Chapter 11 Responsible Purchasing: Moving from Compliance to Value Creation in Supplier Relationships¹

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11.1 Introduction

11.1.1 Why Responsible Purchasing?

An increasing number of companies are intertwined with a large number of suppliers. Suppliers are increasingly important for the competitive advantage of the buying company, as the latter is relying on the innovative and quality-enhancing capabilities of its suppliers to reduce costs and improve time to market (Matthyssens and Faes 2013). However, this relationship creates a high dependency of the buying company on its business critical suppliers, making buying companies extremely vulnerable for irregularities in their supply chain.

Boeing's Dreamliner may serve here as an example. The first Dreamliner was delivered in September 2011 to All Nippon Airways, 3.5 years behind schedule. There were many reasons for this significant delay. First, the large number of new technologies (e.g., new composites for body parts, new electronics for customer entertainment and climate control) resulted in many problems. Next, Boeing's complex global supply chain design represented an even greater challenge (Tang et al. 2009). Parts were sourced from specialized suppliers worldwide. The orchestration of the parts among the supply partners and Boeing seemed an impossible job. Next, it was no surprise that the first planes showed significant failures

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(ranging from cockpit windshield crack, to overheated batteries and even interior fires). When mismanagement takes place in a wrong supply chain design involving monopolistic and specialized business critical suppliers, the consequences will both hit the supplier, the buying company, and the end-consumer. In addition, sustainability risks arise with these global supply chain complexities following from unforeseen supplier malpractices. This results in supply chain interruptions and reputation damage.

Supplier relationships clearly pose new challenges in terms of transparency and traceability. Therefore, it is time for companies to address these challenges and take sustainability criteria into account in their purchasing practices. Principles regarding ethics, safety, and diversity should be supported in order to benefit the firm, supply chain, and society. Support for these principles should be demanded from the suppliers' suppliers as well. However, demanding compliance is one challenge, creating shared value in the supply chain is quite another challenge. The latter requires an orientation towards responsible purchasing, i.e., a (governance) process of creating more transparency, education, collaborative partnerships, and of implementing sustainability practices. Doing so effectively will take time and efforts as companies will move through different stages of maturity.

In this chapter, we argue that responsible rather than sustainable purchasing is needed to support the company's overall business strategy. These two concepts are detailed in the following section.

11.1.2 Responsible vs. Sustainable Purchasing²

Corporate social responsibility (CSR) relates to an organization's responsibility to meet the present needs of its various stakeholders without jeopardizing the future needs of these stakeholders (Brundtland 1987). Other authors have referred to CSR as the economic, legal, environmental, ethical, and philanthropic expectations that society has of organizations at any given point in time (Carroll 1991). In line with these definitions, we define sustainable purchasing as: "the supply of all goods, services, capabilities and knowledge which are necessary for running, maintaining and managing the organization's primary and support activities secured at the most sustainable conditions." Sustainability refers to economic, legal, ethical, and philanthropic aspects in relationships with suppliers. We differentiate between sustainable purchasing and responsible purchasing, as the latter would require a different mentality and orientation from purchasing professionals. Sustainable purchasing includes designing and implementing procedures and guidelines, based on external standards, aimed at fostering sustainable supplier relationships. Responsible purchasing implies that purchasing professionals take it as their personal, rather than their company's, responsibility to secure that these principles are implemented. Whereas sustainable purchasing refers to the institutional responsibility, i.e., corporate responsibility, responsible purchasing is reflected by the adoption of

²Responsible Purchasing equals in this chapter Green Purchasing, Environmentally Preferable Sourcing, Green Sourcing.

sustainability in the daily activities of purchasing professionals based upon their own personal, ethical, and professional standards.

Responsible purchasing does not only look at the effects of supplier relationships on company financial results, risks, and reputation. Rather, it also includes designing and implementing supply chain solutions that are beneficial not only for the company, but also for the world around us. This connotation of purchasing is in line with stakeholder theory as suggested by Freeman (1984), who argues that an organization should not only satisfy the interests of their shareholders, but also the interests of other stakeholders such as customers, suppliers, employees, regulatory agencies, competitors, consumer advocacy groups, and media. This connotation also aligns with what Porter and Kramer (2011) referred to as shared value creation. Implementing sustainable purchasing is already a massive task. The step to implement responsible purchasing is even greater.

11.1.3 Objectives and Structure of the Chapter

Our focus in this chapter is on large (multinational) companies that source *products*. The objective of this chapter is to show what it takes to go to difficult and trouble-some route to drive CSR in supplier, i.e., supply chain relationships. We discuss some important CSR adoption models for large multinational companies (MNCs). This knowledge will enable companies to design a roadmap towards integrated, responsible supply chain practices. Implementing this roadmap comes with significant challenges. Therefore, we end with some critical issues and questions for companies to reflect on, when taking the journey towards responsible purchasing and supply chain practices. However, before doing so we position our paper by discussing three relevant theoretical perspectives for our discussion.

The rest of the chapter is organized as follows. We start by presenting three different approaches for value creation at the firm level in Sect. 11.2. We show that the traditional resource-based view has been supplemented by the resource dependence theory and the stakeholder theory. In Sect. 11.3, we review several approaches to CSR in the supply chain as well as the programs and methods to drive sustainability in supply chain relationships. Section 11.4 is devoted to the presentation of a time-phased model for responsible purchasing adoption. These concepts are compared to practice in Sect. 11.5 through several examples. Section 11.6 presents some challenges related to sustainable supplier relationships. Finally, Sect. 11.7 is devoted to conclusions and suggestions.

11.2 From the Resource-Based View to Stakeholder Theory³

Shareholder value creation has dominated management theory and business practices for decades. The purpose of the firm was to create maximum wealth for its owners, i.e., its shareholders. In doing so, the firm should use and capitalize on its

³This section is partially derived and rewritten from Kibbeling (2010, pp. 20–24).

resources, i.e., the combination of technology, assets, knowledge, financial resources, and expertise. For a long time, the resource-based view was positioned as the most dominant research paradigm in strategic management (Wernerfelt 1984). The resource-based view suggests that a firm's unique resources, its competences to deploy those resources, and its capabilities that are derived from bundled resources provide a source for growth and competitive advantage (Rumelt 1984; Wernerfelt 1984). Possessing and having access to valuable, rare, inimitable, and nonsubstitutable resources would provide competitive advantages in itself, according to these researchers. However, other researchers suggest that value is created only when these resources are evaluated, manipulated, and deployed appropriately within the firm's environmental context. Resources thus require a purpose in order to be successfully structured, bundled, and leveraged. Purpose and value is given to a firm's resources through directing them with an external orientation (Sirmon et al. 2007). An external orientation allows firms to leverage capabilities and resources in such a way that they fit to their context and are considered valuable. This approach is called resource management (Sirmon et al. 2007, 2008).

The resource-based view, however, is in essence internally oriented and does only implicitly embed supplier resources and capabilities in the process of structuring, bundling, and leveraging resources to obtain competitiveness. It remains unclear about how to adopt the proposed external orientation, which is necessary to create sufficient "fit" with the firm's environment, i.e., its multiple stakeholders.

Therefore, other researchers have suggested that rather than internal resources, the way the firm needs to deal with its external resources, i.e., its external dependencies, is important in order to achieve competitive advantage. The central proposition in the resource dependence theory is that firms change as well as negotiate with their external environment in order to secure access to the resources, which they need in order to survive (Pfeffer and Salancik 1978). The resource dependency theory thereby typically looks beyond the boundaries of an individual firm. The resource dependence theory advocates that information generation and intelligence on the environment are key for creating firm awareness and firm responsiveness to stakeholder demands (Handfield 1993; Pfeffer and Salancik 1978). Next it argues that firms are not self-contained in fulfilling demands and therefore need to establish effective linkages with suppliers to access resources and capabilities required to deliver value (Pfeffer and Salancik 1978; Ulrich and Barney 1984). Hence, this theory argues that a firm's success is particularly reflected in the external evaluation of the firm's performance (Christensen and Bower 1996; Pfeffer and Salancik 1978). The resource dependence theory implies that suppliers are necessary for adapting to and anticipating on the developments in the supply chain's environment. Developing effective relationships with the most qualified suppliers seems to be a prerequisite to secure the external resources, which are required to create customer value creation and, hence, foster the firm's competitiveness (Pfeffer and Salancik 1978).

The resource dependence theory is explicit about the purpose of the firm: satisfying external stakeholders, i.e., customers, investors, and other organizations that are affected by the firm (Christensen and Bower 1996). This idea is acknowledged and

elaborated on by stakeholder theory. Stakeholder theory suggests that each stakeholder represents different values that the focal firm should try to realize (Donaldson and Preston 1995; Freeman 1984; Freeman et al. 2007). The aim of stakeholder theory is to satisfy a broad array of stakeholder groups based on their specific demands. Creating value for different stakeholders has an effect on the way firms allocate their resources through adopting different stakeholder orientations; firms may create the proper attitudes and behaviors for satisfying its stakeholders and achieving superior firm performance simultaneously. Stakeholder orientations result in firm competitiveness because focus on stakeholder satisfaction allows a firm to develop trusting relationships with their stakeholders, giving these firms the opportunity to deal better with changes in the environment and consequently spur innovation (Freeman et al. 2007; Harrison et al. 2010).

A stakeholder can be "any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman 1984). These include, for instance, employees, communities, customers, political groups, investors, governments, suppliers, and trade associations. Even though it may be difficult to classify stakeholders, it seems that the stakeholder view is especially useful for reflecting resource-based considerations, market considerations, and socio-political considerations simultaneously. When we adopt this perspective, suppliers should not only create value to the firm's markets (customers), but also to society (all stakeholders representing social and environmental concerns) and to those who did invest financial resources in the firm (shareholders, investors).

In conclusion, the resource-based view of the firm, the resource dependence theory, and stakeholder theory each emphasize a different element of how firms may create value through supply chain cooperation. The resource-based view of the firm is more concerned with the management of a firm's internal resources and capabilities that may satisfy external stakeholders of the firm. In the resource dependence theory, the firm's dependence on other external parties, such as suppliers, is central. Finally, the stakeholder theory focuses on the diverse stakeholder perspectives a firm needs to balance, weigh, and respond to. It argues that for achieving competitive advantage, a firm and its supply chain partners should create in parallel customer value, societal value, and shareholder value (Porter and Kramer 2011). Chapter 21 by Sodhi and Tang (2017) provides further discussion of the stakeholder resource-based view in the context of social responsibility.

11.3 CSR Models and Approaches in Large Companies

There are several approaches to CSR in the supply chain, all having a (slightly) different focus. Some CSR models differentiate between companies, on the basis of, for example, sectors (e.g., food, energy, commodities), value chain position (upstream vs. downstream), or size (large enterprises vs. SMEs). In this section, we briefly discuss some important CSR models for large (multinational) companies and show their importance for the supply chain and purchasing function.

Most CSR models for large companies focus on the steps that are needed to integrate sustainability in the different functions. Several models also focus on the practices that are needed outside the company to create a transparent sustainable supply chain. Various CSR models have determined certain stages of maturity in the implementation of sustainability practices in the organization and its value chain. For example, Zadek (2004) has identified five stages organizations typically go through when developing a sense of corporate responsibility, as they move along the learning curve: defensive, compliance, managerial, strategic, and civil. In addition, research from Van Tulder and Van der Zwart (2006) has distinguished between passive, reactive, active, and proactive approaches of organizations to CSR. Also Nidumolu et al. (2009) have established several stages in the adoption process of CSR for organizations. This model is a good representation of the adoption process of CSR. Consequently, we provide more information about this model in Box 11.1.

Box 11.1 Stages in the Adoption of CSR by Organizations

According to Nidumolu et al. (2009), sustainability is the key driver of organizational and technological innovations that create competitive advantage and lower costs in the supply chain. Based on 30 case studies, they have discovered five stages of change that organizations go through on the "march to sustainability," each stage creating opportunities and requiring new capabilities to deal with challenges (see Fig. 11.2).

- Stage 1: Viewing compliance as an opportunity—Being the first to adopt emerging laws allows companies more time to experiment with creative solutions and discover new business opportunities. It may also reduce costs as one single chain is required for all markets, rather than having to adapt it to the variations of each set of regulations.
- Stage 2: Making value chains sustainable—Once companies have learned to keep pace with regulation, they become more proactive about sustainability and in particular about environmental issues such as resource use. Initially, this helps the company's image, but down the line it also helps to reduce costs and create new businesses.
- Stage 3: Designing sustainable products and services—An improved supply chain management allows a company to take a closer look at their product structures and redesign them to meet customer concerns and examine the products' life cycles.
- Stage 4: Developing new business—New business models provide alternatives to the current way of doing business while succeeding in the value delivery to the customer. These often materialize in collaborations with other companies like when FedEx integrated their chain over that of Kinko's so that documents would no longer have to be shipped, but could be printed on location.
- Stage 5: Creating next-practice platforms—Corporations move from looking for ways to deliver value that are compatible with CSR and sustainability, to make sustainability the main tenant through which business models are created (Fig. 11.1).

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	STAGE 3	esignir	roduct	CENTRAL CHALLENGE	To develop sustainable offer-	gs or red	to become eco-friendly.		COMPETENCIES NEEDED	>> The skills to know which	products or services are most	nfriendly	The shifteness assessed as	The application	offerings and not be consid-	ered as "greenwashing."		> The management know-	how to scale both supplies	of green materials and the	manufacture of products.		INNOVATION OPPORTUNITIES	>> Applying techniques such	as biomimicry in product	development.		>> Developing compact and	eco-friendly packaging.					
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	E 2	g Valu	nable	CENTRAL CHALLENGE	To increase efficiencies	out the va		COMPETENCIES NEEDED	» Expertise in techniques	carbon m	cycle ass	The shility to radesion	20.00	operations to use less ene	s. and or			pacity to	s and reta	erations e		TION OPP	Oeveloping sustainable	of raw m	ents.	1000	sing the	onices s	and solar power.	ginnoval	returned products			
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Fig. 11.1 Stages in the adoption of CSR by organizations (source: Nidumolu et al. 2009)

These and other CSR models consider sustainability as a key driver of innovation and of benefits in terms of people, planet, and profit. As we have argued, sustainability is increasingly becoming a prerequisite for existing business models to remain competitive. Successful sustainability strategies should integrate ethical, operational, relational, and co-marketing approaches (Matthyssens and Faes 2013). In addition, they require collaboration between different functions, such as research and development (R&D), logistics, purchasing, marketing, and sales. Particularly, purchasing departments should take the lead in driving sustainability through the organization, given the importance of suppliers due to the tremendous outsourcing practices of current MNCs and the inherent carbon footprint of upstream supply chains. In addition, the models show that monitoring and evaluation (M&E) are important aspects for the management of sustainability in large companies. The transparency in sustainability performance resulting from M&E does not only benefit the company's reputation in relation to critical external parties, such as non-governmental organizations (NGOs), consumer action groups, public sector actors, and customers that have called upon the business sector to act more responsibly. It also serves as an internal driver for employees and stakeholders in the supply chain. Transparency and an improved sustainability reputation seem to have a positive effect on the employees' and supply chain partners' motivation (Matthyssens and Faes 2013). Further discussion on how firms can use a "sense and response" framework to improve social and environmental performance in their supply chains is provided by Lee and Rammohan (2017) in Chap. 20.

In order to create transparency in the sustainability domain, large companies report on indicators that are derived from the external indices such as the Dow Jones Sustainability Index and the Global Reporting Initiative.⁴ In their reports, these institutions use a wide range of indicators to measure CSR progress and performance. Examples of indicators are the way in which the company is managed (i.e., its corporate governance), risk and crisis management, ethical codes that are present within the organization, the way in which the company tries to improve eco-efficiency and reduce carbon footprint, fuel efficiency, labor conditions, and social reporting.

Large buying corporations could take a leadership role by influencing the CSR policies of their (current) suppliers. More and more MNCs are aware of this so-called "responsibility for sustainability stewardship." They integrate sustainability indicators in the supplier selection process to carefully select suppliers on their current sustainability performance and their potential and willingness to comply with the sustainability policy of the buying company in order to prevent certain suppliers for being excluded, such as smallholders. In addition, companies recognize the value of local sourcing, including small and diverse businesses that can

⁴See also Chap. 6 by Bateman et al. (2017) for more on sustainability reporting.

benefit their communities. In addition, large buying corporations can influence sustainability practices through codes of conduct and audits. Box 11.2 provides an overview of the different programs and methods that companies use to drive sustainability in the supply chain relationships (Van Weele and Vivanco 2014).

Box 11.2 Programs and Methods to Drive Sustainability in Supply Chain Relationships

- Stakeholder management
 - Corporate social responsibility committee
 - Stakeholder meetings on creating shared value (in water, nutrition, rule development, energy, environmental stewardship)
- Supply-chain sustainability strategy
 - Programs aimed at value chain carbon emission reduction
 - Support local buying in countries where sales are made
 - Water management plan across the supply chain
 - Secure long-term raw material supply
 - Product recovery programs
 - Increase share of renewable energy
- Supplier relationships
 - Supplier quality assurance programs
 - Supplier traceability programs
 - Supplier compliance to local legal requirements
 - Supplier sustainability audits (self-assessment, external audits)
 - Supplier sustainability and integrity codes
- Competence development
 - Training buyers in responsible procurement practices
 - Supplier development programs
 - Supplier productivity programs
- External standards
 - Global reporting initiative
 - Dow Jones sustainability Index
 - NGO fair labor Association
 - ISO 14 001
 - EICC code of conduct
 - FSC standard (wood, forestation)

(continued)

Box 11.2 (continued)

- Supply-chain sustainability measures
 - Supply chain carbon dashboard
 - Percentage of sustainable suppliers
 - Percentage of sustainable spend
 - Supplier code of conduct violations

Source: (Van Weele & Vivanco 2014)

These programs and methods may be used to create a common approach towards sustainability in the supply chain. In order to increase the compliance and engagement of suppliers, stakeholder meetings and supplier development programs are organized by the buying company. Buyer-imposed standards and practices may foster innovation within the supplier's organization, which will result in a direct benefit for the supply chain, including the buying company, to serve its customers and society. Therefore, an increasing number of sustainability indices also take the supply chain performance into account when assigning a sustainability score to a company. An example is the ISO 26000 guideline that provides indicators for companies to make their supply chain more sustainable.

11.4 Adopting Responsible Purchasing: A Time Phased Model

In the previous section, we discussed programs and methods to drive sustainability in supply chain relationships. These programs and methods are not used by all companies all of the time. On the contrary, as we observe from company practices, companies seem to go through a growth path in adopting these tools and techniques and in developing responsible purchasing. This growth path is in line with the growth path that companies need at corporate levels to adopt sustainability as a concept as discussed in Sect. 11.3 in the model of Nidumolu et al. (Nidumolu et al. 2009). However, as our previous research shows, 6 there seems to be a time lag between the adoption of sustainability at the corporate, i.e., company

⁵"Creating value in supply chains: supplier's impact on the value for customers, society and share-holders" Kibbeling, M.I. (2010) Ph.D. dissertation, Eindhoven University of Technology. The reason why CSR drives innovation in supply chain relationships is that imposing CSR requirements on incumbent suppliers reduces their product and process solution space. In order to fit the buyer's smaller solution space new products and process solutions are necessary.

⁶See Van Weele and Vivanco (2014).

level, and at the purchasing, i.e., supply chain level. We suggest that the following stages mark the adoption of sustainability in supply chain relationships:

Stage I: Denial—As the company has not integrated sustainability in its business strategy, purchasing is traditionally cost-driven in its supply chain relationships. Suppliers are selected based on the lowest price, i.e., total cost of ownership. Supplier codes of conduct and business integrity codes are usually not present. The dominant view at the board level is that adopting CSR will increase cost and complexity. CSR practices are adopted as long as the balance between extra revenues and extra costs incurred is positive.

Stage II: Opportunism—Here the company expresses sustainability as a prime concern in its public advertising and marketing. However, it is not integrated in its business strategy and operations. Hence, ideas and concepts covering sustainability are not cascaded down to the purchasing department and supply relationships. Hence, there is little difference with the previous stage. The board starts to think about CSR as a concept to foster its customer reputation and to counterattack assaults from external parties. Individual ad hoc CSR initiatives are highlighted and overexposed in company advertising and brochures.

Stage III: Compliance to the law—As the company has faced some difficulties on sustainability issues with the external world, the board of directors has become sensitive to the company's risk profile. Hence, business managers are instructed not to violate any social laws or environmental laws in the areas in which they operate. The first training and awareness programs are designed at a corporate level, following a typical top-down approach. These programs, however, have not trickled down to the purchasing and supply operations yet. Occasionally, purchasing may have introduced an integrity code to its suppliers. At this stage, purchasing is still passive, traditional, and cost-driven.

Stage IV: Sustainability as a driver for lower cost—At this stage, due to a number of consulting assignments and studies within the company, the board of directors has become aware that pursuing sustainability in its operations might drive down the costs, fostering internal motivation for sustainability. When energy consumption is decreased overall, the company's carbon footprint will go down resulting in lower energy bills. Internally, energy saving programs show great results and new solutions. As the company is aware of its high external cost, initiatives trickle down to the purchasing department to pursue similar programs in supply chain relationships. This leads to specific sourcing programs aimed at reducing energy costs and carbon footprint at suppliers. In addition, procurement managers start to set up supplier sustainability audits to make suppliers comply with social and environmental regulations.

Stage V: Sustainability as a driver for product and business innovation—At this stage, the company has experienced that driving sustainability in its company operations leads to new products, processes, and customer solutions. Imposing CSR requirements on incumbent suppliers changes their product and process solution space. In order to fit the buyer's smaller solution space, new products and process solutions are necessary. Suppliers are invited to discover better sustainable solutions to enable less energy consuming products and processes. As a result, supplier relationships change from being competitive to more collaborative. Suppliers are

urged to transfer sustainability requirements to their next-level suppliers. The board monitors progress on specific supply chain sustainability initiatives. CSR performance measures, next to traditional cost and savings measures, make up the procurement organization's dashboard.

Stage VI: From corporate social responsibility to creating shared value—At this stage, sustainability is fully integrated into the company's business and supply chain strategy and operations. Over time, the change of the company's philosophy has led to a reduction of the number of supply chain relationships and towards more transparent and collaborative partnerships with suppliers. There is an active exchange of ideas and best practices between both the company and its key business-critical suppliers about how to grow profitable and even more sustainable business in the future, while at the same time reducing carbon footprint and creating value for all stakeholders. Procurement specialists engage with local and smaller suppliers, after thorough pre-qualification, to support them in adopting CSR practices and upgrading their sustainability performance. At this stage, the company pursues a truly responsible purchasing strategy.

As companies move from Stage 1–6, purchasing as a business function becomes more integrated and its focus shifts from traditional cost-driven transactional purchasing to value-driven, supplier development (a theme also emphasized in Lee and Rammohan (2017), Chap. 20).

In the next section, we provide some examples of how companies handle responsible purchasing as well as a discussion on how the examples relate to the theoretical concepts presented above.

11.5 Examples⁷

11.5.1 Mattel: How Bad Practices at the Suppliers May Affect the Entire Supply Chain?

Violation of human rights or environmental unfriendly practices by suppliers do harm to the entire supply chain. In 2007, Mattel, the global leader in children's toys, became front-page news due to its problems with Chinese suppliers. A few suppliers had replaced certified paint with cheaper paints to reduce cost. Unfortunately, the new paint contained lead, which is generally considered to be harmful to children's health and safety. By bringing these products to consumers, Mattel apparently was violating US regulations on health and safety. Mattel was not informed by its contract manufacturers of the change of paint. The company received the news when a European retailer discovered lead paint on a toy. Due to extensive press exposure, Mattel's senior management had to recall 1.5 million Chinese-made products. Later, another 436,000 products had to be recalled. Because of this incident, Mattel found itself in the center of a debate over sustainable sourcing and more particularly about the safety of products made in China.

⁷ Parts of this section are derived from Van Weele (2014), Chapter 14.

Apparently, during the many years that Mattel sourced its products from China, the company had become overconfident about its ability to operate in China without major problems. Initially, it seemed that the problem was limited to only one supplier. However, when Mattel's safety lab at Shenzhen investigated the contents of their toys, other products with similar failures surfaced. That was the moment that the management recognized it probably had to deal with a more systemic problem, rather than the isolated case of one bad paint supplier. Earlier, Mattel was involved in another affair when it had to recall millions of toys with tiny magnets that had harmed some children who swallowed them. Mattel found out that some of its preferred suppliers, in order to save costs, used cheaper suppliers themselves. One of these low-cost suppliers was the paint supplier who was not listed on Mattel's approved supplier list.

Mattel has been manufacturing in Asia far longer than many other companies. The first Barbie was made there in 1959. Other products, like its Fisher Price toys, Matchbox cars, and Pixar toys, followed. It developed long-term relationships with certain Chinese contractors, some of which spanned decades. Paradoxically, this might have worked against the company. The longer it outsourced to a factory supplier with good results, the more lax its controls became. Two contractors that caused the recalls were among the most trusted. Lee Der, the supplier involved in the first recall, worked with Mattel for 15 years. Early Light Industrial, which made the Sarge cars, supplied toys for more than 20 years. The latter supplier caused the recall of 436,000 Pixar car toys, which was also caused by yet another contractor, as Early Light had subcontracted production of the cars' roof and tires to a subcontractor called Hong Li Da. In all cases, Mattel's contract manufacturers violated the company's rules on what paint they were allowed to use. Mattel had certified only eight paint suppliers. Mattel realized that it was not monitoring its contract manufacturers closely enough. It appeared that a number of companies were part of Mattel's supply chain that were never visited by Mattel's sourcing professionals and quality inspectors. As a result, Mattel's board of management decided on a three-point action plan which included: (1) tightening control of production, (2) investigating unauthorized use of subcontractors by contract manufacturers, and (3) bringing back in-house testing of all purchased products. Based on its investigations, Mattel fired four contractors and they enforced the rule upon their contract manufacturers that they cannot hire two or three layers of suppliers below them. In order to restore its reputation, global advertising campaigns were set up to inform consumers about the measures that were taken. Part of the campaign was the statement that Mattel is less dependent on Chinese suppliers than most of its competitors.

11.5.2 Philips: How to Engage Suppliers in Promoting Sustainability Principles?

Suppliers are an important source for a company's competitive advantage. However, as the examples of Boeing and Mattel have shown, suppliers can also be an important source of unforeseen problems and risk. How should companies deal with these sustainability problems and risks in supply chain relationships? How and what

principles should companies put in place with regard to people, planet, and profit in supplier relationships? How should companies convince suppliers to promote sustainability principles in their operational processes? Companies that know how to deal with these issues are still rare. Some companies are leading the way. Philips is one of them.

In 2002, Philips started a worldwide sustainability program for its global procurement organization. For this purpose, in 2003 a standard was developed with regard to the requirements that suppliers should meet in the area of sustainability. The standard was implemented in 2004. This is no small thing, if one realizes that more than 50,000 suppliers worldwide were involved in the program. All suppliers were invited to participate in the program through a formal letter sent by Philips' CEO. The letter encouraged suppliers to conduct a "self-assessment" and to report the outcome of this self-assessment to Philips. Next, Philips would conduct a similar audit by its own internal auditors. For this program, more than 400 associates were trained and instructed. Next, the results of the Philips' audit were compared with the results from the supplier's self-assessments. Variances between both audits were discussed and suppliers were invited to come up with an action plan to take corrective measures, which were periodically followed up by Philips' procurement organization. In its audits, Philips focuses on sustainability and the way in which suppliers deal with issues such as environmental protection, labor conditions, safety, child labor, discrimination and diversity, the number of labor hours, and compliance with local labor laws. Apart from this, the auditors focus on the presence of banned substances. Attention is paid also to the suppliers' relationships with unions. Just asking suppliers to sign a declaration in which they declare to comply with Philips' environmental policies, like in the past, was not enough anymore. In the past, suppliers were, with their eye on future business, very much willing to put their signature without actually checking their operations against Philips CSR guidelines. For Philips' CEO, this was no longer sufficient. The company wanted to ensure that suppliers were meeting its CSR requirements. Suppliers that did not meet these requirements were dropped from Philips' suppliers list. As a result, the number of suppliers worldwide was reduced from 50,000 to about 30,000, most of whom are now in line with Philips' environmental policies. Environmental regulations become increasingly tighter, especially for European firms. The list of banned substances for European firms is consistently growing. Next, European consumer laws require firms to offer a full traceability of their products and product components. After some incidents, where products that were imported from Asian manufacturing facilities contained hazardous materials, Philips started its BOMCheck program that would require suppliers to keep record in a web-enabled Philips-controlled database of their product constituents and origins. This database would secure Philips from future claims from consumers and NGOs based on banned substances.

Is the approach sufficient for the future? The answer, clearly, is "no." Philips, at this moment, has aligned its first-tier suppliers with its environmental policies.

Today, Philips urges its suppliers to transfer their CSR policies to their (second-tier) suppliers and raw materials producers. In this area, the company still has a long way to go.

11.5.3 Unilever: How to Improve the Sustainability of the Supply Chain?

Another company that gives priority to sustainability in the supply chain is Unilever. In 2010, Unilever launched its Sustainable Living Plan. This plan was aimed at achieving three major objectives before 2020: (1) to help more than 1 billion people improve their health and well-being, (2) to halve the environmental footprint of Unilever's products, and (3) to source 100% of all agricultural raw materials sustainably and enhance the livelihoods of people across the entire value chain. The Sustainable Living Plan was based upon a thorough analysis of Unilever's carbon footprint across its value chain, from its raw materials suppliers up to its retailers and end consumers. The results of this analysis are shown in Fig. 11.2.

This figure shows that only 3% of Unilever's carbon footprint is caused by its factories. Around 2% is caused by its distribution and transport network. However, its supplier network is responsible for 26%, which represents a significant challenge for its sourcing specialists. In addition, the majority of its carbon footprint is caused by the consumer at the point of consumption. This analysis explains why Unilever has put great emphasis on new product development and innovation in order to stimulate sustainable behavior from their consumers.

New detergents, allowing for less water consumption and lower temperatures, have been introduced. Another example is body care products, such as shampoos that allow faster rinsing when taking a shower. Sourcing strategies have been aimed at improving farmer productivity, less use of pesticides, and increasing the use of renewable energy. Unilever's Sustainable Living Plan has changed its international sourcing strategies significantly. Unilever is not unique in taking supply chain sustainability initiatives. Other frontrunners in the food business are Nestlé and Mars, who embarked on similar programs.



Fig. 11.2 Carbon footprint of Unilever's Value Chain (source: www.unilever.com)

11.5.4 Nestlé: How to Adopt Responsible Purchasing? 8

Nestlé's Nespresso division may serve as an example of the time-phased model presented in Sect. 11.4. Until 2003, Nespresso was a growing coffee roaster focused on the premium consumer segment. It sourced its high-quality coffee through global commodity traders such as ECOM and Expocafe. In 2003, it had to rethink its sourcing model. The reason was threefold.

On the one hand, its sourcing strategy was felt to be too much supply-driven. Until the beginning of the 1990s, the coffee market was a controlled market regulated internationally through the International Coffee Agreement (ICA). However, in 1999, the International Coffee Organization failed to set new export quotas and as a result it collapsed. Oversupply in many coffee markets led to price erosion, which had terrible social, economic, and political consequences. Nespresso, being a highquality coffee brand, was confronted with flawing and ever-changing coffee quality grades. Moreover, the fluctuating raw materials prices were a direct threat to a consistent consumer pricing policy and the company's profitability. On the other hand, global coffee consumption went through a period of significant growth creating a high demand. The company constantly had to struggle to find high-quality coffee at the right volumes and the right prices. In addition, oversupply in the coffee markets led to low and unfavorable prices that had a detrimental effect on farmer incomes. Grassroots and NGOs, such as Greenpeace and the Fair Trade movement, joined forces in promoting the welfare of small producers in developing countries (Alvarez 2008), accusing MNCs such as Nestlé of unethical and unsustainable practices in their supply chain relationships. Multinationals were, rightly or wrongly, accused of violating local labor laws, ignoring issues of climate change, and performing unethical practices in their supplier relationships. More specifically, NGOs took aim at the unjustified profits that were reported by these companies, accusing them of unfair distribution of profitability within the coffee supply chain. Nespresso had to increasingly deal with the pressure of these three forces.

Mr. Lopez, Chief Procurement Officer (CPO) of Nespresso, was asked to look into this changing context, as it had direct consequences for his global sourcing organization. The challenges he and his team had to deal with were as follows: How could Nespresso secure its supply of high-quality coffee in such unstable market conditions? How could Nespresso avoid bad publicity, when they operated at such a large distance from the coffee growers? How could or should Nespresso improve the conditions in the supply chain? Would it be possible to conceive of a sourcing model that would incorporate all of these factors? And how should such a sourcing model look like?

Mr. Lopez and his colleagues pondered about designing a new sourcing model for Nespresso. Here, companies like Toyota and IKEA, who had long-term and strong sourcing relationships with their suppliers, served as a source of inspiration. They decided to change Nespresso's mediated sourcing model and go for a model allowing

⁸The following text is derived from: Van Weele and Van Tubergen (2013), p. 18.

Nespresso to deal directly with the coffee growers. This would mean that gradually most intermediate organizations that Nespresso had dealt with for such a long time needed to be bypassed. The basic idea underlying this plan was that if Nespresso was able to select its suppliers itself, it could build a strong personalized relationship with them and transfer knowledge to improve farmer practices and secure the supply of coffee. Nespresso would motivate its coffee growers by paying them a premium over the market price. This direct sourcing model would allow Nespresso to have a much larger control over its supply chain, which was felt necessary to improve farmer productivity and quality and increase supply chain transparency and sustainability.

In order to implement the direct sourcing model—changing the entire way of working with suppliers—Nespresso needed to change its business model. Therefore, Mr. Lopez and his staff initiated a companywide program, i.e., Nespresso's AAA Sustainable Quality Program in 2003. The aim of this program was to foster both quality and sustainability in all supply chain relationships. Several tools, such as an innovative farm assessment and support program, were developed to select and involve coffee suppliers in the program (Goodbrand.com). Core elements of the program were:

- Certificates: Nespresso developed a proprietary standard to assess social and environmental standards on coffee farms. This was done in close collaboration with Rainforest Alliance.
- 2. *Premiums*: Nespresso paid 30–40 % above the standard coffee market price; this would amount to about 10–15 % above the coffees of the same quality.
- 3. *Partnering*: Nespresso aimed at developing long-term relationships with coffee farmers to improve farmer productivity and decrease crop diseases.

The growth path in adopting sustainability and responsible practices in its supply chain relationships took Nespresso almost 10 years. However, today its global program for coffee supply is unique, representing a firm basis for Nespresso's market success. It has built some strong supplier relationships, although these have to be continuously adapted to challenges in the world, such as climate change, poverty, or changing regulating environments.

11.5.5 Shared Value Creation in the Examples

As the examples of Mattel, Philips, Unilever, and Nestlé show, the relationship with suppliers is an important topic to foster supply chain value creation. In order to unleash the innovative capacity and create shared value in the supply chain, extensive (green) collaboration is needed between supply chain partners. This list of examples could have been much longer. Other companies operating in retail and fast-moving consumer goods have made CSR a cornerstone in their sourcing policies and supply chain relationships. Value creation is not only aimed at creating

⁹ See for other examples Walmart (http://goo.gl/U8wzHT) and IKEA (http://goo.gl/flXzdM).

shareholder value; rather, as companies interact with their environment, it is aimed at meeting demands and requirements of other important stakeholders such as customers, society, NGOs, and suppliers. Creating shared value seems to be the key.

Nespresso's example also shows that driving sustainability in supply chain relationships results in an unexpected source of productivity and human well-being, if and only if sustainability is well-integrated in the business model. However, it is important that the sustainable business model remains adaptable to the everchanging context in which buyers and suppliers operate. Meanwhile, the example, set by Nespresso, has now been followed by many food producers including Unilever, Danone, Mars, Pepsico, Royal FrieslandCampina, and Nutreco.

11.6 Challenges in Creating Sustainable Supplier Relationships

The examples in this chapter have subscribed the view that driving sustainability through the supply chain is a source of innovation and cost reduction. A growing number of scholars and practitioners state that including sustainability has become a prerequisite for a business model to be competitive these days. Responsible Purchasing (RP) is one of the key elements of a sustainable business model, although it is not always easy to integrate it in an (existing) business model. It requires (long term) commitment not only from the buying company, but also from its (business critical) suppliers. Previous research has shown that four important issues hamper the implementation of RP, i.e., a complex context, the lack of internal commitment, the difficulty in obtaining supplier involvement, and the evaluation of sustainable practices. It is important for purchasing to take these challenges into account from the very first phase of an RP implementation strategy. Here, we discuss each of these issues in more detail.

Complex context: Since companies are increasingly sourcing on a global scale, they are operating in differing national and international institutional contexts; thereby they are coping with a lot of (heterogeneous) suppliers. Major differences exist among suppliers (e.g., firm size and business model orientation) and in the (institutional) environments of suppliers (e.g., in public policy, national labor law, environmental standards, and poverty levels). The sustainability practices of a supply chain can be compliant with the law in one country, yet they may not meet the minimum standard of another country's law. In addition, there is an abundance of local and global sustainability standards and benchmarks for supply chains that are not always compatible. Section 11.3 has listed some well-known general standards. However, this list is far from complete, as also many sector-specific sustainable supply chain standards exist. This abundance makes it easy for companies to get lost in the details of the standards. Thus, which standards and certificates should organizations choose and comply with? In addition, which standards will survive in the future?

Internal commitment: Another challenge is the internal commitment to RP within the buying company. As the shift towards sustainable supply chain management, particularly RP, requires a sustained business model, top management commitment is an issue, especially when the urgency for sustainability has not reached the boardroom yet. Several studies have shown the importance of top management commitment for responsible purchasing and supply practices in the organization (Walker and Brammer 2013). The purchasing function should be able to present the strategic value of RP, clearly showing the social, environmental, and financial benefits of RP. In addition, they have to create commitment from other departments within the organization as well, such as the marketing and R&D function. This requires collaboration and integration among multiple levels of the organization and the supply chain. It also requires a frontrunner mentality within those who lead the purchasing function.

Supplier involvement: In order to benefit from sustainability initiatives in the supply chain, all business critical supply partners should comply with the sustainability policy. However, how do suppliers benefit from complying with the sustainability policy? How should organizations deal with suppliers that do not want or are not able to comply with the sustainability standards and the combined risks for excluding certain qualifying suppliers, for example, smallholders? What are the effects of imposing rules and guidelines on supplier operations and innovativeness? How should organizations deal with the suppliers of the suppliers, what are the boundaries of the corporate responsibility of the buying company? These issues could be addressed by integrating (key) suppliers in the design and development of the sustainability standards within the supply chain by means of stakeholder meetings and co-creation sessions. In this way, a certain platform among the supply chain partners is created, increasing the chances that suppliers transfer these sustainability practices to their own supply chain partners as well.

Monitoring and evaluation: Companies are using several techniques to measure and report the level of progress in sustainability practices of their suppliers. However, monitoring is one thing, acting upon it is another. Based on extensive multinational company research, it turns out that companies measure many (intermediate) results, but they do not always show them against actual targets set in the supply chain (Van Weele and Vivanco 2014). In addition, it is unclear what initiatives, i.e., actions, deliver the best results in terms of corporate advantage and shared value in the supply chain. Sustainability practices should be evaluated just like any other business practice instead of within a separate CSR department with separate KPIs and performance measures. Organizations should try to map the business impact from particular sustainability initiatives and make a selection on the profitable initiatives (profitable in the broadest sense of the word, i.e., people, planet, profit (PPP)). However, many researchers state that the current tools are not able to measure the impact in all three PPP dimensions accurately. Especially, direct and indirect social impact, both on the value chain members and on their communities, is difficult to measure. This requires further development of current M&E sustainability performance tools.

11.7 Conclusions and Suggestions

What should companies do to foster RP and build responsible supply chain relationships? Here, we present some suggestions:

- Conduct a full Value Chain Analysis, revealing your company's carbon footprint (see also Chap. 3 by Boukherroub et al. (2017)) and CSR risk exposure. Every CSR policy starts with a thorough fact-finding. Every value chain is different. When the company conducts such an analysis, it will realize that significant part of its total carbon footprint is related to actual product used by customers and its suppliers. In addition, the value chain analysis should also focus on other elements regarding responsibility such as compliance to social laws and human labor conditions. Hence, new product development for less energy intensive products is needed. This should be followed by a sustainable sourcing policy aimed at reducing the carbon footprint in the upstream supply chain; preferably with suppliers that have a sound and well-implemented CSR policy. Procurement and supply chain management without doubt will appear to be the key drivers of initiatives to drive down the supply chain carbon footprint, water usage, and waste and improve social conditions at supplier worksites.
- Formulate ambitious goals and objectives to drive down upstream supply chain
 carbon footprint and other CSR impacts. Ambitious goals like reducing both
 water consumption and energy consumption with 50% in 5 years time in the
 upstream supply chain are necessary to create a sense of urgency and drive innovative solutions. More importantly, these goals and objectives need to be followed up both by the supply chain management and the board.
- Partner with suppliers. The formulated goals and objectives cannot be achieved by the company in isolation. They need to seek support from their supply base. Auditing suppliers on implementation of sustainability practices (see Box 11.2 of this chapter) is the first step. Inviting suppliers to come up with ideas and solutions to meet the predetermined sustainability goals and objectives is the second step. When selecting suppliers for future business, having a sustainability policy in place is recommended as a qualifying criterion.
- Supplier development. As meeting these predetermined sustainability goals and objectives is to be seen as the joint responsibility between the buyer and his suppliers, buyers need to be intimately familiar with the best practices within the suppliers' industries. Rather than deal-making, the buyer will spend his time setting up supplier development programs. Part of his/her job will be discussing and suggesting ideas for productivity improvement and shop floor efficiency. This would call for a new generation of buyers, who need to be technically qualified, commercially skilled, and sensitive to dealing with different cultures.
- Value- and revenue-driven, rather than cost-driven. When adopting these practices, purchasing will change in nature from a traditional cost-driven activity, to a value- and revenue-driven activity that is much better aligned with business management. Next to cost savings, the percentage of spend that is sourced sustainably, the number of suppliers that work according to the sustainability

guidelines, and energy consumption, CO_2 emissions, and water consumption KPIs will make up the purchasing managers' performance dashboards. This will enable them to share best practices within and across sectors and to effectively team up with (non)governmental institutions.

It must be noted, however, that companies will take different pace through different levels of maturity on their path to supply chain sustainability. The path will be different depending on whether companies operate upstream or downstream of their value chain. Companies operating downstream in the value chain in general are more visible to the public and the press and will therefore be pressed to adopt sustainability practices in general, and more particularly, in their supply chain relationships. This will be less true for companies operating more upstream in their value chains. Nevertheless, business experiences show that adopting CSR practices in many cases is sound business, leads to more controlled supply chain relationships and better collaboration, and therefore often results in a better long-term profitability. It should therefore be a prime concern to all purchasing and supply chain managers.

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