginning with the conventional accounting, through the environmental accounting, to the sustainability accounting. Finally, relating to this a case study demonstrates the role and contribution of the sustainability accounting to the successful implementation of the sustainability strategy in a Hungarian company.

Key words: *corporate sustainability, sustainability strategic management, sustainability accounting*

JEL code: M21, M41, Q56

Sustainability has become a kind of ‘mantra’ in the 21st century. It includes the promise of development towards a more equitable society and a richer world in which the natural environment and cultural artefacts are preserved for future generations. *Sustainable development* is a challenge that today’s companies also have to address as it significantly affects their strategy. While the idea of sustainability is vividly present in the life of many companies, they still cannot state about themselves that their operation is based on the principles of sustainability due to the lack of sustainability-related *strategies* and the knowledge needed to implement sustainability management *processes* and *methods*.

1. The process of sustainability strategic management

The dimensions and principles of sustainability open an opportunity for a conscious creation of sustainability strategic management processes together with the formulation and implementation of a *sustainability strategy*. According to Bieker’s and his co-authors’ wider interpretation, it gives a special emphasis to the statement that *corporate strategies have to meet the expectations of the company’s present and future stakeholders without making any crucial compromises in terms of skills and*

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capabilities (Bieker et al, 2002). Kerekes and Kindler (1997) came up with a more accurate formulation, according to which “sustainability strategy puts an emphasis on such responsible corporate activities that regard the issue of sustainability as development and growth opportunities for the company, and as such, they are enforced in all fields of activity.” It means that a certain system of advantages and disadvantages should be developed by which corporate actions can be steered in the desired direction.

Sustainability strategic management enables companies to develop and apply strategic methods and tools by which environmental protection and people’s well-being can be ensured. This notion is expressed in Crutzen’s (2011) definition as follows: “*On the one hand, sustainability strategic management establishes a link between social, environmental and corporate management and the strategy itself, on the other hand, integrating the social and natural environmental information to the company’s management information and sustainability report*”.

1.1. Strategy-making

Three major elements have to be integrated in the process of sustainability strategic management at the same time: *strategy-making*, *strategy implementation* and *feedback*. The first phase of the *strategy-making process* mainly serves the better foundation and effective implementation of *decisions having strategic importance*. In doing so, *the internal changes of a company* have to be determined *for the sake of sustainability* while more profoundly understanding the nature of social and environmental changes. In order to meet this requirement more easily, it is advisable to divide the complex work of formulating a sustainability strategy into four distinct phases which are the following: the definition of strategic inputs, strategic analysis, creating strategic alternatives and evaluating and selecting strategic alternatives.

1.1.1. The definition of strategic inputs

The first three elements of *strategic inputs* – the company’s mission, values and vision – describe the company’s *internal conditions*. These are linked to the company’s strategic intent together with its strategic target system. The company’s ability to realize its intent and reach its strategic goals of sustainability mainly depends on the influence and the *external* changes of social and environmental expectations.

Determining these strategic inputs in advance often proves to be difficult mainly because a sustainability strategy, at least in an explicit form, is not available.

1.1.2. Strategic analysis

The analysis of the company’s *current and future situation*, *on the one hand*, means the timely recognition of both social and natural environmental requirements and taking into account the anticipated increasing pressure coming from stakeholders, which requires the continuous analysis of regulations as well as the values of the social and natural environment (*external factors*), *on the other hand*, it also assumes that the company is aware of its own internal resources and activities (*internal factors*) and it continuously evaluates their social and environmental impacts.

1.1.3. Strategic alternatives

During the strategic analysis mentioned in the previous point, the internal and external factors determining the company’s sustainability strategy can be examined along with its capabilities and opportunities. Based on the results of the analysis, it becomes possible to formulate a *deliberate strategy or strategic alternatives*, explicitly expressing the company’s basic position on the subject of sustainable



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development. The five types of competitive sustainability strategies are defined by Bieker et al (2002) as follows:

The aim of *Strategy “safe”* is to reduce, avoid or handle the company’s overall operational risk.

The aim of *Strategy “credible”* is to preserve and enhance credibility and corporate reputation.

Strategy “efficient” is designed to improve the social or environmental effectiveness of business processes.

Strategy “innovative” is aimed at increasing the range of socially and environmentally-friendly products and services.

The aim of *Strategy “transformative”* is to develop new markets and restructure already existing markets.

These five strategies are applicable both on corporate and divisional levels, furthermore they can also be successful with certain products or technologies. However, this classification seems idealistic as these strategic alternatives may overlap in practice, and no clear distinction can be made between them.

1.1.4. The evaluation and selection of strategic alternatives

In the above, we quickly followed the way in which a company acquires accurate knowledge on its macro- and microenvironment, its resources and its intentions, and we identified the possible strategic alternatives. For choosing from the range of strategic alternatives, it is not sufficient to define the possible directions of strategic development or strategic options, a system of criteria helping the managers responsible for making strategic decisions has also to be designed.

1.2. The implementation of the strategy

The second main phase of the process of sustainability strategic management is the implementation of the strategy which typically involves such tasks as action planning, defining the necessary resources, organization restructuring, management and leadership. Due to the limited space, we set aside the detailed description of these activities and we do not mention the *context* that mainly influences the introduction of strategies, either (small-sized companies, multinational and manufacturing companies, public utility companies as well as voluntary organizations).

1.3. The sustainability performance assessment, strategic feedback

For an organization, an essential part of the implementation of the strategy is to “keep its eye on the target”. It means the *monitoring, evaluation and feedback* on the sustainability performance.

Monitoring and evaluation are intended to adjust the organization’s sustainability strategy to the ever-changing conditions and to the changing social and environmental demands. The *strategic feedback* is an information on the changes in certain subareas or in the whole organization of the company as well as on the changes of the social and natural environment, and it has the potential to start adapting or redefining the sustainability strategy. This feedback closes the circle of sustainability strategic management and provides the *initial impetus* for starting the redefinition of the necessary strategy. This feedback is the basis for the *motivation* related to the strategy, thus enabling the organization to *continuously improve its performance*. All of this can only be conceivable if the appropriate information is available for the management on the course of the implementation of the strategy, the achieved sustainability performance and the occurring problems. In the modern organization of a company, a *sustainability accounting system* gives the basis for receiving information on monitoring, evaluating and giving feedback, its development history is briefly described below.



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2. A new approach to strategic performance evaluation – sustainability accounting

In the course of sustainability strategic performance evaluation, companies need to build up and operate an accounting information system that meets the requirements of sustainable development. The development stages of accounting towards this direction are described below.

2.1. Changes in traditional accounting

Traditional accounting systems are information systems supporting the daily operation of economic organizations, with the purpose of observing, collecting, recording, measuring, classifying the economic events that have an influence of the company's assets, financial and earnings position, together with their impact. Therefore, the aim of accounting for stakeholders (owners, managers, creditors, inspection bodies, etc.) is to provide accurate information for making future decisions.

In the light of corporate sustainability, however, the generally accepted accounting principles, the range of those demanding accounting information and the content of accounting information all have to be reinterpreted.

2.1.1. A new approach to the going concern principle

One of the most fundamental principles in accounting is the going concern principle, which states that *“in the course of book-keeping and preparing the accounts, it must be assumed that the enterprise will maintain its operation in the foreseeable future, will be able to carry on its activities, and a significant decrease or closing down its activities is not expected for any reason.”* (Act C on Accounting § 15 (1), 2000). This wording suggests that only a stable external environment allows the companies' activities on an unchanged continuation, and assumes what is also emphasized in Aras and Crowther's (2008) work, namely, observing the going concern principle results in keeping the companies' operations maintainable. However, a company's external environment should include the business (economic) environment in which it operates, the local and regional social environment in which it is located, and the natural environment, which, in turn, gives a natural limit to the company's operations (Hódi Hernádi, 2012).

2.1.2. Reconsidering the content and the range of those demanding accounting information

Since the information provided by accounting systems are suitable for preparing and establishing decisions, that is why it is important to make the demanded information available. However, it would be reasonable to give an extended interpretation on the range of stakeholders. Therefore, according to Hódi Hernádi (2012), the population, meaning society itself, the natural environment, especially at local and regional levels, as well as future owners, employees, the next generations, and the future state of the natural environment all have to be taken into account. After all, the point of sustainability focuses on their needs in order to make all those decision-making opportunities accessible to them that are currently in place for present-day stakeholders.

The fundamental task of accounting is to provide reliable and real information on the operation of the company for market participants. However, different information is needed by different stakeholders. Therefore, an accounting information system should be established that is capable of collecting, organizing the social and environmental information necessary for making various decisions, and is capable of presenting and interpreting them to both internal and external users in a reliable and accurate way. In response to these changing requirements, traditional accounting systems have to change and improve accordingly. The next step of this improvement is the development and the implementation of environmental accounting systems.



2.2. The characteristics of environmental accounting

The concept of *environmental accounting* and reporting appeared in the literature nearly a decade ago. According to Schaltegger and Burritt's (2000) definition, "*environmental accounting can be defined as a field of accounting that includes those activities, methods and systems that record, analyse and report on the environmental problems of a given economic system or on the economic impacts of environmental protection activities*". Environmental accounting systems basically consist of two parts, one of them deals with the environment-induced financial impacts, i.e. environment-related expenditures and savings, while the other part is concerned with the environmental impacts of the company's business, that is, how the natural environment changes as a result of the company's operations (Pál et al, 2006). Environmental accounting systems present the above-mentioned effects both by measuring in natural units and expressing in terms of money, as – opposed to traditional accounting – non-monetary and qualitative factors are also strongly emphasized here.

Thus, basically there are four areas of environmental accounting (Csutora and Kerekes, 2004): *internal ecological accounting, environmental management accounting, external ecological accounting, and environmental financial accounting*.

"*So ecological accounting facilitates establishing a connection between environmental and economic performance together with the presentation of the interaction between these two types of performances*" (Pál, 2011).

By focusing on the company's financial and environmental dimensions, environmental accounting systems ignore the impact of corporate activities on society. However, according to the conclusion of the present paper, all three dimensions must be taken into account in the development of accounting systems, giving way to sustainability accounting systems.

2.3. The theoretical framework of sustainability accounting

Borrowing the notion made by Schaltegger and Burritt (2010) *sustainability accounting* is the peak of accounting. Sustainability accounting, reaching far beyond environmental accounting, examines business operations by putting all three – economic, social and environmental – dimensions into its focus, and most importantly, it emphasizes the interaction of these dimensions in accordance with corporate sustainability.

The most widely accepted definition was presented by Schaltegger and Burritt (2010):

"*Sustainability accounting describes a subset of accounting that deals with activities, methods and systems to record, analyse and report:*

- – *First, environmentally and socially induced financial impacts,*
- *Second, ecological and social impacts of a defined economic system (e.g., the company, production site, nation, etc.), and*
- *Third, and perhaps most important, the interactions and linkages between social, environmental and economic issues constituting the three dimensions of sustainability.*"

The development of a sustainability accounting system includes the following five elements: the aim of operating a sustainability accounting system; the principles and requirements of operating the system; methods and devices for data collection, data record, measurement and analysis; sustainability accounts and reports; and the qualitative characteristics of the resulting information (Lamberton, 2005).

2.3.1. The aim of sustainability accounting systems

Sustainability accounting information systems are *primarily designed to* evaluate the performance of the economic organization in terms sustainability, i.e. paying special attention to its economic, social and



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environmental aspects. Similarly to traditional accounting, sustainability accounting can also be divided into two areas according to the external or internal users provided with the necessary information.

The external stakeholders' need for information focuses on the accountability of the organization's operations both in social and environmental terms. In addition to this, sustainability accounting information systems provide internal stakeholders, the management with information relevant to the decision-making, thus playing an important role in strengthening the internal management of the organization. As it is possible to determine the effects and consequences of the measures taken to achieve sustainability objectives in the course of performance evaluation, it gives a good basis for the preparation of a possible intervention, that is, for controlling and feedback.

2.3.2. The principles and requirements of operating a sustainability accounting system

During the development of a sustainability accounting system, some important *principles* and *requirements* should be taken into consideration that specify the methods and devices applied in the course of data collection, measurement, and evaluation, as well as the content and the process of reporting.

As already mentioned, with the reinterpretation of the going concern principle, existing *accounting principles* also gain new meanings both in social and environmental terms.

The following principle is *the interpretation of sustainability at a corporate level*. It is an important issue because it determines the framework of the whole system. The company's sustainability goals, the compound realization of economic, social and environmental sustainability raise the issue of their integrated measurement and performance evaluation. Due to the complexity of the company's sustainability performance evaluation, *the boundaries of the sustainability accounting system* have to be clearly marked in a way that it still could be managed by the company.

The following essential requirement is the selection of the proper *period for accounting, evaluation and analysis*, that is, the determination of the period in which the company is evaluated in terms of sustainability.

The evaluation of the social and environmental impacts caused by corporate activities or the entire life cycle of a product requires the application of non-monetary, qualitative *indicators* beside the usual monetary indicators for measuring economic or financial performance.

2.3.3. Methods and devices for data collection, data record, measurement and analysis

The sources used for *collecting and recording data* are wide-ranging and abundant, however, in the selection process some *cos-benefit* aspects should be enforced.

Based on the collected economic, social and environmental data, it becomes possible to measure the company's sustainability performance, and it requires *a variety of benchmarks* and *evaluation methods*. Some of these are the cost estimation of decision alternatives regarding corporate sustainability (Bebbington and Gray, 2001), input-output analyses, life cycle analyses, and the mapping of social and environmental impacts. One of the most complete methods available for the management is the Sustainability Balanced Scorecard (SBSC), an integrated indicator system aimed at evaluating the company's performance (Fülöp and Hódi Hernádi, 2012), which is the basis for decision-making and monitoring the realization of objectives.

Considerable attention should be paid to the evaluation of environmental protection measures, the costs of social and environmental liabilities in order to make the company accountable in terms of sustainability.

2.3.4. Sustainability accounts and reports

The fourth part of sustainability accounting focuses on distributing both quantitative and qualitative information to users. Here, there are two key questions to be answered. What is the appropriate form and content of a *sustainability account*? How often should these *reports* be prepared and published?



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Sustainability accounting information are presented by the SBSC including a wide variety of performance indicators, and other sustainability reports based on the guidance of the Global Reporting Initiative (GRI).

Such reports should be made regularly through the entire lifetime of a product. It is reasonable to present and publish the company's accounting information related to sustainability on its website. The sustainability of the company's accounting information should be presented and published on the website, thus these continuously updated information on sustainability are made available promptly to the stakeholders.

2.3.5. The qualitative characteristics of information on sustainability

The information provided by sustainability accounting systems have to meet a number of important requirements. These are based on the *characteristics of traditional accounting information*, as well as on the guidelines of GRI sustainability reports. The two highlighted features are transparency and controllability. *Transparency* demands the complete publication of processes, procedures and assumptions (GRI, 2002). *Controllability* requires that the recording, organizing, analysis and publication of the presented data and information should be done in a way that enables auditors to certify data reliability (GRI, 2002).

The further requirements concerning sustainability information are: completeness, credibility, neutrality, clarity, materiality, timeliness, comparability and readiness for interpretation in the context of sustainability.

It is reasonable for companies wishing to comply with the requirements of sustainability to design and operate sustainability accounting systems since it is a kind of financial language for decision-makers.

2.4. The relations between sustainability strategy and sustainability accounting

Sustainability accounting systems must primarily meet the needs of the top management. Accordingly, the function of a sustainability accounting system is to identify, collect, analyse, and communicate feedback on the company's economic, social and environmental performance. In order to achieve this

- as a first step, the *identification* of those strategic and operational indicators should be carried out that are crucial to the success of the business and the creation values for stakeholders (Schaltegger and Wagner, 2006). In other words, in accordance with its sustainability strategy, the company systematically has to choose the appropriate goals of sustainability performance indicators, their structure and their information needs also should be planned.
- In the next step the required quantitative and qualitative data *should be collected* that include social and environmental costs, expenses and risks, then the financial benefits and savings of sustainable business operations, and finally, the natural effects on the society and the environment. These can be acquired either directly or indirectly by taking cost-benefit aspects into consideration.
- The third step is *to analyse* the company's sustainability performance, and then to monitor whether the company has met its strategic and operational objectives or not, and whether it has revealed the reasons for achieving or failing them.

Sustainability accounting systems thus support sustainability strategies, where they provide appropriate, reliable and real information on the sustainability results of the company. Apart from supporting managerial decision-making, the information provided by sustainability accounting systems can also be utilized in other areas that give a basis for reports on sustainability. The major corporate as well as micro- and macroenvironmental benefits resulting from operating a sustainability accounting



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system are summarized in Table 1 as important contributing factors to the development and implementation of sustainability strategies.

Table 1

The benefits of operating sustainability accounting systems

| Corporate benefits | Micro- and macroenvironmental benefits |
|---|--|
| <ul style="list-style-type: none"> • Presents the impact of sustainability performance on balance sheet earnings; • Maps cost-saving opportunities, revenues and financial advantages originating from sustainability-oriented operation; • Evaluates, handles and reduces social and environmental risks, liabilities, cost and expenses; • Creates more favourable conditions in the course of economic or investment negotiations, widens the range of potential investors; • Helps to determine the cost of production as well as set the price of a product more accurately; • Support establishing cleaner production projects, the evaluation of investments (by mapping the social and environmental effects of investment decisions); • Facilitates the appearance on the list of 'eco' suppliers; • Facilitates tracing energy and material flows more accurately, contributing to increased resource efficiency; • Helps the management to make responsible decisions; • Fosters the social and environmental awareness of employees while performing their tasks and strengthens their commitment and motivation. | <ul style="list-style-type: none"> • Satisfies the information needs of external users; • Makes better relationships with the stakeholders; • Ensures and improves the legitimacy, credibility and the reputation of the company; • The public recognizes corporate accountability, transparency and trustworthiness in social and environmental issues, thus improving the company's general acceptance; • Facilitates the comparability of the company's sustainability performance to other companies or industrial sectors; • Promotes the application and improvement of sustainability accounting by acquiring knowledge on the best practices; • Contributes to sustainable development on a corporate, national and global level. |

Source: authors' calculations, 2013

3. The overview of the operation of a sustainability strategic management and a sustainability accounting system

The following case study illustrates how a sustainability accounting system can be used to promote the successful implementation of a sustainability strategy in one of Hungary's largest chemical companies. *Tiszai Vegyi Kombinát Public Limited Company* has 1114 employees and an annual sales revenue of 365185 million HUF. It is a production company which makes ethylene and propylene by processing naphtha and gasoline as raw materials.



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3.1. The company's current strategic position

Sustainable development is an integrated part of the company's strategy as well as its daily operation. Consequently, there is no separately handled sustainability strategy or sustainable budget strategy, instead, each and every program is based on concept of sustainable development.

According to this, the company has determined the following six areas of concern within the three dimensions of sustainability for the coming period between 2011 and 2015: economic sustainability, health and safety, communities, human resources, environment and climate change.

TVK pays special attention to creating a cleaner, better environment, safe and healthy working conditions, for which it regards prevention and responsible care as a basic condition. Thus, the basic principles of sustainability and environment-centered thinking are deeply embedded in the company's long-term strategy.

3.2. The structure of TVK's sustainability accounting system

The company is aware that nowadays the benchmarks of long-term success and social acceptance cannot be observed only in economic indicators. Its activity is increasingly evaluated in the light of the company's ability to reduce the negative effects on both the environment and society. This goal is served by the development and operation of a sustainability accounting system.

3.2.1. The aim of TVK's sustainability accounting system

TVK's sustainability accounting system contributes to the long-term realization of corporate sustainability by providing a well-established and applicable *planning and decision-making process* as well as ensuring an *effective controlling system*.

Its sustainability accounting system evaluates the efficient implementation of the formulated sustainability strategy together with achieving the designated objectives, furthermore, it encourages continuous improvement efforts, and helps to increase the level of *awareness* and *transparency*.

3.2.2. The principles and requirements of operating TVK's sustainability accounting system

Every industrial sector and every corporation have different objectives and, therefore TVK is not exceptional in individually identifying and defining its objectives and tasks in terms of sustainability, which reads as follows: "*Sustainable development is a corporate commitment for us that is aimed at equally integrating economic, environmental and social factors into our daily business operations, maximizing long-term value and keeping the license we received from society to carry on our operations.*"

As a chemical company, it has a significant impact on the environment and society, the negative consequences of its operations are reduced by applying the *principles of precaution and responsible care*.

The company marks the *boundaries* of its sustainability accounting system following the guidelines made by is the UN's Global Compact and the GRI. In practice, it means that the company defines its strategic and operational objectives within the three dimensions of sustainability, and evaluates its sustainability performance.

The *evaluation period* of the company's sustainability performance is basically determined on a yearly basis. During product development, however, the "cradle to grave" concept also appears, that is, the health and environmental effects of these products are taken into account through the whole product life cycle.

The currency unit employed by TVK, according to its size and international influence, is expressed in million HUF or in a thousand Euros. In addition, metric tons are commonly used as a natural *unit of*



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measure, partly for measuring the weight of the produced goods and partly for measuring environmental impacts.

3.2.3. Methods and devices for data collection, data record, measurement and analysis

The nature of information its sustainability accounting system is required to collect is derived from TVK's sustainability strategy and its objectives. In most cases, the indicators are based on measurement and calculations but sometimes it also happens that they are based on estimations depending on the subject or on the premises.

The operational environment and the company's performance are constantly analysed and evaluated in order to fully meet the shareholders' expectations.

Economic performance is evaluated by the quantification of environmental and social costs and revenues, the application of risk matrices, life cycle analyses and benchmarks. The impact on society is examined with the help of stakeholder analyses and social efficiency indicators. The company's environmental performance is monitored by applying condition test methods, eco-efficiency indicators, and input-output analyses. Since TVK pays special attention to developments contributing to sustainability, it measures the percentage of the realization of such investments together with their average level of preparedness.

For the integrated evaluation of corporate sustainability performance the Sustainability Balanced Scorecard is used. Apart from this, the company examines its compliance with the requirements of the GRI, its position in the ranking of sustainability and CSR, and it also appears in the definition of the Dow Jones Sustainability Index and the Oekom Research index.

3.2.4. TVK's sustainability accounts and reports

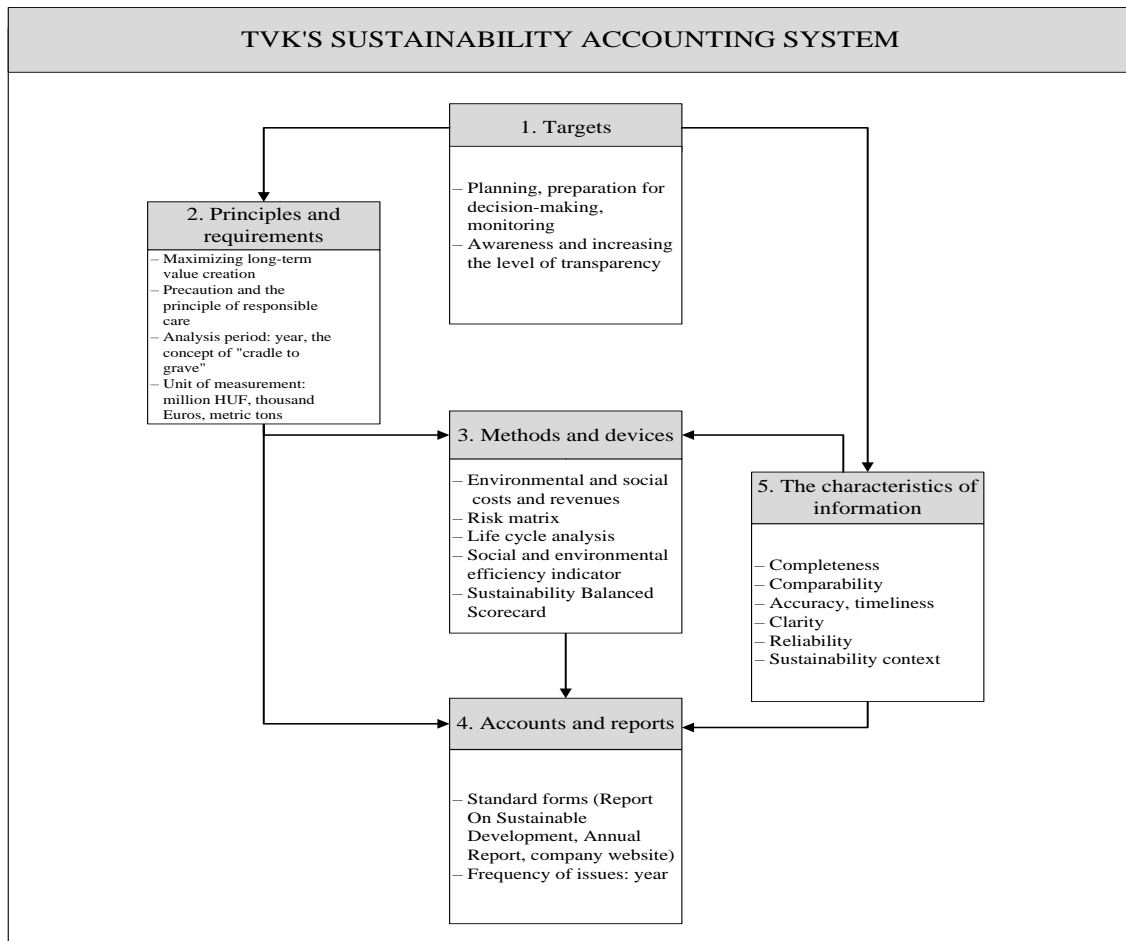
From the above, it is obvious that TVK is committed to sustainable development and communicates its achievements to the stakeholders. An annual report is issued on the company's sustainability performance. Although monthly and quarterly reports are issued for to the board of management, they usually focus on the financial situation of the company, lacking any social and environmental information. The evaluation of sustainability investments and projects is an exception, provided that they report whether their realization is carried out in due time, in the required quality and below the originally approved budget.

The company developed a standard form for its reports, ensuring the comparability of its accounts. In terms of economic and financial issues, detailed information can be found in the *Annual Report*, while more can be read about the company's sustainability performance in its *Report On Sustainable Development*. It has to be emphasized that the company's Annual Report also includes data reflecting its sustainable performance in an integrated way.

3.2.5. The qualitative characteristics of information on sustainability

By providing as many detailed and accurate industry-specific information as possible, TVK aspires to the greatest level of transparency in order to minimize the risks related to the anticipated economic, social and environmental changes and developments, and to ensure the comparability of the results. Therefore, the accounting information on its sustainability performance have to be *relevant, complete, comparable, accurate, timely, clear and reliable* and they equally have to be concerned with both the positive and negative effects (a *balance* should be sought after), they have to be in line with the stakeholders' expectations, they have to present *sustainability connections* as well.

As a summary, the logical framework of TVK's sustainability accounting system is shown in Figure 1.



Source: author's construction based on Leskó's interview, 2013

Fig. 1. The logical framework of TVK's sustainability accounting system

3.4. The result of TVK's sustainability strategy and its accounting experience

In order to maintain and reinforce TVK's regional petrochemical leadership, it is not enough for the company to implement sustainable development investments and develop a good relationship with the society, but it also has to quantify and evaluate its sustainability performance - as it is concluded in TVK's Report on Sustainable Development (2011).

It is essential for the management of the company to receive an accurate picture on the realization of its strategic sustainability objectives, the financial aspects of the company's sustainable operation, and the environmental and social effects of TVK's activities and products.

As it was shown in its sustainability report in 2011, the most effective results were achieved in relation to climate change and the environment, while the company was the least effective in the course of implementing strategic objectives regarding economic sustainability.



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With TVK's increased activity and environmental awareness in relation to sustainability, the role of sustainability accounting information has become more appreciated, which is predominantly provided by the corporate sustainability accounting system. The company's accounting system establishes a connection between social and environmental issues and financial opportunities, furthermore it controls, maintains and enhances the company's economic, social and environmental capital, which may result in a significant competitive advantage. This is how the application of TVK's accounting system contributes to the company's sustainable operation and the successful implementation of its sustainability strategy.

4. The outcomings of the study and its contribution in the field of the management sciences

The novelty of the study could be evaluated or summarized from three aspects:

1. We further developed the general process of the strategic management according to the principles of the sustainability starting from the formulation of the sustainability strategy, through its implementation, to the performance assessment of the strategy. We identified the activities, tasks of the different sections of the process with the adequate modern management measures, and we described the determinants of the selection.
2. We overviewed the developing phases of the accounting in the last two decades from that aspect what extent the system integrates the principles of the sustainability into itself: traditional accounting (economic factors), environmental accounting (economic and environmental factors), and sustainability accounting (economic, environmental and social factors). We made a comparison of the characteristics of the different accounting information systems in order to make easier the selection of the measures and tools using them for the strategy performance assessment.
3. We presented the practical application of the conceptual model of the sustainability accounting system in a company case study, moreover we determined the relations between the sustainability strategy and sustainability accounting, and we listed the company and micro-environmentally benefits of the system.

Obviously, all of these results could be seen as the beginning steps of a new research programme that we should improve from both theoretical and practical point of view in the near future.

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