



SUSTAINABILITY MANAGEMENT SERVICES

MAKE IT EASY TO OPERATE SUSTAINABLY

PROLOGUE

I have a dream that one day every manufacturing company will operate if not restoratively then at least sustainably. I like that dream. It inspires me and gives me ideas. One of them was the concept of Sustainability Management Services.

The idea took form in 2008 as I was thinking about possible concepts related to promoting sustainability. So I got the idea of a company able to assist other companies at any stage in their quest for sustainability in operations. I knew it was a "wild" idea. But it felt so strong, and so good, that I decided to further explore both it and the concept of sustainability. This exploration is presented to you and complemented with a reality check with findings from interviews with ca. 50 persons from different industries.

SUMMARY

The ongoing recession motivates companies to increase their effectiveness. Sustainability Management Services is a way to do that in an ecologic way while simultaneously further sustainable profitable growth.

The concern for our planet and future existence has made authorities and consumers increasingly demand products and services produced sustainably. Many companies find reaching sustainability in operations difficult because they lack directions and processes for it. It requires versatile expertise to have a global view on sustainability, and to be able to assist customers at any stage and in any field of the sustainability process. Few, if any, companies are able to provide this global (extensive and worldwide) assistance. This is a call to create one.

INTRODUCTION

We live on ecological credit

We exploit and pollute the earth more than it can cope with. We live on ecological credit. The concern for our planet and future existence has made consumers and authorities increasingly demand products and services produced sustainably. Sustainability in operations poses a challenge for companies, but also gives a lot of possibilities. Urgent and massive actions are needed.

UNDERSTAND SUSTAINABILITY

Sustainability is meeting needs

Sustainability is maintenance and enhancement of economic, social and environmental resources in order to meet the needs of current and future generations.

Economic sustainability means that operations are financially feasible meeting the current and future needs of the company and its' share holders. Social sustainability takes care that Current and future individual needs such as health, wellbeing, nutrition, shelter, education and cultural expression could be met.



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Environmental sustainability is defined as the environments ability to continue to function properly indefinitely. This means that the source and sink functions of the environment should not be degraded.

Three main criteria for environmental sustainability

To reach environmental sustainability the following criteria need to be met:

1. Extraction of non-renewable resources minimized and not exceeding agreed minimum levels
2. Absorptive capacity of the environment to assimilate waste not exceeded
3. Extraction of renewable resources less than the rate at which they are renewed

Today society mines and disperses materials at a faster rate than they are re-deposited back into the Earth's crust (oil, coal, and metals such as lead).

Society produces substances faster than they can be broken down through natural processes (e.g. CO₂), if they can be broken down at all (dioxins, DDT, PCBs etc.).

Furthermore society extracts resources at a faster rate than they are replenished (overharvesting trees, fish etc.), or manipulates ecosystems (changing ground water flows, paving over fertile land, causing soil erosion etc.). All these actions destroy nature.

Sustainable operations meet sustainability criteria

Sustainable operations are achieved when environmental, social and economic sustainability criteria are met. In practice this includes following actions:

1. Eliminate all forms of waste in every area of business as well as toxic substances from products, facilities and vehicles.
2. Use energy, preferably renewable energy, as efficiently as possible.
3. Optimize material use. Redesign products and processes to close the technical loop. Use recovered and bio-based materials whenever feasible.
4. Transport efficiently to reduce waste, emissions and the use of resources.
5. Integrate sustainability principles in the company culture making sure peoples' needs are met today and in the future.
6. Create new ways of doing business that demonstrates and supports sustainability based commerce. Secure that the financial targets are met today and in the future.

Actions to reach sustainable operations are illustrated in Figure 1.



Figure 1. Actions to reach sustainable operations

Sustainability Management is optimizing 5 different capitals

Every organisation will use Natural, Capital, Manufactured, Social and Human Capital to deliver its products and services. To operate sustainably the organisation will manage and optimize all 5 capitals. The capitals





are interlinked and overlap each other. They should be in balance to allow smooth operations. Achieving that is called Sustainability Management.

The Five Capitals Model gives an understanding for sustainability in terms of economic wealth creation. The model allows businesses to consider how wider environmental and social issues can/will affect long-term profitability. The Five Capitals Model is illustrated in Figure 2.

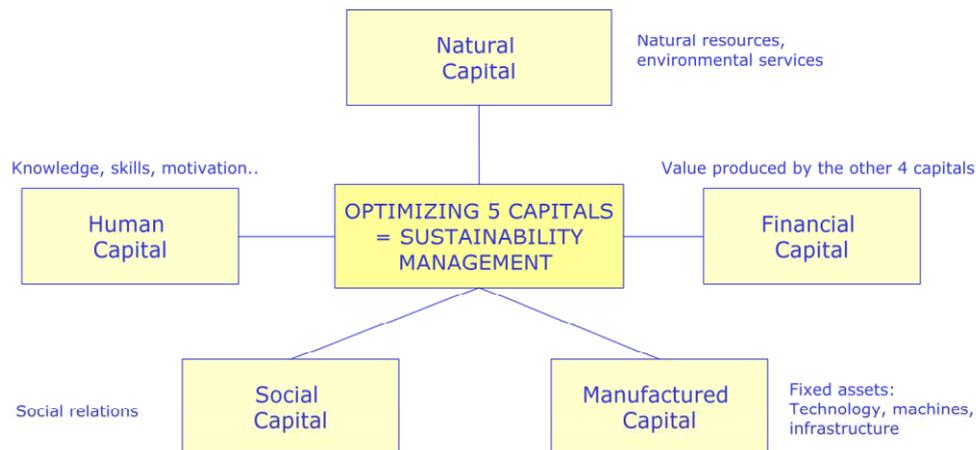


Figure 2. Summary of the Five Capitals Model

CRITERIA FOR SUSTAINABILITY MANAGEMENT

Sustainability Management requires versatile action

Sustainability Management requires goal setting, starting point determination, needs identification, action point definition, implementation and follow up.

Sustainability Analysis (e.g. environmental review, energy analysis) identifies direct and indirect impacts of operations. It gives basis to identify needs and needed actions.

Successful *Resource Efficiency Management* is crucial to get results with environmental sustainability. It includes elimination of waste and harmful substances, use of renewable energy, closed loop products and processes and efficient transportation. Environmental Information Management Systems support Resource Efficiency Management.

Management Systems are important for all different capitals management. They are tested and documented standard practises that help to smooth operations by monitoring the performance and allowing regular checks. Cost/Benefit calculations help to foresee and track costs. They also help to indicate relevant measures to monitor progress.

Successful Communication is needed to get the message through. *Training* stakeholders may be necessary.

Excellent plans are worthless if the implementation fails.





Criteria for Sustainability Management are outlined in Figure 3.

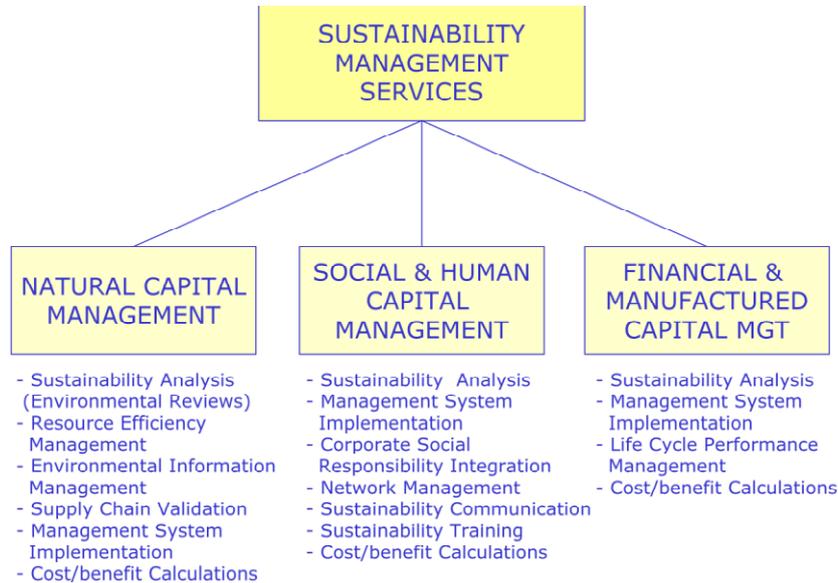


Figure 3. Sustainability Management criteria

Successful Sustainability Management is a result of SMART actions

To be successful, sustainability management actions need to be SMART (Sustainable, Measurable, Acceptable, Relevant and Tangible).

An action is SMART, when it is:

- Sustainable: it is done in a sustainable way and leads to sustainable operations;
- Measurable: the progress and the results are measurable (“what gets measured gets managed”);
- Acceptable: the goals are agreed upon with all stakeholders;
- Relevant: actions are directed only on what is relevant
- Tangible; the goal is understandable, concrete, doable and timely specified

Some companies lack processes for SMART Sustainability Management

The global management consulting company AT Kearney and the Institute For Supply Management surveyed 25 North American Fortune 100 companies about Sustainability Management and Sustainable Supply Chain Management. Being “green and ethical” will be a necessity for all participants in the supply chain, but most firms lack the formal direction and processes to fulfil sustainability commitments. In addition many companies lack a comprehensive and robust way to track their own and their supplier’s sustainability performance. It may not only be difficult to make SMART plans, but also implementing them and measuring progress.

Sustainability Management is easier with an experienced partner

Sustainability management is easy (easier) when you know what to do and how to do it. If you don’t know what to do, you need a partner that does. It enables your sustainability work to be easy and straightforward.





The ideal partner is a master in practical sustainability management and is able to assist in any stage of the sustainability management process. It can:

1 Bring clarity and structure

Give overview; give a realistic picture of the current state of sustainability (starting point); define what is needed to obtain sustainability (technology, processes, systems); help to calculate costs, benefits and impacts on the bottom-line; assess consequences of doing and not doing and assist in communicating the sustainability message.

2 Provide solutions (in-house or through network)

Provide technology, processes and systems, and work on a global basis (comprehensively and worldwide).

3 Measure progress

Supply management systems.

Not many companies fulfil Sustainability Management partner criteria

Few companies, if any, have what it takes to offer extensive sustainability management services. You have to pick and mix among different service providers. For that you need know whom and what to choose. This can be very challenging especially for companies without extended EHSQ resources.

Is Your Company an ideal partner for Sustainability Management Services?

There is a calling for someone to create SMART, Sustainability Management Services. What if Your Company would be the company to create that?

REASONING FOR BUILDING SUSTAINABILITY MANAGEMENT SERVICES

This part is company specific.

REALITY CHECK TO SCREEN THE MARKET

Market screening to identify needs

A market screening was performed in October – November 2008 to check the interest and need for extensive Sustainability Management Services. Persons belonging to Authorities & Organisations, Power, Oil & Gas Industry, Forest Industry, Municipal Waste and Metal Recycling Industry, Petrochemicals industry, Chemicals and Plastics industry, Food Processing Industry and Mining Industry were interviewed.

What if ... a background story for the interview

Generally the person interviewed were told I was calling as a private person hating to live on ecological credit, and dreaming of a situation where industrial companies would operate if not restoratively then at least sustainably. Digging into the matter to find out what it would mean in practice, I noted that this is an area with a lot of fragmented information. Getting an overall view is difficult. This gave an idea about a company that would have overall view, versatile knowhow, large network and the ability to assist at any stage in the sustainability process bringing clarity and structure, providing solutions and measuring progress.

Many questions to be answered

The target was to get answers to following questions:



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- Is the idea realistic? Would there be a need for something like this?
- What would they like to buy from a company like this? What service/solution would make their work easier?
- What are the challenges they are working with now?
- For companies where the sustainability work is already on an advanced level: What services would have made their sustainability work easier?
- How will the recession influence work toward more sustainable operations?
- What would open the door to further discussions?

Positive response on the idea

Every contacted person, except one, was willing to discuss sustainable development. Generally the idea of extensive sustainability management services was well received. Some people even said they would like to work for such a company.

Some of the interviewed persons identified practical challenges to implement the idea, because a lot of “street credibility” obtained by experience would be needed.

Company size and needs go hand in hand

The smaller the company, the more concrete and earthbound were the needs. It is especially important for them to know exactly “if we do this, we save that much”. Sustainability management is a side function. Medium sized companies have more awareness of sustainability and more concerns. Probably the biggest potential for SMS will be in this sector.

Big corporations have worked for years with sustainability matters. They have internal support functions in EHSQ matters. Their need for general sustainability management services seems to be smallest.

Enhancing effectiveness ecologically seems to be interesting for any company. Provided added value could be proven.

Summary of findings

- Changing regulations forces companies to greater ecological effectiveness. Main emphasis is put on increasing energy efficiency and resource efficiency. Subventions for investments can be obtained.
- Energy analysis highlights areas for improvements and needs for investments. Some companies will renew energy analysis done years ago to find further possibilities to save energy.
- How to measure resource efficiency and energy efficiency? Tools for evaluating and improving resource efficiency and better tools to measure energy efficiency are needed. Commensurability is important.
- Many people in different industries said that information on law changes are easily obtained. But, not advice and instructions on how to anticipate and, take into account, and apply the new regulations in own operations.
- Some plants need modernizations. How to make more effective without constructing new? How to join new to old?
- What happens to equipment at the end of its' life cycle? How can the parts be reused/recycled?
- How to change behaviour and attitudes of the personnel? How to communicate sustainability matters in a clear, tangible and understandable way?
- Recession gives time to increase effectiveness. Short term, many small improvements. Long-term, systemic changes.

Industry specific findings

Have been removed for confidentiality reasons





CONCLUSIONS

Resource & energy efficiency, law changes and communication give challenges

Energy efficiency & resource efficiency measures are motivated by a need to cut costs and obligations to meet tightening regulations. Companies are busy anticipating and implementing law changes.

Sustainability is a complex issue. Companies have, or will have challenges to translate all their beautiful words on sustainability into concrete measurable actions. Despite having done a lot on sustainability, or having sustainable products, many companies have not been able to “politically and commercially” benefit. They have not been able to successfully communicate with their stakeholders.

Companies struggle with the abovementioned areas. They are willing to pay for help. I see plenty of business possibilities for a company experienced in environmental business. Nevertheless, entering or expanding these areas requires extensive homework.

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