Step-by-Step Guide to Sustainable Supply Chain Management

A Practical Guide for Companies
## Content

**Sustainable supply chain management—Why is it an important topic for businesses?** ................................................................. 4

**Goals, contents, and navigation** .................................................................................................................................................. 5

### I. Advantages and challenges of developing sustainable supply chain management ........................................................................ 7

1. Advantages of sustainable supply chain management ................................................................. 7
2. Dealing with challenges of sustainable supply chain management ........................................... 8

### II. Sustainability topics and action areas .................................................................................. 10

### III. How can a company gradually introduce sustainable supply chain management? .................................................................. 12

- Process step 1: Mapping the supply chain .......... 13
- Process step 2: Identifying significant sustainability impacts, assessing risks, and determining action areas ................................................................. 17
- Process step 3: Analysing gaps and deriving measures ........................................................................... 29
- Process step 4: Adapting internal structures and processes ................................................................. 35
- Process step 5: Formulating supplier requirements and making them binding ................................................................. 39
- Process step 6: Evaluating the sustainability performance of suppliers and building competences .................................................................................. 43
- Process step 7: Reporting ............................................................................................................... 49

### IV. Where can the business find further information? .......................................................... 53

1. Industry initiatives (a selection) .......................................................................................................... 53
2. Further guides (a selection) .............................................................................................................. 55

**Sources** ...................................................................................................................................................................................... 57
Many smaller and medium-sized companies, like larger companies, are already engaging with social responsibility in their business practices. At the same time, they are being asked to live up to their social responsibilities when it comes to their supply chains and are motivated to do so, as supply chains are the origin of a large share of environmental impacts. Supply chains also hold great potential for and provide opportunities to avoid or at least decrease considerable risks to the environment, those impacted, and the companies themselves. The catastrophic impact of suppliers’ insufficient security and occupational health and safety standards, as the collapse of the Rana Plaza building in Bangladesh revealed, shows how important and urgent it is for companies to address the social impact of their activities within their supply chains as well.

Growing expectations for companies to recognise their social responsibilities, including those related to their supply chains, are above all the result of closer relationships between companies and suppliers due to globalisation. Therefore, the United Nations (UN) has addressed the topic in its 2030 Agenda, as have the Group of Twenty (G20) and Group of Seven (G7) states. With the implementation of the European Directive on non-financial reporting (2014/95/EU), the “National Action Plan for Business and Human Rights” and the CSR Forum, the German Federal Government has set standards on the national level for businesses to be socially responsible. Given the pressure of global challenges and goals, such as decarbonisation of the global economy, an expansion of the European Union (EU) political and legal framework can be expected in the medium term. Proactive sustainability management geared towards managing long-term risks and opportunities means both following laws currently in force and anticipating and preparing for future regulations.
Goals, contents, and navigation

This publication is geared towards small and medium-sized companies that have already built a solid foundation of environmental and/or sustainable practices in their factories and offices and now want to take their first steps towards sustainable supply chain management. It provides support for the development of more sustainable supply chains. For those companies that have already introduced an Environmental Management System (EMS) in accordance with EMAS (Eco-Management and Audit Scheme) or ISO (International Organization for Standardization) 14001, this practical guide provides starting points for the management of indirect environmental aspects and analysing the life cycle of products and services.

This publication does not claim to illustrate all activities needed for sustainable supply chain management. Rather, it introduces the topic and creates a starting point for companies.

In Part I, the guide outlines the advantages of sustainable supply chain management for companies, and how they can respond to the challenges of supply chain development. In Part II, the guide highlights relevant topics (including the environment, human rights, and working conditions) essential to sustainable supply chain management for all industries. How a company decides which topics are essential for its own business is described in Part III.

Part III uses a processed-based approach to introduce the basic steps and approaches to designing and optimising supply chains for sustainability. It shows how a company can capture and display its entire supply chain, how it can identify additional challenges to sustainability, and assess and prioritise these challenges by means of a materiality analysis (process steps 1 and 2). It also lays out how to derive goals and measures for individual company levels (process step 3) and how to adequately align internal structures and processes (process step 4). Interested companies can also learn how to formulate their requirements for their suppliers (process step 5) and which instruments they can use for monitoring (process step 6) to build relationships based on trust. The concluding seventh process step outlines approaches to reporting progress in the introduction of sustainable supply chain management (process step 7). The process descriptions addressed are general and applicable across industries. As a result, the instruments or methods used in practice may have to be more specific depending on the industry, necessitating further information. Suggestions on further sources of information can be found in Part IV.
The authors would like to offer their sincere gratitude to the companies and experts who contributed to the creation of this guide in the form of case studies, expert dialogues, and background discussions.

**Navigation**

Systematic environmental and sustainability management comprises both the upstream and downstream value chain of a business for a manufacturing company, from the production of raw materials to the recycling and/or environmentally responsible recovery of the final product after use. **This guide addresses the upstream steps in the value chain, such as the company’s suppliers.** This applies both to direct suppliers, with whom a contractual relationship exists, and to sub-suppliers that deliver to the business’s direct suppliers, such as raw materials producers at the very start of the supply chain.

**Part III** is divided into seven process steps of sustainable supply chain management.

![Process Steps](image)

---

**Case study**

Concrete examples of companies involved in the creation of case studies for the project are found here.

**Further information**

Further information on guidelines, standards, and websites that cover the topic “sustainable supply chain management” in greater depth can be found here.
I. Advantages and challenges of developing sustainable supply chain management

1. Advantages of sustainable supply chain management

Minimising and avoiding risk
Upstream processes—from resource cultivation to individual processing steps to transport—act directly or indirectly as value drivers. In this way, a diligent selection of resources and their processing into precursor products increase product quality. On the other hand, inhumane working conditions and negligent, serious environmental damages caused by upstream processes indicate an unreliable, risky supplier and a lack of quality. Companies are increasingly being held accountable for the social impacts of their upstream processes. Public scandals and related loss of reputation can thus detract from business success.

Designing efficient business processes and strengthening the capacity for innovation
Supply chain management can allow resource, energy, and transport costs to be systematically compiled. These costs can continuously decrease when companies design their own processes (for example, logistics) more efficiently and/or support their suppliers in establishing or improving management processes. Additionally, more efficient processes and systems decrease the demand for materials and thus manufacturing costs. Responsible occupational health and safety practices can also lead to cost reductions through increased productivity and fewer accidents. Anchoring sustainability principles in product development can strengthen capacity for innovation. Innovative solutions for production processes and transport can also be found by working with suppliers on these issues.

Strengthening transparency and living up to higher standards in the business environment
Networking and digitization have made it easier for consumers and civil society to trace products back to their origins. Further, communication technology makes it possible to quickly access this information, for example with apps. Consumers are then in the position of being able to view a product's origin and production conditions. By introducing sustainable supply chain management, the company can show consumers, the public, and policymakers that it is aware of its responsibilities, willing to actively address significant sustainability impacts and risks, and prepared to counter them as much as possible.
Creating values collectively

Last but not least, sustainable supply chain management contributes to the achievement of social responsibility. With the adoption of the Sustainable Development Goals (SDGs) in 2015 for the period leading up to 2030, the UN has strengthened the sustainable management approach. The SDGs can serve as a “compass” for the challenges of the coming decades and as a driver for innovation. A stronger linkage between entrepreneurial value creation and societal needs is increasingly desired. However, this demands cooperation within the company’s own supply chain and with other businesses with similar supply chains, as well as with non-governmental organisations (NGOs) and other actors.

2. Dealing with challenges of sustainable supply chain management

Sustainable supply chain management is a marathon, not a sprint. Nowadays, supply chains are usually global and involve complex networks. Given a broad spectrum of products, multiple supply chains exist. Companies should thus begin pragmatically and continue step-by-step. The first milestone consists of determining where significant sustainability impacts exist. Gaining an improved understanding of the supply chain, exchanging information with other businesses in the industry, and forging links to direct and sub-suppliers result, over time, in more and more possibilities and approaches to optimal sustainable supply chain management.

Determining sustainability impacts and risks in the supply chain can be demanding—focus is necessary. It is important to identify real and potentially significant impacts on people and the environment. Negative impacts can represent risks for the business in a variety of forms, such as legal, financial, or image related. Exact local knowledge of suppliers and sites is critical to determining significant impacts. In practice, this is rarely available and requires great effort. Businesses should thus develop useful filters by focusing on specific countries and/or by making use of existing industry knowledge on sustainability impacts.

Promoting sustainability with suppliers can be accompanied by obstacles. This is especially the case when the possibility of influencing the supplier is low, for reasons such as low contract volumes, lack of a direct contractual relationship, or customer specifications. Businesses usually choose direct exchange with their suppliers, potentially in cooperation with their customers, to jointly exercise influence.
Sustainable supply chain management must be integrated into various existing internal processes to be effective.

This can lead to conflicts with classic procurement criteria, such as price, delivery time, and quality. In practice, companies try to solve such conflicts of interest with open deliberation. It should be communicated that sustainability in the supply chain creates value.

Sustainable supply chain management goes beyond direct suppliers. Usually, companies first turn to their direct suppliers, with whom they are contractually bound. Often, however, the materiality analysis reveals that the negative impacts originate at the sub-supplier level. For every measure to be taken, it is thus important to consider how sub-suppliers can be integrated. For example, a code of conduct can obligate the suppliers to apply the same standards to their own suppliers. Companies should, however, avoid simply passing on the requirements, and thus the responsibility. Rather, they should work with their direct suppliers in determining how to proceed.

There are stringent requirements for data management.

To be able to recognise sustainability impacts, such as waste water pollution in textile production, robust data from direct and sub-suppliers is necessary. Data management can, however, be very demanding. It is possible that the data exists in various formats—sourced from a variety of direct and sub-suppliers and originating in completely different systems. This data must often be manually collated, which demands high personnel costs. It can also be difficult to gain data from sub-suppliers as there is no direct contact with them. It is often difficult to estimate negative impacts, especially emissions and/or water usage. Industry initiatives can help here. The materiality analysis should additionally serve as a risk filter to identify significant sustainability impacts, or “hotspots”.

Further information can be found in process step 4 in Part III.

Further information can be found in process step 5 in Part III.

Further information can be found in process steps 6 and 7 in Parts III and IV.
As with measures for promoting sustainability in the company’s own factories and offices, sustainable supply chain management is only effective when all sustainability topics and action areas are considered (jointly) and interpreted in the context of the business.

Inspired by the international norm on social responsibility ISO 26000, table 1 lists four core topics. Although these do not comprise all topic areas able to be identified by a thorough materiality analysis, they can still provide a first orientation. The topics and action areas address (negative) impacts that the company should deal with. The process steps laid out in Part III of the practical guide (especially process step 2) should help companies determine significant sustainability impacts, which can be used to identify action areas for sustainable supply chain management.

![The internet portal for the initiative “Biodiversity in Good Company” (see bibliography) offers information for businesses trying to get a first grasp on the topic of biodiversity. The portal also provides information on biodiversity within the supply chain.](image)

### II. Sustainability topics and action areas

As with measures for promoting sustainability in the company’s own factories and offices, sustainable supply chain management is only effective when all sustainability topics and action areas are considered (jointly) and interpreted in the context of the business.

Inspired by the international norm on social responsibility ISO 26000, table 1 lists four core topics. Although these do not comprise all topic areas able to be identified by a thorough materiality analysis, they can still provide a first orientation. The topics and action areas address (negative) impacts that the company should deal with. The process steps laid out in Part III of the practical guide (especially process step 2) should help companies determine significant sustainability impacts, which can be used to identify action areas for sustainable supply chain management.

![The internet portal for the initiative “Biodiversity in Good Company” (see bibliography) offers information for businesses trying to get a first grasp on the topic of biodiversity. The portal also provides information on biodiversity within the supply chain.](image)

<table>
<thead>
<tr>
<th>Sustainability Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
</tr>
<tr>
<td>Human rights</td>
</tr>
<tr>
<td>Labour practices</td>
</tr>
<tr>
<td>Fair operating practices</td>
</tr>
</tbody>
</table>

#### Table 1: Sustainability topics and action areas (on the basis of ISO 26000)

<table>
<thead>
<tr>
<th>Action Areas</th>
<th>Sustainability Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoiding environmental impacts and hazardous materials</td>
<td>Banning child and forced labour</td>
</tr>
<tr>
<td>Climate change mitigation and adaptation</td>
<td>Equal opportunities and non-discrimination</td>
</tr>
<tr>
<td>Increasing resource efficiency</td>
<td>Freedom of association</td>
</tr>
<tr>
<td>Avoiding loss of biodiversity</td>
<td>Avoiding complicity</td>
</tr>
<tr>
<td></td>
<td>Employment and employment relationships</td>
</tr>
<tr>
<td></td>
<td>Working conditions and social protection</td>
</tr>
<tr>
<td></td>
<td>Health and safety at work</td>
</tr>
<tr>
<td></td>
<td>Social dialogue</td>
</tr>
<tr>
<td></td>
<td>Fighting corruption</td>
</tr>
<tr>
<td></td>
<td>Responsible political involvement</td>
</tr>
<tr>
<td></td>
<td>Fair competition</td>
</tr>
<tr>
<td></td>
<td>Respecting property rights</td>
</tr>
</tbody>
</table>

Source: Own illustration on the basis of the ISO 26000: 2011
Depending on the industry (and further influencing factors; see especially process step 2), various action areas are relevant for companies. The following list should not be seen as exhaustive. It offers first tips for selected industries, but does not replace a diligent examination by the company of which sustainability topics and action areas are specifically applicable.

**Chemical industry**
- Chemicals and product safety
- Climate protection
- Waste water
- Workplace safety and accident prevention

**IT sector**
- Recycling and re-utilisation of products/resources
- Environmental impacts of production processes
- Hazardous materials management
- Observance of labour standards

**Food production**
- Observance of labour standards
- Water management
- Biodiversity preservation
- Transport and livestock-related emissions

**Services (various sectors)**
- Customer and product responsibility
- Ethical business practices
- Human rights and neighbourhood relations
- Environmental consciousness and competence

**Metals and mining**
- Environmental impacts, risks, and accidents
- Protection of human rights and inclusion of local communities
- Climate action, energy efficiency, water management, and recycling
- Workplace safety and accident prevention

**Apparel**
- Observance of labour standards
- Hazardous materials management
- Sustainable water use
III. How can a company gradually introduce sustainable supply chain management?
Process step 1 | Mapping the supply chain

What are the goals of this process step?

Mapping and visualising the supply chain helps the company to first gain an overview of its essential upstream processes that create value. At its core, it is about gathering information available within the company and preparing it for the following materiality analysis. All steps in the supply chain (that is, beyond the direct suppliers) are to be successively illustrated and complemented with information on their activities and suppliers.

This process step is the starting point in the search for potential and actual sustainability impacts and risks. The business can understand the connection between activities in the supply chain and their sustainability aspects and impacts as an impact chain (illustration 1). The terms used in the impact chain will be presented in more detail below.

Certain business activities—as well as the activities of suppliers and sub-suppliers—can lead to positive or negative impacts on the environment and people. Those activities are also referred to as aspects. Those aspects can be influenced directly or indirectly by the company or its suppliers. Other factors, like natural disasters such as flooding and drought, can have negative impacts on the environment, those concerned, and the company itself. Those impacts are often uncertain, occur with delay, or are unknown to the company due to complex mechanisms of action. In those cases, the sustainability aspects can be understood as risks for negative, as well as opportunities for positive, sustainability impacts. Risks (or opportunities) can arise for the environment and affected people, as well as for the company itself, through potential reputation damage or liabilities. Risks for the company can also develop from changing environmental conditions, such as climate change or increasing air or water pollution, and from political, social, or economic conditions in the countries of production countries.

For visualisation of the supply chain, a range of instruments is available. Various providers offer acquirable software-based solutions for supply chain mapping (and analysis).
Which approaches, methods, and instruments are available?

Key questions on illustrating the supply chain(s)

To gain an improved understanding of the impact chain, it is useful for the company to illustrate the supply chain especially to create internal and external transparency. On this basis, exchange (to be intensified in the next process steps) with employees and external stakeholders can take place. The following key questions should be addressed:

- **What** are the upstream steps in value creation (products, services)?
- **Who** are the suppliers (from direct suppliers all the way to raw material producers)?
Which activities take place within the supply chain? Where do production and services originate?

In order to gain information on the upstream supply chain steps (What?) and on direct suppliers and sub-suppliers (Who? Which activities? Where?), it will usually be necessary to delve into the supply chain step by step. As it is especially the case for more complex supply chains that not all of the data can be collected and analysed (especially regarding sub-suppliers), it is recommended to find a sensible point of entry. Depending on the type of company and industry, different approaches can be taken here. It is possible to orient the process by product or service streams, for example based on three steps:

- **Illustrating the most important product and service streams:** Prioritising criteria can include procurement costs or sales volumes for a product or service. If many similar products are produced, it might be useful to focus on individual components and the raw materials behind them.

- **Compiling the activities of direct suppliers and sub-suppliers:** The company should gather information back to the raw materials stage by going beyond direct suppliers. Examples of such activities could be raw materials extraction and processing (sub-suppliers) or component manufacture (direct suppliers).

- **Categorising by direct supplier and sub-supplier sites:** Location often has a large influence on the risk of negative impacts on the environment and humans (see below).

### Information sources

Two data collection starting points are useful:

- **Internal:** Colleagues in acquisitions, development, or quality assurance can already provide information on the supply structure beyond direct suppliers.

- **External:** The company should inquire if its direct suppliers have already mapped out their supply chains. If not, the company should check whether the direct suppliers would like to conduct this process step together. Industry associations or initiatives on sustainable supply chain management might also offer information on the typical supply chain structure (geographical, supply chain steps).

### Visualising the supply chain

Visualising the supply chain is useful for presenting the connection between activities in the supply chain and/or of suppliers. It also offers a basis for identifying sustainability impacts risks in the next process steps, and for planning and implementing pinpointed improvement measures.

**Nager IT**, a manufacturer of fairly-produced computer mice, presents on its website a pragmatic and easy to create approach that includes the results of the materiality analysis (see process step 2). Further information at [www.nager-it.de](http://www.nager-it.de)
Process step 2 | Identifying significant sustainability impacts, assessing risks, and determining action areas

1. What are the goals of this process step?

- **Identify sustainability aspects and impacts of company activities:** Sustainability aspects are determined for the respective activities in the supply chain. Information on direct suppliers and sub-suppliers, their activities, and corresponding sustainability aspects along the value chain is crucial to subsequently determining actual and potential impacts—both for the environment and those affected, as well as for the company itself. This process step is not concerned with a precise quantitative determination, but rather with a rough assessment of the sustainability aspects and effects.

- **Assess and prioritise sustainability risks:** On the basis of the analysis and determination of sustainability aspects and impacts, the company assesses and prioritises the risks of negative effects on the environment and people, as well as risks that arise for the company (liability, reputation, etc.).

- **Determine sustainability topics and action areas:** The business “translates” its knowledge about negative sustainability impacts and risks to the questions of which sustainability topics and action areas are relevant in order to optimise and develop a sustainable supply chain. Focusing on specific sustainability topics and action areas is important in order for the company to be able to effectively use its own limited human and financial resources.

Examples of stakeholder integration are presented in the ranking of sustainability reports published by the Institute for Ecological Economy Research (IÖW) and the organisation future:

www.ranking-nachhaltigkeitsberichte.de/en.html
The EMAS Regulation lists direct and indirect environmental aspects in Annex I (Environmental Assessment), which can be used for guidance (for further information on sources, see chapter 6 of this guide). Environmental aspects that can also be attributed to suppliers’ environmental behaviour can include, for example, emissions, discharges into water bodies, or soil use and contamination. An assessment must be made determining which environmental aspects can (or may) lead to significant environmental impacts.

Companies using an EMS like EMAS or ISO 14001 are already aware of the connection between (environmental) aspects and (environmental) impacts from their business practices. The company should be thorough in identifying and describing impacts so that the analysis of the key sustainability topics and action areas in the supply chain can be carried out in a targeted manner.

The following table (Table 2) presents an example of the impacts that can be connected with specific environmental aspects.

<table>
<thead>
<tr>
<th>Sustainability aspects</th>
<th>Negative impacts on the environment and/or people</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ Carbon dioxide (CO₂) emissions from the transport of raw materials and components</td>
<td>✗ Global warming caused by CO₂ emissions and its impacts on humans and the environment</td>
</tr>
<tr>
<td>✗ Use of water in metals processing</td>
<td>✗ Water scarcity, ecosystems impairment, usage competition, and increasing water costs in the region</td>
</tr>
<tr>
<td>✗ Use of chemicals in clothing production</td>
<td>✗ Negative health impacts for workers at production sites, water pollution, destruction of the local population’s livelihoods</td>
</tr>
<tr>
<td>✗ Child labour in the minerals extraction</td>
<td>✗ Negative physical and psychological impacts and limited access to education for children</td>
</tr>
<tr>
<td>✗ Lack of protective gear and workplace safety training for supplier company employees</td>
<td>✗ Negative health impacts for workers at production sites, increased risk of workplace accidents</td>
</tr>
</tbody>
</table>

Source: Own illustration
When the company is determining sustainability impacts, it is useful to prepare a materiality analysis as a next step, such as the overview shown in table 3. It is sensible to prepare this list for every step in the supply chain, especially when the supply chain is complex.

### Table 3: Example overview of (potential) sustainability impacts

<table>
<thead>
<tr>
<th>Categorisation</th>
<th>Example activity: Purchase of raw materials  <em>(should be more detailed in practice)</em></th>
</tr>
</thead>
</table>
| Sustainability impacts          | ➤ Water scarcity  
➤ Health and environmental damage from the use of chemicals  
➤ Dangerous working conditions and child labour |
| Affected groups                 | ➤ Workers  
➤ Local communities |
| Particularly vulnerable groups  | ➤ Female workers  
➤ Female members of local communities |
| Relevant business departments   | ➤ Purchasing department, quality management, logistics |
| Relevant business relationships | ➤ Commodity traders |

*Source: Adapted from Dietrich et al. (2015: 22f.)*

### Information sources for the materiality analysis

It is justifiable to begin with an educated guess when taking on the question of which negative sustainability impacts in the supply chain are significant. Industry initiatives, dialogue with target groups, and exchange with other businesses facing similar challenges offer further information to be checked and substantiated via internal and external exchange. Businesses can determine the negative impacts of the activities in their supply chains using the following sources:

➤ **Discussions within the organisation**: Building on the exchange from the supply chain mapping, employees in departments relevant to the supply chain can contribute their knowledge to identifying negative sustainability impacts and risks. Direct conversations or employee surveys are suitable approaches.

➤ Further information on the sustainability aspects of raw materials extraction and raw materials-related ecological risks can be found on the Federal Environment Agency website (see bibliography).

The European Union has agreed on a Regulation ([EU] 2017/821) to determine due diligence obligations concerning the supply chain for importers of conflict minerals.
Direct exchange with suppliers: The company should check whether it is possible to gather information on the sustainability impacts of sub-suppliers via direct supplier activities. Data collection processes should be sensibly and efficiently bundled. It is advisable to link this with the supplier self-assessment instrument.

Document research: Media, industry federations, NGOs, scientific institutions, and databases can provide information on sustainability impacts. The company should also consider whether its suppliers have other customers who have already carried out a publicly accessible sustainability analysis on the particular supplier(s). In the field of supplier evaluation, operators of online databases for supplier evaluations carry out their own, uniform audits and provide the data collected to their customers. Among the best-known companies are Achilles, Ecovadis, Fair Factories Clearinghouse, Intertek, NQC, Sedex, and Supply Shift. Industry initiatives such as the Business Social Compliance Initiative (BSCI), Electronic Industry Citizenship Coalition (EICC), and Together for Sustainability also provide their members with data from a joint pool of audits (for further information, see Part IV of this guide).

Dialogues with NGOs, industry associations, government agencies, and other civil society actors: Direct exchange can help, for example, in obtaining sector-specific and/or country-specific information, analyses, and assessments. NGOs dealing with sustainable supply chain management include Greenpeace, World Wildlife Fund, and Transparency International, among others. Foreign representation/embassies and chambers of commerce abroad can also be good sources of information. Trade unions are also increasingly concerned with the topic of sustainable business.

In most cases, the focus of the activities in this sustainable supply chain management phase will be on the four main sources mentioned above, as personnel and financial resources do not permit exchange with further actors. If further resources are available, the following sources are of interest:

Involvement of (potentially) affected people: If contact with the residents of the supplier’s neighbourhood exists, the company should use this connection.

For environmental topics—Environmental aspects and lifecycle assessments of products, materials, or services: The “lifecycle assessment” is an instrument for assessing impacts throughout the entire life cycle. By creating a lifecycle assessment, the company can identify “hotspots” along the supply chain in order to take targeted action and measure improvements. The ISO 14040 and ISO 14044 standards provide a methodological basis for life cycle assessments. In addition, there are other ISO standards for determining the footprint of products and organisations. For greenhouse gas emissions, these include, among others, ISO 14064 (three parts on greenhouse gas inventories, requirements quantifying and reporting greenhouse gas emissions, and data validation) and ISO 14067 (requirements and guidelines for quantifying and communicating the footprint of greenhouse gas emissions), and for the water footprint, ISO 14046. The European Commission has developed two methods for determining the
In certain countries, there is a high risk of massive environmental damage and/or human rights violations. International standards call for specific measures in these cases. Further information on the standards can be found on the information portal provided by the Federal Ministry of Labour and Social Affairs at: www.csr-in-deutschland.de/EN

CSR Netherlands has developed a risk checker on behalf of the Netherlands Ministry of Foreign Affairs for companies with international business dealings. The risk checker includes, for example, country risk analyses with a view to central sustainability issues in various country-product combinations. www.mvorisicochecker.nl

Assess and prioritise sustainability risks

On the basis of the analysis and determination of sustainability aspects and impacts, the company can assess and prioritise the risks of negative impacts on the environment and people. Views from stakeholders are an important component for collecting data on negative impacts and determining risks. The risk-based approach emphasises that sustainable supply chain management should be approached on the basis of the precautionary principle, and that the company should strive to act preventatively.

In practice, risk typically results from the magnitude and probability of the negative impacts. A weighting can then be undertaken, in which special consideration should be given to the magnitude.

- The magnitude focuses on who is affected, and to what extent, by the negative impacts. Indicators can be: the number affected, the seriousness of the impacts (danger to life; intense, large-scale environmental pollution), possibility of remedy (is the impact irreversible?).

- The probability focuses on factors that increase the likelihood of a negative impact. Two factors are especially important. First, the location/country of the supplier, and second, the sustainability level (see “factors influencing risk” below).

The initial consideration of the company should focus on the negative impact on the environment and those affected. The negative environmental impacts can relate, for example, to a local ecosystem at the location of a supplier. Affected persons in the company might be: employees of the supplier companies, temporary or migrant workers employed by the company itself and/or in supplier companies, as well as local communities near the production facility (own or those of supplier companies).
The company should pay particular attention to groups that are potentially even more vulnerable. Depending on the context, these can be women, the elderly, children, young people, and people with disabilities.

**Factors influencing the risk of negative impacts on the environment and people**

To analyse whether there are negative impacts on the environment and people, and how large the estimated risks are, the company can make use of influencing factors:

- **Country:** In which countries do the suppliers operate? This aspect is particularly relevant when the upstream value creation occurs where environmental and social laws and standards are low and/or not respected. The focus is on suppliers from areas of conflict and high risk, for example, where waste water resulting from the extraction of raw materials is disposed of improperly and thus water systems (drinking water, agriculture) are contaminated. The same applies to countries and regions where human rights are not guaranteed by the government and are regularly violated.

- **Industry:** Depending on the industry, the likelihood and extent of negative impacts on the environment and those affected can differ considerably. In certain industries, raw materials are used that may not be sustainably produced or extracted. Companies should, as much as possible, rely on information from existing industry initiatives and other associations.

- **Supply chain structure:** In general, a complex and multi-stage supply chain involves increased risk. The lack of traceability and the associated lack of transparency can contribute to the erosion of environmental and social standards. For example, an engineering company that produces an end product from prefabricated parts can very likely expect significant CO₂ emissions in the supply chain.

- **Relationship to suppliers and the potential to influence:** If a supplier is not already intrinsically motivated to operate more sustainably, the influence of a company on the implementation of social and ecological standards depends primarily on purchasing volume and the corresponding market power. If these factors are not very pronounced, it reduces the company’s influence, which can lead to an increased risk of negative environmental impacts along the supply chain.

- **Suppliers’ level of sustainability:** The level of sustainability of suppliers can significantly influence the likelihood that negative effects will occur along the supply chain. Where direct suppliers and/or subcontractors are members of a supply chain initiative (for example, Fair Wear Foundation in the textile sector, Forest Stewardship Council or Programme for the Endorsement of Forest Certification Schemes for timber or UTZ for agricultural products), or have already implemented a management system (EMAS and ISO 14001 in the environmental sector, or Social Accountability (SA) 8000 and Occupational Health and Safety Assessment Series (OHSAS) 18001 for social and occupational safety), the risk that they
violate applicable law or environmental and social standards is significantly reduced.

Risk assessment and prioritisation

Experience has shown that it is usually not possible to address all sustainability impacts simultaneously (or to their full extent). This is especially true for smaller companies. It is thus advisable to work out where the greatest risks for negative impacts on the environment and those affected can occur. The above-mentioned influencing factors can therefore also be used as a risk filter. For example, the following table (Table 4) is an assessment method based on the probability of occurrence (P) and the magnitude of the effects (M). Ratings can be from 1 (low) to 5 (very high). The individual evaluations are added so that an overall assessment of the risk can be made along a three-point scale (low, medium, high; see below). The table is intended to show by way of example that risk assessment can help focus on key effects and derive action areas for measures to be taken. Further detailing is possible, for example a breakdown by subject area (environment, human rights, labour practices, et cetera) or precise delimitation among the risk categories (very high, medium, low, et cetera).

Within the course of the application of EMS like EMAS or ISO 14001, well-founded approaches to assessing and prioritising environmental aspects and impacts have become established at company level. Companies can make use of this experience (for contacts to EMAS networks, see Part IV).
Risks for the company itself—incorporating the entrepreneurial perspective

The term “risk” in sustainable supply chain management has two parts: alongside risks for the environment and people, there is risk for the company itself. Sustainable supply chain management is from both a sustainability and company perspective most effective when it is in harmony with the long-term direction and goals of the company and makes best use of the company’s core competences. Therefore, the company should work out how the effects on the environment and affected parties along the supply chain and changed framework and environmental conditions can impact its business. These repercussions can present themselves as risks, for example in terms of delivery, liability, or reputation risks, but also as opportunities, for example through the development of new business models or customer groups. Guiding questions can be:

- How can the identified negative ecological or social impacts in the supply chain influence the company’s performance (for example via damage to reputation, fines, supply problems, low product quality, etc.)?
- Concerning this: Which laws (or international/national agreements) must be observed by the company in relation to its supply chain?
- Which repercussions do changed environmental conditions, like climate change, increased resource scarcity, or the loss of biodiversity, have on the company and its supply chain?

### Table 4: Example assessment and prioritisation using a risk matrix

(Assessment was conducted for the sake of illustration and does not necessarily mirror real situations and/or estimates in practice. P: probability of occurrence; M: magnitude)

<table>
<thead>
<tr>
<th>Impact (examples)</th>
<th>P</th>
<th>M</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contamination of water systems in a region through inappropriate disposal of waste water by suppliers. Contamination of drinking water and water used for agriculture.</td>
<td>4</td>
<td>5</td>
<td>very high</td>
</tr>
<tr>
<td>Smog via emissions of soot, sulfur dioxide (SO₂) dust</td>
<td>2</td>
<td>5</td>
<td>high</td>
</tr>
<tr>
<td>Workplace accidents due to the suppliers insufficiently implementing occupational health and safety measures</td>
<td>1</td>
<td>5</td>
<td>medium</td>
</tr>
<tr>
<td>Forced overtime for employees of the suppliers</td>
<td>1</td>
<td>3</td>
<td>low</td>
</tr>
</tbody>
</table>

Source: Own illustration
Which existing company goals are at risk without additional engagement in sustainability in the supply chain, or how can they be strengthened through sustainable supply chain management?

Which business opportunities and new markets arise from a sustainable supply chain?

In which action area (see Part II of the guide) of sustainable supply chain management can the company most effectively apply its core competences?

With which sustainable supply chain management measures can the company achieve the maximum impact?

How well does the action area fit with the type of company (size, sector, degree of internationalisation)?

Which (economic, contractual, and other) possibilities for influence does the company have to improve sustainability performance in its supply chain?

The last four questions represent measures the company should already begin to introduce. They are closely connected with the possibilities for influence that the company has and are addressed in the next process step 3.

---

Selecting significant sustainability topics and action areas

The above-mentioned assessment of significant sustainability risks should allow the company to identify topics and actions to take in order to design and optimise sustainable supply chain management. The sustainability topics and action areas outlined in Part II provide a good orientation for this.

For the final prioritisation of the topic and action areas, it is suitable to use a matrix in which estimates based on internal perspectives are recorded on the X-axis. The Y-axis contains an assessment from the previous matrix (impact of the company on the environment/people, relevance for stakeholders) (see illustration 2).
Illustration 2: Example determination of significant sustainability topics and action areas
(Assessment was conducted for purposes of illustration and does not necessarily mirror real situations or estimates)

1. Respect for property rights
2. Supplier’s respect for human rights
3. Climate change mitigation
4. Good working conditions and social protection
5. Avoiding loss of biodiversity
6. Climate change adaptation
7. Increasing resource efficiency
8. Fair competition
9. Dealing with local communities
10. Water usage
11. Equal opportunities and non-discrimination
12. Ban on child and forced labour
13. Supplier’s observance of labour rights
14. Avoidance of hazardous substances
15. Fight against corruption

Source: Own illustration
The company can find examples for this last step of the materiality analysis in many sustainability reports. In these reports, however, it is less about the specific question of which topics of sustainable supply chain management are being reported on, but rather about the topics of sustainability management in general.

Twice a year, at Weleda, a manufacturer of certified natural cosmetics and anthroposophical products, the purchasing division—in cooperation with the quality and supply chain management department—applies a risk assessment system to enable the identification of potential price, supply, supplier, and environmental risks. These dangers are prioritised. The hierarchy or prioritisation of the measures is primarily based on the assessment of the individual and overall risks per raw material.

At Weleda, various risk criteria (quality, price, procurement, origin, supplier, environmental risks, et cetera) are assessed individually for each raw material. The assessment takes place in four steps, and ranges from very low to very high risk. This results in an overall valuation per raw material, and then an overview of the entire resource portfolio (per purchasing category). This overview is then sorted in descending/top-down order. The most critical raw materials (for example six times very high risk) are then at the top of the list.

www.weleda.com
Process step 3 | Analysing gaps and deriving measures

1. What are the goals of the process step?

- **Compare with existing goals, measures, and processes (gap analysis):** Based on the results of the materiality analysis, the company should record the objectives, measures, and processes that can be used or adapted within the framework of sustainable supply chain management.

- **Derive measures for improving sustainability performance in the supply chain:** Once impacts have been collected and key sustainability topics and action areas have been identified, the aim is to determine the measures the company can use to optimise its supply chain from a sustainability perspective.

2. Which approaches, methods, and instruments are available?

**Compare with existing goals, measures, and processes (gap analysis)**

A two-step approach is needed to record the actual situation: First, the company can review written documents, such as company guidelines, process diagrams, target definitions, codes of conduct, or environmental management audit results. Subsequently, it can search for direct exchange with contact people from various business units.

The comparison helps to gain information from colleagues on existing processes, possible preliminary work, and starting points. In addition, the exchange can raise awareness of the need for sustainability in the supply chain among the colleagues. The company should first consider which businesses should be involved. Companies that use EMS such as EMAS or ISO 14001 will be able to make good use of the experience gained. In the case of topics that have so far tended to be less focussed upon, such as working conditions and/or protection of minorities, it is recommended to make possible contacts in the company more visible. The company should
refrain from using abstract terms such as “human rights,” “environmental protection,” and “sustainability in the supply chain” in internal communications. Rather, it should choose terms that are specific to values, products, or existing processes.

Derive measures for improving sustainability performance in the supply chain

In order to improve the actual situation defined in the previous process step, the company needs a positive target situation for its supply chain management activities.

The target situation can be derived from written values, such as developing a mission statement for sustainable supply chain management. With such a mission statement, the company outlines the importance of sustainability aspects in the supply chain and the type of supply chain management it strives for in the long term. The mission statement gives guidance to management, employees, and suppliers and sets the benchmark for assessing measures. This should be supported by the company management. In addition, scientific and political goals, for example climate goals, can act as a guide for the company’s level of ambition and be translated into business goals.

Connection between impacts and measures

The nature of the company’s actions depends on the influence it has on the impact, reduction, or avoidance of risks. The “Guiding Principles for Business and Human Rights of the United Nations” and the “Organisation for Economic Co-Operation and Development (OECD) Guidelines for Multinational Enterprises” suggest three fundamental patterns of action (see Table 5). They can serve as a general orientation (including for environmental topics) that can be developed according to the company’s own policies.
### Table 5: Derivation of patterns of action

<table>
<thead>
<tr>
<th>When a business...</th>
<th>... then it should...</th>
</tr>
</thead>
</table>
| ... *causes or could cause* negative impacts through its own activities (actions or omissions) ... | ... take the steps necessary to end or avoid such impacts.  
... compensate for damages that have occurred. |
| ... *contributes or can contribute* to negative impacts through its own activities... | ... take the steps necessary to end or avoid the impact going forward.  
... use its influence to reduce any remaining impacts as much as possible.  
... compensate for damages as much as possible, if necessary in cooperation with other businesses involved. |
| ... *is directly linked* with negative impacts of the products and services of another company as a result of its business relationship to that company... | ... use its influence over the origin of the negative impacts with the goal to prevent or reduce the impacts in question. |

*Source: based on Shift (2014, p. 14)*

### Prioritising measures

When it comes to deciding which concrete measures the company should implement, it is useful to consider internal measures and how to improve sustainability performance in exchange with suppliers. This particularly applies if the company is addressing questions about sustainable supply chain management for the first time. In this case, the company should focus primarily on the internal knowledge and skills structure, based on the results of the materiality analysis and stocktaking of the actual situation. In principle, it makes sense to involve stakeholders (employees and suppliers) in the development of internal and external measures. In the following, internal and external sample measures are listed:

**Internal measures:**

- Monitoring media and NGO reports on sustainability topics
- Training employees who have connections to sustainable supply chain management, for example on how to recognise risks in the supply chain
Checking whether existing information processes in risk management are sufficient to record sustainability-relevant elements (for example changing country risks)

Developing sustainability criteria for purchasing

Checking whether industry initiatives exist and joining industry initiatives

External measures:

Building contacts with civil society and scientific actors in relevant countries of origin to find out more about the environmental impacts of the materials production

Formulating a code of conduct for suppliers

Checking the validity of information provided by direct suppliers and sub-suppliers

Establishing auditing processes at the direct supplier level

Developing and providing training offers for direct suppliers and potentially sub-suppliers

Consolidating the pool of suppliers to reduce complexity in the supply chain

In practice, the company is usually confronted with two challenges: conflicting goals, and the question of how measures can be implemented in light of limited possibilities to influence.

Dealing with conflicting goals

If requirements for sustainable supply chain management are integrated into the company’s overall system of goals, conflicts can arise with previously established goals. This is particularly true with purchasing goals, where the criterion of sustainability can conflict with the classical criteria of price, delivery time, and quality. For example, sustainable products might not be available in sufficient quantities or quality, or the purchasing price might be higher. There is no patent magic bullet solution for dealing with such conflicts. Embedding of sustainability into the supply chain is also intended to help to make such conflicting goals visible in the first place. The company needs to find a way to prioritise objectives and resolve conflicting goals. How this is done depends not only on corporate culture and how the company works in other situations of conflict, but also on how the company has strategically embedded sustainability into its business already.
Measures that go beyond direct suppliers

The question of ways to influence is particularly important when it comes to improving the sustainability performance of sub-suppliers with whom no contractual relationships exist. Possible concrete starting points here are:

- Establishing expanded contractual relationships.
- Offering training sessions and workshops beyond direct suppliers.
- Fostering intra-industry cooperation in the medium to long term, which can eventually help mobilise raw materials producers to opt for more sustainable production methods.
- For businesses that are both suppliers and clients: making contact with clients to jointly develop sustainability requirements as well as jointly implement them in the supply chain.

In principle, the company should always consider how it can work together with other companies or in intra-industry initiatives to increase its influence. There are already initiatives in many sectors. In addition to the availability of delivery data, many industry initiatives offer additional services, such as training and consultations for participating companies and suppliers. In addition, there is also the possibility to address fundamental business strategies. These include, for example, product design, which influences the choice of raw materials and components.

Basic paths of action (addressed in more depth in this guide)

Usually, a company turning to this topic for the first time chooses from among the following fundamental and cross-topical measures, addressed in further process steps:

- Checking central business processes and setting up ongoing processes for sustainable supply chain management (process step 4)
- Informing suppliers, defining requirements, and seeking self-assessment (process step 5)
- Reviewing sustainability performance of suppliers (process step 6)
- Developing suppliers (via training, for example) (process step 6)
- Disclosing information on the state of sustainability in the supply chain (process step 7)
Process step 4 | Adapting internal structures and processes

1. What are the goals of this process step?

New and existing business processes within the company are set up or adjusted based on the results of the materiality analysis and the inventory. It is also necessary to provide the financial, human, and technical resources required to lay the internal foundations for sustainable supply chain management.

2. Which approaches, methods, and instruments are available?

In order to achieve goals and implement measures within the company, competent employees and free resources are needed. This is often a challenge, especially for smaller companies. After all, only a minority of them can afford a sustainability staffer or a whole sustainability department. In order to achieve efficient and effective implementation, it is important to build on existing structures and processes within the company and gradually integrate sustainable supply chain management requirements. If supply chain management is aligned with sustainability issues, new links between different departments and employees can arise. Companies should promote internal exchange and, in cooperation with the colleagues involved, determine necessary procedures and responsibilities.

Anchoring sustainable supply chain management in the company

In order to anchor sustainable supply chain management in the company effectively and develop it systematically, two (ideal-typical) arrangements are possible for allocating responsibilities.
Expert-led teams (for example, purchasing)

On the one hand, responsibility can lie centrally with an expert, a team, or a department. This can be, for example, purchasing, quality, environmental or sustainability management. In this case, the impetus for implementation comes from a specific person or entity (for example, the management officer). Such a clearly identifiable “lead” makes it much easier for employees to orient themselves, but it can also counteract cross-functional integration.

Interdisciplinary or overarching teams

On the other hand, an interdisciplinary team consisting of representatives from different departments with a link to the supply chain can take responsibility. In addition to the “classical” purchasing and quality management functions, product development or communication can also take the role. This team does not have to be explicitly responsible for the supply chain, but can handle the issue as part of corporate environmental or sustainability management. The advantage of teams lies in the integrating various functions into sustainable supply chain management. However, the overriding responsibility can become blurred. In addition, conflicts among different functions can hinder a team in its work.

In everyday life, a company is likely to choose a middle road between the two constellations—expert-led teams or interdisciplinary/overarching teams. Whichever way is suitable in each case depends on various factors. These include, in particular, the number of employees as well as the complexity of supply chains. A solution in which one employee simply takes on additional responsibility for their supply chain should be avoided, as doing so could result in sustainability management becoming secondary to regular operating procedures.

Operative responsibilities and powers

In addition to strategically anchoring sustainable supply chain management responsibility, the department employees’ operational responsibilities must also be taken into account. On the one hand, sustainability targets have to be broken down and integrated into the employees’ individual target agreements. On the other hand, it must be ensured that the targets are not “atomised” and decoupled from corporate values and targets.

An important success factor for internal implementation is employee motivation: implementation objectives should be made both binding and attractive. This can be done by linking them to existing remuneration and incentive systems (as well as sanctions). Recognition and motivation can also be achieved by participating in supply chain-specific sustainability or CSR competitions, by pursuing good sustainability ratings, or by passing on positive customer or stakeholder feedback.
The company’s purchasing and procurement department provides a good starting point for operational implementation. As a rule, this department carries out the supplier evaluation and selection; it is thus responsible for a core process of supply chain management. The applicable guidelines should be aligned early on with the goals of sustainable supply chain management and adapted accordingly. In addition, the early integration of product development a lot of potential for the supply chain to be designed sustainably. If sustainability criteria are already taken into account in development processes, risks along the supply chain can be significantly reduced or even avoided.

In addition to knowing the objectives, the employees need information and knowledge. Information on the company’s own supply chain(s), suppliers, as well as on the ecological and social risks of the supply chain should be accessible to and understandable for the employees. In turn, employees should be able to comment on these data and contribute their ideas. Last but not least, this strengthens the sense of responsibility for the shared topic of sustainability.

In order to understand the at times complex sustainability aspects in supply chain management and to develop appropriate expertise, employees need regular training courses. If internal resources and knowledge are available, the qualifications can be built and conveyed internally. In the case of strongly specific aspects, such as the evaluation of the ingredients of specific materials and/or legal questions concerning the manufacturers, external offers can be helpful, such as from consultants, providers of appropriate standards, NGOs, and local experts (trade unions and foreign trade chambers, for example). This approach has the advantage of active discussion with stakeholders and thus enables external input.
Process step 5 | Formulating supplier requirements and making them binding

1 What are the goals of this process step?

During this process step, the company develops a code of conduct. It communicates requirements of direct suppliers and asks for a self-assessment of their implementation capabilities. The results flow into conventional supplier evaluation. If a supplier relationship is being established or continued, the code of conduct is integrated into the supplier contract and is thereby binding for the direct suppliers and, if applicable, for the sub-suppliers as well.

2 Which approaches, methods, and instruments are available?

Only when suppliers know, understand, and accept the results of the extended supplier evaluation can they jointly ensure that the required social and environmental standards are being adhered to. This process step thus describes how supplier requirements can be defined and communicated to them. The main focus is on the code of conduct and how this can be integrated into the supplier relationship.

Developing a code of conduct

The code of conduct (or “supplier code of conduct”) is the document that formulates, or “codifies,” all requirements for direct suppliers and sub-suppliers, if applicable. It forms the interface between the company’s internal objectives and the desired behaviour of the direct suppliers and, where appropriate, sub-suppliers, by making these specifications concrete. At the same time, if accepted by all parties, it is the basis for understanding upon which a company bases its own and collaborative action, evaluates progress, and plans long-term cooperation. Therefore, the code is the first and most fundamental measure that a company should make establish.
The company should get suppliers, especially existing ones, on board early on to jointly discuss objectives and requirements. This can already be done when formulating the company’s own vision and goals. The results of such (informal) conversations can give suggestions for the formulation of a code of conduct.

Core contents

The code of conduct should refer to both general and specific international standards and norms, and, where appropriate, local laws and regulations in the place of production. This is particularly advisable for two reasons: on the one hand, no new standards need to be defined, as they will already have been formulated at the international level for many industries and product categories. On the other hand, suppliers should be faced with uniform requirements rather than having to deal with a variety of different ones depending on the company. International standards, especially in industry- and product-specific variants, simplify requirement formulation for suppliers.

Which standards are important for the company depends on its industry, business model, and risks identified. General standards and norms to which the company’s code of conduct can refer include:

- International Bill of Human Rights
- International Labour Organization (ILO) core labour standards
- UN Ten Principles of the Global Compact
- OECD Guidelines for Multinational Enterprises
- ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy
- ISO 26000: Guideline for social responsibility
- UN Guiding Principles on Business and Human Rights
- OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions/UN Convention against Corruption

The company should define a **zero-tolerance range** within its code of conduct and ensure that its direct suppliers are sufficiently informed in advance on the consequences of infringement. Which areas are included here can be determined by the above-mentioned standards. Usually included are the deforestation of virgin forests, child labour, and human trafficking.
Codes of conduct are all similar in structure. They frequently consist of:

- **Introduction**: It summarises the mission statement and references relevant international standards. It may also specify the duties of the direct supplier, such as passing the code on to sub-suppliers and/or being willing to participate in audits.

- **Supplier requirements**: These are often broken down into sectors such as environment, social, and governance. The individual requirements can cross-reference valid standards. For the environment sector, for example, an EMS according to EMAS or ISO 14001 might be required.

- **Supplier understanding and consent**: Suppliers confirm with their name and the signature of a representative that they have read and accepted the code.

### Making the code of conduct binding

The company should make the requirements of the code of conduct a binding part of its relationship with direct suppliers. A first step may be for companies to require them to sign the code of conduct and to commit themselves to its implementation. The requirements of the code can be explained by means of a discussion or a webinar. In addition, the direct supplier should be asked to make the code accessible to all employees in the company, which may require translation into local languages.

More binding is integration of the code into the supplier contract. This can be done by means of complete adoption of the code (for example as a contractual annex) or by the transfer of central requirements into the actual contract text. The company should ensure that the relevant passages are as clear and precise as possible and to avoid general, purely declarative statements.

The supplier commitment also affects the relationship with the sub-suppliers. As a rule, there is only a contractual relationship with the direct supplier (tier 1). This does not initially include its suppliers (tiers 2, 3, etc.), that is, the sub-suppliers. However, the contract may oblige the supplier to make the code of conduct binding for its own suppliers and thus pass the specifications forward. This is particularly important when companies have identified risks upstream. In this case, precise, contractually stipulated specifications are necessary so that the direct suppliers select primary products according to the company’s quality and sustainability criteria.

- **VAUDE** has nominated 150 materials manufacturers that meet the company’s quality and sustainability criteria and from which the prefabricator should source materials. If the producers do not revert to nominated materials manufacturers, they are contractually obliged to ensure that their materials suppliers comply with VAUDE criteria.

- With the requirements, as with other contractual conditions, the company should take care to not overstretch the direct suppliers’ capacity with demanding clauses. The responsibility for a sustainable supply chain is a shared one. Moreover, the requirements cannot always be implemented directly upon the conclusion of the contract, but require gradual goal fulfilment. Contractual requirements for upstream stages in the supply chain should therefore be combined with support measures and communicated as a common learning process.
Process step 6 | Evaluating the sustainability performance of suppliers and building competences

1 What are the goals of this process step?

- Evaluate the suppliers: In order to ensure compliance with the code of conduct and/or the contractual arrangements and implementation of the measures, a company has a number of mechanisms it should make use of—in the light of significant sustainability impacts—depending on the possibilities for influence and available resources.

- Develop suppliers’ capabilities: In order to improve the supply chain, it is most effective in the long term to build up appropriate supplier capabilities. In doing so, the company enables suppliers to meet their customers’ expectations.

- Supplement criteria for supplier selection and confirmation: the company incorporates sustainability criteria when selecting and confirming supplier. The information from the materiality analysis and from the suppliers’ self-assessments can be used in the selection of new suppliers as well as in confirming of existing suppliers.

2 Which approaches, methods, and instruments are available?

Evaluation measures are particularly necessary where potential damage is threatening and the probability of occurrence is high. On the other hand, information may suffice if the risk is low. In the long term, it is useful to combine different measures. Lacking the necessary control mechanisms, the review alone will be as insufficient as developing the suppliers would be in the long run.
Evaluate the suppliers

A step-by-step evaluation system is particularly suitable for companies with many direct and sub-suppliers. Even if business relationships with all direct suppliers are based on the code of conduct, they should be systematically reviewed and capacities should be built up to evaluate self-assessments. Audits of direct suppliers should only take place at suppliers and locations with an increased risk of violations of sustainability requirements, due to high personnel and financial costs. Companies should also consider the extent to which they can use online databases for supplier ratings and industry initiatives.

Supplier self-assessment

To find out how their suppliers deal with risks that arise on site and/or in upstream processes, companies can use a self-assessment. Suppliers estimate the extent to which they meet desired requirements by answering a questionnaire. Some companies already use a self-assessment as part of their quality management or purchasing, but without asking about sustainability issues. The questionnaire can be supplemented by specific inquiries on ecological and social aspects of the supply chain. It may refer to the code of conduct as well as to specific risks. Possible topics for the query may be:

- Responsibility for sustainability management and compliance with certificates and standards
- Certification in environmental topics (such as EMAS, ISO 14001), labour standards (for example SA 8000)
- Adherence to non-certifiable standards (such as principles of the UN Global Compact or ISO 26000)
- Participation in multi-stakeholder and industry initiatives
- Internal sustainability-relevant measures and management processes that prevent negative impacts on the environment and society, for example by means of relevant indicators
- Results of the previous audits as well as information on the type, extent, and conductor of the audits
- Sub-supplier commitments, for example in the form of their own codes of conduct

The advantage of the supplier self-assessment is that companies can implement it quickly to get a first impression of the supplier’s strengths and weaknesses. This makes it possible to review the results from the materiality analysis, supplement future analyses and, adapt the list of prioritised suppliers as necessary. In addition, the self-evaluation raises awareness of sustainability requirements among existing and new suppliers. There are

ISO 19011 is a guideline for auditing management systems. Further information is available at www.iso.org
now a number of web-based solutions that support companies and their suppliers in the query. However, the self-assessment is always a snapshot based on mere self-declaration. Therefore, specific supplier commitments as well as control and support measures should follow.

Audits

The evaluation by means of an on-site audit—by one’s own company or by external third parties—goes beyond the supplier’s self-assessment. This approach is recommended if there is an increased risk of violation. In the audit, qualified auditors check at regular intervals or on a case-by-case basis whether the supplier is in compliance with the agreements. As in the case of “conventional” supply chain management, it is possible to differentiate among internal audits (1st party), supplier audits, in which customers audit their suppliers (2nd party), and third party audits (3rd party).

However, especially for smaller companies, the possibilities for audit are limited. In this respect, the materiality analysis as a filter plays a decisive role in setting the most effective focus on sustainability. If the materiality analysis reveals that a large number of suppliers should be audited, especially in countries where a company is not represented, it should always be checked whether auditing capacity is adequate and the necessary knowledge is available. If not, it may be useful to include external auditors. Many internationally operating certification organisations which also carry out environmental certifications offer supply chain audits.

Audits generally employ questioning, observing, and listening to determine whether the specifications are being adhered to and how the supplier is developing. An audit is carried out on the basis of specific requirements recorded in audit reports. Guidelines can, for example, be based on the code of conduct or on the requirements of management system standards such as EMAS. Essential audit components are:

- **Discussions with management:** Corporate policy and implementation, use of management systems, salaries, working hours, et cetera.
- **Discussions with employees:** Possible topics include working conditions, resource use, gender equality, etc. Discussions should be carried out with a representative number of employees.
- **Site inspections:** Visually assessing the locations for visible violations.
- **Document evaluation:** Checking personnel files, documents on health and safety, information on working hours, data on emissions, material and energy consumption.

An audit can bundle different topics to save resources. For example, it is common to address quality issues and sustainability topics, such as environmental protection, working conditions on the ground, occupational safety, child labour, minimum wages, and health protection. The results are entered into the supplier evaluation and can be used for purchasing decisions.
Decisions. In addition, they serve to broaden the knowledge of supply chain(s) and associated risks.

Develop suppliers’ capabilities

Development of corrective action plans

If the results of the self-assessment or the audit reveal that the supplier has potential for improvement or even violations, the company should examine whether it can develop a concrete action plan with the supplier and support its implementation. As a matter of principle, corrective action plans should clearly define the content and timing of objectives, and set clear indicators for review. If deficits are striking, it is advisable to supplement supplier contracts with corrective action plans as well as with binding targets and rules. However, this form of cooperation is only possible if the supplier is willing to do so or if the company has corresponding influence. If this is not the case and there are serious infringements, it must be determined whether it is possible to terminate the business relationship and change the supplier.

Long-term building of supplier competences

Short-term corrective measures should be accompanied by medium-to long-term development of competences among the suppliers. These include the following:

- Supplier training (on relevant sustainability standards and requirements)
- Technical support for process optimisation (for example for reducing emissions)
- Implementing supplier pilot projects (for example for introducing environmental management systems)
- Carrying out materiality analyses with suppliers

As with other process steps, companies should be able to implement common measures for establishing and extending supplier sustainability capacities via industry initiatives.
Supplement supplier selection and confirmation with sustainability criteria

Supplier selection and confirmation is an elementary process step that should use knowledge gathered up to that point. The information from the materiality analysis and from the self-assessment in particular should be used selecting new suppliers and in confirming existing suppliers. In doing so, the company should build on existing instruments and processes and supplement them with sustainability criteria. One example is supplier evaluation in quality management.

The evaluation criteria for “conventional” supply chain management (price, quality, delivery time, etc.) are supplemented with defined social and environmental standards. Sustainability certificates, results of audits or materials pollutant tests (for example in the textile sector) and/or corrective action plans ensure adherence to these standards. In addition, it is possible to define exclusion criteria such as the existence of clear legal violations.

When choosing suppliers, VAUDE considers ecological and social criteria along with economic aspects and quality standards. The aim is to find a balance between functionality, price, and environmental friendliness (of manufacturing conditions for example). Price and functionality play an important role as products must be attractive to consumers. However, ecological and social criteria are equally important and are therefore equally weighted. This is especially true if they are part of GreenShape 2.0 (VAUDE’s own label) and must be met on that basis.
Process step 7 | Reporting

1 What are the goals of this process step?

- **Disclose information on sustainable supply chain management as part of reporting:** Companies build transparency via their engagement in sustainability in the supply chain.

- **Select indicators for reporting:** The information communicated internally and externally is measured using meaningful indicators.

2 Which approaches, methods, and instruments are available?

**Disclose information on sustainable supply chain management as part of reporting**

In order to meet increased demand for information on responsibility and sustainability risks in the supply chain, the company should report on its activities in sustainable supply chain management. This is usually done via sustainability reports. There are various reporting standards and guidelines that a company can use for supply chain topics.

The company must ensure that the information meets the needs of the stakeholders and that it does not ignore any essential aspects. The central information includes:

- **Disclosure of sustainability impacts/risks along the supply chain and display of the need for action** (*good practice:* individually naming risk countries, transparence by region and country supplier list)

- **Details on materiality and risk analysis processes as well as on value chain evaluation** (*good practice:* risk analysis with reference to risk country lists, in-house quantifying risk assessment system)

- In the evaluation of the ranking of the sustainability reports published by IÖW and future, there are references to transparency requirements in the area of sustainable supply chain management. For further information, see [www.ranking-nachhaltigkeitsberichte.de/en.html](http://www.ranking-nachhaltigkeitsberichte.de/en.html)
Information on the implementation of measures, including those that call for standards and codes of conduct, reference national and international industry standards, reference of audits generally (good practice: transparency of audits in their scope, depth, and results (review system), consequences/handling of violations)

Source: Hoffmann et al. 2015.

Decisive for the choice of communication channel and preparation of information is the target group that companies want to reach. Employees are also a target group. Therefore, internal communication channels such as an intranet and newsletters should also be used.

Select indicators for reporting

The company can review and, if necessary, adapt existing key indicators for sustainable supply chain management. Examples of meaningful existing indicators are the number of pollutant tests, proportion of rejected products and average duration of supplier relationship.

The company, on the other hand, sets new benchmarks when it wants to measure the success of specific measures that it has taken as a result of the previous steps. It can rely on different sources, for example, the Global Reporting Initiative (GRI) Sustainability Reporting Standards, the German Sustainability Code (DNK), and the Environmental, Social and Governance (ESG) KPI Catalogue of the European Federation of Financial Analysts Societies provide numerous key supply chain indicators.
**Examples of intra-company indicators:**

- Number and/or value of purchased and possibly certified (intermediate) products and share of respective segment
- Rejection rate (percentage change compared to previous year)
- Number of supplier audits (by company employees)
- Collaborations with supply chain-specific stakeholders (for example, number and type of memberships in associations and initiatives)
- Training of company employees (for example, in hours or number of employees)

**Examples for supplier-specific indicators:**

- Share of (sub-)suppliers who have signed the code of conduct
- Proportion of (sub-)suppliers who have submitted a self-assessment
- Proportion of certified (sub-)suppliers
- Number of audits
- Number of (sub-)suppliers going through a corrective action plan
- Average duration of supplier relationships
- Number of (sub-)suppliers with which the relationship was ended
- Proportion of (sub-)suppliers trained by company employees or third parties

Migros has made 20 “promises” to children with the “Generation M” advertising campaign. These include scheduled operational sustainability targets, such as the improvement of the working conditions of 75,000 employees’ supplier and the procurement of palm oil from exclusively sustainable cultivation. The promises are communicated in-store and through advertising. They can be viewed as indicators on the company’s website.
IV. Where can the company find further information?

1. Industry initiatives (a selection)

Companies should use industry initiatives and sector-specific or cross-sectoral collaborations, as they can benefit both the company and its suppliers. By jointly establishing effective standards and working together on training and control, companies can save money. The same applies to suppliers, since they do not have to react to every single request from their customers, whose claims are bundled. Depending on the industry initiative, the service and performance spectrum may differ. The company should therefore carefully examine expected performance. Criteria may include sustainability aspects covered, level of ambition, stakeholder involvement, training offered, robustness of the data collection processes, and the costs of joining an industry initiative, among others.

Initiatives for a number of sectors already exist. This list does not claim to be exhaustive. The company should ask industry associations and/or other companies within the same industry whether sustainability initiatives have already been established.

**Chemical industry – Together for Sustainability**
The alliance uses Ecovadis for supplier evaluation. In addition, the alliance offers joint audits of companies as well as the possibility to access existing supplier evaluations.

**Electronic industry – Electronic Industry Citizenship Coalition (EICC)**
In the EICC, the world’s leading electronics (and other) companies have come together to promote ethical, environmental, and social responsibility in the supply chain. Members are obliged to implement the code of conduct published by the coalition.

**Retail – Carbon Performance Improvement Initiative (CPI2)**
Commercial enterprises launched a climate action initiative under the auspices of the Foreign Trade Association (AVE). The focus is on a management tool for the design of sustainable supply chains and the use of energy, water, and chemicals at production sites.
In GeSI, organisations and companies from the information and communications sector have joined forces to offer capacities, information, and practical examples and to promote sustainable information and communications technology.

The initiative provides, among other things, a code of conduct with a focus on social issues in the supply chain as well as support for compliance verification. Companies can access other services. The initiative is based on comprehensive stakeholder integration. A prerequisite for membership is membership of the Foreign Trade Association (AVE).

In line with the BSCI, the BEPI has established itself within the Foreign Trade Association. BEPI’s objective is to establish a minimum standard for improving environmental performance at production sites in risk countries. The focus is on risk analysis and giving manufacturers individual advice and training.

The initiative is a federation of governments, NGOs, and businesses. The members are committed to increasing transparency in the process of companies paying governments for raw materials. The umbrella organisation in the raw materials sector is the International Council on Mining and Metals.

The alliance serves to promote efforts to improve the handling of conflict minerals in the supply chain from the DR Congo as well as from the Great Lakes region in Africa. The initiative provides financial and coordinative support for organisations located in the regions concerned dealing with the trade of conflict minerals.

In addition, there are a number of resource-related initiatives. These include:

- Better Cotton Initiative
- Aluminium Stewardship Initiative
- Fair Trade for Gold and Silver
- Forest Stewardship Council
- Marine Stewardship Council
- Roundtable on Sustainable Palm Oil

Annex A of ISO 26000 provides an overview of sector-specific and general sustainability initiatives.
2. Further guides (a selection)

<table>
<thead>
<tr>
<th>UN Global Compact Office 2012: Sustainability in the supply chain. A practical guideline for continuous improvement. Berlin: Offices German Global Compact Network.</th>
<th>The comprehensive guide helps companies meet the challenges of integrating CSR into the supply chain and provides them with practical insights to apply the principles of the Global Compact throughout their supply chains to build and develop sustainable supply chain management. <a href="http://www.globalcompact.de">www.globalcompact.de</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>World Economic Forum 2015: Beyond Supply Chains. Empowering Responsible Value Chains. Prepared in collaboration with Accenture. World Economic Forum: Geneva.</td>
<td>The report (in English) contains a list of 31 supply chain management practices from companies. These examples are intended to help companies implement specific measures for the design and optimisation of their supply chains. <a href="http://www.weforum.org">www.weforum.org</a></td>
</tr>
</tbody>
</table>
Sources

**Literature**


**Norms and standards**


Global Reporting Initiative: G4 Sustainability Reporting Guidelines. Reporting principles and standard specifications (2. ed.). Amsterdam: GRI.

KPIs for ESG. A Guideline for the Integration of ESG into Financial Analysis and Corporate Valuation (Version 3.0). Frankfurt am Main: DVFA.


Regulation (EG) No. 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS)

Websites

Business Social Compliance Initiative
www.bsci-intl.org/resource/countries-risk-classification

Bertelsmann Foundation
www.bti-project.org/de/startseite

Federal Ministry of Labour and Social Affairs
www.csr-in-deutschland.de/EN

Business in Biodiversity-Initiative
www.business-and-biodiversity.de/en

World Bank
https://datahelpdesk.worldbank.org/knowledgebase/topics/19280-country-classification

German Council for Sustainable Development
www.deutscher-nachhaltigkeitskodex.de/en

EMAS Helpdesk of the European Commission
www.emas.eu

Yale University
http://epi.yale.edu

FTSE Russell
www.ftse.com/products/indices/ftse4good

International Organization for Standardization
www.iso.org

Global Compact
www.unglobalcompact.org

United Nations
http://hdr.undp.org/en/content/human-development-index-hdi

MVO Nederland
www.mvorisicochecker.nl/en

OECD
www.oecd.org
Federal Environment Agency
www.probas.umweltbundesamt.de

IÖW and future
www.ranking-nachhaltigkeitsberichte.de

Product DNA SA
www.respect-code.org

Federal Environment Agency
www.umweltbundesamt.de/umweltfragen-umsorell
(in German only)

Federal Environment Agency
www.umweltbundesamt.de/umweltfragen-oekoriss
(in German only)

Federal Environment Agency
www.umweltbundesamt.de/umweltfragen-rohstoffpolitik-0
(in German only)