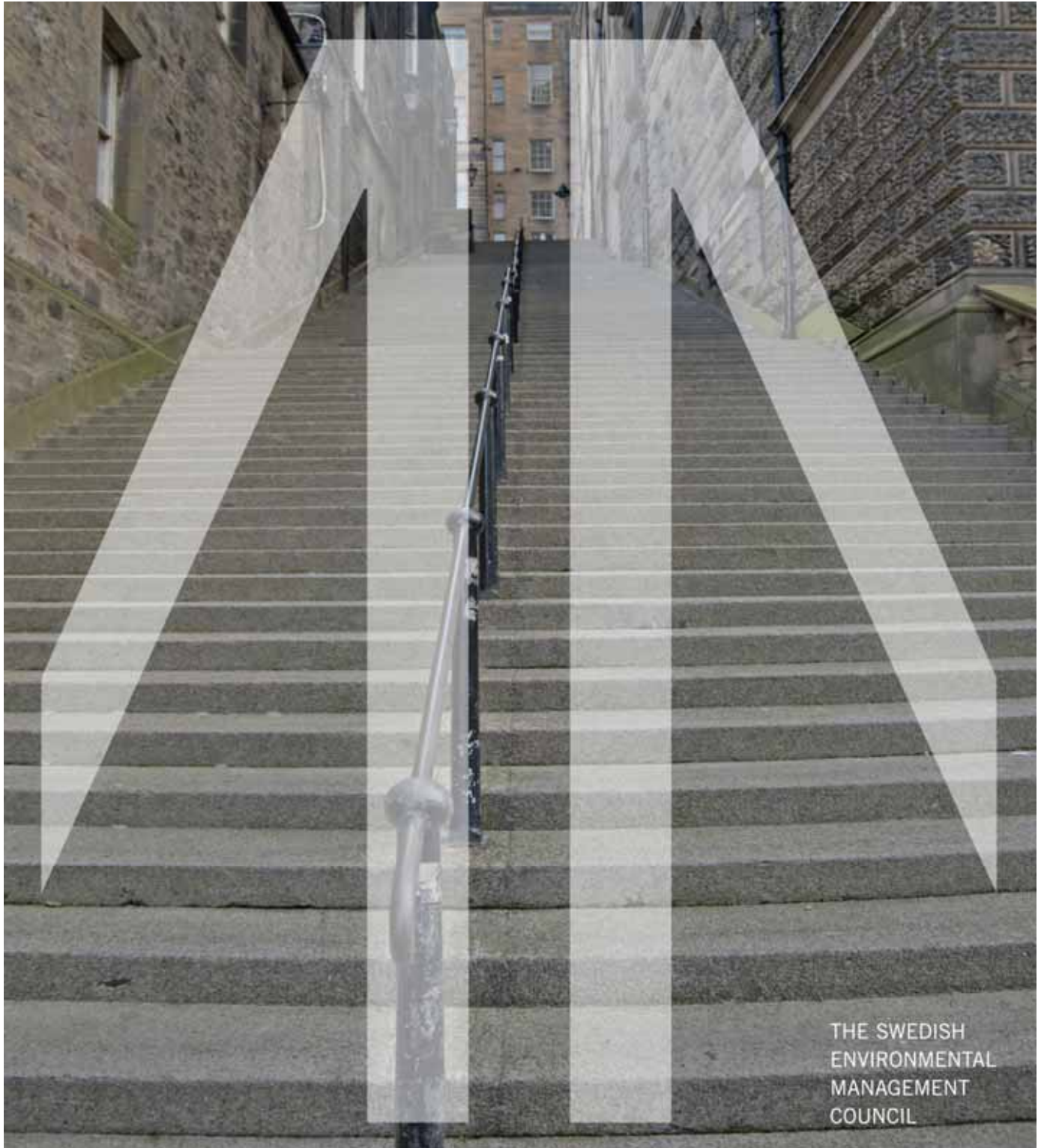


GREEN PROCUREMENT

TAKING IT TO THE NEXT LEVEL



	SEMCO	DATE	2009-11-26	PAGE	2 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

GLOSSARY

BAT	Best Available Technology
CF	Carbon Footprint(ing)
CN	Carbon Neutrality
CO ₂	Carbon dioxide
EKU	Ecologically Sustainable Procurement
EMAS	Eco-Management and Audit Scheme
EMS	Environmental Management System
EPA	Environmental Protection Agency
EPD	Environmental Product Declaration as a part of the international EPD [®] system
GHG	GreenHouse Gas
GPP	Green Public Procurement
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
ISO	International Standardisation Organisation
LCA	Life Cycle Assessment
LCC	Life Cycle Cost analysis
LOU	The Swedish Public Procurement Act
NAP	National Action Plan
PCR	Product Category Rules
SCM	Supply Chain Management
SCP	Sustainable Consumption and Production
SEMCo	Swedish Environmental Management Council (in Swedish: MSR)
SME	Small and medium-sized organisations
SR	Social Responsibility
SRP	Socially Responsible Purchasing
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute

	SEMCO	DATE	2009-11-26	PAGE	3 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

INTRODUCTION

DIGEST OF INTERIM REPORT

WORK BY THE SWEDISH ENVIRONMENTAL MANAGEMENT COUNCIL AND THE SWEDISH NATIONAL ACTION PLAN FOR GREEN PUBLIC PROCUREMENT

In recent years, green procurement has emerged as a potentially powerful tool, not only for gaining environmental and sometimes even cost benefits and to minimize risks, but also driving research into new and innovative technologies. The political support for green procurement has been manifested at international, EU, and national level.

Following on from this, green procurement practices began to be implemented in a growing number of organisations, in both the public and private sector, resulting in large differences in the status of green procurement and purchasing in different organisations and countries.

The Swedish Environmental Management Council (SEMCo) has, in its work with the Swedish National Action Plan (NAP) for Green Public Procurement (GPP) 2007-2009, developed a conceptual working model (see Fig. 1) for taking on board the various tasks given in a coordinated and structured manner in order to facilitate identification of the different work elements, planning of how to carry out the work as well as outlining the way to receive the necessary feed-back from the practical use of the results of the work.

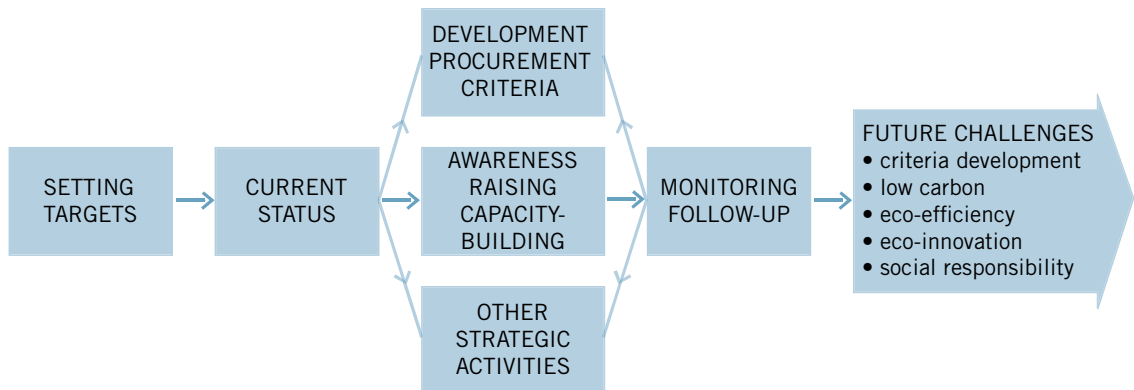


Figure 1. A conceptual outline of the “working model” developed by SEMCo to plan and carry out the work with the Swedish National Action Plan for green public procurement.

SEMCo has found cooperation with institutions and research organisations of great value for selected work elements, among those organisations the Swedish Environmental Research Institute (IVL) and the Royal Institute of Technology (KTH). The important work with the literature review, mapping and monitoring of background conditions and current status, has been carried out as cooperation between SEMCo and the International Institute for Industrial Environmental Economics (IIIEE) in Lund. All those individuals involved in the SEMCo work, including its own staff, are identified in the full Interim Report.

	SEMCO	DATE	2009-11-26	PAGE	4 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

In order to create a level playing field for green procurement among European countries and to facilitate further progress of green procurement, it is of outmost importance to evaluate existing experiences to indicate directions for future developments. The timing for such activities to commence in the near future seems logical as work by many other EU Member States on their NAPs started fairly early in 2007 and now should be in the process of summarising their experiences for future work to come. Additionally, Sweden recently took an initiative to bring together the leading seven Member States with regard to GPP (as identified by the EU-study ‘Green Public Procurement in Europe 2005’) to share their experiences with other European countries and support the EU Commission in its future endeavours with GPP.

SEMCo early identified the value of regularly review its work from various points of views reflecting inputs from key stakeholder to get the necessary feedback for continuously improving its operations and the resulting work. So far, investigations have been carried out with the help of outside experts and consultants to evaluate SEMCo’s work with procurement criteria and the practical use of them among procurement and purchasing organisations as well as suppliers and tenderers in the public and private sector, but also to get feedback from other organisations in different ways involved in procurement and purchasing. At this point, there is one important audience missing – the international community. It is our hope that this document, a digest out of the Interim Report from the work of SEMCo and the Swedish National Action Plan for Green Public Procurement 2007-2009, is able to attract experts in green procurement outside Sweden to provide us with their views and ideas on our current work and the work to come.

We thank you in advance and are looking forward to receive your comments.

Sven-Olof Ryding
SEMCo, MD and editor

Note 1

The content of this document has not been addressed to SEMCo’s Board of Directors giving it no official character. The responsibility of results obtained and conclusions drawn, therefore, rests with the management of SEMCo.

Note 2

Due to the significant heterogeneity in the way that both practitioners and researchers define and conceptualise terms commonly used in a procurement context, this report makes use of the following meanings:

- “green”: the use of environmental criteria
- “socially responsible”: the use of social and/or ethical criteria
- procurement: the commercial process resulting in contracting suppliers
- purchasing: the administrative process resulting in sub-ordering from contracted suppliers

Note 3

This digest of the Interim report does not include a reference list as it is a summary of a more comprehensive documentation. A full reference list can be found in the Interim Report and the various underlying SEMCo reports (see Annex 1)



SEMCO	DATE	2009-11-26	PAGE	5 (68)
REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

CONTENTS

- Glossary2
- Introduction3
- 1 Setting targets7
 - 1.1 The Swedish National Action Plan for Green Public Procurement7
- 2 Background and current status8
 - 2.1 Supply chain management8
 - 2.2 Green procurement and socially responsible purchasing9
 - 2.3 Carbon footprint of products and climate communication/labelling.....13
- 3 Development of procurement criteria.....15
 - 3.1 Development of procurement criteria at different levels17
 - 3.2 The work with chemical issues19
 - 3.3 The precautionary and substitution principles.....19
 - 3.4 Life cycle cost analysis (LCC).....19
 - 3.5 Verification and follow-up.....20
 - 3.6 The use of Environmental Management Systems (EMS) and Environmental Declarations in public procurement.....21
- 4 Awareness-raising and capacity-building.....23
 - 4.1 The need for information and education for a better use of SEMCo's procurement criteria23
 - 4.2 Information and education activities24
- 5 Other associated strategic activities.....26
 - 5.1 Consumption targets26
 - 5.2 Technology/innovation procurement.....27
 - 5.3 SEMCO'S Innovation Forum30
 - 5.4 Eco-efficiency through Energy Performance Contracting (EPC)30
 - 5.5 The use of Global Reporting Initiative (GRI) indicators in public and private procurement31
 - 5.6 Product-related environmental information suitable for procurement.....32
 - 5.7 Development of a Carbon Footprint Measurement Toolkit for Eco-labelling36
 - 5.8 Climate declarations as an international concept for product carbon footprints38
- 6 Mapping and monitoring.....40
 - 6.1 To what extent are SEMCO'S procurement criteria practised?41

	SEMCO	DATE	2009-11-26	PAGE	6 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

6.2	Can the use of SEMCo’S procurement criteria be perceived as restricting competition?	42
6.3	Could industry benefit from making use of SEMCO’S procurement criteria? ...	43
6.4	Is the practise of green procurement increasing in public authorities, municipalities and county councils on a year-by-year basis?.....	44
6.5	Are the user-friendliness and content of information on the SEMCo homepage felt satisfactory?	47
7	Future challenges	48
7.1	The criteria development challenge.....	49
7.2	The low carbon challenge	52
7.3	The eco-efficiency challenge.....	54
7.4	The environmental innovation challenge	55
7.5	The social responsibility challenge	57
8	What to bring to the next level – some general observations	60
Annex 1: Documentation.....		65
SEMCo Reports.....		65
SEMCo Guidance documents.....		66
Other SEMCo documents.....		66
SEMCo Information material.....		66
SEMCo Books		66
External documents and scientific articles in connection to SEMCO’S work		66

	SEMCO	DATE	2009-11-26	PAGE	7 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

1 SETTING TARGETS

Two documents serve as the steering documents in setting targets for SEMCo's activities: the Owners Directives on the one hand and the Swedish National Action Plan for Green Public Procurement on the other.

SEMCo is jointly owned by the Swedish government, the Swedish Association of Local Authorities and Regions, and the Confederation of Swedish Enterprises. The Owners Directives state that SEMCo shall act as the competent body for the European Eco-Management and Audit Scheme (EMAS), to administrate and develop the EPD[®] system for product-related environmental information and to develop a system of sustainable public and professional procurement based on management of the EKU tool (developed by the delegation for Ecological Sustainable Procurement, EKU).

1.1 THE SWEDISH NATIONAL ACTION PLAN FOR GREEN PUBLIC PROCUREMENT

According to background material provided by the Swedish Environmental Protection Agency (EPA) in 1995, environmental requirements were commonly used in public procurement. At that time, six out of ten procurements contained environmental requirements, but only half of these – and one third of government framework agreements – contained environmental requirements that could be considered to have a real impact on the environmental performance of the subject for procurement. The EKU tool was not as widely used as it could have been. Lack of knowledge regarding the formulation of environmental criteria was identified as the main obstacle. Furthermore, guidance for the authorities was weak and monitoring insufficient.

VISION AND NATIONAL TARGETS FOR 2010

The Swedish Government is of the opinion that the public sector should, wherever possible and in accordance with the EC Public Procurement Directive and its associated Swedish Public Procurement Act (LOU), make use of effective environmental criteria in their procurement activities. The Swedish government therefore welcomes the EU Commission's encouragement for GPP and recognises the urgent need for an action plan with targets and measures to help make public procurement greener.

The Swedish government recognises the importance of having a vision describing intended long-term achievements. A vision must not be fixed in terms of time, nor must it be overly specific. However, it should indicate desired accomplishments in the upcoming work on GPP and act as a beacon for all parties concerned by defining the intended future situation with regard to conduct and support functions. The Swedish government is of the opinion that the following national objectives should be met by 2010:

- the proportion of public procurements with well-formulated environmental criteria should increase,

	SEMCO	DATE	2009-11-26	PAGE	8 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- the proportion of state framework agreements with well-formulated environmental criteria should increase,
- the proportion of authorities at government, municipality and county council level that regularly make use of well-formulated environmental requirements should increase.

SEMCO'S OBLIGATIONS

SEMCo has been identified as a key actor in promoting the development of GPP. In order to function as the best source of support for procurers and purchasers in the long term, it is important that SEMCo carefully follows the development of work on GPP measures and their effects. SEMCo, under the direction of the government offices, should help represent Sweden in the course of EU and international collaboration on GPP. The collaboration with the EU Commission is particularly important, as is cooperation between SEMCo, the Swedish Environmental Protection Agency (EPA) and other relevant authorities. The Swedish EPA should report back to the government with proposals for future work in the field of GPP.

SEMCo has been given various tasks in the Swedish NAP, which can be divided into three areas:

- development of support and environmental criteria providing an as complete tool as possible for all product groups commonly subject to green procurement,
- raising awareness and building capacity,
- investigation of other strategic activities linked to GPP, e.g. consumption targets, Life Cycle Cost (LCC) analysis and further development of the concept of technology and innovation procurement – in collaboration with, amongst others, the Swedish Energy Agency, Vinnova, the Swedish Agency for Technical Development (NUTEK), and the Swedish National Board for Public Procurement (NOU – now transferred into a unit of the Swedish Competition Authority).

2 BACKGROUND AND CURRENT STATUS

2.1 SUPPLY CHAIN MANAGEMENT

Due to increasing demand from downstream manufacturers and their purchasing activities, a growing number of organisations are becoming more heavily involved in supply chain management. A common response among many of these organisations is to improve their internal environmental work by addressing their upstream suppliers as part of their own procurement activity.

A variety of incentives and obstacles influencing supply chain management have been identified, the major incentives being customer requirements, avoidance of negative publicity, and legal compliance (more often applicable to small and medium-sized

	SEMCO	DATE	2009-11-26	PAGE	9 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

companies, SMEs) and the biggest obstacles being contracting supplier conduct, use of a large pool of suppliers, and uncooperative suppliers.

Environmental Management Systems (EMSs) such as ISO 14001 and EMAS have inherent potential for making supply chain management more effective and thereby promoting greener purchasing processes. However, in reality it seems that making use of EMS in this way is not being widely recognized and applied.

2.2 GREEN PROCUREMENT AND SOCIALLY RESPONSIBLE PURCHASING

Over the past decades, procurement departments in both the public and private sector have experienced increasing demands to integrate environmental criteria in their procurement activities. These expectations come from various stakeholders, such as businesses, consumers and NGOs, but also from political initiatives and emerging policies. The potential for green procurement as a policy instrument and as an important tool within the concept of sustainable development has become increasingly recognised over recent years. Parallel to this, political support for green procurement has been manifested at international, EU and national level. Driven by this support, green procurement practices began to take form, resulting in a variety of policies and initiatives, and giving a different status to green procurement and purchasing in different countries. A wealth of literature reporting on green procurement and its incentives and obstacles exists.

Increasingly, both private and public organisations face growing attention from their stakeholders with regard to their social performance. This attention focuses not only on the treatment of employees and the communities in which the organisations themselves operate, but also increasingly on the social profile of their suppliers.

The role of businesses in the context of sustainable development is changing. The idea that companies have both environmental and social responsibilities has existed for a long time. The most recent interpretation of this idea, Social Responsibility (SR), has been triggered by increasing stakeholder awareness and interest in the social, environmental, and ethical consequences of corporate practices in several tiers of the supply chain. Even public organisations are now experiencing scrutiny from the public. Over time, this attention has compelled public organisations to incorporate non-economic criteria into their procurement and purchasing practices. This is usually referred to as Socially Responsible Purchasing (SRP).

An abundance of literature sources investigate incentives for organisations to engage in SR activities. However, a connection to purchasing is still lacking in the literature on SR. Furthermore, the upcoming international standard on SR, ISO 26000, contains limited guidance on SRP, but defines the concept of sustainable procurement. So far, limited knowledge and practical experience exist, and little has been studied regarding the incorporation of social aspects into procurement activities by both businesses and public organisations. The literature indicates that initiatives to systematically implement social responsibility in purchasing are fairly new. However, attempts to integrate social considerations are taking place in both private and public organisations. Among authorities, practices so far have been found to be quite limited. The extent of

deployment and integration of policies and codes regarding social responsibility in the private sector has been found to differ significantly from organisation to organisation. However, some progress was detected – the rate at which social requirements are integrated in procurement has been found to be higher than for corresponding environmental requirements.

INCENTIVES AND OBSTACLES

There is considerable confidence that the use of green procurement can have a significant impact in extending markets for more sustainable goods and services. The aggregated public and private purchase expenditure is substantial, which makes it an important driver for the introduction of greener products to the market, but also for greater adoption of product and process improvements with regard to environmental performance. Hence, the potential positive environmental effects of green procurement – for both the public and private sector – may be considerable. Documented experiences so far come mainly from the public sector, but there are numerous indications that the potential environmental gains from green procurement as a whole are impressive.

The extent and content of sustainable activity in private and public organisations are changing, acting as both incentives and obstacles in their work. The most commonly reported incentives and obstacles in green procurement and SRP are summarised in Table 1. Many private organisations experience close attention to their actions from a number of stakeholders, including customers, the media, governments and investors. In most cases the focus is on the lack of possibilities to control social and ethical performance in the supply chain.

Table 1. Commonly reported incentives and obstacles in green procurement and socially responsible purchasing (based on material in Leire C., IIIIEE Doctoral dissertation 2009:1)

	Incentives	Obstacles
Green procurement	<ul style="list-style-type: none"> • Send a clear message about consciousness to buy “green” • Stimulate markets for sustainable goods and services • Award the production of “greener” goods and services • Influence the behaviour of other socio-economic actors • Advance economic performance • Improve the sustainability of in-house consumption 	<ul style="list-style-type: none"> • Abundance of environmental information creates confusion • Lack of information about suppliers and their environmental performance • Restricted knowledge about potential benefits • Limited understanding of the life cycle cost of products • Too large offer of different product alternatives • Feeling of inability and lack of enthusiasm among procurers
Social Responsible Purchasing	<ul style="list-style-type: none"> • Show sensitiveness to stakeholder influence • Open possibilities to reduce potential costs that otherwise might appear in a long-term perspective 	<ul style="list-style-type: none"> • Lack of resources for supplier audits • Impossibility to ensure that suppliers fulfil Code of Conducts • Differences in culture and

	<ul style="list-style-type: none"> • Satisfy employees concerns and organisational values, • Manage reputation risks and liability for potential social damage • Improve the organisation's social and ethical profile 	<ul style="list-style-type: none"> • management style among suppliers • Low levels of social standards and high levels of corruption in countries of supply • Challenges in setting and verifying procurement criteria
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The structure of a procurement organisation with regard to resources and hierarchy is crucial to have in mind when judging the outcome of green procurement and SRP. Even the commitment and motivation of the procurement staff is important to consider for the evaluation of the results. Different responsibilities and authorities are involved among the personnel in the procurement and purchasing process:

- the strategic level, usually including managers responsible for decisions influencing the position of the organisation in the market, establishing rules, routines and follow-up activities, and making decisions on behalf of procurement staff on a lower level.
- the tactical level, usually including procurers in charge of the commercial part of the procurement process, e.g. the type of procurement, products, selection of suppliers and terms for sub-ordering,
- the operational level, usually including the purchasers in charge of the administrative part of the purchasing process including sub-ordering, delivery of goods and regular follow-up on contracts.

ASSURANCE PRACTISES/VERIFICATION IN SOCIALLY RESPONSIBLE PURCHASING

Purchasing organisations benefit from having developed internal procedures for supplier evaluation and auditing. Many organisations may already have an established pool of suppliers with whom they have long-term business relationships – implying that a transition period before all suppliers are systematically qualified is likely when SRP is introduced. The collection and verification of supplier information requires both resources and competence. Engaging external auditors in the SRP process is becoming more widespread, but has also proven to be quite complicated, and there are still very few auditing organisations that specialise in social audits. The choice to use internal or external auditors depends on some important differences, bringing with them both advantages and disadvantages worth considering.

SIMILARITIES AND DIFFERENCES BETWEEN GREEN PROCUREMENT AND SOCIALLY RESPONSIBLE PURCHASING IN THE PUBLIC AND PRIVATE SECTORS

Organisations differ, being either public or private, with regard to the environmental or social aspects they choose to incorporate into their procurement activities. Over the years, the range of expectations on green procurement in the public and private sector has expanded. The social and ethical issues, on the other hand, have not received the same level of attention, or have not resulted in the same level of formal and structured

	SEMCO	DATE	2009-11-26	PAGE	12 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

work as environmental issues. Nevertheless, the rate at which social issues have been adopted seems to be higher than for environmental factors.

As a general observation, the integration of social requirements in private purchasing is lagging behind the environmental criteria as practised in most green procurement activities. On the other hand, green procurement is increasingly embracing social and ethical issues, and many knowledge-related synergies and learning effects should be expected.

A summary of general observations regarding similarities and differences between green procurement and socially responsible purchasing in the public and private sectors is given in Table 2.

Table 2. Commonly reported similarities and differences between green procurement and socially responsible purchasing in the public and private sectors (based on material in Leire C., IIIIEE Doctoral dissertation 2009:1)

	Similarities	Differences
Green Procurement vs Socially Responsible Purchasing	<ul style="list-style-type: none"> • Both concepts deal with the same principal issues simultaneous and they engage the same personnel • Environmental and social issues are tightly linked • The process of integrating requirements is fairly comparable 	<ul style="list-style-type: none"> • Socially responsible purchasing focuses on upstream processes, while green procurement mostly on downstream processes • Basis for procurement requirements stem from different concepts and sources • The choice of purchasing requirements may be difficult to defend but on different premises
Public vs Private procurement and purchasing	<ul style="list-style-type: none"> • The great number of activities identical at the administrative and operational level • The procurement process to a large extent driven by political policies and legislation 	<ul style="list-style-type: none"> • Market and stakeholder expectations • Influence of political policies • Available experiences, • Product assortment • Flexibility in criteria setting, • Supplier relationships and audits • Available manuals and tools

The general view is that public organisations should contribute to a better fulfilment of social and environmental policy objectives through their procurement. Many private organisations, on the other hand, have the ambition to improve the overall environmental and social performance among their partners in the supply chain, thereby gaining a competitive edge and addressing the primary interests of their stakeholders. In the private sector, probably more so than in the public sector, the implementation of green procurement is by its nature a strategic task that needs to be considered in relation to profitability.

	SEMCO	DATE	2009-11-26	PAGE	13 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

2.3 CARBON FOOTPRINT OF PRODUCTS AND CLIMATE COMMUNICATION/LABELLING

Climate change is a significant concern, emphasizing not only the importance of reducing greenhouse gas (GHG) emissions at plant level, but also increasingly the impact from products and services. Measuring Carbon Footprint (CF) at an organisational and product level is a first step necessary for development of an effective strategy for reducing GHG emissions.

William Rees is usually the person mentioned for pioneering the term “ecological footprint”. By his definition, an ecological footprint equals the “*amount of land required by a given population to produce its goods and services on a continuing basis*”. The concept of an ecological footprint has since gained broad acceptance and recognition. More recently it has been extensively applied in other fields, primarily as CF within the concept of climate change, but also as a water footprint when dealing with water issues. It is important to emphasize, however, that the concept of footprinting refers to quantitative indicators and not to a traditional labelling system.

Even though CF has become a popular way to express the climate impact of organisations and their products and services, there is still no accepted universal CF definition. Terms like carbon footprint, climate footprint, and GHG emissions footprint are commonly used. However, they are not consistently defined. The GHG Protocol, Corporate Accounting and Reporting Standard developed by the World Resources Institute and World Business Council for Sustainable Development (WRI/WBCSD) makes use of the term “emission footprint”, without further explanation. A reasonable interpretation would see the term as extending corporate GHG inventories to parts of the value chain not normally included. The term “emission footprint” is used only once in the ISO 14064 series of standards on GHG accounting, again without a definition. The Intergovernmental Panel on Climate Change (IPCC) does not use the term “emission footprint”, as the endeavours of the IPCC are more directed towards national accounting than corporate or product calculations. It is possible that the current work to develop a Standard for the Carbon Footprint of Products (ISO 14067) will resolve this issue.

Another term currently under discussion and still not properly understood is Carbon Neutrality (CN), which at first glance would seem to indicate something with a CF of zero. However, CN is mainly an indication of an organisation’s ambition to reduce its impact on climate change through investment in projects that generate emission reductions, offsetting the emissions that cannot be reduced internally.

In a policy context, CF can be seen as a subset of the growing demand for life-cycle based information as used in knowledge-based decision-making in the context of Sustainable Consumption and Production (SCP). Studies on CF do not take into account other environmental impact categories beyond climate change. Use of only CF information in policies for general pollution mitigation measures can therefore give a distorted picture of the overall environmental performance of a product or service. The risk exists that statements and claims based on CF studies can be misunderstood and may result in market distortion, leading to fewer environmental benefits on the whole. Therefore, if decisions are to be taken with the ambition of covering a broader range of

	SEMCO	DATE	2009-11-26	PAGE	14 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

environmental issues, it is essential to include information addressing a number of these impacts, not only information from CF calculations.

THE CLIMATE CHANGE DEBATE REVEALS THE NEED FOR NEW COMMUNICATION STRATEGIES

Several initiatives have been taken recently to find an acceptable approach for measuring and quantifying the climate impact from products and services. Unfortunately, many of these efforts are not coordinated and do not make use of available information and international standards developed by the WRI/WBCSD and the International Standards Organisation (ISO), among others. Too many different calculation approaches will cause confusion in the marketplace and lead to difficulties communicating product climate performance. This is especially evident when comparing the CF of different products, which has a high priority among customers as it enables climate-smart purchasing choices to be made. Additionally, both private and public organisations want to be able to communicate the CF of their activities, products and services in a credible and understandable way.

The ongoing debate about the greenhouse effect and its short and long-term effects has changed the communication landscape, highlighting the following issues:

- Many users and target groups for climate information seem to have a gradually increased knowledge of product climate impact and are relatively skilled in dealing with this information.
- Consumers increasingly wish to have access to basic CF data enabling them to make lifestyle changes to reduce their impact on the climate.
- Consumers request more quantitative information that makes a comparison of the climate impact of different products possible.
- Consumers seem more and more willing to accept the challenge of making their own decisions regarding which products have a low climate impact.

As a consequence, the climate issue will have to be accompanied by new strategies for communicating environmental issues. The strong arguments for a greater effort to include climate information and to establish systems for climate labelling are primarily a result of the demand for information from the market and private consumers.

An EU project to develop a carbon footprint Measurement Toolkit included a broad stakeholder consultation to gain insights into different audiences' priorities regarding quantification and communication of product carbon footprints. A summary of this consultation was used to help set up ten principles for CF of products as a simple guide for those organisations working with the development of systems and tools for climate communication (see Fig. 2).

	SEMCO	DATE	2009-11-26	PAGE	15 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- Quantification**
- The entire product life cycle shall be covered in the GHG quantification (if not, this must be justified and generally accepted)
 - All types of GHG emissions have to be included and converted into CO₂-equivalents
 - The use of primary and secondary data shall be clearly defined and their accuracy and precision noted in general terms
 - The underlying data shall be subject to a routine follow-up procedure and be verified by an independent third party
 - The possibility for comparisons shall be guaranteed
- Communication**
- The information shall be separated into the different life cycle stages
 - It shall be possible to distinguish between GHG-emissions of fossil and biogenic origin
 - Information on the impact on other environmental issues shall be made available
 - Explanatory material shall be provided upon request
 - Positive guidance on possibilities for fair comparisons shall be given

Figure 2. Ten principles for quantifying and communicating CF of products

These ten principles may be seen as too demanding and far-reaching regarding CF quantification, extent of information to be reported, the reporting format, and verification, which will place an extraordinary workload on organisations wishing to provide information regarding the climate performance of their products. However, in many cases sufficient support and technical specifications may be found in already existing documents in the ISO 14000 series of standards, as outlined in Fig. 3.

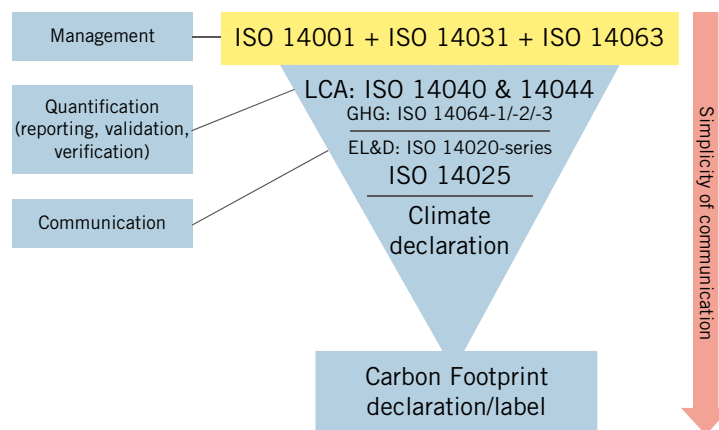


Figure 3. Tentative outline for the sequence of ISO standards available for use in a system for carbon footprint labelling

3 DEVELOPMENT OF PROCUREMENT CRITERIA

The criteria development work by SEMCo results in proposals for environmental criteria for use in procurement contracts for goods and services. For the most relevant product groups, this work has the overall ambition to facilitate the use of environmental criteria in

	SEMCO	DATE	2009-11-26	PAGE	16 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

tender documents, but also to inform suppliers/tenderers of the environmental criteria which may apply in a procurement context in the near future.

The development of procurement criteria is a gradual process based on open participation involving all interested parties. The procurement criteria are developed following a comprehensive quality assurance process with consensus-based decision-making. The sequence of activities in the development process builds largely on the way ISO standards are developed, which has gained broad international acceptance and appreciation by different stakeholders, mainly in the business sector. SEMCo's document on how criteria development work shall be carried out, "*Development of procurement criteria, requirements with guidance for use*", describes in detail the work to be done, as per the structure of ISO 14001 (see Fig. 4), and includes the following elements:

- Scope
- The concept of sustainable procurement
- Requirements for criteria development work
- Implementation and operation
- Requirement for the criteria development process
- Quality assurance
- Maintenance
- Decisions
- Document handling

	SEMCO	DATE	2009-11-26	PAGE	17 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

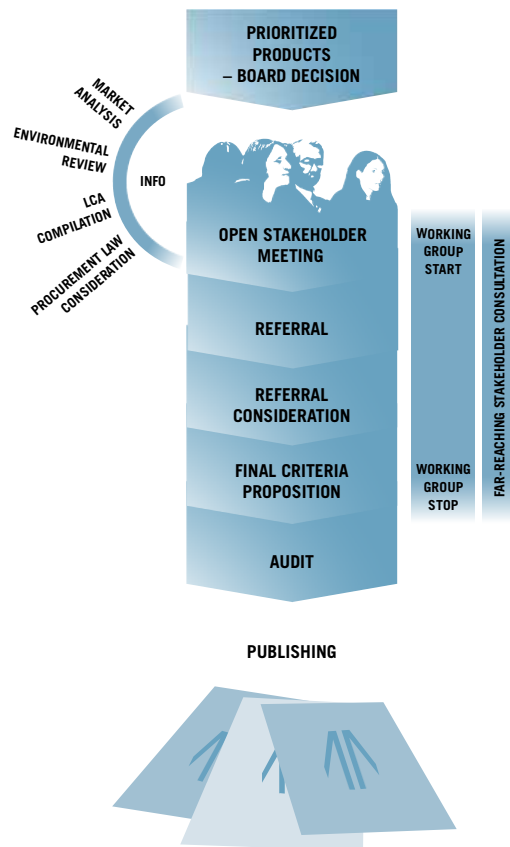


Figure 4. Outline of the practical work in the development of procurement criteria as used in SEMCo

A method has been developed for an objective identification of relevant product groups to consider for public procurement. A systematic approach based on the System for Environmental and Economic Accounts (SEEA) was used, with the following points of departure for a selected product or product group:

- assess the relative magnitude of the environmental impact,
- estimate the volume of sales in the public sector,
- collect purchasing preferences from public procurers.

3.1 DEVELOPMENT OF PROCUREMENT CRITERIA AT DIFFERENT LEVELS

An important part of SEMCO's criteria development work is to conduct market overviews identifying the available range of products with varying environmental performance for the purpose of developing procurement criteria at various levels, where appropriate (see Fig. 5).

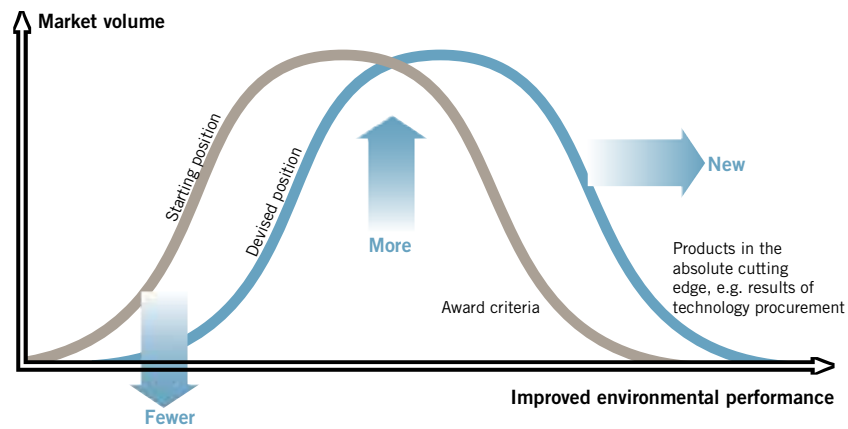


Figure 5. Description of how the market's range of products with good environmental performance can increase through use of effective and well-formulated procurement criteria

Criteria are being developed for three levels of stringency and ambition:

- Level 1: Basic requirements - covering products that fulfil the basic level of environmental performance (somewhat exceeding legal requirements).
- Level 2: Advanced requirements - covering products in the best environmental performance quartile (25 %), about the same level as current eco-labelling criteria.
- Level 3: Spearhead criteria (see below) - covering products at the absolute forefront of existing environmental developments/innovations, based, for example, on the concept of Best Available Technology (BAT).

Given a selection of different levels of procurement criteria, a procurer has the possibility to decide which level(s) to use in their procurements, based on their own preferences/ambitions.

The spearhead criteria should be regarded as being at the absolute forefront of environmental innovations (cf Fig. 6). They should be used to encourage procurers and purchasers who wish to buy environmentally excellent products, and at the same time motivate suppliers to further expand their work developing environmentally preferable products.

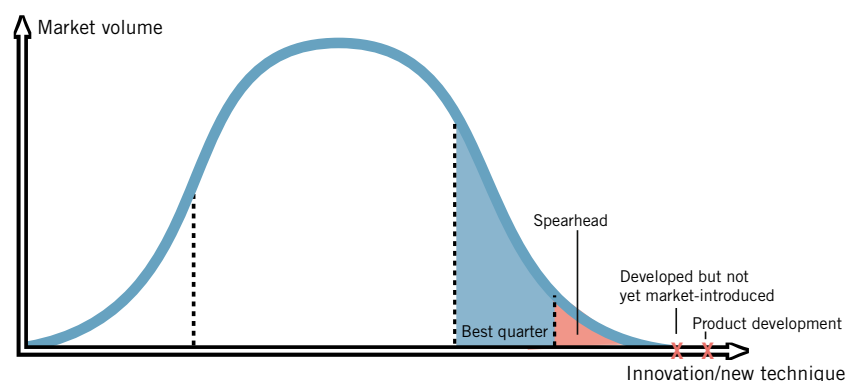


Figure 6. Product market volume can be divided into different levels of environmental performance based on the environmental requirements set, reflecting innovation/new technologies

	SEMCO	DATE	2009-11-26	PAGE	19 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

3.2 THE WORK WITH CHEMICAL ISSUES

SEMCO is working with a variety of efforts for a non-toxic environment within the framework of the procurement criteria development process. SEMCO's chemicals strategy has the form of a guideline document for developing procurement criteria. The document sets targets for chemicals with specific defined properties that should be avoided or limited in products procured. The targets should be met using a check-list as a practical tool for ensuring compliance with the chemical strategy. Using the check-list, specific chemical substances used in selected product group are identified.

3.3 THE PRECAUTIONARY AND SUBSTITUTION PRINCIPLES

In addition to the basic EC legal principles there are some other environmental legal principles that could be applied within public procurement, including the precautionary principle and the substitution principle. Both of these principles allow measures to be taken even if no fully consistent evidence exists that an activity, a product or a service is hazardous.

The precautionary principle was introduced into the Treaty on European Union 1993 and is one of the founding principles within the EU environmental policy. The precautionary principle has been given a strong position in Article 174 or recognition when enacting new directives and regulations. The treaty also includes a direct reference to the precautionary principle (Article 174.2). The areas for application of the precautionary principle involve consumer policies, as well as human, animal and plant welfare.

The substitution principle, involves avoiding the use of products that may present risks to human health and the environment if less harmful products can be used in their place. In an international context the substitution principle refers to the term functional substitution, which signifies avoiding dangerous substances by using alternative technical solutions. In recent years the substitution principle has found wider acceptance, but has not been recognised as having the same status as the precautionary principle from an international point of view.

A general observation with regard to use of the precautionary or substitution principles is the near-impossible mission for most procurement departments of dealing with the complex legal issues and their case-by-case interpretation, as well as the skills necessary to properly handle all requirements associated with the presentation of evidence and proof by the parties involved in the procurement and purchasing process. The full SEMCO report on the relevance of the precautionary or substitution principles in public procurement should therefore be seen as an internal working document for use by SEMCO when developing procurement criteria.

3.4 LIFE CYCLE COST ANALYSIS (LCC)

A life cycle cost analysis considers the total cost of a product during its use. It covers not only the basic investment, but also the operating and maintenance costs. Other costs considered important in this context include environmental taxes and the cost of discarding the product, as well as various incomes such as subsidies and the remnant value which can influence the calculations of the total anticipated cost.

	SEMCO	DATE	2009-11-26	PAGE	20 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

SEMCo has developed a general tool for LCC calculations based on the net present value method, applicable to most products. The net present value method is used to recalculate all expected expenses in the investment and any earnings to a present value of today in order to compare future costs with those of today, as a specific currency today will have a different value tomorrow, and any currency today can be invested or provide a return in some other way. Therefore, all future costs are recalculated to the time of the purchase. However, certain economic aspects that need to be considered for selected product groups may demand more detailed and customised calculations.

As general rule, LCCs are included in any procurement criteria developed by SEMCo, when found relevant. It is important to initially examine the prerequisites for a specific procurement to check the applicability of the tool and how it can best be used. This may be done using a three-tiered approach considering the following questions:

1. Is the product to be purchased suitable to be subject to LCC calculations?
2. In which phase of the procurement can the LCC tool best be used?
3. What type of tool should be used?

LCC calculations are best suited to products with high energy consumption in use, e.g. vehicles, lighting, and office machines, where operating and maintenance costs are comparatively high during the product life cycle, and are therefore important to consider in the procurement process.

The concept of LCC is best applied during the procurement process – preferably in the needs analysis – where it can be used to improve purchase planning and estimate the difference in cost of leasing or purchasing products. It can also be used to estimate how much an environmentally compatible, green alternative would cost in comparison with a conventional product – maybe even resulting in a cost saving rather than an increase. It is further useful in the tender evaluation where the results from an LCC calculation can be applied as an evaluation criterion. It should be emphasized the necessity that the tender document clearly describes the parameters which are to be included in the calculations and the documentation of the measurement methods as information to a tenderer about what information they should provide.

3.5 VERIFICATION AND FOLLOW-UP

In order for procurement activities to be credible and a driving force in environmental work, the use of environmental criteria should be checked and followed up. Procurement authorities have an obligation to conduct follow-up activities. It is important to formulate environmental criteria that can be verified and checked, and that purchasers have information on the type of verification to request from suppliers. However, far too often, the implementation and follow-up of environmental criteria for the contract duration are not handled in a satisfactory way. In the long term, this situation can jeopardise the credibility of green procurement.

Verification (or evidence) should not be handled as a separate phenomenon in the procurement process, as the formulation of environmental criteria can affect the choice of verification and the potential for an effective follow-up process. For this reason it is

	SEMCO	DATE	2009-11-26	PAGE	21 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

important to initially examine the validation methods and then the choice of verification, prior to the formulation of environmental criteria. The type of verification should preferably be selected based on cost and time efficiency in the context of the EU legislative principles, where these aspects are evaluated together in a step-by-step manner (cf. Fig. 7) leading to identification of the type of verification likely to be most suitable in different procurement situations. In this way, validation of the environmental criteria takes place simultaneously.

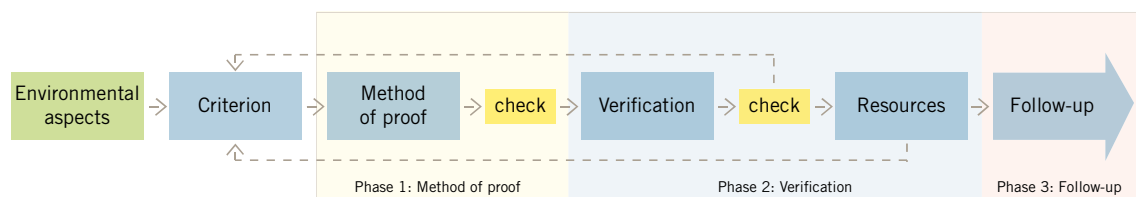


Figure 7. An outline of the verification process used by SEMCo in formulating environmental criteria for public procurement

SEMCo makes use of the verification process as outlined in Fig. 7 when setting procurement criteria based on the following considerations for the three phases:

- *Phase 1: Method of proof.* Once the validation method has been established it is important to make an assessment based on certain questions before work proceeds, e.g.: Is the validation method good enough? Some measuring methods may involve a certain margin for error, is this acceptable? Have tests previously been carried out in the same manner, do they have a scientific basis, and are they comparable?
- *Phase 2: Verification.* Based on the validation, the next phase is to consider which types of verification are commonly available within the product group/industry in question. Common verification methods exist for a range of different product groups. The verification methods must be examined as to whether they are financially feasible, i.e. both time and cost efficient.
- *Phase 3: Follow-up.* Follow-up or inspection can be carried out during the tender assessment or at various points of time during the contract period. Different contract terms and conditions, to be fulfilled during the contract period, cannot be checked until they are due for completion.

3.6 THE USE OF ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS) AND ENVIRONMENTAL DECLARATIONS IN PUBLIC PROCUREMENT

There is an increasing need for credible documentation when substantiating compliance with requirements in green procurement. Environmental management systems (EMSs) focusing on the environmental performance of an organisation and environmental product declarations focusing on the environmental performance of goods and services have considerable potential for greater use in procurement contexts.

The proper use of EMSs in green procurement is generally felt to be unclear with regard to what is permitted according to the European Procurement Directive and its Swedish application, LOU. Whenever demands have been placed on EMSs in practise, however, these demands usually lack a direct connection to the subject matter of the contract.

	SEMCO	DATE	2009-11-26	PAGE	22 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

When a specific element of an EMS has been referred to, it has often been in terms of the existence of an existing environmental policy, preset environmental targets etc., which in turn have no direct connection to the subject matter of the contract. All of these experiences have limited the use of EMSs in procurement contexts.

Many organisations, especially small and medium-sized companies (SMEs) that have introduced EMSs for the purpose of gaining a market advantage in public and private procurement activities are greatly disappointed, as the existence of an EMS usually does not lead to the desired positive market effect. This may result in other supplier organisations – that do not spend money and resources on EMS work – being able to offer lower prices, giving them a competitive edge. Additionally, it is often claimed that voluntary environmental commitments do not seem to be much rewarded by the authorities.

Environmental declarations are not commonly used as documentation or verification in green procurement. This is due partly to the low uptake of environmental declarations in the market and partly to uncertainty regarding the type of information to include in an environmental declaration, whether or not they are available, and which suppliers can actually provide them. The different systems for environmental declarations available on the market vary in many respects, and the information and data is reported in different ways, making it difficult to compare environmental information between different products. Environmental declarations can meet many of the demands procurers have for relevant, credible and verified product information, if they are developed as part of an existing and available programme on the market.

With regard to the methodological and legal points of departure, procurement legislation unfortunately contains limited information regarding evidence that can be required in a tender document. As a consequence, procurement organisations could be regarded as having great freedom in choosing both the type and the level of verification, bearing in mind that tenderers may not be able to provide different types of verification about the environmental performance of their organisations or their good and services.

One practical way to increase the uptake of EMSs and environmental declarations in public procurement could be to combine work on the two. It is often difficult in the long term for an organisation (after the implementation of an EMS, with many easily identified cost-effective measures, i.e. the low-hanging fruit) to identify and prioritise significant environmental aspects related to their products and services. This is often associated with the need for specialised expertise and consulting firms. Here, an environmental declaration can add significant value. It constitutes a direct input to the continual efforts to identify new and upcoming environmental aspects for the maintenance and further development of an effective EMS. The basic data collected for an environmental declaration is a multi-purpose exercise, to be used not only for the preparation of an environmental declaration but also to:

- regularly identify significant environmental aspects for the organisation's operations,
- increase an organisation's knowledge about environmental aspects related to a certain product or service, as an input to the development of more environmentally-friendly products and services.

	SEMCO	DATE	2009-11-26	PAGE	23 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

4 AWARENESS-RAISING AND CAPACITY-BUILDING

From an early stage, awareness-raising in the form of information and education was identified as an important part of the work required to meet the targets set to increase the use of environmental criteria in public procurement. Therefore, SEMCo has spent much time and effort gathering information from all relevant stakeholders regarding how and when to carry out awareness-raising activities to ensure optimal uptake and understanding, fostering better use of environmental criteria in procurement.

4.1 THE NEED FOR INFORMATION AND EDUCATION FOR A BETTER USE OF SEMCO'S PROCUREMENT CRITERIA

SEMCo carried out a study using interviews and a questionnaire aiming to:

- identify target groups and the most important prerequisites to consider for future information and education activities,
- map the type of information, awareness-raising, and services needed among these target groups in order to increase the use of environmental criteria in green procurement,
- suggest how the need for information and education could be met in a satisfactory way,
- summarise which organisations and interested parties could potentially help SEMCo expand and improve its information and education work.

The study results indicate clearly that the target groups to prioritise for information and support are procurement officers, procurement managers and politicians (with politicians receiving a different message to the other groups). Other target groups repeatedly raised the need for more distinct political objectives and better organisational solutions.

There is a need for awareness-raising on various issues related to green procurement. Half of the respondents in the study felt they had insufficient knowledge to be able to include environmental criteria in their public procurement activities, i.e. to carry out their duties. The most-requested information and education deals with:

- the type of environmental criteria to be used,
- evaluation and follow-up of environmental criteria,
- assessment of environmental performance versus price of the product,
- access to guides on use of supporting tools,
- access to available success stories.

There is in fact an abundance of opportunities to get information and education within the field of green procurement. Seminars, conferences and special education activities are continuously being held. However, the target groups differed in their ability to digest and understand the content of presentations and information material, making it difficult to provide a consistent picture of the need for information and education. However, it seems evident that future information and education material ought to be customised to a

	SEMCO	DATE	2009-11-26	PAGE	24 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

greater extent for use by the various target groups – this is quite a challenging and resource-intensive task to undertake.

RECOMMENDATIONS

The consolidated outcome of the study on information and education needs in GP resulted in the following recommendations to improve awareness-raising and capacity-building:

- increase dissemination of information regarding the services offered,
- make available information regarding access to criteria, advice and tools for evaluation and follow up, and guidance for the assessment of environmental and economic benefits,
- develop education modules for different topics linked to green procurement, adapt them to the identified target groups needs and prerequisites, and transform them into self-education material for electronic access,
- prior to information or education seminars/meetings, collect information on the background and expected results of the participants in order to be able to tailor the information or education package to best suit the participants,
- begin strategic, long-term cooperation with experienced education organisations,
- consider the value of “licensing educators” that can help SEMCo to establish a group of expert green procurement educators well informed about the work of SEMCo in their information and education activities,
- collect and publish success stories, giving examples of successful methods, political objectives and requirements, environmental criteria, evaluation methods and ways to follow-up the results of contracts given.

4.2 INFORMATION AND EDUCATION ACTIVITIES

SEMCo has carried out several types of information and education activities, the most important being:

- Homepage – SEMCo re-launched its main homepage (www.msr.se) and created a new website for climate information (www.climatedec.com) in English and Swedish. The re-launch of the main homepage was based on input and suggestions for improvement from discussions with a reference group. Work is ongoing to further refine the homepage based on a web-enquiry and follow-up interviews.
- Education – SEMCo regularly carries out various types of education activities for different audiences. These activities can take the shape of either a basic education on general topics related to GPP, or a tailor-made education to meet particular customer demands, e.g. for sector-specific purposes. Additionally, SEMCo has started special education courses to meet the needs of frame agreement authorities.
- Web-based education – SEMCo has developed two interactive education courses offered on the web: a basic training package on general topics for GPP (see front

	SEMCO	DATE	2009-11-26	PAGE	25 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

page in Fig. 8), and specific education for energy-efficient procurement related to climate issues – the latter available in English.

- Information material – SEMCo has developed information material on different topics for various purposes (see Annex 1).
- Guidance documents – SEMCo has developed guidance documents for topics of particular importance to organisations involved in GP (see Annex. 1).
- Conferences/seminars – SEMCo staff members are regularly involved as speakers in conferences and seminars of various kinds arranged by other organisations.
- Seminars for politicians – SEMCo, in cooperation with the Swedish Association of Municipalities and Regions, has conducted a series of regional seminars around Sweden with the main objective of conveying a message to politicians and decision-makers regarding the potentials and benefits of green procurement.
- Annual conference on green procurement – SEMCo arranges an annual conference called Green Procurement, which has been appreciated and recognised as a national meeting place for all involved in green procurement to present and discuss current issues of interest.
- Awards – SEMCo has launched annual awards for *Best Green Procurer* and *Best Green Supplier* to reward organisations at the frontline of green procurement practice, to set good examples, and to show success stories.
- Reports – SEMCo regularly issues reports resulting from its own activities and projects, and from external contract work (see Annex 1).

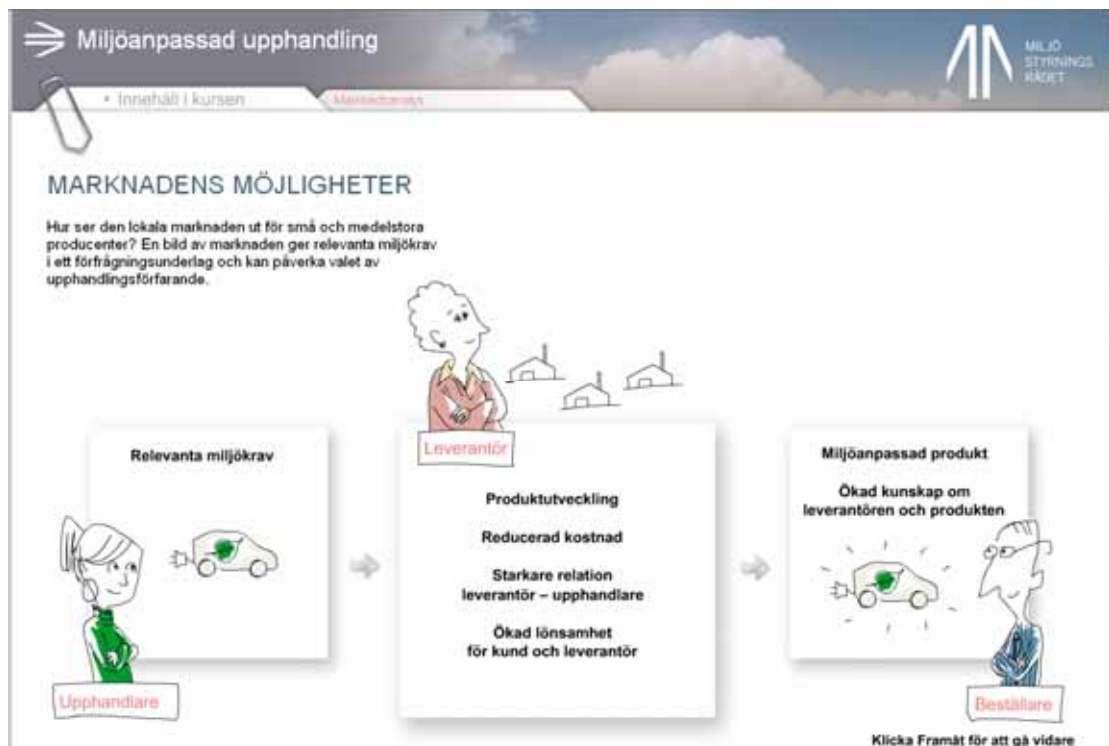


Figure 8. The front page for SEMCo's web-based basic training package on general topics for GPP

	SEMCO	DATE	2009-11-26	PAGE	26 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

5 OTHER ASSOCIATED STRATEGIC ACTIVITIES

5.1 CONSUMPTION TARGETS

The Swedish government sees the concept of consumption targets as worth considering, but has chosen to prepare a structured analysis of the economic and social consequences of consumption targets before taking action. Following on from this decision, the Swedish government has given SEMCo the task of investigating the concept of consumption targets further and to arrange a continuing dialogue on the subject.

SEMCo used a three-tiered approach in its investigation of consumption targets:

- first, identify the principles to consider when carrying out work on consumption targets by inviting an expert group of representatives from different sectors of society to a series of meetings. The aim was to prepare a summary of prerequisites for the work, as well as a list of suitable product groups to study,
- second, discuss and develop different ways to formulate consumption targets based on the identification of suitable product groups,
- third, conduct an analysis of the consequences that can arise if the suggested consumption targets are implemented.

In its investigation of consumption targets, SEMCo identified the following points of departure for consideration prior to setting detailed levels:

- a target should be relevant and based on public sector activity that has a significant impact on the environment,
- a target should be chosen in areas where pre-existing procurement criteria and standards are available. This would help reduce implementation costs (for both purchasers and suppliers) and allow follow-up activities to be carried out to help achieve the target,
- a target should be formulated as a performance target, and not as a reward for specific technical solutions, thereby minimising the potential for the development of innovative technology,
- a target should yield real cost savings in the long term, making it possible to both weigh cost against environmental benefits and also apparent cost savings.

Based on the results from the EU-initiated so-called EIPRO study, three business sectors were identified as the cause of almost 80 % of the total environmental impact from human activities in Europe: the transport, food and construction sectors. As consumption targets already exist for two of these areas in Sweden (for food and vehicles), SEMCo, in conjunction with representatives from the Ministry of the Environment, considered it appropriate to focus the investigation on suitable consumption targets in the building and construction sector, with a special focus on climate change issues.

A number of interesting measures for feasible consumption targets could be implemented in the building and construction sector. However, they need to be identified and selected in a well-considered and structured manner. SEMCo made use of the

	SEMCO	DATE	2009-11-26	PAGE	27 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

following points of departure in its selection of suitable consumption targets. They should:

- give incentives to formulate relevant environmental criteria,
- not become an obstacle for small and medium-sized enterprises,
- add benefits compared to other types of legal or policy instruments,
- not induce a high administrative burden,
- be possible to follow-up.

Based on these assumptions and prerequisites, SEMCo formulated the following consumption target for the building and construction sector:

“Energy consumption when constructing new public buildings shall be lower, expressed in percent, than the existing rules (referred to as the BBR-rules) defined by Swedish Building Agency”

The suggested consumption target was subject to a discussion among experts at a number of relevant institutions and organisations to gain insight into the relevance of the suggested reduction of energy consumption. This inquiry indicated 30 % to be a reasonable reduction rate. Some of the organisations that were consulted recommended going beyond the 30 % level, possibly up to 50 %, applying to both new construction and re-development projects.

5.2 TECHNOLOGY/INNOVATION PROCUREMENT

Technology procurement aims to stimulate and accelerate market introduction of new technology. The underlying methodology engages different actors on the market in order to develop new/required products, and has been quite successful in satisfying customer needs, resulting in positive environmental effects and stimulation of business development. The outcome of a technology procurement process often leads to a substantial market introduction of the products developed. Technology procurement can thus act as a catalyst, with a demonstrable, direct effect when large volumes are procured.

SEMCo has managed and carried out a project in cooperation with the Jegrelius Research Centre and the Environmental Innovation Forum (MInT) looking into the concept and further development of technology procurement. An overall objective of the project was to create a basis for the possible establishment of a future national programme for environmentally-driven technology procurement. It further aimed to identify how elements of a technology procurement procedure could be linked into daily procurement processes based on the criteria development work carried out by SEMCo.

Within the framework of the EU’s work with the Environmental Technology Action Plan (ETAP), technology procurement has been defined as *“an approach in which public authorities integrate environmental criteria in all procurement process steps, thereby stimulating the spread of environmental technology and the development of ecologically sustainable products by identifying and selecting the solutions that have the least possible environmental impact seen in a lifecycle perspective.”* Green procurement can therefore be

	SEMCO	DATE	2009-11-26	PAGE	28 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

regarded as having a clear link with technology procurement. The International Energy Agency (IEA) has defined technology procurement as *"a process by which a product, service or system is procured, and for which the development of new technical solutions is necessary in order to meet buyers' needs. The work on technological development, which is part of the process, may include the application of advanced technologies, but also less advanced technology and product modifications. The development work may include the product, the product system as well as the manufacturing process"*. As technology procurement is popularly being referred to as a way "to buy environmentally-sound products that are not yet available on the market", it seems logical to differentiate between procurement of technical solutions already developed but not yet commercially available – *technology procurement* – and procurement of technical solutions not yet developed – *innovation procurement*.

Technology procurement is a gradual process (see Fig. 9) which usually covers the feasibility study, the formation of buyer groups, the development of technical specifications, tendering, the evaluation of tenders, follow-up, as well as dissemination and market introduction.

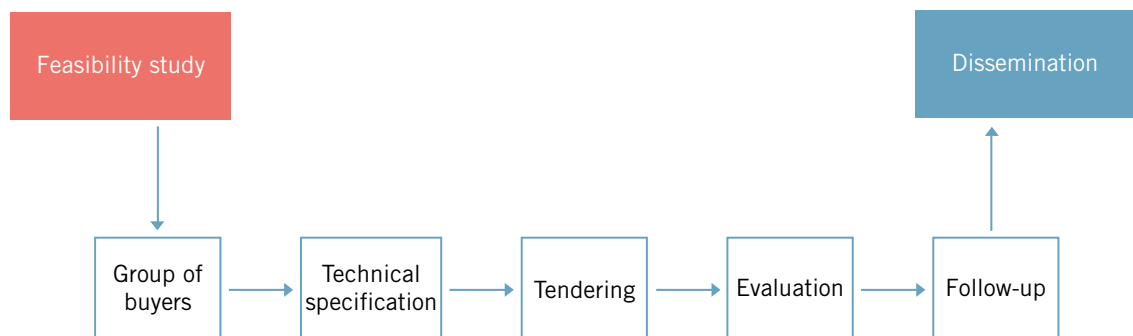


Figure 9. Steps in a traditional technology procurement process.

Considerable experience exists internationally regarding activities and projects of various types related to technology procurement. Many of these are covered in the international literature as a result of conferences, seminars and workshops. Within the EU, several activities can be identified in connection with both technology development and procurement – several of these in the form of specific projects.

While technology procurement and business development focuses on users/customers and the proliferation of new products, technology procurement also has the function of encouraging the development of various industrial activities. The literature highlights the role of risk-aware, enthusiastic customers as the driving force in the development of new products. Collaboration with the customer is very important for innovative companies in the early stages of environmental development work. Existing experiences show that where collaboration with the customer took place, innovation has evolved to a greater extent and has been more successful than in projects where little or no cooperation occurred. Customer interaction is one of the ten primary factors for success.

Various aspects need to be considered, such as:

- Different categories of customers
- Technology procurement in the early stages including:

	SEMCO	DATE	2009-11-26	PAGE	29 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- niche markets,
- specific programmes for early starters,
- special support programmes.

IDENTIFICATION OF FOCUS AREAS AND BUYER GROUPS

It is important to have a structured approach when selecting the focus areas and potential buyer groups. The SEMCo project used a method for selecting focus areas for which groups of buyers could be formed, with the aim of contributing to the phasing out of significant substances that are hazardous to health and the environment. The substances and products identified in the preparatory work can be seen as indicators to help identify potential groups of buyers, known as indicator substances and indicator products (cf Fig. 10):

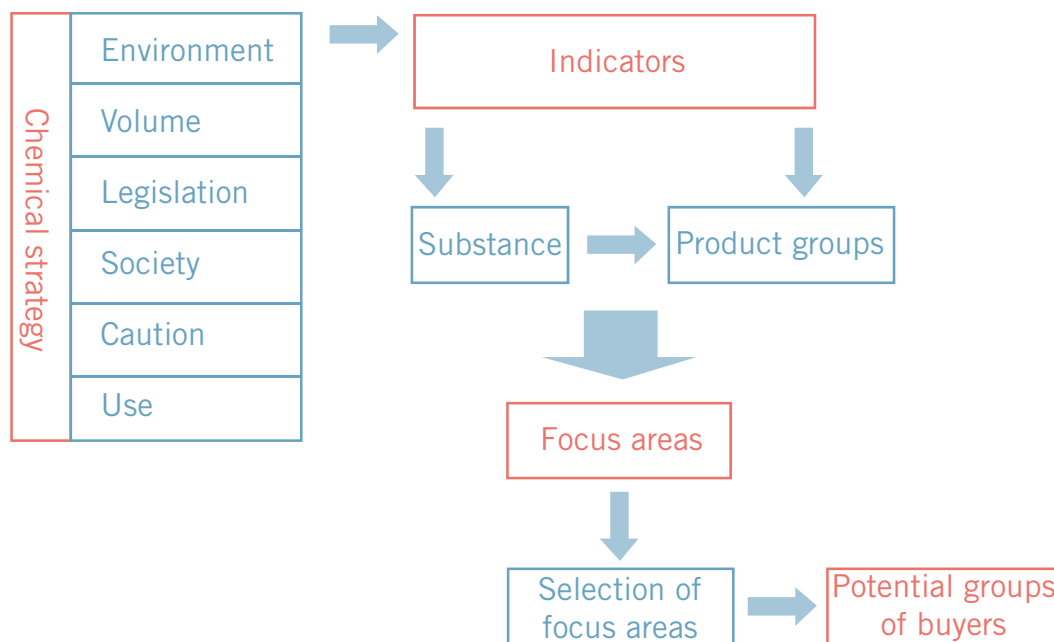


Figure 10. Schematic representation of the method for identification and selection of focus areas and buyer groups

A general national model for future work with technology/innovation procurement is proposed, in which the different stages can be viewed in various time horizons with different purposes:

- in the short term, linked for example to the work carried out by SEMCo in market overviews, dialogues between suppliers and buyers as well as in innovation forums for different product areas, as input to the development of spearhead criteria,
- in the long-term, linked to the traditional concept of technology procurement, either in the form of a more generally recognised technology procurement concept as a functional tool for different product categories, or in the form of a concrete process between different tenderers in separate projects.

	SEMCO	DATE	2009-11-26	PAGE	30 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

5.3 SEMCO'S INNOVATION FORUM

SEMCo's Innovation Forum was created to coordinate various networks that aim to stimulate environmental innovations, and to encourage development in procurement areas where few products with sufficiently good environmental performance exist, but where the potential exists for the development of innovative environmental technologies.

The Innovation Forum is a platform for dialogue on how requirements for product development can be fulfilled by supplier innovations, where:

- purchasers are actively working with priority lists,
- suppliers are presenting innovations,
- supplier seminars are organised to identify the frontline products,
- supplier dialogues are organised to discuss conditions for the development of new technology,
- interested purchasing organisations can be identified by suppliers with innovations.

SEMCo has pioneered the Innovation Forum in the form of a national substitution group for non-toxic health-care, with good results. The group consists of a majority of the Swedish county councils. The objective of the group is to find environmental innovations for substitution problems within the health-care sector.

An important starting point for future work is the further consideration of the precautionary and substitution principles. It is the ambition of SEMCo to expand the work with Innovation Forums to include more networks and product areas, such as energy-efficient products that do not have measurement standards, energy labelling or similar.

5.4 ECO-EFFICIENCY THROUGH ENERGY PERFORMANCE CONTRACTING (EPC)

As a consequence of rising energy costs, many property managers are seeking ways to make their buildings more energy-efficient. One way to achieve this is to choose a traditional energy-efficiency approach; another way is to choose a concept referred to as energy performance contracting (EPC). EPC is an interesting energy-efficiency approach with a significant potential to be of use in GPP and to save energy and costs.

The concept of EPC involves a number of inherent features, some of the more important ones being:

- performance guarantee,
- transfer of knowledge,
- cost efficiency,
- environmental benefits.

EPC is a form of functional procurement of energy savings including a performance guarantee. Within the concept of EPC, an energy service company is contracted to improve the energy efficiency of a building (or buildings) in which the cost reduction due

	SEMCO	DATE	2009-11-26	PAGE	31 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

to the guaranteed energy saving is used to cover the capital investments needed to buy and install the necessary equipment. The responsibility for the end result rests with the entrepreneur, who guarantees an energy saving capacity over the entire contract period. In one type of application of the EPC concept the actual energy saving can even be higher than guaranteed, as the entrepreneur will guarantee a minimum level of savings, and it will benefit the entrepreneur to share the surplus profit with the purchaser. In case the forecast savings do not occur, the entrepreneur is obliged to pay a refund.

If the procurement exceeds the threshold values, the choice of a suitable procurement model usually results in a negotiated procurement with preceding advertisement as per EU procurement directives. The evaluation should preferably be made using the concept of the most economically preferable tender, and not only depending on the lowest price.

Quite a number of advantages in carrying out an EPC project have been identified. Listed below is a summary of the most frequently mentioned incentives for making use of EPC in public properties:

- saving money,
- the need for modernisation of the properties,
- reducing high energy consumption,
- improving ventilation systems for health and comfort,
- making maintenance more efficient and reducing the need for acute measures

5.5 THE USE OF GLOBAL REPORTING INITIATIVE (GRI) INDICATORS IN PUBLIC AND PRIVATE PROCUREMENT

The concept of sustainability is broad; it includes economic and environmental issues, as well as social and ethical ones. Sustainability issues have become more and more entrenched in both the public and private sectors, although it can be noted that the business sector has gained most experience in this area. In December 2007 the Swedish government decided that state-owned companies should prepare and publish sustainability reports in accordance with the GRI's guidelines – an initiative that received a considerable international echo in terms of good leadership.

Procurement legislation refers to *social considerations*. These involve considerations in connection with procurement, and need not directly reflect the procuring authority's/entity's work with social responsibility. Ethical considerations/ethical requirements are other concepts within the framework of sustainability – the difference could be defined as follows: ethical considerations are limited mainly to human rights, while social considerations are much wider, and include factors such as gender equality, accessibility, integration, democracy, etc.

Regardless of which terms are used, an ethical needs analysis is usually already implemented in the planning of forthcoming procurements. Such an analysis takes into account factors of the procurement that affect society. Nowadays, procurement legislation explicitly demands favourable conditions for the disabled, and measures for the prevention of unemployment and for young people. Additionally, specific needs of particularly disadvantaged groups of people who use buildings, public transport and

	SEMCO	DATE	2009-11-26	PAGE	32 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

various services must be met. Requirements that roads be built to be safe constitute a further social requirement that benefits all citizens. An ethical approach can also mean that goods and services used by the procuring authority should be produced in such a way that internationally recognised standards for reasonable working conditions and human rights are observed.

SEMCo has made an attempt to examine the GRI Social Indicators for Human Rights, Labour Practices & Decent Work and Society, where all mandatory (core) indicators have been analysed, with the additional indicators only being included if of relevance to public procurement. SEMCo has drawn tentative conclusions from this examination with regard to their use in public procurement. The tentative conclusions are summarised in Fig. 11.

- GRI has no absolute requirements that infringements of, amongst other things, ILO core conventions must not occur, but if detected they should be rectified.
- Accordingly, GRI is per se no verification that such infringements do not occur. On one hand, it suggests that the company/organisation has traceability, and thus the knowledge, to take action, on the other hand, companies that use GRI can prove that there are no infringements if their risk analyses have identified that such do not occur.
- In view of how the situation appears in the world today it will likely be difficult to require that the fundamental ILO conventions be respected in all contexts. But knowledge, risk analyses and action can significantly improve the situation, and public procurement may encourage participation.
- It is now an explicit option to request that suppliers comply with ILO core conventions in connection with public procurement. However, it is unclear and even doubtful whether it is possible to have more stringent requirements in the public procurement of products. The conditions for such requirements in a public procurement process are that they do not discriminate against companies or products from certain regions or countries, that they do not involve political commitments, that they do not favour organisations of a certain size, and that they are not otherwise disproportionate in relation to the purpose. Examples of factors with uncertainty include requirements pertaining to remuneration above the minimum level, premiums, loan conditions and protection of indigenous people. With the UN Universal Declaration of Human Rights, the perspective is a little different. Human rights determine the relationship between governments and individuals. The main rule is that only states are liable for violations of human rights internationally, not individual organisations.

Figure 11. Summary of SEMCo's tentative conclusions from the examination of relevant GRI indicators for potential use in green procurement

5.6 PRODUCT-RELATED ENVIRONMENTAL INFORMATION SUITABLE FOR PROCUREMENT

The global market is increasingly demanding science-based, verified and comparable information about the environmental performance of products and services, for use in several market-based applications, such as green procurement and purchasing. In meeting these demands, organisations must have objective and reliable information about the environmental performance of products and services, so that they can use the information in their own contexts and make their own decisions. The development of

	SEMCO	DATE	2009-11-26	PAGE	33 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

systems for environmental declarations was mainly a response to this market need for reliable product-related environmental information.

Responding to this trend in market information demands, SEMCo initiated, developed, and established an official type-III environmental declaration programme in the late 1990s, called the EPD[®] system. Over the years, the EPD[®] system has gradually been converted into a system with international applicability; renamed as the international EPD[®] system, it includes expertise and organisations in many parts of the world and is open to all interested companies and organisations. Companies and organisations can join the international EPD[®] system to benefit from the potential advantages it offers as a communication tool for environmental marketing.

The overall objectives for the international EPD[®] system are:

- to help and support organisations communicate the environmental performance of their products and services in a credible and understandable way,
- to offer a complete programme for any interested organisation in any country to develop and communicate environmental declarations according to ISO 14025,
- to support other programmes for environmental declarations in seeking cooperation and harmonisation and helping organisations to broaden the use of their environmental declarations in international markets.

The international EPD[®] system aims to ensure objectivity, comparability and credibility in communicating environmental performance within clearly defined and classified product categories and service types. The system approach covers separate products and services as well as complete or partial assortments of products and services. The international EPD[®] system is designed to meet various information needs within the supply-chain and for end products both in the private and public sector, as well as for more general purposes in information activities and marketing.

An environmental declaration is defined in ISO 14025 as “*quantified environmental data for a product with pre-set categories of parameters based on the ISO 14040 series of standards, but not excluding additional environmental information*”. The international EPD[®] system builds on a large number of existing ISO standards (as illustrated in Fig. 12), these being:

- Management standards (ISO 9001 and 14001) to guide the programme operator in the administration of the systems approach.
- ISO 14040 and 14044 as well as ISO 14064-1-2-3 for setting up rules for Life Cycle Assessments (LCA) in GHG quantification, validation, and verification.
- ISO 14025 and 21930 describing the procedure for developing Product Category Rules (PCRs) and their open consultation, review, approval and publication.
- ISO 14025 for setting up the rules for independent verification.
- The General Programme Instructions (GPIs) complete these rules in existing standards, e.g. with specific data quality requirements, data sources, conversion factors, stakeholder participation, etc.

	SEMCO	DATE	2009-11-26	PAGE	34 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

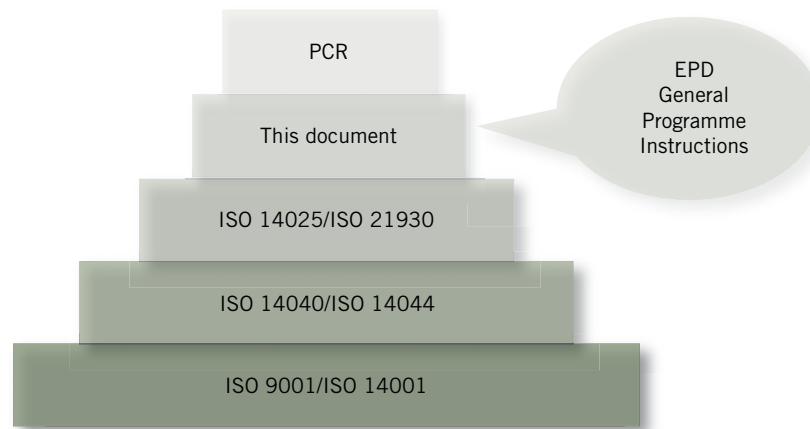


Figure 12. Principal layout of the international EPD[®] system and the relevant ISO standards as building blocks

Of special interest for SEMCo's work on green procurement is that, according to ISO 14025, one of the primary objectives is to assist purchasers and users in making informed comparisons between products. Environmental declarations according to ISO 14025 are the only internationally recognised and practised tool enabling a comparison of the environmental performance of separate products; in most cases this is exactly what is needed from a procurement point of view in selecting from different bids.

PRODUCT CATEGORY RULES (PCR) - THE KEY VEHICLES FOR COMPARISONS

To be able to fulfil high market expectations for a number of practical applications, environmental declarations must comply with specific and strict methodological prerequisites. These expectations include the possibility to sum LCA-based information in the supply chain and to compare the information in different environmental declarations. To achieve this goal, common and harmonised calculation rules have to be established to ensure that similar procedures are used when creating environmental declarations. However, groups of products usually differ in their inherent environmental performance, requiring specific rules for the product group so-called PCRs. PCRs contain specific instructions detailing LCA-based data collection methods for different product groups, conversion of the collected data to the prescribed indicators, and presentation of the information. The PCR documents are regarded as complementary to the GPI of the international EPD[®] system. The development of PCRs follows a strict procedure, including a multi-phase approach for initiation, preparation, consultation, approval and publication, and updating.

The international EPD[®] system has developed the *Global PCR Forum* to secure an open, international participatory process enabling all interested parties and stakeholders to comment on proposals for PCR documents. In order to meet the need for easy access and handling of comments provided by any user, the Global PCR Forum provides custom-built internet-based services.

	SEMCO	DATE	2009-11-26	PAGE	35 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

INTERNATIONAL HARMONISATION OF PRODUCT CATEGORY RULES

Trade of products and services often extends beyond national borders, calling for a harmonisation of PCR documents from various countries, by different companies and branch organisations, as well as independent bodies operating or implementing environmental declaration programmes. The PCR work is probably the most vital element to correctly develop and coordinate within an environmental declaration concept in order to achieve harmonisation of PCRs. This harmonisation is a prerequisite for avoidance of obstacles to trade, misunderstandings, and uncertainties on how to best use environmental declarations in the market. Very distinct obstacles must be overcome for a successful harmonisation and facilitation of PCR development work:

- there is a need for internationally recognised PCR terminology to properly identify similar available PCRs,
- there is a need for a new approach to facilitate PCR development work, which at present is usually an unnecessarily heavy and costly workload for the organisations involved.

The international EPD[®] system has made attempts to contribute to the solution of these problems by introducing both a modular approach for PCR development and an international classification system for the proper identification of PCRs.

THE PCR MODULE INITIATIVE (PMI) – AN APPROACH FOR FACILITATING PCR WORK

CPC (Central Product Classification) is an UN-base scheme for statistical division of product categories and service types. SEMCo has identified the CPC system to be best approach to use for establishing a PCR structure as it relates on supply chain/ life cycle approach. The CPC system will help in determining the general PCR rules valid for most products and, hence, could be included in the overall PCR rules. For the suggested CPC structure, the PCR documents will be referred to as information modules, to be supplemented by other similar modules or relevant information. Typically, the content of a PCR document describes rules to be followed in three stages (see Fig. 13) – upstream, manufacturing and downstream – that can also be referred to as modules, where the manufacturing module is often known as the core module.

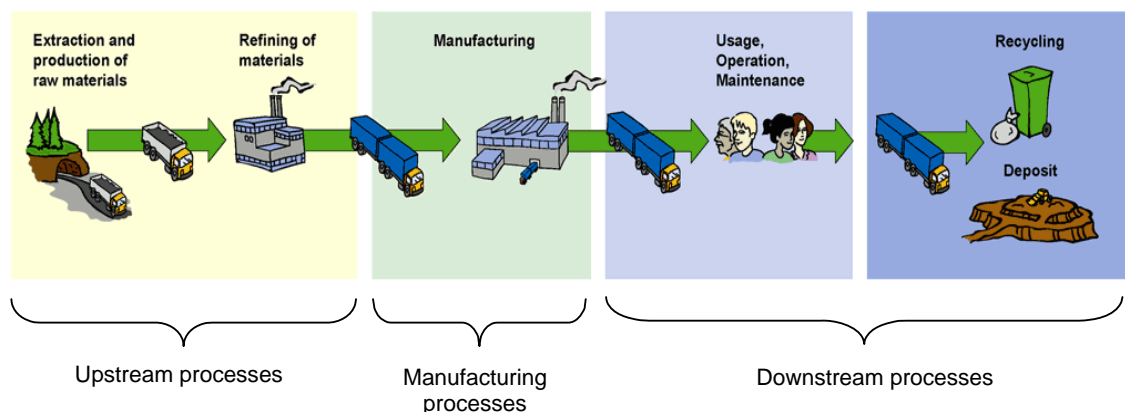


Figure 13. The life cycle of a product divided into different stages.

	SEMCO	DATE	2009-11-26	PAGE	36 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

AN INTERNATIONAL CLASSIFICATION SYSTEM FOR THE PROPER IDENTIFICATION OF PCRS

The international EPD[®] system has introduced a PCR classification scheme building on a hierarchic approach to developing PCR modules, in order to reduce the workload involved in development, consultation and approval. The main rationale of the approach taken is to simplify and harmonise PCR work and to avoid market confusion and trade complications. The main reasons for introducing an international PCR classification system are:

- to avoid unnecessary duplication of PCR development,
- to provide a structured approach for the build-up of a global PCR system,
- to facilitate and simplify tracking of available PCRs on the market.

5.7 DEVELOPMENT OF A CARBON FOOTPRINT MEASUREMENT TOOLKIT FOR ECO-LABELLING

Despite the usefulness and widespread market application of the EU Eco-label over many years across Europe, it is important to recognise the growing interest and market demand for the introduction of the concept of CF into the EU Eco-label, as a growing number of international, national and sector initiatives to deal with CF calculations are under way. Considering this scenario, the EU commission initiated a project, EU Eco-label - the Carbon Footprint Measurement Toolkit (Service Contract N. 070307/220/486031/SER/G2), with the objective of providing the commission with a (software) toolkit suitable for CF measurement/calculation, aimed at the possible inclusion of direct CF quantification within the criteria development processes of the EU Eco-label. The complexity of the toolkit should be adjusted to the policy-maker level, i.e. for use by the European Commission, the European Union Eco-label Board, and the Ad Hoc Working Group (AHWG), but should also be easily understood and used by applicants. The Italian organisation Life Cycle Engineering (LCE) in Turin and SEMCo were entrusted with the project.

A well-known definition of CF as “*the overall amount of carbon dioxide (CO₂) and other GHG emissions associated with a product along its supply chain, including its use and end-of-life (EOL) stages*”, was used as an input parameter to the CF Measurement Toolkit and various methodologies and tools were used in the development of the toolkit (see Fig. 14). The CF is calculated by converting all GHG emissions to an aggregated value of equivalent CO₂ representing the global warming potential (GWP), thereby giving a quantified estimate of the product’s climate impact.

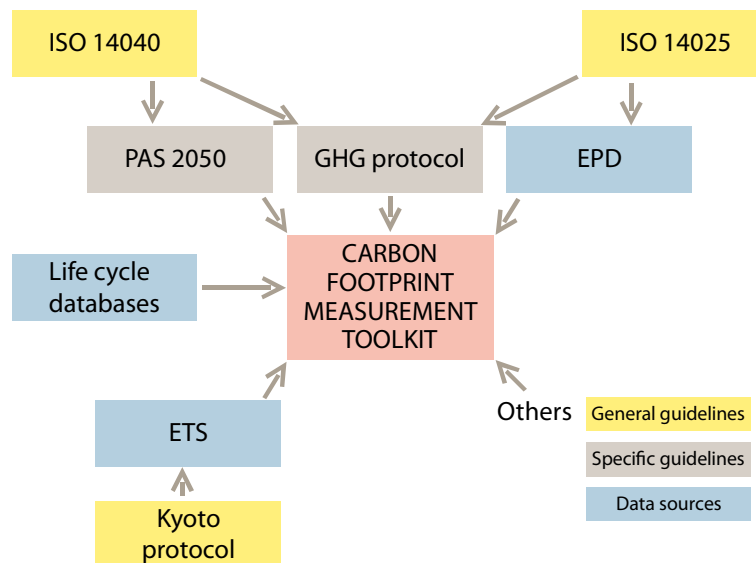


Fig 14. The various methodologies and tools used in the development of the Carbon Footprint Measurement Toolkit

The CF of a product to be subject to Eco-labelling can be described as the sum of two main types of GHG emissions:

- direct/primary footprint mainly as a result of combustion of fossil fuels at a manufacturing site and due to electricity consumption,
- indirect/secondary footprint including GHG generated from all other relevant sources.

An example of how results of the CF Measurement Toolkit are reported is given in Fig. 15.

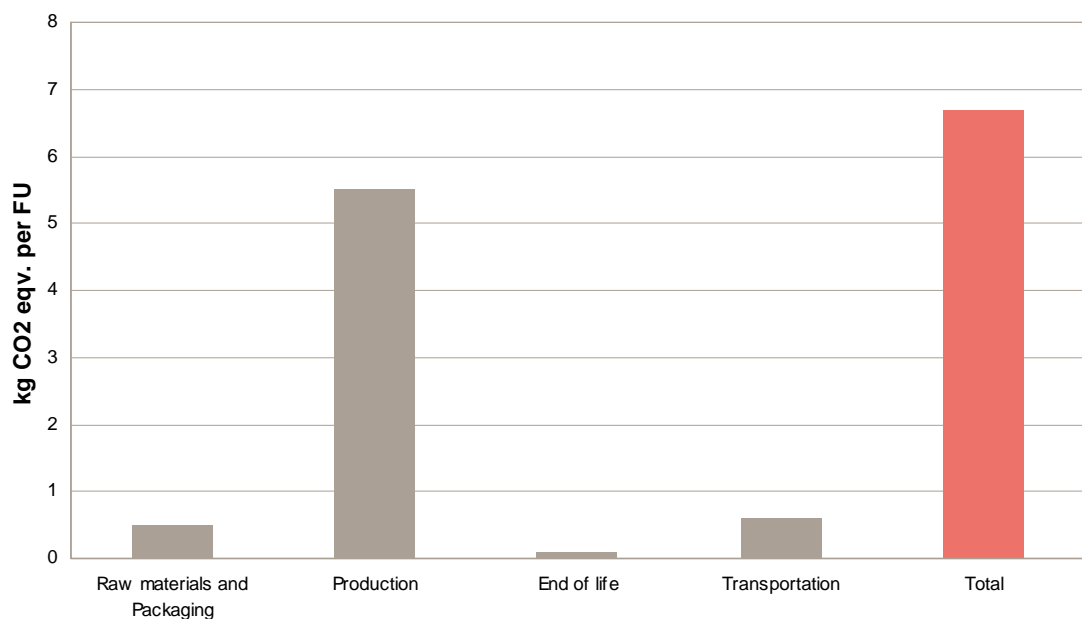


Figure 15. Example of a CF calculation tool software report. The case refers to climate impact for fired hard processed floor coverings, part of the Hard Floor Coverings Product Group in the EU Eco-label criteria set

	SEMCO	DATE	2009-11-26	PAGE	38 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

TECHNICAL ASPECTS AND REMAINING ISSUES TO CONSIDER

The preliminary results of the project were presented and discussed at a special expert workshop arranged by the EU Commission at its Joint Research Centre (JRC) in Ispra, Italy with some 60 invited LCA experts. A summary of the discussions focusing on remaining issues to consider is given in Fig. 16.

<p>Remaining issues to consider</p> <ul style="list-style-type: none"> • Biological CO₂ should be considered as both emissions to the atmosphere and as a form of carbon credit for wood-based products. • The toolkit should be fed by data from a specific database; an applicant is allowed to provide their own data for input, but these data must be verified. • The specific database must rely on publicly available data, preferably those generally recognised as having met the prescribed requirements set up by the International Life Cycle Data Base (ILCD), currently under development and coordinated in Europe by the JRC IES at Ispra, including data from the European Life Cycle Database (ELCD). • How to deal with energy mixes and the inherent regional differences with regards to national energy mixes, and under what circumstances such national data may be used. • How to integrate CF calculations by means of end-of-life scenario data, with particular reference to specific market trends and LCA results for the product group in question.
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Figure 16. Summary of expert discussions of technical aspects and remaining issues to consider for the proper inclusion of CF information in Eco-labelling

5.8 CLIMATE DECLARATIONS AS AN INTERNATIONAL CONCEPT FOR PRODUCT CARBON FOOTPRINTS

Information from environmental declarations is sometimes considered to be too unspecific and wide, as it covers all relevant aspects of the environmental performance of a product. The international EPD[®] system allows adaptation of the given information to specific user needs and market applications by introducing the concept of “single-issue environmental product declaration (EPD)”. A single-issue EPD can, for instance, take the shape of a climate declaration, extracting the information related to climate change by describing the GHG emissions in terms of CO₂-equivalents. Other examples would be a eutrophication declaration, summing up the environmental impact of nutrient-enrichment of lakes and coastal areas, or a recycling declaration, describing various ways to recycle used materials as inputs in the manufacturing of new products.

Climate declarations can be regarded as a subset of EPDs generated in the international EPD[®] system. The difference is that EPDs account for several types of environmental impact, while a climate declaration, being an extract of the information in an EPD, focuses solely on the climate issue. Climate declarations were launched by SEMCo in May 2007 as a response to the increasing market pressure for organisations to report on their GHG emissions and their impact on climate change. Climate declarations are based on principles inherent in the ISO standard for Type-III environmental declarations (ISO 14025). This gives them widespread international acceptance. It also brings with it

	SEMCO	DATE	2009-11-26	PAGE	39 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

recognition of the information as being objective and covering the full life-cycle, and credibility due to the compulsory requirement for independent third-party verification.

In short the contents of a climate declaration are:

- A digest of an EPD covering all climate related information – e.g. the use of renewable resources, global warming potential for all stages in a products life cycle, maintenance, waste handling, EOL, etc.
- Product and company-specific information.
- GHG information from all life cycle stages, reported separately for all types of GHG emissions.
- Indication of the total carbon footprint.
- Information regarding the verification procedure.
- A reference to the background EPD, giving information on all relevant environmental impact categories.

APPLICATIONS AND BENEFITS

There are several market applications for climate declarations, especially for:

- Green procurement, where climate declarations can be used for the market analysis, as a pool of verified information for formulating environmental criteria, and as a tool for verification. Climate declarations enable procurers to meet one of the most important challenges – the comparison of climate impact of separate products and services. Compulsory third party verification ensures the highest possible degree of credibility.
- Reporting, where climate declarations can be used to provide information to authorities, as a basis for eco-labels, and for the public in various forms.
- Internal environmental work, where climate declarations give an organisation a good overview of how their products or services affect the environment. This can be useful in internal product-development work, and represents a solid basis for the management of forthcoming aspects related to climate issues.

The information in a climate declaration is presented in a common reporting format as a one-page document (see Fig. 17). It contains information about:

- the product – its function and performance,
- the company – a short overview of work on, for example, a company's environmental and social responsibility aspects,
- climate impact – emissions of greenhouse gases for all life-cycle stages converted and summarised as a measure of the total climate impact (expressed as CO₂-equivalents and GWP-values),
- other environmental information – additional information relevant for comprehension of the information in the climate declaration,
- verification – how the information has been checked by independent verifiers,

	SEMCO	DATE	2009-11-26	PAGE	40 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- contact details – who to contact for more information,
- where to find additional information – in the full EPD, including information on other environmental impact categories.

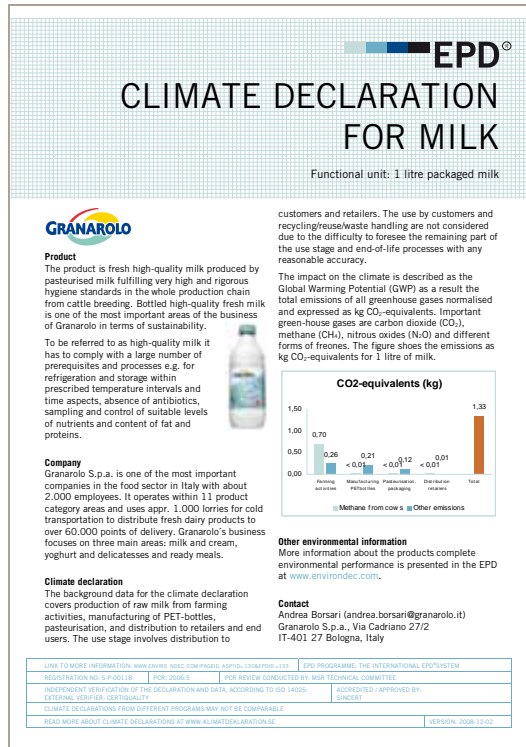


Fig 17. Example of a climate declaration

CLIMATE DECLARATIONS AS A SOURCE OF INFORMATION FOR CLIMATE LABELLING AND CARBON FOOTPRINT OF PRODUCTS

The overall purpose of a climate declaration is to create an internationally recognized, common format for communicating the climate impact of goods and services in a transparent and credible way. Climate change is a global problem that needs an international solution, which in turn must rest on a credible and comparable foundation. This is a huge challenge to undertake for all sectors of society, not least private consumers who, through their purchasing power, are able to steer product development in a more pronounced climate-oriented direction. Therefore, climate declarations could act as a multi-faceted tool for climate information, and as a possible basis for a future climate labelling system.

6 MAPPING AND MONITORING

SEMCo aims to map and monitor various stakeholder viewpoints to get necessary input for evaluation and continuous improvement of its own work. The parties of primary concern and the specific issues to be covered are:

	SEMCO	DATE	2009-11-26	PAGE	41 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- Procurement and purchasing departments: to what extent are SEMCo's procurement criteria practised?
- Tenderers and suppliers: can the use of SEMCo's procurement criteria be perceived as restricting competition?
- The business sector: could industry benefit from making use of SEMCo's procurement criteria?
- The public sector: on a year-by-year basis, is the practise of GP in public authorities, municipalities and county administrations increasing?
- Visitors to SEMCo's homepage: are the user-friendliness and content of information on the homepage felt satisfactory?

6.1 TO WHAT EXTENT ARE SEMCO'S PROCUREMENT CRITERIA PRACTISED?

Regular internal work to monitor and follow-up the uptake of criteria developed and released for use on the market is of utmost importance to SEMCo. SEMCo has developed a strategic qualitative model to be used for this internal follow-up work. So far, SEMCo has carried out internal monitoring and follow-up work for two product categories – food (with 6 sub-categories) and furniture, and presently has limited experience of this method for getting detailed feedback on its criteria work.

General results to highlight so far are that:

- county councils make use of environmental criteria to the greatest extent, followed by municipalities and authorities,
- municipalities are in the lead regarding prioritisation of environmental aspects when evaluating suppliers, followed by authorities and county councils,
- sparsely populated municipalities make less use of environmental criteria, mostly due to a lack of time, resources, and knowledge,
- there seems to be a preference for using environmental criteria if the criteria are easy to control and follow-up,
- demands on suppliers usually take the form of a description of their environmental work.

SUGGESTIONS FOR IMPROVEMENT

General suggestions for improvement are that:

- there is considerable demand for a simplification of SEMCo's criteria to enable their use directly in tender documents, and simpler criteria together with more advanced criteria,
- there is a need for clearer, more specific criteria, including a motivation for their use via a breakdown of the long-term economic benefits,

	SEMCO	DATE	2009-11-26	PAGE	42 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- SEMCo could influence procurement organisations to a greater extent to make better use of environmental criteria by redirecting information to politicians rather than to procurers.

6.2 CAN THE USE OF SEMCO'S PROCUREMENT CRITERIA BE PERCEIVED AS RESTRICTING COMPETITION?

SEMCo has carried out a study to examine how suppliers and tenderers generally perceive its current procurement criteria by interviewing personnel in companies from different branches providing chemical/technical products, food, and transport services. The companies were chosen to give a representative sample based on size/number of employees, type of goods and services produced, geographical location, and that they provide answers in tender documents and participate in green procurement. An extract of the conclusions are presented in Fig. 18.

	SEMCO	DATE	2009-11-26	PAGE	43 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

Overview of responses from suppliers and tenderers as to the extent they perceive SEMCo's procurement criteria as restricting competition.

- Almost none of the organisations perceive criteria on environmental performance (or social responsibility) as inhibiting competitiveness. It is not the requirements as such but how they are specified that might be in conflict with fair competition.
- Existing environmental criteria are felt to be relatively easy to fulfil, and many suppliers are of the opinion that the requirements are in agreement with general developments within different branches of industry.
- All suppliers agree that criteria for social responsibility are not well represented in daily procurement activities, but welcome such initiatives in the future.
- The existence of criteria for environmental performance (or social responsibility) is not a reason for suppliers to choose not to participate in procurement; rather it is the overall appraisal of the validity of the business and its market benefits.
- Most companies do not consider criteria for environmental performance (or social responsibility) a reason for increasing the price of their products and services. The criteria used in GPP are generally not regarded as the most far-reaching or advanced on the market.
- Most suppliers share the view that their products and services have become more environmentally aware over time. This is partly a result of green procurement but is also due to increasing demands for environmental friendliness and acceptable social behaviour from private companies, consumers, and the public.
- All companies agree that external demands for good environmental and social behaviour have had a considerable impact on their product development, and that aspects such as legislation, public opinion, eco-labelling requirements and demands in the private sector are more influential than public procurement.
- Environmental criteria are often used as qualification criteria. However, the use of award criteria is increasing, which is welcomed. Many companies would prefer a more distinct and broader use of environmental requirements specified as contract clauses.
- There is a common demand for more requirements linked to follow-up activities, e.g. in the form of contract clauses requiring audits or regular reporting.
- Many suppliers seem to prefer more overarching environmental criteria based on a life cycle perspective of products and services; hence, they would welcome extended periods for carrying out contracts and more efficient contract solutions in order to be able to invest in new technical solutions.
- The work by SEMCo was generally seen as a positive input to procurement and purchasing. The suggested criteria have become clearer, more homogeneous, and more consistent.

Figure 18. Overview of response from suppliers and tenderers as to the extent they perceive SEMCo's procurement criteria as restricting competition

6.3 COULD INDUSTRY BENEFIT FROM MAKING USE OF SEMCO'S PROCUREMENT CRITERIA?

The Swedish NAP for GPP states that SEMCo should determine the value of SEMCo's procurement criteria in companies and enterprises being both privately and publicly

	SEMCO	DATE	2009-11-26	PAGE	44 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

owned. SEMCo is currently working on this task in the form of a qualitative interview study. Interviews are being conducted with environmental managers and procurement managers in 15 companies covering five different sectors. The results obtained so far could be summarised under four headings:

- Greatest need in the food and transport sector. The telecoms and manufacturing industries claim that they are capable of managing green purchasing without too much outside support, perhaps due to a large proportion of their purchasing being product-specific materials and semi-manufactured products, with fewer suppliers in the value chain. The food and transport sectors, on the other hand, seem more dependent on support tools for their purchasing activities, maybe because their customers outnumber those in the telecoms and manufacturing industries and come from several sectors of society.
- Greatest interest for purchase of core products. The purchase of core products¹ can be regarded as more company-specific and of vital importance for successful product development. Companies need to get correct and reliable deliverables in accordance with specifications in contracts and, in the case of a large number of competitors, may need to keep their competitive edge in the market.
- Purchase of support products not prioritised. The purchase of support products² can be seen as being associated with consumption patterns in society in general – aspects that are high up on the political agenda in the public domain. The relatively low interest in purchasing support products in the private sector may be due to the perception that the public sector has good control over purchasing of this type of product.
- A majority of companies positive towards access to supporting tools. There is an ongoing process in the business sector to find a common approach for all types of purchasing. Many companies are no longer negatively inclined towards the inclusions of environmental criteria, even on a higher level, with comparatively demanding criteria indicating good environmental performance of products and services, as long as the criteria are perceived as relevant, objective, scientifically sound and market-oriented.

6.4 IS THE PRACTISE OF GREEN PROCUREMENT INCREASING IN PUBLIC AUTHORITIES, MUNICIPALITIES AND COUNTY COUNCILS ON A YEAR-BY-YEAR BASIS?

A part of the Swedish NAP is directed towards evaluating to which extent environmental criteria are being adopted in public procurement over time. The Swedish EPA is responsible for this part of the Swedish NAP and initiated a series of successive investigations in 2004, 2007, and 2009. The objective of the monitoring study was to map

¹ Core products include the raw materials, plant, equipment and services that directly contribute to the creation and delivery of the organization's own revenue-generating products and/or services

² Support products include items required to sustain the operational functioning of the organisation including maintenance, repair, and operations, consumables, services, and investment goods or capital equipment.

	SEMCO	DATE	2009-11-26	PAGE	45 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

to which extent environmental criteria are used in public procurement among different target audiences, and how procurement departments are practising green procurement. The target groups for the monitoring activities were all persons responsible for procurement activities in the public sector – in authorities, municipalities, and county councils.

The 2009 study included 510 public organisations, divided into:

- 288 municipalities,
- 21 county administrations,
- 201 authorities.

Hence, the monitoring studies were carried out in a way that covered the entire population of procurement units. The response rate was quite high, at 82 %, with the following distribution: authorities – 80 %; municipalities – 80%; county councils – 90 %. This gave sufficient statistical information for a trustworthy evaluation of the real conditions regarding the uptake of GPP in Sweden.

A digest of the results from the 2009 study in comparison with the results from 2007 (in parentheses) shows that:

- 82 (78) % of the organisations answered that they have a policy or guidelines for incorporating environmental concerns into their procurements.
- 55 (47) % of the organisations answered that they have pre-set targets for green procurement.
- 52 (45) % of the organisations answered that their staff has been trained in green procurement.
- 57 (57) % of the organisations answered that they always, or at least very often, use environmental criteria in their procurements.
- 52 (37) % of the organisations answered that they prefer the most environmentally-friendly products when sub-ordering products and services according to existing contracts.

Of special interest for SEMCo are the results from the two questions referring to its own activities.

TO WHAT EXTENT ARE SEMCO'S PROCUREMENT CRITERIA USED IN GREEN PROCUREMENT?

There was an increase in the use of SEMCo's procurement criteria from 42 % in 2004 to 57 % in 2009 (Fig. 19). In 2009 one-third (34%) stated that they do not use the criteria and 1 % stated that they sometimes use the criteria. Analysing the results by target group indicated that the county councils and municipalities make use of SEMCo's criteria to a greater extent (89 % and 75 %, respectively) than the public authorities, where only 27 % of procurement units make use of the criteria.

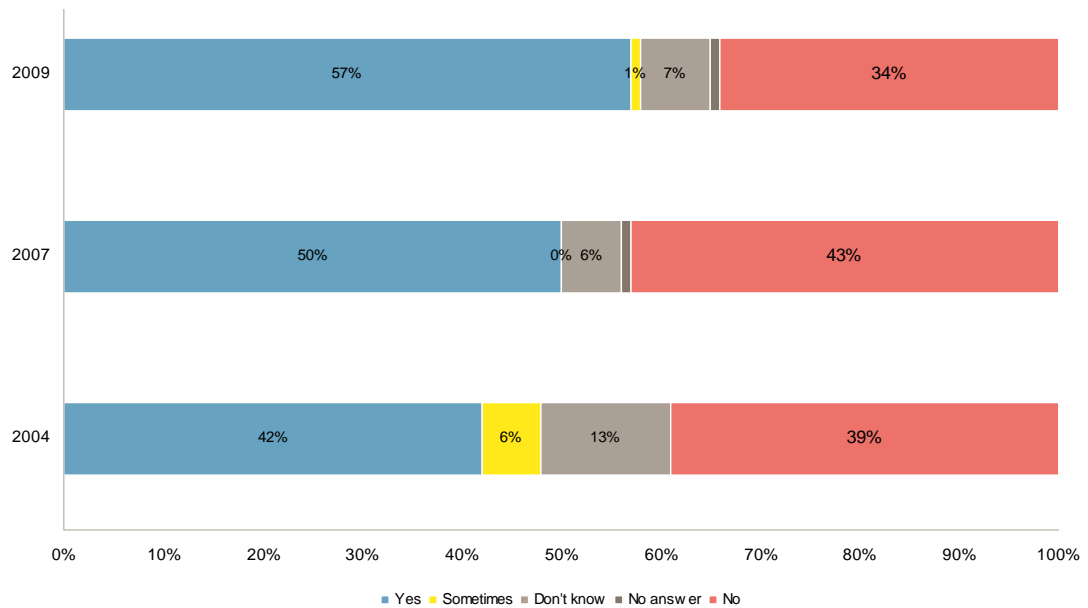


Fig 19. Response to the questionnaire regarding use of SEMCO's procurement criteria

WHAT IS THE REASON FOR NOT USING SEMCO'S PROCUREMENT CRITERIA

The results from 2009 indicated that one-third of respondents (33 %) do not possess enough knowledge to use the SEMCO procurement criteria – 28 % answered that they do not know about the criteria, 14 % that the criteria are too complicated and 11 % that they only purchase services. Compared to the corresponding results from 2004, this showed a positive trend for all reasons mentioned for not using SEMCO's criteria (Fig. 20).

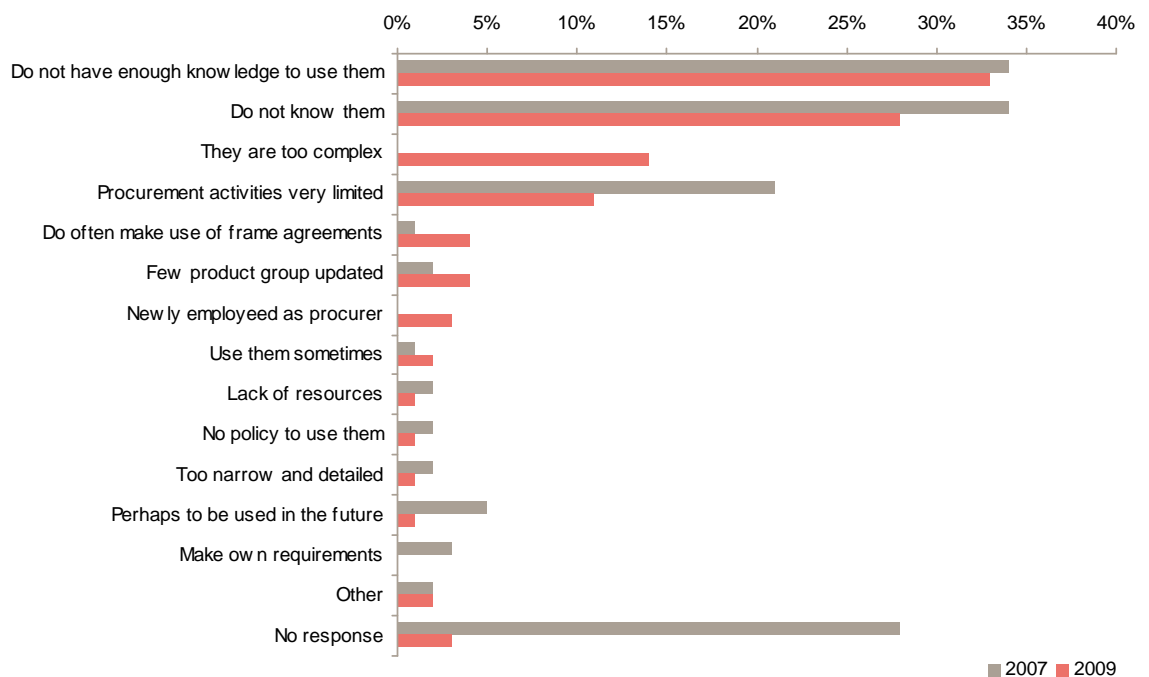


Figure 20. Response to the questionnaire regarding reasons for not making use of SEMCO's procurement criteria

	SEMCO	DATE	2009-11-26	PAGE	47 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

The Swedish EPA study also included questions regarding the types of information or guidelines that are most needed to enable procurement officers to consider environmental aspects in procurement to a greater extent. In 2009 two out of three respondents (66 %) answered that information and guidance on available tools for green procurement could result in a more effective use of environmental considerations in procurement.

The trend from 2004 to 2009 showed increased support for almost all alternatives given for better information and guidance in green procurement, maybe as a result of the extended interest in and practise of green procurement as a whole.

In summary, half of the Swedish public authorities claim that they use SEMCo's procurement criteria to green their procurement. Those not using the tool say it is mainly because they are not aware of its existence, or do not know how it should be used. This observation may be somewhat difficult to understand taking into account the extremely high overall availability of the SEMCo homepage as indicated in a recent EU-study (see below – Chapter 6.5)

6.5 ARE THE USER-FRIENDLINESS AND CONTENT OF INFORMATION ON THE SEMCO HOMEPAGE FELT SATISFACTORY?

SEMCo has contracted a number of outside experts to get feed-back on the structure of the homepage and how users perceive the information in terms of user-friendliness, accessibility and being comprehensible. The investigations have both been carried out as web-based inquiries and interviews with selected key stakeholders.

The web-based inquiry included questions about:

- the overall performance with regard to specific features and functions related user-friendliness (navigation, clear-cut headlines, inviting lay-out, effective search functions etc)
- criteria-related information with regard to accessibility and being comprehensible (criteria document, background documentation and motives, suggested verifications, reply forms etc)

The outcome of the web-based inquiries were generally very positive and the responses (according to a scale 1-5) for most of the questions were given values beyond what generally is considered to be a satisfactory result.

The interviews with selected key stakeholders included much more in-depth questions separated in one quantitative part about the number of visitors to designated parts of the homepage, and one part about the design of the homepage and finally one part about the content of the homepage specifically focusing on procurement criteria.

A summary of the findings showed that for:

- The quantitative part:

	SEMCO	DATE	2009-11-26	PAGE	48 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- the overall impression of the homepage is generally very good, but most audiences would benefit from SEMCo being able to offer a database of “green products” meeting the requirements of the SEMCo procurement criteria,
- a large portion of the respondents do not have sufficient knowledge to be able to answer the questions.
- The design part:
 - first impression being fairly positive to the design of the homepage – it creates a certain expectation what to come,
 - visitors more seldom visiting the homepage felt a bit confused due to the perceived complexity of green procurement,
 - the need for a more customised separation of the homepage to better suit various demands from different audiences for specific support and information.
- The content part:
 - the information about the procurement criteria has to be clearly separated to meet the various demands of procurers having different possibilities to make practical use of the criteria with special emphasis to facilitate and simplify the context of procurement criteria,
 - all respondents being very enthusiastic to the possibility of creating a database over products and services meeting the requirements for SEMCo’s procurement criteria,
 - to create guidance documents to illustrate best use of the criteria in different procurement situations.

In a recently EU-initiated study on evaluating the overall availability of web-based information from public authorities, Sweden was placed a less favourable position compared to other Member States. However in spite of this, some few Swedish authorities were identified as being in the absolute top of being able to meet most information demands – one of them was homepage of SEMCo.

7 FUTURE CHALLENGES

Green procurement in itself is a complex and multi-faceted concept involving a large number of parameters, all having an influence on the final outcome. Following the direction of SEMCo’s owners, and in order to meet the Swedish government's national objectives (as detailed in the NAP) – to increase the proportion of public procurement procedures with well-formulated environmental criteria – by 2010, SEMCo found it valuable to set up a tentative working model covering as many of these parameters as possible. The overall objective of such a “GPP evaluation model” is to identify significant aspects influencing the use of environmental criteria in public and private procurement. Essential factors to include are previous experiences in the public and private sector with green procurement and socially responsible purchasing (in terms of incentives and obstacles, and similarities and differences), SEMCo’s work with criteria development and

others strategic activities, the outcome of the mapping and monitoring activities aiming at evaluating the use of SEMCo’s criteria and support functions. Information from all these sources has to be weighed against selected external and internal input parameters to be able to sort out the most influential factors in green procurement (Fig. 21). The outcome of being able to sort out the most significant aspects will be of outmost value in the planning of continuing efforts to further increase the use of well-formulated environmental criteria in public and private procurement. The SEMCo “GPP evaluation model” is further described in the full Interim Report.

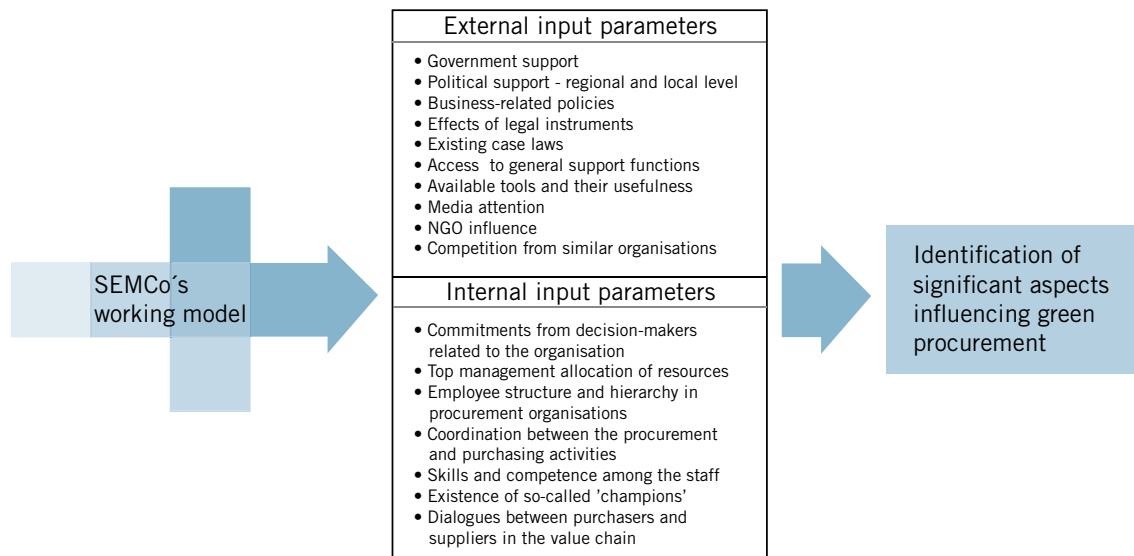


Figure 21. A tentative outline of a” GPP evaluation model” indicating the various influencing input parameters to consider for enabling relevant explanations to trends in the uptake of green procurement

The results of awareness-raising and capacity-building in the identification of the most important factors influencing green procurement are also important to consider. Hence, it is quite an undertaking but not the least necessary to identify the most significant influential parameters in order to be able to describe the reasons for the positive trend indicating an increased use of SEMCo’s procurement criteria in public procurement over the past three to five years. This positive market response as such is, but no means, encouraging but should not be judged as the final result of all activities carried out during the first Swedish NAP 2007-2009. There are still many other challenges ahead for SEMCo – some of which are described below.

7.1 THE CRITERIA DEVELOPMENT CHALLENGE

Over the years the SEMCo approach to developing procurement criteria has been extended and refined to yield the multi-stage process followed today, in compliance with the preparation and publication of international standards, which is an open participatory procedure involving all interested parties. Additionally, the criteria development process is subject to both internal and external quality-assurance and revision to attain as much credibility as possible. However, being able to contribute to greener public procurement to a larger extent is not only a question of publishing well-established procurement criteria. A number of important issues need to be considered to ensure maximum uptake

	SEMCO	DATE	2009-11-26	PAGE	50 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

of the criteria, including marketing efforts (such as release activities), information campaigns, education, good examples, etc.

FURTHER REFINEMENT OF THE CRITERIA DEVELOPMENT PROCESS

SEMCo has been able to fulfil most of the targets for criteria development described in the Swedish NAP, i.e. to establish an “*as complete set of procurement criteria as possible for product groups commonly subject to public procurement*”. However, taking into consideration the results from all studies focusing on the market response of this achievement, it is quite clear that uptake of the criteria could be viewed as slower than expected. The criticism of the SEMCo procurement criteria most often brought forward is that they are too technical, complex, and difficult to understand. For future work at SEMCo, it is evident that greater effort needs to be made to simplify the criteria for easier comprehension and use, especially in small public authorities without the necessary expertise and resources. In fact, this seems a reasonable step to take, considering that a complete set of procurement criteria is now available.

Experience also indicates the need for a substantial effort to maintain the quality of the existing criteria through regular monitoring, updating, and revision of criteria. It may be wiser to keep the extent of procurement criteria now available and ensure that they are up-to-date and in a good shape, rather than developing too many new ones if not more resources will be available in the future.

The Swedish NAP included the task to further develop the concept of technology and innovation procurement in collaboration with, amongst others, the Swedish Energy Agency, Vinnova, The Swedish Agency for Technical Development (NUTEK), and the Swedish National Board for Public Procurement (NOU). This has been a challenging task, where several opportunities emerged for better use of day-to-day public procurement work to drive research into innovative technologies. It seems well-advised to further develop this concept within the framework of future work at SEMCo.

In summary, the most likely way forward for SEMCo’s work with procurement criteria will take three different paths – simplifying criteria to make them more understandable and useful for a broader audience; continuing quality maintenance and updating of the existing set of criteria; and developing procurement criteria further at different levels of ambition, building on the work to develop spearhead criteria within the context of technology and innovation procurement (Fig. 22.) – all of which will contribute to transforming the SEMCo procurement criteria “*from being as complete as possible to the better practical application*”.

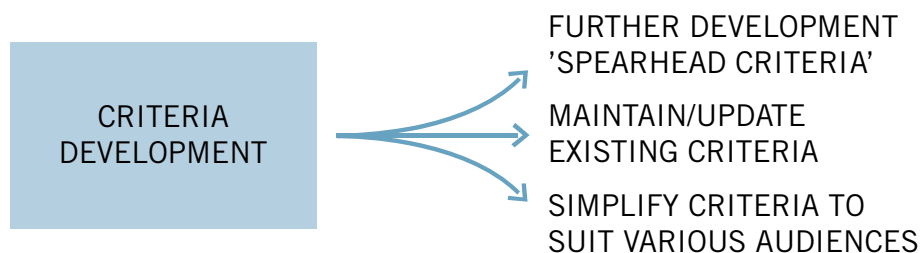


Figure 22. Tentative outline of the different routes for SEMCo to take in future work developing the concept of procurement criteria

	SEMCO	DATE	2009-11-26	PAGE	51 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

Other elements also have to be considered to make better use of the full potential of green procurement. These are inputs to the criteria development process that have been identified over time, and it seems beneficial to incorporate them into future activities. The most prominent examples are:

- The inclusion of social and ethical aspects in setting criteria; this has been put forward numerous times by all participants in the working groups for criteria development, as well as by outside parties.
- Better guidance on verification and follow-up procedures.
- The piloting of carbon footprint criteria based on climate declarations.
- The regular practise of LCC included in all criteria documents.
- More focus on developing procurement criteria for various services.
- How to better align with ongoing EU work on Eco-Design and Eco-labelling.
- Development of a parallel fast-track for procurement criteria already containing ready-made information otherwise dealt with in the pre-study.

VERIFICATION AND FOLLOW-UP

Procedures for purchasers to verify and follow-up information from tenderers and suppliers must be so simple that also those without special knowledge on the subject are able to buy products from legal and acceptable sources. To this end, rather than pile copies of permits and invoices on their customers, it should be the possible for suppliers to fairly easy check that they use robust mechanisms to ensure that requirements are met. However, it tends to be a reality that purchasing organisations do not possess the in-depth knowledge nor the necessary resources to be able to professionally examine and judge the truthfulness of various types of declarations and verifications related to chain-of-custody practises, either in the form of signed documents, certificates or existing labelling systems. Hence, SEMCo could take on the responsibility for one of the most demanded support functions forwarded by procurement organisation in many contexts related to green procurement – verification and follow-up. Here, SEMCo could offer a support function in the form of a *Point of Expertise* to assist public procurers and help them navigate the process of acceptable purchasing, administer controls on representative samples of contracts, and monitor and report on the overall performance of such a system. The tasks of a Point of Expertise could for example include to:

- develop contract templates,
- provide generic web-based information on how to purchase environmentally and socially acceptable products,
- check that certificates referred to are valid and correct, and assign the contracts to the appropriate control category based on the means of verification,
- compile from auditors about lessons learned,
- prepare and make available on the website summaries of the results of the controls, strengths and weaknesses of the approach, suggested amendments etc.

	SEMCO	DATE	2009-11-26	PAGE	52 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

DEVELOPMENT OF A DATABASE APPROACH

Several studies have indicated the SEMCo criteria sets are becoming too complex with different types of criteria levels which hamper its practical use and applicability for many procurers. There is a need for a customised approach to all criteria sets for reducing the number of criteria documents and to facilitate understanding of the contents.

SEMCo has developed quite a number of criteria documents over the years and an immediate challenge to meet seems to be to start creating of a database approach associated to the criteria development for facilitating the internal criteria work by SEMCo as well as for external users of the information. The obvious solution to the problem is to transfer the criteria into a database. Such an approach should make possible the design of tailor-made criteria documents according to any procurer's own ambitions and preferences. It could even be envisaged that procurers can choose their own specific preferred criteria through a wizard-solution.

A database approach is beneficial for several reasons also for the quality-assurance procedure practising internal and external verification of the criteria development process. External auditors will much easier have an overview of the criteria work carried out, the details in criteria documents as well as interlinked components of separate criteria documents.

MARKETING AND DISSEMINATION

Complementary to these suggestions there is also a need for enhanced marketing of the criteria, which could be fulfilled by a number of activities, such as:

- Release activities and information campaigns in connection with the launch of new criteria.
- Market-oriented information and education taking into account specific customer needs.
- Extension of web-based education for specific topics of interest, e.g. on energy-efficient and climate-smart procurement.
- Regional conferences for a better spread of information on the work carried out by SEMCo.

7.2 THE LOW CARBON CHALLENGE

In recent years, awareness of climate change and the devastating consequences of the greenhouse effect has grown considerably. Climate change and its clear link to fossil fuel use are at the centre of international politics and political commitment. A significant contribution to the growing concerns regarding climate change has been the emerging political commitment to finding effective policies and mitigation measures to reduce GHG emissions; this has often been accompanied by intense media coverage. When scientists report on new, alarming discoveries in connection with climate change, the perception has been that science is moving faster than society can catch up.

Undoubtedly, the climate issue can be much better handled within the framework of green procurement, for example by:

	SEMCO	DATE	2009-11-26	PAGE	53 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- settling the need for a common and internationally-recognised CF calculation method, to avoid the confusion created on the marketplace by the current introduction of many different national initiatives,
- introducing, to a larger extent, direct climate impact data (e.g. in terms of Global Warming Potential, GWP) instead of indirect information (such as energy consumption labels),
- ensuring it is possible to compare the climate performance of different products, which is a necessity in most procurement and purchasing activities.

Over the past few years, following the emerging concerns over climate change, different stakeholders have stressed the need to find scientifically valid and relevant ways to measure and quantify GHG emissions, both at organisational and product level. As a consequence, various attempts are emerging in many countries and by many parties to quantify product CFs, resulting in a proliferation of models and methodologies. As the rationale for each of these calculation models is quite different, this has led to much confusion in the marketplace. Some recent consumer studies have recently looked at several leading carbon calculators for specific purposes and found results to differ by up to 350 %, while for mainstream manufactured goods it is not uncommon to see differences of 200 % or more for CF estimates of the same product.

The market demand for information on climate change impact of products and services is constantly growing, which would allow informed comparisons to be made within the context of green procurement. In this context, procurers and purchasers usually ask for the CF associated with the supply chain for the manufacture, distribution, and disposal of products provided. Additionally, they specifically want a guarantee that the statements made accurately reflect the real situation and are credible and relevant.

However, behind any simple claim there is a complex world of science based on multi-faceted facts. It is therefore advisable that a figure on CF be accompanied by informative background data to aid interpretation of the given information. Company choices and interpretations can often make comparisons difficult. Harmonisation of CF calculation approaches in specific business sectors is desirable to limit confusion at the customer level and in the marketplace. From an industry point of view, the more common and internationally accepted the approach, the more credible the comparisons.

It is of vital importance that any concept for a climate label introduced to the market be indisputable and correct from the very beginning. It seems to be a common understanding that there is only one chance for a successful system for climate labelling to be introduced to the market - if it fails, consumers will most likely go back and make their choices based solely on price.

A number of challenges must be overcome to be able to convey a fairly simple and understandable message – not conflicting with the need for a systematic, credible approach – to a broad and diversified audience. Fig. 23 presents possible designs for a climate/CF label based on the international EPD[®] system and associated ISO standards.

CLIMATE DECLARATION

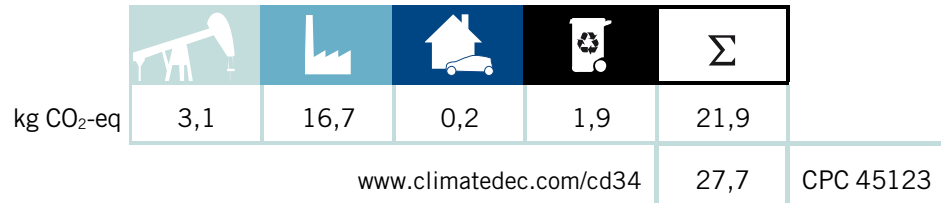


Figure 23. Examples of climate/carbon footprint labelling as a consolidated graphical presentation of the climate impact of a product during its life cycle (expressed as CO₂-equivalents)

SEMCo aims to pilot a system for climate/CF labelling in green procurement in the future. However, the concept outlined in Fig. 23 should be developed further to be flexible in the sense that it allows modification to capture and adapt the information for specific purposes, for example:

- indication of the climate impact for all transport to the point of sale,
- separation of greenhouse gas emissions into those originating from biogenic and fossil sources (to indicate potential carbon sinks and carbon neutrality),
- presentation of results for continuous improvements of a products climate impact,
- presentation of offset programmes.

7.3 THE ECO-EFFICIENCY CHALLENGE

A future vision of success in a global transition to a sustainable society will most likely be followed by a substantial uptake of eco-efficient product development. However, there are strong convictions that mitigation measures to combat environmental problems may hamper economic growth and competitiveness if not handled properly. This is especially apparent in sectors that are energy-intensive, export-oriented, and subject to unilateral policies.

Additionally, the Stern Report emphasised that the effects of climate change will be very costly, but that measures taken in the short term to mitigate climate change will most likely lead to economic gains against the costs of addressing the long-term effects of climate change once they have appeared.

Changes in production and consumption patterns are necessary to achieve a sustainable society. It is a common perception that environmental work in general will result in increasing costs and prices of products and services. However, examples indicating the opposite exist, i.e. environmental work could actually lead to cost savings. One of these examples, relating to GPP, is an EU study carried out by PricewaterhouseCoopers (PwC), with the main objective of monitoring the current level of GPP in the seven best-performing member states. This study showed that GPP can lead to cost reductions instead of cost increases. By using an LCC, the average financial impact of GPP was found to be approximately -1 %. This would lead to the conclusion that, although practising green procurement induces higher direct purchasing costs, when compensated by lower operating costs it can result in a decrease of total costs. For Sweden these calculations resulted in a cost saving of 1.24 %, equal to around SEK 6 billion.

	SEMCO	DATE	2009-11-26	PAGE	55 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

SEMCo could meet the eco-efficiency challenge in a number of ways. The most important being the possibility to become a cooperating partner in the work on EU directive (2006/32/EG) on effective final use of energy and energy-related services. For the effective final use of energy in the public sector, each Member State shall ensure that the public sector sets a good example and informs citizens of the measures taken. The directive further states that, without conflicting with national or EU legislation, each Member State should choose two measures from the list in Annex VI and facilitate its implementation by making publicly available guidance documents on energy-efficiency and energy savings. These may be used as potential award criteria in tender documents in public procurement. The list of potential measures in Annex VI of the above-mentioned EU directive includes demands to: use financial instruments for energy savings, purchase equipment and vehicles, purchase equipment with low energy consumption, replace or modify existing equipment, use energy inspections, and purchase or rent energy-efficient buildings. SEMCo could take responsibility for those parts of the directive with a clear link to the type of work SEMCo is performing. This would preferably be carried out in close cooperation with the Swedish Energy Agency.

Other ways to meet the eco-efficiency challenge could be to:

- make better use of special eco-efficient procurement approaches based on sets of criteria for energy-consuming goods and services by expanding marketing of the web-based education developed by SEMCo,
- introduce LCC calculations in all criteria documents developed.

Another interesting concept would be to further develop the concept of Energy Performance Contracting (EPC) for areas other than buildings and properties, including motivation for consultants and entrepreneurs to carry out a contract with the aim of reaching an even higher level of energy-efficiency than agreed upon. The PwC study mentioned above indicated cost savings in sectors other than the construction sector, e.g. in transport.

7.4 THE ENVIRONMENTAL INNOVATION CHALLENGE

The potential benefits of procurement as a vehicle for innovation are receiving growing attention by providing lead markets for new technologies. This concept introduces a different organisational approach, where organisations are given an incentive to allocate more money to research in the knowledge that buyers exist that will order the new products in volumes covering the excess cost of their investments. Hence, competition is shifted from the primary focus on price to the introduction to the market of more sustainable products with new technical solutions. It may be beneficial to move away from the traditional procurement concept with more-or-less fixed technical and functional specifications for products and services, as this overly-prescriptive approach may in fact prevent innovation. Achieving the objective of creating a parallel, innovative approach in publicly purchased goods and services is a major challenge for Europe. New technologies resulting from more innovative public procurement will influence corporate purchasing in the private sector, and most likely vice versa. The establishment of more innovative procurement practices will benefit from other policy objectives, such as sustainability.

	SEMCO	DATE	2009-11-26	PAGE	56 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

SEMCo's contribution to the environmental innovation challenge would initially be directed towards the further development and practice of the concept of twinning SEMCo work with the development of procurement criteria at different levels, including spearhead criteria as the most ambitious level. The more traditional concept of technology procurement would either take place in the shape of a more general development of the technology procurement concept as a tool for all product groups, or in the form of a concrete process between different tenderers in separate projects.

The realisation of such a twinning approach should preferably build on pilot studies for different product groups or service types, with the overall objective of creating a basis for the future establishment of a national programme for environmentally-driven technology/innovation procurement. The work in the short-term would preferably be based on the ongoing work with the Swedish NAP for GPP carried out by SEMCo, specifically focusing on the development of purchasing criteria at the forefront of Best Available Technology (BAT), and environmental innovations aiming to stimulate development of environmentally beneficial frontline products. This would serve as guidance and support for procurement organisations wishing to be part of the development process in their daily procurement activities. The aim of this work is not only to increase the market share of existing products with good environmental performance but also of product concepts and other existing innovative solutions not yet commercially available.

SEMCo's Innovation Forums could influence the market, having a push-and-pull effect based on the efforts to encourage close dialogues (match-making) between purchasers and suppliers (see Fig 24), and to arrange regular open spearhead seminars in cooperation with business networks.

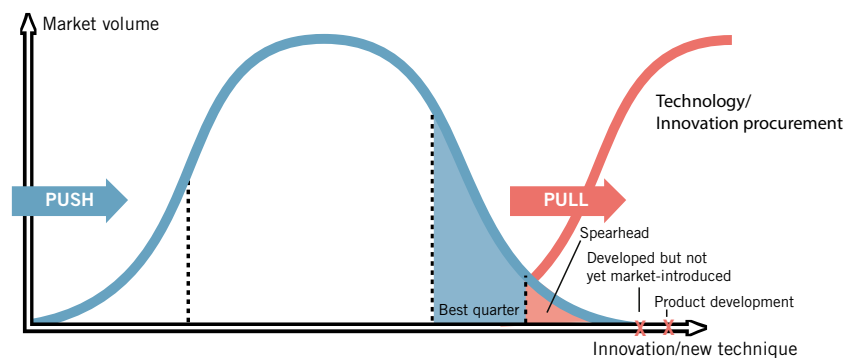


Figure 24. SEMCo's work with innovation forums can have a push-and-pull effect

It should be emphasized that the new European directives for public procurement include a number of different options in the procurement procedure favouring the stimulation of innovative technical and environmental solutions. Opportunities exist within:

- The negotiated procedures and competitive dialogues, which can be used optionally to structure the procurement process in certain situations, and to facilitate the critical elements of dialogue between customer and supplier.
- Technical dialogues in the preparation phase before tenders are sought.

	SEMCO	DATE	2009-11-26	PAGE	57 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- The equal footing now given to technical specifications made in terms of functional or performance-based requirements, and to references made to standards.
- Options to submit variants of bids.
- Conditions that allow transfer of intellectual property to the supplier.

7.5 THE SOCIAL RESPONSIBILITY CHALLENGE

For many years it was a common understanding that economical and social responsibility were in contradiction to traditional business concepts. Milton Friedman was a forerunner of this view, as presented in an article in the *New York Times Magazine* in 1970, *The Social Responsibility of Business is to Increase its Profits*.

Nowadays, there is general agreement that the business sector must commit itself to a different approach regarding its social responsibility. The slow implementation and uptake of socially responsible purchasing across companies and organisations is, to some extent, an indication of the lack of generally agreed-upon policies in both the public and private sector. Additionally, various available definitions are found in the literature, with varying intentions, and the extent of deployment and integration in organisations where policies exist differ significantly.

Political demands for non-economic considerations in business activities seem to be heavier on the public sector than on the private sector. However, while being under heavier political pressure, public procurement tends to be more restrictive with regard to the possibility of making non-economic demands on suppliers in procurement activities. In contrast, private organisations can use green procurement as a multi-faceted tool to gain a competitive advantage, establish long-term business relations with suppliers, secure market shares, extend the customer base, create improved performance among actors in the supply chain, and increase competitiveness in the market.

SEMCo's potential contribution to the social responsibility challenge and mapping of the background conditions and current status – based on literature reviews and interviews with different organisations, in cooperation with the International Institute for Industrial Environmental Economics (IIIEE) in Lund – could be an input to help set up a generic model for the integration of social issues into the procurement and purchasing process of an organisation, and into its supply chain. The purpose of devising such a generic model is to provide an overview of the process of introducing, implementing, and maintaining SRP in an organisation, whether public or private. Such a model could act as a source of information and inspiration for organisations that are considering introducing or are in the process of developing SRP in their activities. The model can also potentially be used as a benchmarking tool by organisations that are in the process of developing a system for SRP, or are already at the leading edge of this work. The SRP process is commonly divided into several stages, as follows:

- developing internal policies,
- setting procurement criteria,
- applying assurance practises,
- managing supplier relations,

	SEMCO	DATE	2009-11-26	PAGE	58 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- building internal SRP capacity.

It seems that such a model should to a large extent be based on previous experiences, mostly gained in the private sector, and separated into various conceptual phases such as:

- developing a Code of Conduct (CoC),
- implementing actions in the purchasing organisation,
- implementing actions in the supply chain,
- requesting and evaluating information from suppliers,
- auditing supplier performance on site.

SEMCo also intends to put into practice findings from its study on the potential use of selected GRI social indicators for use in SRP. It would be of general interest to further explore the usefulness of the GRI social indicators in GPP, as these indicators have been accepted as operational and reasonable from a business point of view, it being the responsibility of the enterprises to provide this type of information. If a better practice of selected GRI social indicators became reality within the context of GPP, it might have the benefit of facilitating the interpretation of chain-of-custody documentation, as the GRI indicators were prepared in consultation with the business sector to be operational and acceptable as a means of verification for GRI reporting.

Another challenge for SEMCo would be to take part in work soliciting required information from suppliers in order to become a member of existing information clearing houses/exchange data centres, such as SEDEX, with the aim of being a secure, efficient and cost-effective means for our suppliers to communicate and provide assurance about labour standards and for us to monitor, manage and where needed, play our part in improving standards. In such a system suppliers submit information that can be shown to other companies only with the permission of the suppliers. The system also has a built-in scoring method that helps focal organisations to quickly see whether suppliers conform to all the requirements of the SEDEX system, or if there are some aspects that need to be improved. Such an approach will most likely facilitate the current, expensive audit procedures conducted by a number of multinational organisations.

One further challenge for SEMCo would be to gain acceptance for simple tools offering guidance and help to procurement organisations in understanding the underlying principles and scope of various certification/labelling systems commonly used within the context of SRP. An example of a simple tool in the form of a matrix is outlined in Table 3.

Table 3. Comparison of different certification systems and how they relate their requirements to ethical aspects influencing farmers and other workers according to UNI and ILO conventions (1: IFOAM/KRAV; 2: RFA/SAN; 3: UTZ cert; 4: Fairtrade; 5: Ethical Tea Partnership)

Certification systems	1	2	3	4	5
Product category <i>C/T/C = Coffee/Tea/Cacao</i>	C/T/C	C/T/C	Coffee	C/T/C	Tea
UN Convention on children (No 32)	x	x	x	x	x
<i>Core ILO conventions</i>					
No 27: Forced labour		x	x	x	x
No 87: Freedom of associations and protection of the right to organise		x	x	x	x
No 97: Right to organise and collective bargaining	x	x	x	x	x
No 100: Equal remuneration		x	x	x	x
No 105: Abolition of forced labour	x	x	x	x	x
No 111: Discrimination (employment and occupation)		x	x		x
No 138: Minimum age	x	x	x	x	x
No 182: Worst form of child labour		x	x	x	x
<i>Other ILO conventions</i>					
No 1: Hours of work (industry)		x	x		
No 110: Plantations				x	
No 118: Equal of treatment	x	x			

This type of matrix can be of use in the needs analysis to get an overview of the different certification systems, and how they relate to demands for ethical aspects

STANDARD FOR SUSTAINABLE PROCUREMENT

There exist a lot of experiences on a local and regional level as a result from the UN Conference in Rio de Janeiro 1992 imposing the value of increased awareness and engagement for sustainable development. In many countries this became the starting point for the local so-called Agenda 21 commitments including aspects related to social responsibility. A large number of local activities were initiated in Sweden and elsewhere. In an international comparison, the Agenda 21-work in Sweden has positioned itself as one of the more elaborated and advanced. However, the huge amount of tasks usually undertaken in a number of sectors of society called for a structured approach to become successful and practical applicable. Some municipalities in Sweden started to link their Agenda 21-work to existing management systems, usually to emerging or implemented environmental management systems.

Inquiries and investigations carried out in those municipalities being forerunners in, what came to be referred to as integrated management systems, clearly indicated the need for better guidance on how to transform green procurement into sustainable procurement. As result, SEMCo and the Swedish Association for Local Authorities and Regions took an initiative to approach the Swedish Standards Institute (SIS) suggesting the development of a standard for sustainable development in local authorities and regions.

Within the context of the work with this standard, a challenge would be to prepare a guidance standard/document for sustainable procurement. SEMCo is currently leading such a work, which at present has resulted in a draft document describing a procedure for sustainable procurement following the well-known concept of plan-do-check-act in which common elements of a procurement process have been introduced (Fig. 25)

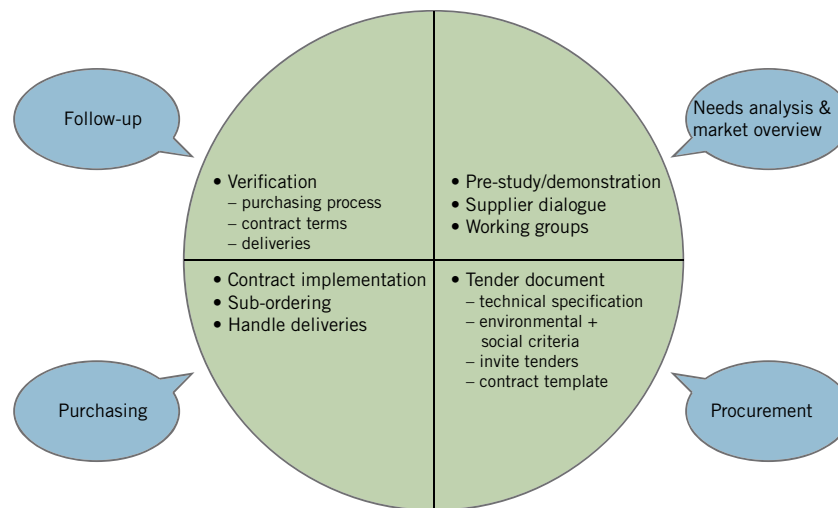


Figure 25. A suggested conceptual outline for a staged process for sustainable procurement

The close linkage to internationally-recognised ways of managerial work incorporating a traditional and well-tried procurement procedure may lead to that this sustainable procurement concept can gain a wider international attention.

8 WHAT TO BRING TO THE NEXT LEVEL – SOME GENERAL OBSERVATIONS

The work carried out by SEMCo within the context of green procurement has resulted in valuable experiences and “lessons learned” in number of areas, but there is still a lot more to learn and to bring to the next level of green procurement.

BACKGROUND AND CURRENT STATUS

- A growing number of organisations are becoming more involved in supply chain management (SCM), however, a structured use of environmental management systems to support SCM is not widely recognised and applied.

	SEMCO	DATE	2009-11-26	PAGE	61 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- There is a need for recognition and understanding of the principal underlying differences between public and private procurement and purchasing as well as between green and socially responsible procurement for enabling a proper evaluation of significant aspects influencing sustainable procurement.
- Attempts to integrate social considerations in a structured way in green procurement are taking place in both private and public organisations even though practices so far have been found to be quite limited. The rate at which social requirements are integrated in procurement has been found to be higher than for corresponding environmental requirements.
- Both green and socially responsible procurement and purchasing concepts are tightly linked together as they deal with the same principal issues, and the process of integrating requirements is fairly comparable engaging the same personnel.
- The ongoing debate about the greenhouse effect and climate change and its short and long-term effects on humanity has changed the communication landscape in favour of consumer awareness and the consumer's willingness to accept the challenge of making their own decisions regarding which products that have a low climate impact.

DEVELOPMENT OF PROCUREMENT CRITERIA

- There are numerous benefits from conducting the criteria development process as a staged process based on open participation involving all interested parties in order to harmonise criteria-setting to the current state of product development. The process shall follow a comprehensive quality assurance process with consensus-based decision-making building on the way international standards, which has gained broad acceptance and appreciation by different stakeholders. It is important for the full recognition and acceptance to "ready-made procurement criteria" that the development process is subject for both internal and independent external audits.
- It is important to give more attention to provide procurers with a selection of different levels of procurement criteria enabling them to decide what level(s) to use in upcoming procurements, based on their own preferences and ambitions.
- So-called spearhead criteria should be regarded as reflecting the absolute forefront of environmental developments and innovations, and used to encourage procurers and purchasers who wish to buy environmentally excellent products, and at the same time motivate suppliers to further expand their work developing environmentally preferable products.
- There is considerable demand for a simplification of SEMCo's criteria to enable a more extended use directly in tender documents, and/or simpler criteria together with more advanced criteria, Hence, there is a need to further develop the SEMCo's set of procurement criteria "*from being as complete as possible to the better practical application*".
- As few organisations perceive the SEMCo procurement criteria on environmental performance as inhibiting competitiveness (it is not the requirements as such but

	SEMCO	DATE	2009-11-26	PAGE	62 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

how they are specified that eventually might be in conflict with fair competition), more efforts should be directed towards refinement of the criteria reporting format.

- There is a need for development of a method to ensure the objective identification of relevant product groups to consider for public procurement based on the relative magnitude of the environmental impact, estimated the volumes of sales and preferences from procurers and purchasers.
- There is a need to develop a parallel “fast-track criteria development process” (without compromising on the accuracy and quality of the criteria) in case EU-wide procurement criteria are prepared already containing vital background information to be able to consider national amendments and the establishment of stakeholder acceptance in Sweden.
- Life cycle cost (LCC) calculations should preferably be integrated into all procurement documents to enable estimates of the total cost of a product during its use covering not only the basic investment, but also the operating and maintenance costs.
- It is important to start the practical work including social and ethical aspects in setting procurement criteria – a request that has been put forward by participants in the working groups for criteria development, as well as by outside parties.
- The proper use of environmental management systems and environmental declarations in green procurement is generally felt to be unclear with regard to what is permitted according to existing procurement legislation and the availability of such voluntary tools on the market. One practical way ahead is to increase the uptake of these tools in public procurement could be to combine work on the two resulting in a “win-win situation” for many purposes.
- The continual development of new procurement criteria will in the end call for a structured database-supported approach to gain a common reporting format, to facilitate access to tailored and specific criteria documents, and to enhance the possibility to rationally handle modifications and amendments as a result of revising and updating existing criteria. The database approach will improve the user-friendliness of homepage making it more adaptive and interactive as well as to support a more detailed search function for specific elements included in the various criteria documents.
- As purchasing organisations usually do not possess the in-depth knowledge nor the necessary resources to be able to professionally examine and judge the truthfulness of various types of declarations and verifications related to chain-of-custody practises. SEMCo could take on the responsibility by offering a support function in the form of a *Point of Expertise* to assist public procurers and purchasers in verification and follow-up of environmental and social criteria.

AWARENESS-RAISING AND CAPACITY-BUILDING

- Make use of regular investigations to keep track of stakeholder’s preferences and needs with regard to information in the form of printed materials, seminars and conferences and different forms of information campaigns.

	SEMCO	DATE	2009-11-26	PAGE	63 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- SEMCo could influence procurement organisations to a greater extent to make better use of environmental criteria by re-directing information to politicians rather than to procurers.
- Develop education modules for different topics linked to green procurement, adapt them to the identified target group's needs and prerequisites, and transform them into self-education material for electronic access.
- Make continual efforts to improve information on the homepage by e.g. collecting and publish success stories, giving examples of successful methods and cost savings, political objectives and requirements, environmental criteria, evaluation methods and ways to follow-up the results of contracts given.
- Make better use of special eco-efficient procurement approaches based on sets of criteria for energy-consuming goods and services by expanding marketing of the web-based education developed by SEMCo.

OTHER ASSOCIATED STRATEGIC ACTIVITIES

- Make better use of new potentials in the current legislation for public procurement which includes a number of procurement procedures favouring the stimulation of innovative technical and environmental solutions.
- A further development and practice of the concept of twinning SEMCo work in developing procurement criteria at different levels, including spearhead criteria as the most ambitious level, together with the initial stages of technology/innovation procurement may re-position daily procurement activities to become a more substantial driving force for new environmental technology.
- More efforts on SEMCo's Innovation Forums could influence the market, having a push-and-pull effect based on the efforts to encourage close dialogues (match-making) between purchasers and suppliers.
- Special emphasis should be directed towards the further development of the concept of Energy Performance Contracting (EPC) for areas other than buildings and properties, including motivation for consultants and entrepreneurs to carry out a contract with the aim of reaching an even higher level of energy-efficiency than agreed upon initially.
- It would be of general interest to further explore the usefulness of the GRI social indicators in GPP, as these indicators have been accepted as operational and reasonable from a business point of view especially focusing on verifying chain-of-custody aspects.
- Introduce environmental product declarations (EPDs) according to the International EPD® system as the foundation of product-related information in green procurement.

MAPPING AND MONITORING

- Commence work with investigating to what extent existing procurement criteria are used in practise to gain valuable insight prior to revising/updating procurement criteria.

	SEMCO	DATE	2009-11-26	PAGE	64 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

- Keep a close dialogue with key stakeholders and users of SEMCo’s tools and support functions to continuously keep an updated register on necessary activities to carry out for the enhanced use of SEMCo’s procurement criteria.
- Be consistent in collecting the same type of information about the usefulness and availability of SEMCo’s work to enable a structured evaluation on a year-by-year basis.

FUTURE CHALLENGES

- There is a need for better statistics in order to prioritize the most important product groups in order evaluate the benefits and cost savings following green/sustainable procurement.
- Continue the work to develop a general approach to a “GPP evaluation model” enabling the identification of the most significant aspects influencing green procurement.
- Accept national differences among EU Member States and incorporate them into generally-applicable EU-wide criteria if present, and encourage the work in those countries wanting to take on the role of becoming a front-runner on sustainable procurement.
- There is a need to more professionally handle climate information in green procurement by means of introducing information direct GHG emissions as expressed as CO₂-equivalents as indications of carbon footprints, which increasingly are recognised as a trustworthy carrier of climate change information in society as a whole.
- Introduce the result of the work on a standard for sustainable procurement to a European and international audience.

	SEMCO	DATE	2009-11-26	PAGE	65 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

ANNEX 1: DOCUMENTATION

SEMCO issues various documentation of both internal and external character. The internal ones contain selected pre-studies, market overviews and different types of investigations of product group's subject for criteria development. These internal documents can be found at www.msr.se. The external documents are listed below.

SEMCO REPORTS

- Environmental management systems and environmental declarations in procurement and purchasing: Unge M., Ryding S.-O. & Frenander C., MSR Report 2007:2
- Verification and follow-up for ecologically sustainable procurement: Dalenstam E., MSR Report 2007:3
- Technology procurement - tool for promoting innovation and new environmental technology: Dalenstam E., Nohrstedt P., Ryding S.-O., Englund A., Stigh L., von Sydow U. & Östberg T., MSR Report 2008:2
- Consumption targets in green public procurement: Ståhlberg A., MSR Rapport 2008: 14 (in Swedish)
- Is environmental requirements in public procurement restricting competition?: Ståhl M., MSR Rapport 2008:E3 (in Swedish)
- Need of information and education in green public procurement: Ståhl M., MSR Rapport 2008:E4 (in Swedish)
- Socially responsible purchasing in the supply chain; The present state in Sweden and lessons for the future: Mont O. & Leire C., MSR Report 2008:E8
- Increased uptake of EMAS: Almgren R., MSR Rapport 2008:11 (in Swedish)
- Environmental and legal principles in public procurement: Sennström L., MSR Rapport 2009:2 (in Swedish)
- Follow-up of environmental demands in public procurement of food: Tideklev N., MSR Internal Report 2009 (in Swedish)
- Follow-up of environmental, ergonomic and technical demands in public procurement of furniture: Tideklev N., MSR Internal Report 2009:(in Swedish)
- Life cycle assessment of chemicals in electric and electronic goods: Christensson A., in prep. (in Swedish)
- Examination of verification and follow-up of social and ethical requirements: Sennström L., in prep. (in Swedish)
- Green purchasing in the private sector: Persson M., in prep (in Swedish)
- Environmental and social criteria in Swedish public procurement of wood-based products – draft definitions and suggestions for implementation: Lindhe A., in prep.

	SEMCO	DATE	2009-11-26	PAGE	66 (68)
	REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

SEMCO GUIDANCE DOCUMENTS

- Follow-up of procurements: MSR Vägledning 2008-01-24 (in Swedish)
- Legal aspects and case-laws: MSR Vägledning 2008-02-20 (in Swedish)
- Social and ethical requirements in public procurement: MSR Vägledning 2008-12-04 (in Swedish)
- Coordination of deliveries: MSR Vägledning 2009-05-06 (in Swedish)
- Green procurement of services: MSR Vägledning 2009-05-08 (in Swedish)
- Green procurement using Environmental Performance Contracting, EPC: MSR Vägledning 2009-05-27 (in Swedish)

OTHER SEMCO DOCUMENTS

- SEMCo's chemical strategy for a non-toxic environment: Dalenstam E., MSR Policy 2007-11-10
- GRI in public procurement; Analysis of opportunities to use GRI:s indicators in public procurement: Frenander C., MSR PM 2009-01-30

SEMCO INFORMATION MATERIAL

- Make use of environmental requirements: MSR, 2008 (in Swedish)
- Climate information for green procurement: MSR, 2009
- Experiences from EPC-projects: MSR, 2009 (in Swedish)
- Green procurement – a step towards an eco-efficient economy: MSR, 2009

SEMCO BOOKS

- Environmental management for green procurement and purchasing: Falk J.-E., Frenander C., Nohrstedt P. & Ryding S.-O., Jure förlag 2004 (in Swedish)

EXTERNAL DOCUMENTS AND SCIENTIFIC ARTICLES IN CONNECTION TO SEMCO'S WORK

- Swedish national action plan for green public procurement – Official government letter 2006/07:54
- Environmentally-adapted ordering according to purchase agreements: Sihlén Monica, Stockholm University, Master Essay 2007:8 (in Swedish)
- Climate communication and climate labelling: Ryding S.-O.: in "Environmental communication and sustainable development", SIS förlag 2009 (in Swedish)
- The carbon footprint measurement toolkit for the EU Eco-label: Baldo G, Marino M., Montani M. & Ryding S.-O., Int. J. Life Cycle Assessment, Springer Verlag 2009



SEMCO	DATE	2009-11-26	PAGE	67 (68)
REPORT	GREEN PROCUREMENT - TAKING IT TO THE NEXT LEVEL			

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