

A Review of Sustainable Supply Chain Management Practices in Canada

Oguz Morali · Cory Searcy

Received: 8 December 2011 / Accepted: 2 November 2012 / Published online: 16 November 2012
© Springer Science+Business Media Dordrecht 2012

Abstract There is a growing body of research on the theory and practice of sustainable supply chain management (SSCM). However, relatively little research has been conducted on the extent to which corporations have integrated sustainability principles into the management of their supply chain and the evaluation of supplier performance. The purpose of this article is to explore the extent to which corporate sustainability principles are integrated into supply chain management (SCM) in corporations. Canada is used as a case study in this article. The study included a content analysis of one hundred Canadian corporate sustainable development reports and in-depth interviews with 18 Canadian experts on SSCM. The article highlights the wide array of ways in which Canadian corporations address SSCM issues. Amongst other topics, issues associated with supply chain governance, standards for SSCM, collaboration with suppliers, performance measurement, and accountability within the supply chain are explored. The findings reveal that there are many challenges in integrating sustainability into SCM. These challenges shed light on possible future directions for research in SSCM. This article underlines the need for research that reflects the interconnected nature of the economic, environmental, and social dimensions of sustainability, particularly as it relates to measuring supplier performance on sustainability initiatives.

O. Morali (✉)
YSGS, Environmental Applied Science and Management
(ENSCIMAN) Program, Ryerson University,
350 Victoria Street, Toronto, ON M5B 2K3, Canada
e-mail: oguz.morali@ryerson.ca

C. Searcy
Department of Mechanical and Industrial Engineering, Ryerson
University, 350 Victoria Street, Toronto, ON M5B 2K3, Canada
e-mail: cory.searcy@ryerson.ca

Keywords Canada · Corporate social responsibility · Integration · Performance indicators · Performance measurement · Standards · Supplier monitoring · Supply chain management · Sustainability

Abbreviations

CSDRs	Canadian corporate sustainable development reports
CSR	Corporate social responsibility
GRI	Global reporting initiative
KPI	Key performance indicator
RBV	Resource-based view
RDT	Resource dependence theory
SCM	Supply chain management
SSCM	Ustainable supply chain management

Introduction

Over the past two decades, increasing pressures from governments, customers, employees, shareholders, and other stakeholder groups have prompted corporations to address the economic, environmental, and social implications of their activities. As a result, the concept of sustainability and its applications to business practices have gained prominence. Integrating the concept of sustainability with core business functions that fall within the domain of supply chain management (SCM), such as procurement, logistics, and knowledge management, has led to a critical and interdisciplinary field: sustainable supply chain management (SSCM). However, although the theory and practice of SSCM have been evolving fast, many corporations are still searching for the best ways to incorporate and implement sustainability principles into their

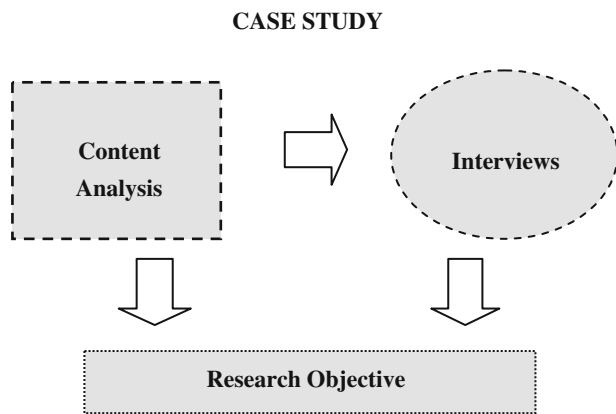


Fig. 1 Methodological approach

supply chain. Further, while the literature on SSCM is plentiful and growing, a rather small amount of research has been conducted on the extent to which corporations have built sustainability principles into their SCM practices. The purpose of this article is to shed light on this issue, provides insight and examples into current practices, encourages thinking and discussion into how the key gaps might be addressed, and provides a basis for future studies.

With that in mind, this article presents the results of a study designed to address the key research objective: ‘Explore the extent to which corporate sustainability principles are integrated into SCM in corporations’ and two interrelated research questions:

RQ-1 What are the organizational structures, standards, and processes that corporations adopt to implement sustainability initiatives within SCM?

RQ-2 How do corporations utilize the collaborative paradigm to address sustainability issues within SCM, particularly as they relate to supplier encouragement?

Canada was used as a case study, which employed a content analysis of 100 corporate sustainable development reports (CSDRs) and interviews with 18 corporate experts.

The structure of the article is organized in seven sections. In section ‘[Summary of the literature](#)’, a brief review of the literature on SSCM is provided. Focus is particularly devoted to the relationship between the principles of sustainability and their integration into the SCM field. In section ‘[Research objective and related questions](#)’, the research questions are presented. In section ‘[Methodology](#)’, the methodology of the study is introduced. In section ‘[Results](#)’, the results from a content analysis of 100 Canadian CSDRs and in-depth interviews with 18 corporate experts are presented. In section ‘[Discussions](#)’, a discussion of the results is provided. Finally, the article ends

with a section on the ‘[Conclusions, research limitations, and recommendations for future research](#)’.

Summary of the Literature

The literature review has two primary objectives. The first objective is to introduce the concept of sustainable development and SSCM, with particular emphasis given to theoretical background and discussions. The second objective is to report the state of SSCM implementation by corporations. A two-phase approach was employed to increase the transparency and improve the replicability of the literature review (Fink 2005). The first phase involved using a preliminary set of keywords (Table 1) to guide the search process by identifying the peer-reviewed research that explicitly included SSCM in its title.

This resulted in identifying 59 articles for initial inclusion in the search database. A review of the titles and keywords from these 59 articles helped in further identification of the keywords (see the sequential search terms in Table 1) for the second part of the literature review. The second phase involved the application of different combinations of the keywords from Table 1. To ensure that no relevant articles were missed, keyword searches included JSTOR, ProQuest, Science Direct, Scholars Portal, and Google Scholar databases. To limit the articles to a manageable number, the articles that did not meet our two primary objectives in conducting the literature review were excluded.

Sustainability and Supply Chain Management

A prevalent and far-reaching definition of sustainable development is: ‘development that meets the needs of the present without compromising the ability of future generations to meet their needs’ (World Commission on Environment and Development 1987, p. 8). At the core of sustainability is the interrelated relationship among the economic, environmental, and social dimensions, i.e. the three pillars of sustainability. The three pillars of sustainability have been translated into a corporate context by many authors (see, for example, van Marrewijk 2003; Garriga and Mele 2004; Steurer et al. 2005; Gray 2010), leading to different definitions of corporate sustainability with different system boundaries. Dyllick and Hockerts (2002, p. 131) provide one representative definition of corporate sustainability as: ‘meeting the needs of a firm’s direct and indirect stakeholders (such as shareholders, employees, clients, pressure groups, communities, etc.), without compromising its ability to meet the needs of future stakeholders as well’.

Table 1 Literature review search terms

Keywords
Preliminary search term
Sustainable supply chain management
Sequential search terms
Accountability
Audit
Buying
Code
Collaboration
Cooperation
Economic
Encourage(ment)
Environment(al)
Evaluation
Governance
Green
Ethic(al)
Health
Human rights
Integration
Indicator
Legitimacy
Manufacturing
Measure(ment)
Network
Logistics
Monitor
Purchasing
Performance
Risk (management)
Social
Social enterprise
Social responsibility
Stakeholder
Supplier management
Supply chain management
Standard
Strategic
Value chain
Vendor
Theory

van Marrewijk (2003) points to the application of the concept of corporate sustainability to supply chain issues as particularly complex and challenging. During the 1990s and early 2000s, increased concerns over the environmental impacts of firms' activities prompted the extension of supply chains to include by-products and to consider the entire lifecycle of a product. Within this context,

organizations have adopted and integrated various environmental principles and management practices, such as the Cleaner Production Programme, Valdez Principles, and the EMAS environmental management systems with SCM (Tsoufias and Pappis 2006; Vachon and Klassen 2006a). While research has shown that environmental decision-making tools and green supply chain practices positively affect corporate and environmental performance (Handfield et al. 1997; Melnyk et al. 2003; Zhu and Sarkis 2004; Michelsen et al. 2006; Darnall et al. 2008), focusing solely on environmental parameters may be counterproductive to improving the 'triple bottom line' (Elkington 1998) of corporate performance (Matos and Hall 2007). From the micro-economic perspective, SSCM has emerged as a result of marrying the three pillars of sustainability with core business practices, such as procurement, logistics, knowledge management, marketing, and operations.

The literature provides many definitions of SSCM. Carter and Rogers (2008, p. 9) define SSCM as: 'The strategic, transparent integration and achievement of an organization's social, environmental, and economic goals in the systemic coordination of key inter-organizational business processes'. However, several authors have noted that a theoretical background for SSCM is often found to be missing (Svensson 2007; Carter and Rogers 2008; Seuring and Muller 2008b) and efforts to introduce theoretical frameworks for SSCM are still in their infancy (Gold et al. 2010). Therefore, the SSCM field has drawn from a number of theories. A recent theoretical review of literature by Sarkis et al. (2011) highlights that SSCM literature relates to nine different organizational theories, which are: complexity theory, ecological modernization theory, information theory, institutional theory, resource-based view (RBV), resource dependence theory (RDT), social network theory, stakeholder theory, and transaction cost economics. Font et al. (2008) assert that SSCM draws from a number of theories with the principle that corporations must engage in their supply chain upstream towards producers, and downstream towards consumers to ascertain that every component of their products and services are sustainable. For example, a SSCM framework developed by Bowen et al. (2001) drew explicitly on the RBV to link organizational resources with triple-bottom-line performance. Carter and Rogers (2008) borrowed from four distinct theories from four different disciplines—RDT from sociology and political science, transaction cost economics from economics, population ecology from biology, and the RBV of the firm from strategic management—in an attempt to build a framework and advance future research propositions in theory development for the SSCM field. As a result, Carter and Rogers (2008) provided a theoretical framework for SSCM in which firms create a competitive advantage when long-term sustainability strategies are

integrated throughout the supply chain. Further, this framework illustrates that firms that simultaneously integrate all three pillars of sustainability will achieve higher economic performance than firms that integrate only one or two. Gold et al. (2010) confirm the positive and sustained effect of SSCM on a firm's performance and—based on the framework of Bowen et al. (2001)—propose a theoretical conceptualization of SSCM as a catalyst of inter-firm resources and inter-firm competitive advantage. Derived from the RDT and RBV, Svensson (2007) also provides a conceptual framework that expands the boundaries of theory in SCM through the requisition of first- and second-order supply chains.

SSCM: Implementation

Several authors have explored the motives for SSCM implementation. These are commonly listed as government regulations, pressures from customers and other stakeholders, managing company image, competitive advantage, supplier management for risks and performance, and environmental and social advocacy (Sarkis 2001; Roberts 2003; Darnall et al. 2008; Seuring and Muller 2008b; Björklund 2011). However, the integration of environmental and social principles between a firm and its suppliers requires upstream or downstream interaction with other organizations in the supply chain. This integration, which can be implemented at an operational or strategic level, helps generate risk management measures and environmental and social standards to which suppliers may be expected to conform, such as ISO 14001 for environmental management systems and SA8000 for social accountability (Vachon and Klassen 2006b; Koplin et al. 2007; Mueller et al. 2009). International standards may bear sufficient legitimacy amongst stakeholder groups to be perceived as appropriate risk reduction mechanisms (Rosen et al. 2002; Roberts 2003). The risk management aspect is particularly vital for firms in a global economy where increased demands of integration have broadened the definition of the supply chain. This is because firms' brand image and competitiveness in the marketplace may be dependent upon their suppliers' practices that defy the principles of sustainability (Meixell and Gargeya 2005; Cousins et al. 2004; Matos and Hall 2007). A systematic approach to risk management can help firms provide sustainable benefits to all supply chain partners while presenting them competitive advantages over others (Teuscher et al. 2006). In particular, integrating and implementing supplier evaluation methods on sustainability risks present opportunities in developing core capabilities, which lead to competitive advantage for firms (Foerstl et al. 2010).

As mentioned above, there are many different factors that motivate corporations to adopt SSCM practices. The

same factors also have an impact on the level of integration (quantity and diversity of initiatives taken) and intensity (suppliers involved) of the related practices in the supply chain (Font et al. 2008). Hence, agreeing on the successful execution of SSCM practices is not an easy task. The literature lists many challenges to integration and implementation of SSCM, such as (Storey et al. 2006; Carter and Rogers 2008; Seuring and Muller 2008a; Linton et al. 2007 cited in Morali and Searcy 2010a):

(a) Lack of understanding the intricate interplay between the three pillars of sustainability and how that affects the economic bottom line, (b) capital investment commitments, (c) risk management and supplier monitoring, (d) measurement, (e) transparency of information and knowledge, (f) alignment of corporate strategy with SSCM initiatives, and (g) corporate culture.

The literature presents relatively few studies on many of those challenges. Several authors have conducted research focused on large multinational companies or focused exclusively on the environmental dimension of sustainability (Michelsen et al. 2006; Koplin et al. 2007; Beske et al. 2008; Nawrocka and Parker 2009; Sharfman et al. 2009; Zhu et al. 2010a). For example, the existing performance evaluation models and tools provided in the literature mostly cover green SCM practices (Veleva et al. 2003; Mintcheva 2005; Hervani et al. 2005; Preuss 2005; Baboulet and Lenzen 2010), with very little research that explicitly integrates the sustainability discussion into the supplier evaluation modeling area (Hutchins and Sutherland 2008; Bai and Sarkis 2010). Some authors have examined the link between environmental and economic dimensions of sustainability to successful SCM implementation (Trowbridge 2001; Vachon and Klassen 2006a). However, the research is very limited on exploring the social dimension of sustainability within the context of SCM. Although a limited number of researchers have presented supplier evaluation schemes that incorporate environmental and social dimensions (Koplin et al. 2007; Yakoleva 2007), the practice and understanding of SSCM is still heavily oriented to the environmental dimension of sustainability. For example, a comprehensive literature review on SSCM identified that out of 191 papers, 140 addressed the environmental dimension while only 20 addressed the social dimension (Seuring and Muller 2008b cited in Morali and Searcy 2010b).

The research has introduced many conceptual and anecdotal contributions to the theory and practice of SSCM field. Overall, our review of the literature has resulted in identifying six themes applied to SSCM-related research (see Table 2).

The research on the 'reporting' theme has focused on corporations' self-disclosure of their corporate sustainability practices through GRI-reporting (Isaksson and Steimle

Table 2 Themes applied to SSCM-related studies

Theme	Current SSCM-related study
1. Reporting	Gray et al. (1995), Esrock and Leichty (1998), Line et al. (2002), Pollach (2003), Perrini (2005), Karen (2008), Steurer and Konrad (2008), Isaksson and Steimle (2009), Schneider et al. (2010), and Tate et al. (2010)
2. Governance	Rasheed and Geiger (2001), Gereffi (2001), Konefal et al. (2005), Ghosh and Fedorowicz (2008), Vurro et al. (2009), Vermeulen (2010), Alvarez et al. (2010), Pullman and Dillard (2010), Martinelli and Midttun (2010), Blowfield and Dolan (2010), Awaysheh and Klassen (2010), Huang (2010), and Tallontire et al. (2011)
3. Integration of CSR practices	Drumwright (1994), Gildia (1995), Sarkis (1995a, b, 2001), Green et al. (1996), Carr and Pearson (1999), Preuss (2000), Carter (2000), Maignan (2001), Trowbridge (2001), Feitelson (2002), Murphy and Poist (2002), Maignan et al. (2002), Deakin (2002), Carter and Jennings (2002), Zhu and Sarkis (2004), Chen (2005), Facanha and Horvath (2005), Foran et al. (2005), Michelsen et al. (2006), Maloni and Brown (2006), Seyfang (2006), Tsouflias and Pappis (2006), Matos and Hall (2007), Koplin et al. (2007), Ciliberti et al. (2008), Darnall et al. (2008), Font et al. (2008), Walker et al. (2008), Zhu et al. (2008), Vermeulen and Seuring (2009), Salam (2009), Pagell and Wu (2009), Björklund (2011), Cowper-Smith and de Grosbois (2011), and Large and Gimenez Thomsen (2011)
4. Performance measurement	Noci (1997), Veleva et al. (2003), Mintcheva (2005), Hervani et al. (2005), Preuss (2005), Sarkar and Mohapatra (2006), Yakoleva (2007), Searcy et al. (2008), Hutchins and Sutherland (2008), Zhu et al. (2008), Chia et al. (2009), Chae (2009), Bhagwat and Sharma (2009), Baboulet and Lenzen (2010), Sloan (2010), Bai and Sarkis (2010), and Roca and Searcy (2012)
5. Standards and monitoring	Pearson and Seyfang (2001), Kimerling (2001), Morrow and Rondinelli (2002), Whitehouse (2003), Roberts (2003), Miles and Munilla (2004), Castka and Balzarova (2007), Nadvi (2008), Mueller et al. (2009), Ciliberti et al. (2009), Jiang (2009), and Foerstl et al. (2010)
6. Collaboration	Spekman et al. (1998), Hoyt and Huq (2000), Daugherty et al. (2002), Balakrishnan and Geunes (2004), Daugherty et al. (2005), Cousins and Menguc (2005), Rodríguez-Díaz and Espino-Rodríguez (2006), Emberson and Storey (2006), Vachon and Klassen (2006a, b), Cheung and Myers (2008), Sodhi and Son (2009), Fawcett et al. (2010)

2009), corporate ethics (Pollach 2003), or CSR initiatives (Perrini 2005; Tate et al. 2010) amongst others. The literature on the ‘governance’ theme centred on the different elements of SCM governance such as the determinants of governance structure (Rasheed and Geiger 2001; Vurro et al. 2009) and the relationship among governance, CSR practices, and firms’ performance (Awaysheh and Klassen 2010; Huang 2010). The literature on the ‘integration of CSR practices’ into SCM includes a wide-range of studies. For example, some research focused only on the strategic integration of environmental issues into SCM (Sarkis 1995b; Seyfang 2006), whereas other research studied both environmental and social aspects of SSCM (Maignan et al. 2002; Koplin et al.; 2007; Cowper-Smith and de Grosbois 2011). Some studies analysed the relationship between the manufacturing strategies and environmental issues (Sarkis 2001). Other topics include the relationship between operational practices and SSCM performance (Zhu and Sarkis 2004), drivers and barriers to SSCM (Walker et al. 2008; Seuring and Muller 2008b), integrating SSCM with other management systems and initiatives (Chen 2005; Foran et al. 2005), best management practices from 10 case studies in creating SSCM (Pagell and Wu 2009), and the theoretical aspects and frameworks of SSCM (Carter and Rogers 2008; Seuring and Muller 2008a). The research on ‘performance measurement’ focused predominantly on measuring the environmental pillar of sustainability in the supply chain (Noci 1997; Veleva et al. 2003), with only a limited number of studies that have taken the three pillars

into account (Bhagwat and Sharma 2009; Bai and Sarkis 2010). The research on supply chain ‘standards and monitoring’ examined the diffusion of voluntary environmental and social standards such as codes of conduct, ISO 14001, and ISO 26000, and other global standards in the supply chain (Pearson and Seyfang 2001; Morrow and Rondinelli 2002; Castka and Balzarova 2007; Nadvi 2008). Finally, studies under the ‘collaboration’ theme looked at the different characteristics of the collaborative paradigm within SCM such as the level of collaboration and best practices (Daugherty et al. 2005), system boundaries of the collaborative paradigm (Vachon and Klassen 2006b), and effects of collaboration on the triple-bottom-line performance (Cao and Zhang 2010).

As can be seen above, the literature has significantly contributed to the SSCM field across several themes. However, the literature on the integration of sustainability principles into SCM (Table 2, theme 3) is fragmented. Many studies focused only on the environmental aspects (Drumwright 1994; Feitelson 2002; Sarkis 2009) or social aspects (Cousins and Menguc 2005; Castka and Balzarova 2007; Hutchins and Sutherland 2008; Ciliberti et al. 2009) of SSCM. Only a limited number of the published studies addressed all three dimensions of sustainability in SCM (Foran et al. 2005; Maloni and Brown 2006; Koplin et al. 2007). Moreover, while the research on the conceptual and theoretical aspects of SSCM (Seuring and Muller 2008b; Sarkis et al. 2011) has grown, the research on what is actually being done by corporations in practice is scarce.

The existing research on corporate SSCM practices (Michelsen et al. 2006; Koplin et al. 2007; Pagell and Wu 2009; Foerstl et al. 2010) employed single- and multiple-case study designs, which involved corporations from a variety of industry sectors and national settings. However, there is very little research on cross-case analysis (Yin 2010), examining patterns of integration of sustainability principles into SCM across organizations with respect to the institutional environments within which these organizations operate. The literature on corporate SSCM practices, in particular, presents major gaps in examining the variety of the formal structures and processes adopted by corporations and the degree to which they are implemented. Similarly, while the research on SCM collaboration is abundant (Hoyt and Huq 2000; Balakrishan and Geunes 2004; Daugherty et al. 2005; Cheung and Myers 2008; Sodhi and Son 2009), the literature that explicitly commits to how the collaborative paradigm is leveraged to address SSCM issues, particularly as they relate to supplier encouragement is sparse. Therefore, there is an ongoing need for case studies that investigate the extent to which corporate sustainability principles are integrated into SCM practices, particularly as they relate to investigating multiple criteria on SSCM, such as governance, collaboration, and supplier encouragement, from a holistic perspective. This article aims to highlight these gaps and offer a foundation for future research by addressing the key research objective: 'Explore the extent to which corporate sustainability principles are integrated into SCM in corporations'.

Research Objective and Related Questions

The research questions for this study are derived from the key research objective noted above. The literature finds an increased use of multiple theories within the same SSCM study (Carter and Easton 2011). The theories and theoretical frameworks presented in section 'Sustainability and supply chain management' provide an implicit background for this study. Building on that literature, the research questions addressed in this article are explicitly based on five theories: contingency theory, institutional theory, RBV, RDT, and stakeholder theory (Table 3).

The basic argument of stakeholder theory is that internal and external parties exert pressure on firms to change organizational practices (Freeman 1984; Freeman et al. 2010). Donaldson and Preston (1995) elaborated three aspects of stakeholder theory—descriptive, instrumental, and normative—and placed the normative aspect at the 'core base' of stakeholder theory because agents of firms recognize all stakeholders' interests with 'intrinsic' moral values. From that perspective, stakeholder theory is particularly applicable to SSCM because stakeholders'

pressure may lead firms to adopt some SSCM practices that are initially economically unfavourable (Sarkis et al. 2011).

Institutional theory and 'new institutionalism' (Meyer and Rowan 1977; DiMaggio and Powell 1983; Meyer 2000) is particularly helpful for elucidating how institutional factors, including regulative, normative, and cognitive processes act as incentives for corporations to adopt organizational structures and processes so that they operate in socially responsible ways or discourage them from operating in socially irresponsible ways. Corporations interact with their stakeholders and behave in a socially responsible manner depending on the institutional structures and countries within which they operate (Fligstein and Freeland 1995; Maignan and Ralston 2002; Bartley 2003; Bjorklund 2011). Therefore, institutional theory facilitates the ability to scrutinize interactions amongst different stakeholders and to understand how corporate governance differs across nations (Aguilera and Jackson 2003).

The institutional environment is a source of coercive isomorphism, which refers to a direct mechanism that prompts institutional diffusion based on stakeholder coercion (DiMaggio and Powell 1983). Further, institutions promote such socially responsible corporate behaviour at the transnational level due to the global spread of organizational practices (Guler et al. 2002). For example, Brown et al. (2009) refer to the Global Reporting Initiative (GRI) as a successful 'institutionalization' and find that organizations adopt the GRI to gain and sustain competitive advantage and 'pre-empt' formal regulations. Campbell (2007) argues that various institutional conditions such as state regulation, 'collective industrial self-regulation', NGOs and other independent organizations, and a normative institutional environment mediate the economic conditions to which firms are exposed. This, in turn, affects the degree of socially responsible corporate behaviour. Matten and Moon (2008) compare institutional frameworks in the United States and Europe on four institutional features—workers' rights, environmental protection, education, and corporate irresponsibility—and illustrate how adoption of CSR practices differ by national institutional frameworks. There are a number of studies that focus on the comparative analysis of ethical organizational behaviour across nations (Ardichvili et al. 2012), the concept of corporate responsibility from stakeholders' perspective in specific institutional environments (Hillenbrand et al. 2012), and the effects of the institutional distance between the home and the host country on multinational corporations' decisions to standardize environmental issues (Aguilera-Caracuel et al. 2012), amongst others. However, the level of integration and implementation of SSCM practices in different institutional environments, within which corporations operate, requires further investigation. Founded on these discussions, we present our key research objective as:

Table 3 Summary of theories applied to research questions

Theory	Originating discipline	Summary description of theory
Contingency theory	Organizational theory, psychology, strategy	The optimal design and leadership style of an organization is contingent upon various internal and external restraints. Therefore, an effective organization and its subsystems must fit with the environment in which it operates (Fiedler 1971; Lawrence and Lorsch 1967; Kast and Rosenzweig 1973; Donaldson 2001)
Institutional theory	Organizational theory, sociology, psychology	Institutional theory examines how social structures, including schemas, rules, norms, and routines act as external pressures to influence organizational and individual behaviour (DiMaggio and Powell 1983; Scott 1987; Oliver 1991)
Resource-based view (RBV)	Strategic management, micro-economics	To achieve and sustain competitive advantage, firms must possess valuable, rare, imperfectly imitable, and non-substitutable (VRIN) resources (Wernerfelt 1984; Barney 1991)
Resource dependence theory (RDT)	Sociology, political science	The environment poses organizations with uncertainty in resource acquisition. Organizations are comprised of internal and external coalitions to acquire control over resources that minimize their dependence on other organizations and control over resources that maximize the dependence of other organizations on themselves (Pfeffer and Salancik 1978; Ulrich and Barney 1984)
Stakeholder theory	Business ethics	Stakeholder theory suggests that every individual or party (stakeholder) participating in the activities of a firm do so to obtain benefits. All stakeholder interests are intrinsically valuable; however, due to externalities produced by firms, the priority of these interests is not self-evident. Therefore, stakeholders exert pressures on companies to reduce negative impacts (externalities) and increase positive ones (Freeman 1984; Donaldson and Preston 1995; Freeman et al. 2010)

Key research objective: Explore the extent to which corporate sustainability principles are integrated into SCM in corporations.

Akin to institutional theory, contingency theory provides reasons for the adoption of corporate sustainability practices. Paloviita and Luoma-aho (2010) show the link among institutional theory, stakeholder theory, and contingency theory by identifying the need to change stakeholder strategies as any stakeholder, including suppliers, can exert authority on organizations. The central premise of contingency theory is that an organization fits its structure to its strategy to increase its bottom line results (Donaldson 2001). There is a relationship between contingencies, such as size and strategy, and organizational structure. For example, large corporations are more likely to adopt and implement corporate sustainability practices (Pagell et al. 2004). Agents of organizations seek functional structures and processes that fit with contingencies to improve performance. Therefore, common external restraints result in similar contingencies, which in turn result in similar organizational structures (Donaldson 2001). In fact, Rowlinson (2004) takes early institutionalism as an extension of contingency theory because the structure of an organization becomes meaningful for its members even though the structure is distorted of its rational purposes. For example, there is a growing number of global initiatives, codes of conducts, industry standards, and best practices that organizations have adopted to help operationalize their strategies as they relate corporate

sustainability goals and objectives (Delmas 2002; McIntosh 2004; Castka and Balzarova 2007; Bondy et al. 2008; Ball and Craig 2010). However, there still is a need to examine the effects of contingencies on the diversity of the organizational structures and processes adopted to address sustainability issues in supply chains. Based on these arguments, we pose the following research question:

RQ-1 What are the organizational structures, standards, and processes that corporations adopt to implement sustainability initiatives within SCM?

Stakeholder theory and institutional theory suggest that normative pressures prompt organizations to interact with its 'communities'—suppliers, employees, and customers—to divide the costs and benefits of externalities. Such interaction is best characterized as cooperation or collaboration (Dunham et al. 2006). Supply chains provide platforms for collaboration to address accountability by internalizing environmental and social externalities (Carter and Jennings 2002; Roberts 2003; Chien and Shih 2007; Sarkis et al. 2010). RDT justifies collaboration and inter-organizational relationship management to maximize power; therefore, to increase long-term performance and sustain growth (Pfeffer and Salancik 1978; Ulrich and Barney 1984). According to RDT, firms are dependent upon other parties to harness critical resources; consequently, managing this dependency is critical for firms' survival and growth (Ulrich and Barney 1984). From this perspective, upstream and downstream collaboration in supply chains and the quality of relationships amongst

supply chain partners is important strategic mechanisms for SSCM to reduce the external uncertainty of firms and thereby increase the bottom-line results (Cao and Zhang 2010; Zhu et al. 2010b). The RBV strives for improved efficiency and effectiveness of a firm by controlling valuable, rare, imperfectly imitable, and non-substitutable (VRIN) resources to gain and sustain competitive advantage (Barney 1991). In fact, as dependence on VRIN resources increases, firms should increase vertical coordination (Pfeffer and Salancik 1978). Upstream and downstream collaboration through the supply chain may result in the development and integration of VRIN resources and capabilities such as organizational reputation, green marketing, and brand image (Sarkis 2009; Shang et al. 2010). Carter and Rogers (2008) state the positive relationship between resource dependence and vertical integration in the supply chain, and provide examples from the literature as to different forms of coordination and collaboration.

The literature, in particular, provides examples of the effects of various collaborative initiatives on encouraging suppliers to adopt sustainability principles. For example, when buying firms work with their suppliers in implementing certain SSCM standards—e.g. environmental policies and governance standards—the suppliers become more likely to adopt and maintain these practices (Carr and Pearson 1999; Krause et al. 2007; Jiang 2009). Reuter et al. (2010) elaborate on the ‘sustainable supplier development’ (SSD) process by presenting how the prevalence of collaboration positively correlates to supplier assessment, selection, and SSD. In fact, as shown in Table 2, the literature provides many examples of the collaborative paradigm in SCM. However, the exact nature and elements of the collaborative paradigm to address corporate sustainability issues are still not well understood (Cao and Zhang 2010; Nyaga et al. 2010; van Tulder 2010). With that in mind, our second research question becomes:

RQ-2 How do corporations utilize the collaborative paradigm to address sustainability issues within SCM, particularly as they relate to supplier encouragement?

Methodology

In this research, Canada was used as a case study. Case studies can be conducted with many different motives and have a distinctive place in evaluation research in that they seek answers to research questions focused on ‘how’ and ‘why’ (Yin 2010). Canada is a constitutional monarchy, under which the Crown occupies a central place in the Canadian Parliament and democracy (Parliament of Canada 2012). The Government of Canada’s approach to sustainable development is integrated into government planning,

reporting, programming and decision-making within the federal government (Government of Canada 2012). Further, Canada has various national institutions that are formed to address sustainable development issues (UNCSD 2012). Canada’s diversified economy has strong ties to the global economic network. According to the World Economic Forum (WEF), Canada’s economy ranks 8 amongst 125 economies worldwide in terms of having the necessary attributes in place for enabling trade (WEF 2010). Moreover, Canada has held leading roles at the Organization for Economic Cooperation and Development (OECD) since its establishment in 1961 (OECD 2011). Therefore, it is particularly relevant to use Canada as a case study to address the key research objective and the supporting research questions. However, this case study is offered without making any claims about transferring the results across different institutional boundaries as case studies are difficult to generalize (Yin 2010). As Matten and Moon (2008) showed, institutional features have an effect on the adoption of CSR initiatives by companies across different nations. Canada’s peculiarities in cultural, political, business and economic systems have major implications for corporations in adopting corporate sustainability principles.

Completion of the case study involved combining two different qualitative methods: content analysis and interviews (Fig. 1).

As is seen from Fig. 1 above, between-methods triangulation is particularly useful when both methods concentrate on different aspects of knowledge in data. By investigating a complex phenomenon—i.e. the key research objective—from different angles, a triangulation of two methods aims at a mutual validation of their results (Flick 2007). For this reason, the overall methodological strategy of the inquiry consisted of two sequential and complementary key phases. The first phase of the research focused on a content analysis of 100 Canadian corporate sustainable development reports (CSDRs). The results from the content analysis informed the development of the second phase: in-depth interviews with 18 Canadian experts on SSCM. Details on the approach for each phase are provided below.

Content Analysis

The key research objective and associated research questions identified in section ‘[Research objective and related questions](#)’ along with the themes applied to SSCM-related research identified in Table 1 provided the basis for structuring the criteria of analysis for the content analysis of Canadian CSDRs. CSDRs typically report and evaluate corporate initiatives from the perspective of sustainability or environment, health, safety, and other social aspects (Karen 2008). Content analysis allows researchers to gather

and analyse data by categorizing texts into more controllable sections and, therefore, is a prolific research methodology in the social sciences for studying the content of recorded human communications (Krippendorff 2004). The average length of a CSDR was approximately 45 pages (in PDF format), resulting in over 4,500 pages to analyse. Therefore, using content analysis to address the key research objective was well suited. The content analysis focused on the eight key areas identified in Table 4.

The study was focused on large corporations as they were most likely to implement and, therefore, report on their corporate sustainability practices (Pagell et al. 2004). A representative list of Canadian CSDRs was developed based on a review of the Corporate Register website (<http://www.corporateregister.com>), the GRI website (<http://www.globalreporting.org>), and via Google search. All reports published before the year 2007 and all French-language reports were removed from the list. As of 1 July 2010, a total of one hundred Canadian CSDRs were identified. These one hundred reports formed the sample for this study. After the sample of CSDRs was established, the content analysis of reports was conducted manually, sequentially examining reports according to alphabetical (company name) order. A conceptual analysis (Krippendorff 2004) was applied through keyword searches (Table 5) to determine the existence of the criteria identified in Table 4.

The results from the keyword searches were recorded in a database for each corporation (by row) according to the each individual theme (by column). The keyword searches were supplemented by additional qualitative analysis of meaning categorization, which involved a systematic conceptualization of the statements before placing them in relevant themes. This was achieved by reading through the

references that turned out as a result of the keyword searches and getting an overall impression (Kvale 2007).

Interviews with Corporate Experts

Interviews are commonly employed in social research because they enable obtaining information that might otherwise be difficult to obtain, and provide a basis for the comparison of participant responses in order to answer a research question (Kvale 2007). The content analysis was supplemented by in-depth interviews for three interrelated reasons. First, CSDRs greatly vary in scope, and therefore, the depth of information communicated through them also varies (Roca and Searcy 2012). Second, the text—i.e. CSDRs—may be devoid of the context that produced them in the first place (Krippendorff 2004). Third, the state of the criteria examined in the content analysis may have changed after the CSDR was produced, therefore necessitating further probing. Consequently, semi-structured interviews with 18 corporate experts were conducted to collect views on the key research question and associated sub-questions. Invitations to participate in the interviews along with the interview protocol (Kvale 2007) and informed consent form were sent to 100 Canadian corporations whose reports were reviewed in the content analysis. Eighteen senior level employees from 16 corporations agreed to partake in the interviews. These corporations represented eight industry sectors including energy, financial, food, forestry, manufacturing, metals-mining, telecom, and transportation. The interviewees represented business units in supply chain management or sustainability departments (or equivalent). The interviews centred on the eight open-ended questions are identified in Table 6, which were derived from a

Table 4 Selection of criteria

Criteria examined	Rationale
Report demographics	Useful in subsequent analysis through establishing demographic patterns, including cross-associations with other criteria
Supply chain (SC) governance	In order to determine the top management mandate and accountability on SCM. This criterion relates to the key research objective and RQ-1
SC strategy/policy	In order to determine the importance of the supply chain and whether or not companies are implementing a supply chain strategy. This criterion relates to the key research objective and RQ-1
Performance indicators	In order to determine what indicators are currently used to measure company performance as they relate to environmental, economic, and social dimensions of sustainability. This criterion relates to the key research objective and RQ-1
Standards	In order to find out what the minimum acceptable standards are for SSCM. This criterion relates to the key research objective, RQ-1 and RQ-2
Monitoring	In order to find out how companies screen their suppliers. This criterion relates to the key research objective, RQ-1 and RQ-2
Collaboration	In order to find out how suppliers are encouraged to be more sustainable and where in the supply chain a company's accountability stops. This criterion relates to the key research objective and RQ-2
Forward-looking statement	Reflects on top management commitment and future strategic priorities on SCM. This criterion relates to the key research objective and RQ-1

Table 5 Keywords applied to themes

	Supply chain governance	Supply chain strategy	Performance indicators	Standards	Monitoring	Collaboration	Looking forward
Keywords applied to every theme							
1	Sustainability	Sustainablity	Sustainability	Sustainability	Sustainability	Sustainability	Sustainability
2	Sustainable	Sustainable	Sustainable	Sustainable	Sustainable	Sustainable	Sustainable
3	Environment	Environment	Environment	Environment	Environment	Environment	Environment
4	Social	Social	Social	Social	Social	Social	Social
5	Ethic	Ethic	Ethic	Ethic	Ethic	Ethic	Ethic
6	Supply	Supply	Supply	Supply	Supply	Supply	Supply
7	Supplier	Supplier	Supplier	Supplier	Supplier	Supplier	Supplier
8	Procure	Procure	Procure	Procure	Procure	Procure	Procure
9	Source	Source	Source	Source	Source	Source	Source
10	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor
11	Chain	Chain	Chain	Chain	Chain	Chain	Chain
Theme-specific keywords							
12	Govem	Policy	Economic	Code	Monitor	Collaborate	Forward
13	Committee	Initiative	Perform	Conduct	Screen	Collaboration	Goal
14	Board	Strategy	Achieve	Certified	Audit	Workwith	Objective
15		Program	Measure	Certification	Measure	Cooperate	Next step
16		Procedure	Indicator	Standard	Observation	Join	Promise
17		Tactic	Metric		Cb serve	Partner	Ahead
18					Check		
19					Scrutinize		

Table 6 Interview questions

Question	Rationale
1. In your organization, what is the primary motivation for sustainability or CSR initiatives?	This question forms a basis for the key research objective
2. How does your company measure the success of its sustainability initiatives in the supply chain?	This question relates to the key research objective and RQ-1
3. What indicators, if any, does your company currently use to measure supplier performance in sustainability?	This question relates to the key research objective and RQ-1
4. Does your organization have any standards for SSCM? Do you require that your suppliers implement any standards for SSCM?	This question relates to the key research objective, RQ-1 and RQ-2
5. How can suppliers be encouraged to be more sustainable? Has your organization undertaken any initiatives to do so? If yes, can you provide any examples?	This question relates to the key research objective and RQ-2
6. Where do you think a company's accountability stops in the supply chain? Why?	This question relates to the key research objective and RQ-2
7. In your experience, what are the barriers to incorporating sustainability issues in SCM?	This question relates to the key research objective and RQ-1
8. What areas do you see for future work in SSCM in corporations?	This question relates to the key research objective and RQ-1

combination of the research questions identified in section 'Research objective and related questions' and the results from the content analysis.

The open-ended questions in Table 6 enriched the data collection by allowing interviewees to elaborate on points of interest. Most of the interviews lasted between 25 and

45 min. All the interviews were conducted via telephone between October 2010 and March 2012. Detailed notes were taken during the interviews. These notes were then sent electronically to the interviewees for verification. The interview notes were read and re-read to establish a close familiarity with the data, therefore, facilitating the analysis.

The data were analysed by meaning categorization and meaning interpretation (Kvale 2007) in alignment with the themes that formed the basis of the content analysis.

Results

The results from the content analysis are presented in section ‘[Results from the content analysis](#)’ and the results from the interviews are presented in the section ‘[Results from the interviews](#)’. It should be noted that section ‘[Results](#)’ focuses on describing the results of the study. The analysis of the results is presented in section ‘[Discussions](#)’.

Results from the Content Analysis

The results from the content analysis are presented in the following sections ‘[Report demographics](#)’ through ‘[Looking forward on SSCM](#)’.

Report Demographics

Of the 100 CSDRs reviewed 5 were dated from 2007, 20 from 2008, 70 from 2009, and 5 from 2010. Twenty-three industry sectors were represented, with the metals-mining (23 reports), energy (22), and financial sectors (17) making up a large percentage (62 %) of the reports. Other industry sectors represented include telecom (4), forestry (4), food (3), insurance (3), manufacturing (3), retail (3), transportation (2), infrastructure (2), government (2), chemical (2), agriculture (1), construction (1), consulting (1), engineering (1), gaming (1), lottery (1), media (1), real estate (1), service (1), and textiles (1). This finding supports that the worst polluters tend to be the best reporters (Delmas and Blass 2010). Although CSDRs were predominantly (75 %) dated from 2009 and 2010, a quarter (25 %) of the reports was dated from 2007 and 2008. This signals that there may be a lag time of 2–3 years after the reference year for some reports to become available.

Supply Chain Governance

This criterion was analysed to assess the degree of management’s accountability on SSCM issues. Only 13 % of the reports included a reference to having a management mechanism in place that ties sustainability to their procurement practices. In general, addressing the governance structure for SSCM is a marginal practice for corporations. In most cases, the governance structure was attributed to many other company functions, with indirect references to the supply chain. For example, Enbridge—a corporation in the energy industry sector—reports: ‘The company has a clearly defined management and governance structure for

all major projects and in that regard strategic relationships have been developed with suppliers and contractors’. Furthermore, most references lacked clear descriptions of mandate or responsibility of the governing bodies, such as committees and councils. The results from the governance theme helped inform the development of the interview questions 5, 6, and 8 (Table 6).

Supply Chain Strategy

This criterion was investigated by checking whether the company reported, or included any reference to, the corporation’s SSCM policy or programs and/or initiatives. Seventy-two percent (72 %) of the corporations reported having a strategy or program in place. Most policy and/or program references explicitly addressed only the environmental criterion of sustainability and left the social and economic criteria unaddressed. Nevertheless, the social and economic criteria were implicit in the corporations’ local-procurement preferences. In fact, the majority of the statements on supply chain strategy were on local purchasing practices. Overall, the majority of companies reported how they work with their supply chain partners at a strategic or operational level. Most of these references did incorporate at least one dimension of sustainability into their procurement strategy or supply chain operations. The results from the supply chain strategy theme helped derive the interview questions 2, 4, and 5 (Table 6).

Performance Indicators

This criterion was applied to find out what indicators are currently used to measure company performance in SSCM. Forty-five percent (45 %) of companies reported at least one procurement-related indicator. The preponderance of the companies cited policy, practices, and proportion of spending on locally based suppliers as an indicator. Many companies listed at least one environmental key performance indicator (KPI). For some representative examples, TD Bank had a ‘Green Product Offerings and Percentage of Green Purchases’ indicator; Bank of Montreal (BMO) had ‘Technology Disposal Program’, ‘Paper Shredding/Recycling’, ‘Renewable Energy Purchased’, and ‘Percentage of Hybrid Vehicles in Service Fleet’ indicators; and TELUS—a corporation in the telecom industry sector—had a ‘Wireless device recycled’ indicator. The most frequently cited social KPI was similar to one used by the Global Reporting Initiative (GRI): ‘Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken’ (GRI indicator HR2). However, the majority of companies that cited this particular indicator provided no company-specific data.

Instead, they provided a clause stating that they did not review their suppliers' human rights performance.

In general, more than half of the reports (55 %) did not include a KPI as it directly relates to SSCM. Moreover, the majority of the reported indicators focused on economic performance as they relate to local purchasing activities. The results from the performance indicators theme helped inform the development of the interview questions 2, 3, and 8 (Table 6).

Supplier Standards

Company reporting on supplier standards was investigated to shed light on the minimum acceptable standards for SSCM. Fifty percent (50 %) of corporations cited at least one relevant standard. Most standards cited were in the form of business codes of conduct. Almost every corporate report mentioned a code of business conduct. However, in cases where this was not clearly associated with supply chain management practices, it was considered that the corporation did not report on any standards. Table 7 shows that the cited standards focused around three key themes: (1) codes of business conduct, (2) product/process-related certifications, and (3) management systems and initiatives.

The results from the supplier standards theme helped inform the development of the interview questions 4, 5, 6, and 8 (Table 6).

Monitoring Supplier Performance

This criterion was examined to find out how companies screen their suppliers. Thirty-three percent (33 %) of companies reported on a supplier management monitoring system. For example, Vancity—a corporation in the financial services industry sector—stated: 'For strategic business relationships, such as our major suppliers and partners, we use our highest type of due diligence, which is

a formal expert screen with 45 indicators across a broad range of environmental, social and governance criteria'.

Only one report contained specific details on the outcome of monitoring activities. In that report, Loblaw's—a corporation in the food industry sector—reported: '114 factories were required to implement a corrective action plan with a follow-up audit in six months [and] 6 factories were delisted because they failed to comply with Loblaw CSR standards'.

Taken as a whole, the majority of the corporations did not report on monitoring supplier performance. Of those that were reported, the method of monitoring varied greatly, including assessment guides and questionnaires, CSR audits, social impact assessments, site inspections, and (unidentified) activities. The results from the supplier performance theme helped derive the interview questions 2, 3, 4, 5, 6, and 8 (Table 6).

Collaboration within the Supply Chain

The search for any collaborative relationship to encourage sustainability between a company and its supply chain partners yielded 42 % of companies reporting on such partnerships. References on the collaborative initiatives were predominantly focused on upstream initiatives with suppliers. Only a small number of companies reported on downstream collaborations with customers. However, they provided little or no details. For example, Coca Cola noted: 'By working with suppliers and customers to reduce the amount of material used in our packaging, we are working to ensure that this packaging is sustainable'.

On the whole, approximately two in every five companies (41 %) cited collaboration either with their suppliers or with their customers. This may suggest that corporations are increasing their efforts to extend accountability and enhance sustainability in the supply chain. The results from the collaboration theme helped inform the development of the interview questions 3, 4, 5, 6, and 8 (Table 6).

Table 7 Supplier Standards Cited

Theme	Standards
Codes of conduct	Code of Conduct, Code of Ethics and Business Conduct, Supplier Code of Business Conduct, Ethics and Compliance Guide, Code of Ethics and Professional Conduct, Standards of Business Conduct, Standard Terms and Conditions (STC), Environmentally Responsible Procurement Standard, Environmental Code of Practice, Supplier Guiding Principles
Product/process-related	Energy Star, International Cyanide Management Code for the Gold Mining Industry, Marine Stewardship Council (MSC) standards, Forest Stewardship Council (FSC), FSC Chain-of-Custody (CoC) certification, Controlled Wood standard, Ontario Energy Board's Affiliate Relationships Code (ARC), GREENGUARD
Management systems and initiatives	Canada's Environmental Choice Program, United Nations Global Compact, ISO 9001, ISO 14001, OHSAS 18001, Outsourcing and External Supplier Risk Management Policies, Paper Purchasing Policy, Global Leadership and Commitment Standard, Global Food Safety Initiative (GFSI), Responsible Care® Initiative, Programme for the Endorsement of Forest Certification (PEFC), Sustainable Forestry Initiative (SFI), Canadian Standards Association (CSA), Chartered Institute of Purchasing and Supply (CIPS), Electric Power Supply Association's Sound Trading Practices

Looking Forward on SSCM

As an indication of top management commitment on SSCM, 32 % of corporations provided references about their plans to further incorporate sustainability into their supply chain. Most of the statements were strategic objectives or goals on supply-chain-related topics. Other reports briefly described what they intend to do next without getting into the specifics. For example, AXA—a corporation in the insurance industry sector—noted that it intended to ‘Extend the corporate responsibility clause to all suppliers’ and Hydro Quebec—a corporation in the energy industry sector—had an objective to ‘Establish specifications for sustainable procurement’.

Including company objectives on SSCM indicates the recognition of sustainability issues and strategic importance of supply chains in improving the corporate triple-bottom-line results. The results from the forward looking statements helped inform the development of the interview questions 7 and 8 (Table 6).

Results from the Interviews

The results from the interviews are presented in the following sections ‘[Primary motivation for sustainability initiatives](#)’ through ‘[Areas for future work in SSCM in corporations](#)’.

Primary Motivation for Sustainability Initiatives

Several driving forces for adopting sustainability initiatives were cited in the interviews. Nine experts identified the need to respond to internal and external pressure that they feel from stakeholders, which they noted include customers, shareholders, government, employees, NGOs, and the community in general. In fact, institutional pressures, which are internal and external pressures that the companies feel from stakeholders, had the greatest influence value for every expert. For some representative examples, one expert cited market forces, particularly driven by customers; another cited the desire to be respected by the community; and another cited government relations as an incentive to address sustainable development issues. Three experts referred to corporate sustainability initiatives as core organizational values that were embedded in every strategic and operational activity. Other commonly cited motivators included risk management, regulatory concerns, increased profit, increased operational efficiencies, reduced costs, corporate image and brand concerns, and corporate culture.

Taken collectively, the experts referred to the need to address institutional pressures, improve stakeholder relations, and triple bottom-line results as the major driver of

sustainability in their corporations. The literature identifies these drivers similarly (Bansal and Roth 2000; Sarkis 2001; Roberts 2003; Darnall et al. 2008; Seuring and Muller 2008b). Economic benefits were cited under two categories: (a) cost savings through reduced health and safety costs, reduced mitigation-related costs, and increased operational efficiencies, and (b) revenue increases through enhanced brand image and gaining competitive advantages by simply being a good corporate citizen.

Measuring Company Success on Sustainability Initiatives in the Supply Chain

The experts provided a wide-range of answers to this question. For example, two experts cited that success was measured by comparing the audit results of the company’s own facilities against previously set company goals. Two other experts noted that success was measured through the number of supplier audits the company conducted. Another expert cited the number of new contracts that include responsible product specifications. Two experts referred to the market success or financial outcomes achieved as a result of such initiatives. Many others noted local procurement policies and practices, results of supplier assessment questionnaires, updating and implementing a code of conduct, and waste reduction as performance measures. All but two of the experts referred to measuring success upstream in the supply chain. In the two exceptions, one expert referred to a carbon calculator tool developed by the company to help customers calculate their total carbon footprint from transportation emissions and the other referred to the increase in the number of green product offerings by the company. One expert stated that the measurement of success was contingent upon the definition of sustainability, and added that the company had some health and safety indicators. Finally, three experts stated that they did not have any specific indicators, but were in the process of developing them. Overall, the experts highlighted a small number of quantitative performance measures. Although the need to measure the success of sustainability initiatives is recognized, it is generally addressed through green procurement policies, market success, and brand recognition.

Measuring Supplier Performance in Sustainability

Probing measurement practices on the supplier side yielded additional insights. Five experts noted that they do not have any specific measures to assess how a supplier does in the supply chain. Five experts cited their company’s supplier assessment questionnaires as the only measure they have. However, the specific questions or indicators within these supplier questionnaires were not identified, except for three

experts who noted that economic, social, and environmental elements are included in the evaluation criteria. For example, one expert cited a 'robust supplier score card', which evaluated suppliers on a variety of categories such as 'quality, price, food safety, availability, and recalls'. Further, corporations' supplier evaluation schemes are rarely made public. The interviews highlighted this reality as a challenge to integrating sustainability with supply chain management while stressing the need to share information and best practices amongst industry practitioners. Other examples of supplier evaluation include: three experts cited third-party certifications, such as FSC and Electronic Product Environmental Assessment Tool (EPEAT); one expert cited a suite of health and safety KPIs; and another cited measurement of the suppliers' carbon footprint.

In general, the experts expressed that there is relatively little emphasis on sustainability in the supplier evaluation area. Only one expert specifically referred to plans of developing KPIs in the supplier base. Further, while there are some exceptions, such as for health and safety indicators and some elements of third-party verifications, the limited number of cited indicators focuses primarily on addressing the environmental dimension of sustainability.

Standards for SSCM

Similar to the results from the content analysis, codes of business conduct were the most-cited standards. One expert noted that suppliers are required to comply with the company's code of conduct and have to sign a certificate of business principles. As many experts noted, companies always reserved the right to audit their suppliers. Nevertheless, only four experts noted that they actually conduct audits. The scope of these audits ranged from asking for proof of third-party verifications to site inspections. Three experts referred to corporate policies and directives that specifically require that products and services comply with the company's procurement criteria. One expert referred to a supplier policy that requires the company's suppliers be evaluated on 17 different items, some of which are sustainability oriented. Beyond codes of business conduct and directives, the types of standards varied by industry. However, in many cases it was stressed that these directives and supplier assessment schemes were internal and that they were not made publicly available. For example, one expert noted that sustainability was such a broad term that it was hard to say that they had specific standards. Another expert stated that: 'although sustainability is weaved through our company's supply chain, it is hard to say there is a standard that explicitly commits to sustainability'. These statements relate to two of the implementation issues of SSCM: transparency of information and lack of understanding the concept of sustainability (Storey

et al. 2006; Seuring and Muller 2008a; Linton et al. 2007). Finally, three corporate experts noted that efforts to incorporate specific standards for their suppliers were an area of priority for the near future.

Supplier Encouragement

Twelve of the experts interviewed noted that their corporations have developed supplier collaboration initiatives. As the experts noted, this is reflected in on-site sub-contractor training in some instances and supplier appreciation events in others. Some experts cited joining collaborative platforms, such as *Bureau de normalisation du Québec* (BNQ), with the goal of optimizing the integration of sustainability principles within Québec organizations. Four experts referred to their company's codes of conduct and supplier contract requirements as the main source of encouraging their suppliers to be more responsible. As one expert noted: 'We deal with a number of suppliers in China [and] we send teams to those companies [in China] to do systematic checks with respect to their health, safety, and other environmental practices'. Another expert noted, adopting new product specifications gives a clear message of the corporation's environmental priorities and drives change to the market. Three other experts made similar remarks about their company's supplier self-assessment questionnaires, noting that they communicate what they expect from their suppliers and their products and services. As one expert stressed, responsible procurement requires dealing with responsible suppliers who produce responsible products. One expert referred to market forces which would eventually encourage suppliers to be more sustainable. Finally, one expert stated that it was dependent upon leadership, which held responsibility for educating company's suppliers to understand and implement what they are expected of. Based on the expert interviews, it is apparent that the environmental pillar of sustainability tends to be more prevalent when it comes to supplier standards and encouragement. However, there were a limited number of examples offered on how social issues were included, for instance, in competitive bidding process and procurement contracts.

Accountability in the Supply Chain

All but two experts cited that responsibility must be shared by all supply chain partners, including intra- and inter-organizational stakeholders, and a life cycle analysis approach should be integrated as a way to address accountability in the supply chain. For example, one expert cited: '[Accountability] does not stop. You have a role to play; everyone has a role to play. It is the same for the sustainability of the product: everyone needs to be aware and do his job'. Another expert noted: '[Accountability] is right across the board: within the

organization, every business unit has responsibility implementing the sustainability initiatives'. Some experts added that this was not currently being implemented due to the barriers noted above. There were two exceptions to the common view of shared responsibility. One expert noted that the accountability ends with the suppliers the company interacts with (i.e. primary supplier). The other expert noted that the company held a second tier supplier (i.e. one that supports a primary supplier in the delivery of goods and services) accountable only when a sub-contractor is working on-site. Overall, the experts predominantly referred to shared responsibility across the supply chain.

Barriers to Incorporating Sustainability into Supply Chain Management

The experts' answers regarding the challenges of incorporating sustainability into supply chain management centred on three key areas:

- (1) *Resources required* all 18 experts referred to the required resources, such as time, people, and financial costs, as the primary barrier. Four experts referred to the hardships in making the business case for allocating the resources. For example, one company had to re-adopt its less environmentally friendly packaging for a certain product due to plummeting sales caused by environmentally friendly packaging.
- (2) *Lack of understanding the concept of sustainability* 11 experts commented on the lack of clear understanding and knowledge of the very concept of sustainability amongst suppliers and customers. As one expert noted, the principles of sustainability could not be integrated without stakeholders' fully understanding what they really are. Many experts referred to education both as a barrier and remedy.
- (3) *Risk management and monitoring* 8 experts cited audit-related challenges. As one expert noted, audits might be perceived as harassment by some suppliers. One expert referred to the difficulties in conducting audits in developing countries. Three experts cited the transparency of information and data gathering from suppliers, particularly as they relate to performance measurement.

Overall, the barriers to integration match the ones quoted in the literature (Carter and Rogers 2008; Seuring and Muller 2008a; Linton et al. 2007). However, the experts cited other important challenges such as lack of leadership from policy makers (cited by two experts), lack of platforms to share expertise and best practices (cited by one expert), required formal processes and bureaucracy to adopt and implement sustainability initiatives (cited by one expert), communication or lack thereof across supply chain

partners (cited by one expert), and supplier reluctance to comply (cited by one expert).

Areas for Future Work in SSCM in Corporations

Seven experts cited the need to collaborate amongst all supply chain partners. This was reflected in comments on creating platforms to share information and best practices amongst industry practitioners by some and engaging suppliers in making business decisions by others. In related comments, some experts referred to overcoming the technical barriers in integrating sustainability principles with existing business systems and practices. As one expert explained, sustainability initiatives put procedural and administrative burdens on corporations and the question then becomes how to integrate sustainability while removing these burdens. Two experts specifically referred to improving the tendering processes and raising the standard for product specifications. Seven experts noted education as an area for future work. For example, one expert cited the need to educate customers while another expert cited the need to educate the industry practitioners. One expert emphasized the need to educate all supply chain partners as: 'Every company or supply chain partner has a different understanding and/or different stage of implementing sustainability. Therefore, [an area of future work is] education throughout supply chain—upstream and downstream—and increasing transparency and traceability while doing so'. Three experts highlighted the need to address the difficulties in supplier audits and monitoring. One expert posed the question: what other criteria can be added to supplier codes of conduct and make sure that they are implemented? Four experts cited measurement of both company performance and supplier performance through developing meaningful KPI. Other areas included balancing the interests of different stakeholders, the need to exercise life-cycle thinking, increasing transparency and communication, and developing practitioner skills and expertise (each cited by one expert). In general, the comments were not surprising: they focused specifically on the barriers to incorporating sustainability into SCM noted above.

Discussions

Overall, the results highlight a range of interesting trends in which Canadian corporations address SSCM issues. In terms of report demographics, the metals-mining, energy, and financial services industry sectors represented the majority of corporate sustainable development reports in Canada. This finding supports earlier research that industries with higher ecological footprint have better reporting practices and communicate more with stakeholders on

corporate social responsibility than other industries (Deegan and Gordon 1996; Delmas and Blass 2010).

The interviews revealed that sustainability initiatives in the supply chain are a strategic and/or operational response from corporations to address stakeholder concerns, and while doing so, to increase their triple-bottom-line results. This is found to be congruent with the literature (Sarkis 2001; Darnall et al. 2008; Seuring and Muller 2008b). Stakeholder theory, institutional theory, RDT, RBV, and contingency theory lend an interconnected perspective as to the reasons Canadian corporations behave in a sustainable way. As stated earlier, stakeholder theory asserts the need to address the pressure that the corporations feel from a variety of stakeholders (Freeman 1984), whereas contingency theory emphasizes the fit between an organization and its subsystems with its environment (Fiedler 1971; Donaldson 2001). Further, institutional theory focuses on external pressures exerted on organizations that result in changed organizational and individual behaviour (DiMaggio and Powell 1983). Taken collectively, these three theories are applicable in explaining the finding that Canadian corporations address stakeholder pressures by adapting to their environment and adopting new organizational structures. RDT and RBV frame a particularly useful perspective in explaining firms' desire to increase their economic, environmental, and social performance. RDT holds that firms increase their long-term performance by managing inter- and intra-organizational dependencies (Pfeffer and Salancik 1978; Ulrich and Barney 1984), whereas RBV necessitates creating new core-competencies and capabilities such as green marketing and increased reputation to gain competitive advantage (Barney 1991; Sarkis 2009). The relationship between sustainability initiatives and corporate value creation is also highlighted by the definition of SSCM. As previously indicated, SSCM emphasizes an achievement of an organization's social, environmental, and economic goals in the systemic coordination of key inter-organizational business processes, which includes SCM.

The majority of the corporate reports explained how the corporations address sustainability issues within the supply chain at the strategic or tactical level. However, both the reports and the interviews indicate that the integration of all three dimensions of sustainability into supply chain operations is relatively limited. Further, most of the references on supply chain strategy in the reports related to local purchasing policies and practices. This indicates that most companies focus their SSCM strategies primarily on the economic dimension of sustainability which, in turn, affects the scope of their measurement practices. Further, corporations that reported on supply chain governance are still in the minority (13 %), with most reports lacking clear definitions on the mandates of governing bodies. Although the

causality between corporate governance and CSR needs further investigation, the elements¹ of corporate governance are positively related to CSR activities (Jo and Harjoto 2012). Given the importance of transparent corporate governance, our findings might explain the inefficiencies in addressing accountability and overall sustainability engagement in the supply chain. The interviews reinforced these findings by highlighting that accountability in the supply chain generally stops at the primary suppliers.

The interviews stress the need to measure company performance on sustainability initiatives within the supply chain, but most companies lack quantitative performance measures to do so. The review of CSDRs revealed that less than half of the companies (45 %) measure the success of their sustainability initiatives within the supply chain. The interviews further reveal that there is less emphasis on measuring supplier performance than on measuring a company's own success. The indicators disclosed predominantly relate to the environmental and economic dimensions of sustainability. For example, most indicators concentrate on eco-efficiency, such as waste reduction and carbon footprint, with only a few indicators measuring the effects throughout the life-cycle of the products. In a critical literature review, analysing a collection of 24 studies on supply chain performance measurement, Akyuz and Erkan (2010) point to this fact and identify the need to develop measurement frameworks that include the social dimensions of sustainability, such as collaboration and partnership metrics amongst others. Further, akin to the wide-range of indicators disclosed, the interviews provided a wide-range of answers on measuring company success on sustainability initiatives in the supply chain. This is congruent with the literature (Matthews 2003; Veleva et al. 2003; Shaw et al. 2010) that despite the proliferation of the GRI, organizations still speak 'different languages' when measuring sustainability. As it applies to the Canadian context, Roca and Searcy (2012) offer a multi-faceted explanation to this finding. First, CSDRs differ in scope; therefore, the indicators disclosed somewhat vary. Second, Canada does not have mandatory reporting requirements, with the exception of limited requirements for the financial services industry sector. Finally, from the stakeholder theory perspective, different stakeholder groups have different priorities; therefore, requiring different information disclosed by different corporations (Roca and Searcy 2012).

The review of reports showed that one in every two companies (50 %) reported on a supplier standard. The standards centred on three key themes: codes of business

¹ These corporate governance variables are: "internal and external monitoring by board, leadership, independent boards, institutional investors, and security analysts" (Jo and Harjoto, 2012).

conduct, product-/process-related certifications, and management systems and initiatives. As part of the global diffusion of standards and practices in supply chains (Guler et al. 2002; Zutshi and Sohal 2003; Lu et al. 2005; Ciliberti et al. 2008), Canadian corporations are increasingly institutionalizing codes of conduct and other supplier standards to operationalize their CSR strategies. The literature (Adams et al. 2001; Kaptein 2004) points to the proliferation of codes of conduct as an indicator of adopting ethical behaviour, particularly when firms engage in off shoring and outsourcing in developing countries (van Tulder et al. 2009). Further, Okhmatovskiy and David (2012) illustrate the adoption of internal governance codes as a 'substitution response' to external, mandatory national standards.

Although the majority of the companies did not report on how they monitor their suppliers, most of them require their suppliers to abide by their business principles and codes of conduct. This may mean that codes of conduct have a particular use in supplier encouragement by keeping suppliers, and other stakeholders such as NGOs, at bay (van Tulder et al. 2009). In fact, the interviews support this by revealing that Canadian corporations use codes of conduct and supplier contract requirements as a means to promote sustainable practices amongst their suppliers. However, both the reports and the interviews demonstrated that the environmental pillar of sustainability tends to be more prevalent when it comes to supplier encouragement. The interviews further elaborated on the ways in which supplier compliance is monitored on codes of conduct and other standards. The monitoring activities included assessment guides and questionnaires, verification of third-party certifications, CSR audits, social impact assessments, and site inspections. The variety of supplier monitoring methods reflects the difficulties in conducting supplier audits, which was identified as a key barrier during the interviews. In many cases, corporations opt for a more economically feasible and less intrusive method of monitoring given the resource limitations and resistance from suppliers. Further, the CSDRs provided evidence that corporations that inform stakeholders on the outcomes of such monitoring activities are scarce.

The review of the CSDRs illustrates that the collaboration is primarily oriented upstream with suppliers, whereas downstream collaboration with customers is scarce. Although it is acknowledged that there are a number of possible explanations, the RBV and RDT provide two particularly relevant theoretical perspectives to explain this. As stated earlier, RBV strives to improve organizational efficiencies and effectiveness to achieve and sustain competitive advantage (Barney 1991). Firm's collaboration with suppliers of strategic importance enables such efficiencies and helps create core capabilities,

particularly as they relate to risk management practices (Cousins et al. 2004; Teuscher et al. 2006). Further, RDT puts emphasis on managing inter-organizational relationships for organizational growth and increased long-term performance (Pfeffer and Salancik 1978; Ulrich and Barney 1984). Unsurprisingly, firms' using collaboration as a strategic tool upstream in supply chains with suppliers may prove more efficient in increasing the triple-bottom-line results than downstream with customers (Daugherty et al. 2005; Attaran and Attaran 2007; Sodhi and Son 2009). The interviews and CSDRs also signal a growing trend in forming collaborative platforms within the supply chain. These platforms comprise different stakeholders, such as government, NGOs, and industry practitioners, that are drawn together to address sustainability challenges. As specified during the interviews, the needs in the areas of engaging supply chain partners in decision making, sharing information and best practices, and developing practitioner skills drive these collaborative initiatives. Pinske and Kolk (2012) point to the strategic importance of multi-stakeholder partnerships in addressing the 'climate-change-sustainable development nexus'. Collaboration with NGOs, in particular, is seen as a proactive management of stakeholder relations on socially responsible behaviour (Dahan et al. 2010). Baur and Schmitz (2012) draw attention to this increasing trend in corporate-NGO partnerships and present how such partnerships can generate learning for the corporations, and co-optation for NGOs.

Finally, the experts referred to shared responsibility while emphasizing the need to exercise life-cycle thinking as a way to address accountability across the supply chain. However, companies are far from incorporating life-cycle practices beyond their primary suppliers due to barriers which centred on three key themes: resource requirement, lack of understanding the concept of sustainability, and risk management and monitoring. These cited barriers to integration are found to be congruent with the literature (Storey et al. 2006; Carter and Rogers 2008; Seuring and Müller 2008a). Engaging supply chain partners upstream with suppliers and downstream with customers to overcome these barriers is a compelling task. It is not surprising that when asked for areas for future work, many experts brought up the need to collaborate amongst all supply chain partners. Other areas for future work centred on the barriers previously cited.

Conclusion, Research Limitations, and Areas for Further Research

As stated earlier, corporations are increasingly integrating the principles of sustainability into their supply chain

management practices to address the economic, environmental, and social implications of their activities. However, little research has been conducted on the extent to which corporations have integrated sustainability principles into the management of their supply chain. This article presented the results of a content analysis of 100 Canadian CSDRs and in-depth interviews with 18 corporate experts to address the key research objective: 'Explore the extent to which corporate sustainability principles are integrated into SCM in Canadian corporations.' A key contribution of this study is that it provides a holistic perspective for a range of interrelated criteria on SSCM which Canadian corporations adopt and implement to address corporate sustainability issues. The key findings show that the percentage of corporations that disclose their corporate sustainability initiatives is collectively higher (62 %) in the metals-mining, energy, and financial sectors than all the other industry sectors combined. Increasing the triple-bottom-line results and responding to the stakeholder pressures are the major drivers behind the sustainability initiatives. Although the majority of corporations studied have a strategy or operational plan to address sustainability issues within SCM, the focus is clearly on the economic and environmental pillars of sustainability. The same is true as it applies to measuring company success and supplier performance. One in two corporations requires a standard from suppliers for SSCM, with the codes of conduct being the most prominent standard. Although collaboration between supply chain partners is becoming increasingly important, it is still heavily oriented towards upstream in supply chain. Further, SSCM governance practices remain peripheral amongst Canadian corporations. This is an impediment to addressing accountability within supply chain, which constitutes a major barrier, amongst others. Finally, corporations' future priority areas in SSCM centre on increased collaboration and education, performance measurement, and supplier audits and monitoring.

Limitations and Areas for Further Research

Although the research design utilized between-methods triangulation to strengthen data collection and analysis, we acknowledge some limitations to this study. First, as noted in section 'Discussions', communicating corporate sustainability initiatives through CSDRs is a voluntary practice for Canadian corporations, with the exception of limited requirements for corporations in the financial services industry. Therefore, corporations are likely to not report on activities that may damage their reputation (Gray et al. 1995). In an effort to enhance reputation and gain legitimacy, corporations can engage in decoupling formal structures, therefore, portraying superficial appearances

(Fasterling 2012), on the criteria examined for the study. Similarly, there may well be discrepancies between the reported sustainability initiatives and what is actually implemented (Kolk 2003). Inclusion of other written communication—e.g. business magazines and papers, NGO reports, and other web databases—can alleviate this issue and present opportunities for future research.

Second, notwithstanding the richness of the insight gained from the expert interviews representing 16 large Canadian corporations, the inclusion of other, small and medium-sized enterprises (SMEs) in the interviews would enhance the data construction and yield additional insights. Similarly, conducting surveys with not only the corporate experts but also the organization and industry-specific stakeholders—e.g. employees, NGOs, and local community members—would provide a more holistic perspective on corporate SSCM practices and issues.

Third, as a well-established rule with case studies, generalizing the findings and, therefore, analysis of this Canadian case study to other countries is limited. As stated in sections 'Research objective and related questions' and 'Methodology', this is due to Canada's institutional and contextual peculiarities. This limitation, however, presents ample opportunities for future research in investigating how corporate SSCM practices differ across countries or institutional settings. Such comparative analyses would provide additional insights for corporations, other supply chain partners, and policy makers on a global scheme.

It is clear that many challenges in integrating sustainability into supply chain management remain. First, additional research is necessary in three key areas: (1) explore approaches to integrate all three pillars of sustainability into supply chain management, (2) develop performance measurement systems for SSCM, and (3) refine sustainability reporting practices with respect to supply chain management. Further, future research must go beyond studying these three areas separately and focus must move towards a more integrated approach. Second, new approaches are needed on linking knowledge to action for SSCM practices. Thus, it is imperative to make knowledge available to supply chain partners, such as corporations, industry practitioners, and customers, through a number of initiatives to further facilitate the integration of all three dimensions of sustainability into supply chain management.

Acknowledgments Funding for this project was provided by the Canadian Purchasing Research Foundation (CPRF) and Natural Sciences and Engineering Research Council of Canada (NSERC). The authors would like to thank the funding agencies and all of the experts who participated in the interview process. Without their contributions, completion of this study would not have been possible. An earlier draft of the content analysis was presented at the Eight International Symposium on Supply Chain Management, September 26–28 in Toronto, Canada.

References

- Adams, J. S., Tschian, A., & Shore, T. (2001). Codes of ethics as signals for ethical behaviour. *Journal of Business Ethics*, 29(3), 199–211.
- Aguilera, R. V., & Jackson, T. (2003). The cross-national diversity of corporate governance: Dimensions and determinants. *Academy of Management Review*, 28(3), 447–466.
- Aguilera-Caracuel, J., Aragón-Correa, J. A., Hurtado-Torres, N. E., & Rugman, A. M. (2012). The effects of institutional distance and headquarters' financial performance on the generation of environmental standards in multinational companies. *Journal of Business Ethics*, 29(3), 199–211.
- Akyuz, G. A., & Erkan, T. E. (2010). Supply chain performance measurement: A literature review. *International Journal of Production Research*, 48(17), 5137–5155.
- Alvarez, G., Pilbeam, C., & Wilding, R. (2010). Nestlé Nespresso AAA sustainable quality program: An investigation into the governance dynamics in a multi-stakeholder supply chain network. *Supply Chain Management: An International Journal*, 15(2), 165–182.
- Ardichvili, A., Kowske, B., Cornachione, E., Li, J., & Thakadipuram, T. (2012). Ethical cultures in large business organizations in Brazil, Russia, India, and China. *Journal of Business Ethics*, 105(4), 415–428.
- Attaran, M., & Attaran, S. (2007). Collaborative supply chain management: The most promising practice for building efficient and sustainable supply chains. *Business Process Management Journal*, 13(3), 390–404.
- Awaisheh, A., & Klassen, R. D. (2010). The impact of supply chain structure on the use of supplier socially responsible practices. *International Journal of Operations & Production Management [Online]*, 30(12), 1246–1268.
- Baboulet, O., & Lenzen, M. (2010). Evaluating the environmental performance of a university. *Journal of Cleaner Production*, 18(12), 1134–1141.
- Bai, C., & Sarkis, J. (2010). Integrating sustainability into supplier selection with grey system and rough set methodologies. *International Journal of Production Economics*, 124(1), 252–264.
- Balakrishnan, A., & Geunes, J. (2004). Collaboration and coordination in supply chain management and e-commerce. *Production and Operations Management*, 13(1), 1–2.
- Ball, A., & Craig, R. (2010). Using neo-institutionalism to advance social and environmental accounting. *Critical Perspectives on Accounting*, 21(4), 283–293.
- Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. *Academy of Management Journal*, 43(4), 717–736.
- Barney, J. B. (1991). The resource based view of strategy: Origins, implications, and prospects. *Editor of Special Theory Forum in Journal of Management*, 17, 97–211.
- Bartley, T. (2003). Certifying forests and factories: States, social movements, and the rise of private regulation in the apparel and forest products fields. *Politics and Society*, 31(3), 433–464.
- Baur, D., & Schmitz, H. P. (2012). Corporations and NGOs: When accountability leads to co-optation. *Journal of Business Ethics*, 106(1), 9–21.
- Beske, P., Koplin, J., & Seuring, S. (2008). The use of environmental and social standards by German first-tier suppliers of the Volkswagen AG. *Corporate Social Responsibility and Environmental Management*, 15(2), 63–75.
- Bhagwat, R., & Sharma, M. (2009). An application of the integrated AHP-PGP model for performance measurement of supply chain management. *Production Planning and Control*, 20(8), 678–690.
- Björklund, M. (2011). Influence from the business environment on environmental purchasing: Drivers and hinders of purchasing green transportation services. *Journal of Purchasing and Supply Management*, 17, 11–22.
- Blowfield, M., & Dolan, C. (2010). Outsourcing governance: Fairtrade's message for C21 global governance. *Corporate Governance*, 10(4), 484–499.
- Bondy, K., Matten, D., & Moon, J. (2008). Multinational corporation codes of conduct: Governance tools for corporate social responsibility? *Corporate Governance*, 16(4), 294–311.
- Bowen, F. E., Cousins, P. D., Lamming, R. C., & Faruk, A. C. (2001). The role of supply management capabilities in green supply. *Production and Operations Management*, 10(2), 174–189.
- Brown, H. S., de Jong, M., & Levy, D. L. (2009). Building institutions based on information disclosure: Lessons from GRI's sustainability reporting. *Journal of Cleaner Production*, 17(6), 571–580.
- Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3), 946–967.
- Cao, M., & Zhang, Q. (2010). Supply chain collaborative advantage: A firm's perspective. *International Journal of Production Economics*, 128(1), 358–367.
- Carr, A. S., & Pearson, J. N. (1999). Strategically managed buyer–supplier relationships and performance outcomes. *Journal of Operations Management*, 17(5), 497–519.
- Carter, C. R. (2000). Ethical issues in international buyer–supplier relationships: A dyadic examination. *Journal of Operations Management*, 18(2), 191–208.
- Carter, C. R., & Easton, P. L. (2011). Sustainable supply chain management: Evolution and future directions. *International Journal of Physical Distribution & Logistics Management*, 41(1), 46–62.
- Carter, C. R., & Jennings, M. M. (2002). Social responsibility and supply chain relationships. *Transportation Research Part E: Logistics and Transportation Review*, 38(1), 37–52.
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: Moving toward new theory. *International Journal of Physical Distribution & Logistics Management*, 38(5), 360–387.
- Castka, P., & Balzarova, M. A. (2007). ISO 26000 and supply chains: On the diffusion of the social responsibility standard. *International Journal of Production Economics*, 111(2), 274–286.
- Chae, B. (2009). Developing key performance indicators for supply chain: an industry perspective. *Supply Chain Management*, 14(6), 422–428.
- Chen, C. C. (2005). Incorporating green purchasing into the frame of ISO 14000. *Journal of Cleaner Production*, 13(9), 927–933.
- Cheung, M., & Myers, M. B. (2008). Managing knowledge sharing networks in global supply chains. *International Journal of Management and Decision Making*, 9(6), 581–599.
- Chia, A., Goh, M., & Hum, S. (2009). Performance measurement in supply chain entities: balanced scorecard perspective. *Benchmarking*, 16(5), 605–620.
- Chien, M. K., & Shih, L. H. (2007). An empirical study of the implementation of green supply chain management practices in the electrical and electronic industry and their relation to organizational performances. *International Journal of Environmental Science and Technology*, 4(3), 383–394.
- Ciliberti, F., Groot, G. d., Haan, J. d., & Pontrandolfo, P. (2009). Codes to coordinate supply chains: SMEs' experiences with SA8000. *Supply Chain Management: An International Journal*, 14(2), 117–127.
- Ciliberti, F., Pontrandolfo, P., & Scozzi, B. (2008). Logistics social responsibility: Standard adoption and practices in Italian companies. *International Journal of Production Economics*, 113(1), 88–106.

- Cousins, P. D., Lamming, R. C., & Bowen, F. (2004). The role of risk in environment-related supplier initiatives. *International Journal of Operations & Production Management*, 24(5/6), 554–565.
- Cousins, P. D., & Menguc, B. (2005). The implications of socialization and integration in supply chain management. *Journal of Operations Management*, 24(5), 604–620.
- Cowper-Smith, A., & de Grosbois, D. (2011). The adoption of corporate social responsibility practices in the airline industry. *Journal of Sustainable Tourism*, 19(1), 59–77.
- Dahan, N. M., Doh, J. P., & Teegen, H. (2010). Role of nongovernmental organizations in the business–government–society interface, introductory essay by guest editors. *Business & Society*, 49(1), 20–34.
- Darnall, N., Jolley, G. J., & Handfield, R. (2008). Environmental management systems and green supply chain management: Complements for sustainability? *Business Strategy and the Environment*, 17(1), 30–45.
- Daugherty, P. J., Chen, H., Roath, A. S., Richey, R. G., Min, S., Arndt, A. D., et al. (2005). Supply chain collaboration: What's happening? *The International Journal of Logistics Management*, 16(2), 237–256.
- Daugherty, P. J., Myers, M. B., & Richey, R. G. (2002). Information support for reverse logistics: The influence of relationship commitment. *Journal of Business Logistics*, 23(1), 85–106.
- Deakin, E. (2002). Sustainable transportation U.S. dilemmas and European experiences. *Transportation Research Record*, 1792(1), 1–11.
- Deegan, C., & Gordon, B. (1996). A study of the environmental disclosure practices of Australian corporations. *Accounting and Business Research*, 26(3), 187–199.
- Delmas, M. A. (2002). The diffusion of environmental management standards in Europe and the United States: An institutional perspective. *Policy Sciences*, 35(1), 91–119.
- Delmas, M., & Blass, V. D. (2010). Measuring corporate environmental performance: The trade-offs of sustainability ratings. *Business Strategy and the Environment*, 19(4), 245–260.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- Donaldson, L. (2001). *The contingency theory of organizations*. London: SAGE.
- Donaldson, T., & Preston, L. (1995). The stakeholder theory of the modern corporation: Concepts, evidence and implications. *Academy of Management Review*, 20, 65–91.
- Drumwright, M. E. (1994). Socially responsible organizational buying: Environmental concern as a noneconomic buying criterion. *Journal of Marketing*, 58(1), 1–19.
- Dunham, L., Freeman, R. E., & Leidtka, J. (2006). Enhancing stakeholder practice: A particularized exploration of community. *Business Ethics Quarterly*, 16(1), 23–42.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141.
- Elkington, J. (1998). *Cannibals with forks: The triple bottom line of the 21st century*. Stony Creek: New Society Publishers.
- Emberson, C., & Storey, J. (2006). Buyer–supplier collaborative relationships: Beyond the normative accounts. *Journal of Purchasing and Supply Management*, 12(5), 236–245.
- Esrock, S. L., & Leichty, G. B. (1998). Social responsibility and corporate web pages: Self-presentations or agenda-setting? *Public Relations Review*, 24(3), 305–319.
- Facanha, C., & Horvath, A. (2005). Environmental assessment of logistics outsourcing. *Journal of Management in Engineering*, 21(1), 27–37.
- Fasterling, B. (2012). Development of norms through compliance disclosure. *Journal of Business Ethics*, 106(1), 73–87.
- Fawcett, S. E., Magnan, G. M., & Fawcett, A. M. (2010). Mitigating resisting forces to achieve the collaboration-enabled supply chain. *Benchmarking: An International Journal*, 17(2), 269–293.
- Feitelson, E. (2002). Introducing environmental equity dimensions into the sustainable transport discourse: Issues and pitfalls. *Transportation Research Part D*, 7(2), 99–118.
- Fiedler, F. E. (1971). Validation and extension of the contingency model of leadership effectiveness: A review of empirical findings. *Psychological Bulletin*, 76(2), 128–148.
- Fink, A. (2005). *Conducting research literature reviews*. Thousand Oaks: SAGE.
- Flick, U. (2007). *Managing quality in qualitative research*. London: SAGE.
- Fligstein, N., & Freeland, R. (1995). Theoretical and comparative perspectives on corporate organization. *Annual Review of Sociology*, 21(1), 21–43.
- Foerstl, K., Reuter, C., Hartmann, E., & Blome, C. (2010). Managing supplier sustainability risks in a dynamically changing environment—sustainable supplier management in the chemical industry. *Journal of Purchasing and Supply Management*, 16(2), 118–130.
- Font, X., Tapper, R., Schwartz, K., & Kornilaki, M. (2008). Sustainable supply chain management in tourism. *Business Strategy and the Environment*, 17(4), 260–271.
- Foran, B., Lenzen, M., Dey, C., & Bilek, M. (2005). Integrating sustainable chain management with triple bottom line accounting. *Ecological Economics*, 52(2), 143–157.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). *Stakeholder theory: The state of the art*. Cambridge: Cambridge University Press.
- Garriga, E., & Mele, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics*, 53(1), 51–71.
- Gereffi, G. (2001). Shifting governance structures in global commodity chains, with special reference to the internet. *American Behavioral Scientist*, 44(10), 1616–1637.
- Ghosh, A., & Fedorowicz, J. (2008). The role of trust in supply chain governance. *Business Process Management Journal*, 14(4), 453–470.
- Gildia, R. L. (1995). Consumer survey confirms corporate social responsibility affects buying decisions. *Public Relations Quarterly*, 39(4), 20–21.
- Gold, S., Seuring, S., & Beske, P. (2010). Sustainable supply chain management and inter-organizational resources: A literature review. *Corporate Social Responsibility and Environmental Management*, 17(4), 230–245.
- Government of Canada. (2012). Sustainable development (SD). Retrieved Accessed March 29, 2012 from <http://www.international.gc.ca/enviro/sustainable-durable/index.aspx?view=d>.
- Gray, R. (2010). Is accounting for sustainability actually accounting for sustainability and how would we know? An exploration of narratives of organizations and the planet. *Accounting, Organizations and Society*, 35(1), 47–62.
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing and Accountability Journal*, 8(2), 47–77.
- Green, K., Morton, B., & New, S. (1996). Purchasing and environmental management: Interaction, policies and opportunities. *Business Strategy and the Environment*, 5(3), 188–197.
- Guler, I., Guillén, M., & MacPherson, J. M. (2002). Global competition, institutions and the diffusion of organizational practices: The international spread of the ISO 9000 quality certificates. *Administrative Science Quarterly*, 47(2), 207–232.

- Handfield, R. B., Walton, S. V., Seegers, L. K., & Melnyk, S. A. (1997). Green value chain practices in the furniture industry. *Journal of Operations Management*, 15(4), 293–315.
- Hervani, A. A., Helms, M. M., & Sarkis, J. (2005). Performance measurement for green supply chain management. *Benchmarking: An International Journal*, 12(4), 330–353.
- Hillenbrand, C., Money, K., & Pavelin, S. (2012). Stakeholder-defined corporate responsibility for a pre-credit-crunch financial service company: Lessons for how good reputations are won and lost. *Journal of Business Ethics*, 105(3), 337–356.
- Hoyt, J., & Huq, F. (2000). From arms-length to collaborative relationships in the supply chain. *International Journal of Physical Distribution & Logistics Management*, 30(9), 750–764.
- Huang, C. (2010). Corporate governance, corporate social responsibility and corporate performance. *Journal of Management & Organization*, 16(5), 641–655.
- Hutchins, M. J., & Sutherland, J. W. (2008). An exploration of measures of social sustainability and their application to supply chain decisions. *Journal of Cleaner Production*, 16(15), 1688–1698.
- Isaksson, R., & Steimle, U. (2009). What does GRI-reporting tell us about corporate sustainability? *The TQM Journal*, 21(2), 168–181.
- Jiang, B. (2009). Implementing supplier codes of conduct in global supply chains: Process explanations from theoretic and empirical perspectives. *Journal of Business Ethics*, 85(1), 77–92.
- Jo, H., & Harjoto, M. A. (2012). The causal effect of corporate governance on corporate social responsibility. *Journal of Business Ethics*, 106(1), 53–72.
- Kaptein, M. (2004). Business codes of multinational firms: What do they say? *Journal of Business Ethics*, 50(1), 13–31.
- Karen, P. (2008). Corporate sustainability, citizenship and social responsibility reporting: A website study of 100 model corporations. *The Journal of Corporate Citizenship*, 32, 63–78.
- Kast, F., & Rosenzweig, J. (1973). *Contingency views of organization and management*. Chicago: Science Research Associates.
- Kimerling, J. (2001). Corporate ethics in the era of globalization: The promise and peril of international environmental standards. *Journal of Agricultural and Environmental Ethics*, 14(4), 425–455.
- Kolk, A. (2003). Trends in sustainability reporting by the fortune global 250. *Business Strategy and the Environment*, 12(5), 279–291.
- Konefal, J., Mascarenhas, M., & Hatanaka, M. (2005). Governance in the global agro-food system: Backlighting the role of transnational supermarket chains. *Agriculture and Human Values*, 22(3), 291–302.
- Koplin, J., Seuring, S., & Mesterharm, M. (2007). Incorporating sustainability into supply management in the automotive industry—the case of the Volkswagen AG. *Journal of Cleaner Production*, 15(11–12), 1053–1062.
- Krause, D., Handfield, R., & Tyler, B. (2007). The relationship between supplier development, commitment, social capital accumulation and performance improvement. *Journal of Operations Management*, 25(2), 528–545.
- Krippendorff, K. (2004). *Content analysis: An introduction to its methodology*. Thousand Oaks: SAGE.
- Kvale, S. (2007). *Doing Interviews*. Thousand Oaks: SAGE.
- Large, R. O., & Gimenez Thomsen, C. (2011). Drivers of green supply management performance: Evidence from Germany. *Journal of Purchasing and Supply Management*, 17(3), 176.
- Lawrence, P. R., & Lorsch, J. W. (1967). *Organization and environment*. Cambridge: Harvard University Press.
- Line, M., Hawley, H., & Krut, R. (2002). The development of global environmental and social reporting. *Corporate Environmental Strategy*, 9, 69–78.
- Linton, J. D., Klassen, R., & Jayaraman, V. (2007). Sustainable supply chains: An introduction. *Journal of Operations Management*, 25(6), 1075–1082.
- Lu, H., Cushing, K. K., & McGray, H. (2005). Understanding ISO 14001 adoption and implementation in China. *International Journal of Environment and Sustainable Development*, 4(3), 246–268.
- Maignan, I. (2001). Consumers perceptions of corporate social responsibilities: A cross-cultural comparison. *Journal of Business Ethics*, 30(1), 57–72.
- Maignan, I., Hillebrand, B., & McAlister, D. (2002). Managing socially-responsible buying: How to integrate non-economic criteria into the purchasing process. *European Management Journal*, 20(6), 641–648.
- Maignan, I., & Ralston, D. A. (2002). Corporate social responsibility in Europe and the U.S.: Insights from businesses self-presentations. *Journal of International Business Studies*, 33(3), 497–514.
- Maloni, M. J., & Brown, M. E. (2006). Corporate social responsibility in the supply chain: An application in the food industry. *Journal of Business Ethics*, 68(1), 35–52.
- Martinelli, A., & Midttun, A. (2010). Globalization and governance for sustainability. *Corporate Governance*, 10(1), 6–17.
- Matos, S., & Hall, J. (2007). Integrating sustainable development in the supply chain: The case of life cycle assessment in oil and gas and agricultural biotechnology. *Journal of Operations Management*, 25(6), 1083–1102.
- Matten, D., & Moon, J. (2008). “Implicit” and “explicit” CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424.
- Matthews, D. H. (2003). Environmental management systems for internal corporate environmental benchmarking. *Benchmarking: An International Journal*, 10(2), 95–106.
- McIntosh, M. (2004). *Raising a ladder to the moon. The complexities of corporate social and environmental responsibilities*. New York: Palgrave Macmillan.
- Meixell, M. J., & Gargeya, V. B. (2005). Global supply chain design: A literature review and critique. *Transportation Research. Part E, Logistics & Transportation Review*, 41E(6), 531–550.
- Melnyk, S. A., Sroufe, R. P., & Calantone, R. (2003). Assessing the impact of environmental management systems on corporate and environmental performance. *Journal of Operations Management*, 21(3), 329–351.
- Meyer, J. W. (2000). Globalization: Sources and effects on national states and societies. *International Sociology*, 15, 233–248.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations. *American Journal of Sociology*, 83, 340–363.
- Michelsen, O., Fet, A. M., & Dahlsrud, A. (2006). Eco-efficiency in extended supply chains: A case study of furniture production. *Journal of Environmental Management*, 79(3), 290–297.
- Miles, M. P., & Munilla, L. S. (2004). The potential impact of social accountability certification on marketing: A short note. *Journal of Business Ethics*, 50(1), 1–11.
- Mintcheva, V. (2005). Indicators for environmental policy integration in the food supply chain (the case of the tomato ketchup supply chain and the integrated product policy). *Journal of Cleaner Production*, 13(7), 717–731.
- Morali, O., & Searcy, C. (2010a). Sustainable supply chain management in canadian corporations: A pilot content analysis. In *Proceedings of the eight annual symposium on supply chain management*, Toronto, Ontario, Canada, September 2010.
- Morali, O., & Searcy, C. (2010b). Building sustainability into supply chain management: A research agenda. In *Proceedings of the 1st annual international symposium on green supply chains*, Akron-Canton, OH, USA.

- Morrow, D., & Rondinelli, D. (2002). Adopting corporate environmental management systems: Motivations and results of ISO 14001 and EMAS certification. *European Management Journal*, 20(2), 159–171.
- Mueller, M., Dos Santos, V. G., & Seuring, S. (2009). The contribution of environmental and social standards towards ensuring legitimacy in supply chain governance. *Journal of Business Ethics*, 89(4), 509–523.
- Murphy, P. R., & Poist, R. F. (2002). Socially responsible logistics: An exploratory study. *Transportation Journal*, 41(4), 23–35.
- Nadvi, K. (2008). Global standards, global governance and the organization of global value chains. *Journal of Economic Geography*, 8(3), 323–343.
- Nawrocka, D., & Parker, T. (2009). Finding the connection: Environmental management systems and environmental performance. *Journal of Cleaner Production*, 17(6), 601–607.
- Noci, G. (1997). Designing “Green” vendor rating systems for the assessment of the supplier’s environmental performance. *European Journal of Purchasing and Supply Management*, 3, 103–114.
- Nyaga, G. N., Whipple, J. M., & Lynch, D. F. (2010). Examining supply chain relationships: Do buyer and supplier perspectives on collaborative relationships differ? *Journal of Operations Management*, 28(2), 101–114.
- Okhmatovskiy, I., & David, R. J. (2012). Setting your own standards: Internal corporate governance codes as a response to institutional pressure. *Organization Science*, 23(1), 155–176.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(191), 145–179.
- Organization for Economic Co-operation and Development (OECD). (2011). Canada and the OECD, 50 years of progress—OECD Observer special focus. Retrieved November 18, 2011 from http://www.oecd.org/document/40/0,3746,en_33873108_33873277_48226216_1_1_1_1,00.html.
- Pagell, M., & Wu, Z. (2009). Building a more complete theory of sustainable supply chain management using case studies of 10 exemplars. *Journal of Supply Chain Management*, 45(2), 37–56.
- Pagell, M., Yang, C., Krumwiede, D. K., & Sheu, C. (2004). Does the competitive environment influence the efficacy of investments in environmental management? *Journal of Supply Chain Management*, 40(3), 30–39.
- Paloviita, A., & Luoma-aho, V. (2010). Recognizing definitive stakeholders in corporate environmental management. *Management Research Review*, 33(4), 306–316.
- Parliament of Canada. (2012). Retrieved March 29, 2012 from http://www.parl.gc.ca/About/Senate/Monarchy/SenMonarchy_00-e.htm.
- Pearson, R., & Seyfang, G. (2001). New hope or false dawn? Voluntary codes of conduct, labour regulation and social policy in a globalizing world. *Global Social Policy*, 1(1), 49–78.
- Perrini, F. (2005). Building a European portrait of corporate social responsibility reporting. *European Management Journal*, 23(6), 611–627.
- Pfeffer, J., & Salancik, G. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Pinske, J., & Kolk, A. (2012). Addressing the climate change—sustainable development nexus: The role of multistakeholder partnerships. *Business & Society*, 51(1), 176–210.
- Pollach, I. (2003). Communicating corporate ethics on the world wide web. A discourse analysis of selected company web sites. *Business & Society*, 42(2), 277–287.
- Preuss, L. (2000). Should you buy your customer’s values? On the transfer of moral values in industrial purchasing. *International Journal of Value-Based Management*, 13(2), 141–158.
- Preuss, L. (2005). Rhetoric and reality of corporate greening: A view from the supply chain management function. *Business Strategy and the Environment*, 14(2), 123–139.
- Pullman, M. E., & Dillard, J. (2010). Values based supply chain management and emergent organizational structures. *International Journal of Operations & Production Management*, 30(7), 744–771.
- Rasheed, H. S., & Geiger, S. W. (2001). Determinants of governance structure for the electronic value chain: Resource dependency and transaction costs perspectives. *Journal of Business Strategies*, 18(2), 159.
- Reuter, C., Foerstl, K., Hartmann, E., & Blome, C. (2010). Sustainable global supplier management: The role of dynamic capabilities in achieving competitive advantage. *Journal of Supply Chain Management*, 46(2), 45–63.
- Roberts, S. (2003). Supply chain specific? Understanding the patchy success of ethical sourcing initiatives. *Journal of Business Ethics*, 44(2), 159–170.
- Roca, L. C., & Searcy, C. (2012). An analysis of indicators disclosed in corporate sustainability reports. *Journal of Cleaner Production*, 20(1), 103–118.
- Rodríguez-Díaz, M., & Espino-Rodríguez, T. M. (2006). Redesigning the supply chain: Reengineering, outsourcing, and relational capabilities. *Business Process Management Journal*, 12(4), 483–502.
- Rosen, C. M., Beckman, S. L., & Bercovitz, J. (2002). The role of voluntary industry standards in environmental supply-chain management: An institutional economics perspective. *Journal of Industrial Ecology*, 6(3), 103.
- Rowlinson, M. (2004). Challenging the foundations of organization theory. *Work Employment Society*, 18(3), 607–620.
- Salam, M. A. (2009). Corporate social responsibility in purchasing and supply chain. *Journal of Business Ethics*, 85(2), 355–370.
- Sarkar, A., & Mohapatra, P. K. J. (2006). Evaluation of supplier capability and performance: A method for supply base reduction. *Journal of Purchasing and Supply Management*, 12(3), 148–163.
- Sarkis, J. (1995a). Manufacturing strategy and environmental consciousness. *Technovation*, 15(2), 79–97.
- Sarkis, J. (1995b). Supply chain management and environmentally conscious design and manufacturing. *International Journal of Environmentally Conscious Design and Manufacturing*, 4, 43–52.
- Sarkis, J. (2001). Manufacturing’s role in corporate environmental sustainability: Concerns for the new millennium. *International Journal of Operations & Production Management*, 21(5/6), 666–686.
- Sarkis, J. (2009). Convincing industry that there is value in environmentally supply chains. *Problems of Sustainable Development*, 4(1), 61–64.
- Sarkis, J., Gonzalez-Torre, P., & Adenso-Diaz, B. (2010). Stakeholder pressure and the adoption of environmental practices: The mediating effect of training. *Journal of Operations Management*, 28(2), 163–176.
- Sarkis, J., Zhu, Q., & Lai, K. (2011). An organizational theoretic review of green supply chain management literature. *International Journal of Production Economics*, 130(1), 1–15.
- Schneider, J. L., Wilson, A., & Rosenbeck, J. M. (2010). Pharmaceutical companies and sustainability: An analysis of corporate reporting. *Benchmarking: An International Journal*, 17(3), 421–434.
- Scott, W. R. (1987). The adolescence of institutional theory. *Administrative Science Quarterly*, 32(4), 493.
- Searcy, C., Karapetrovic, S., & McCartney, D. (2008). Identifying priorities for action in corporate sustainable development indicator programs. *Business Strategy and the Environment*, 17(2), 137–148.
- Seuring, S., & Muller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of Cleaner Production*, 16(15), 1699–1710.

- Seuring, S., & Müller, M. (2008). Core issues in sustainable supply chain management—a Delphi study. *Business Strategy and the Environment*, 17(8), 455–466.
- Seyfang, G. (2006). Ecological citizenship and sustainable consumption: Examining local organic food networks. *Journal of Rural Studies*, 22(4), 383–395.
- Shang, K. C., Lu, C.-S., & Li, S. (2010). A taxonomy of green supply chain management capability among electronics-related manufacturing firms in Taiwan. *Journal of Environmental Management*, 91(5), 1218–1226.
- Sharfman, M. P., Shaft, T. M., & Anex, R. P., Jr. (2009). The road to cooperative supply-chain environmental management: Trust and uncertainty among pro-active firms. *Business Strategy and the Environment*, 18(1), 1–13.
- Shaw, S., Grant, D. B., & Mangan, J. (2010). Developing environmental supply chain performance measures. *Benchmarking: An International Journal*, 17(3), 320–339.
- Sloan, T. W. (2010). Measuring the sustainability of global supply chains: Current practices and future directions. *Journal of Global Business Management*, 6(1), 1–16.
- Sodhi, M., & Son, B. G. (2009). Supply chain partnership performance. *Transportation Research Part E: Logistics and Transportation Review*, 45(6), 937–945.
- Spekman, R. E., Kamauff, J. W., Jr, & Myhr, N. (1998). An empirical investigation into supply chain management: A perspective on partnerships. *Supply Chain Management: An International Journal*, 3(2), 53–67.
- Steurer, R., & Konrad, A. (2008). Business–society relations in Central-Eastern and Western Europe: How those who lead in sustainability reporting bridge the gap in corporate (social) responsibility. *Scandinavian Journal of Management*, 25(1), 23–36.
- Steurer, R., Langer, M. E., Konrad, A., & Martunizzi, A. (2005). Corporations, stakeholders, and sustainable development 1: A theoretical explanation of business–society relations. *Journal of Business Ethics*, 61(3), 263–281.
- Storey, J., Emberson, C., Godsell, J., & Harrison, A. (2006). Supply chain management: Theory, practice and future challenges. *International Journal of Operations & Production Management*, 26(7), 754–774.
- Svensson, G. (2007). Aspects of sustainable supply chain management (SSCM): Conceptual framework and empirical example. *Supply Chain Management: An International Journal*, 12(4), 262–266.
- Tallontire, A., Opondo, M., Nelson, V., & Martin, A. (2011). Beyond the vertical? Using value chains and governance as a framework to analyse private standards initiatives in agri-food chains. *Agriculture and Human Values*, 28(3), 427–441.
- Tate, W. L., Ellram, L. M., & Kirchoff, J. F. (2010). Corporate social responsibility reports: A thematic analysis related to supply chain management. *Journal of Supply Chain Management*, 46(1), 19–44.
- Teuscher, P., Gruninger, B., & Ferdinand, N. (2006). Risk management in sustainable supply chain management (SSCM): Lessons learnt from the case of GMO-free soybeans. *Corporate Social Responsibility and Environmental Management*, 13(1), 1–10.
- Trowbridge, P. (2001). A case study of green supply-chain management at advanced micro devices. *Greener Management International*, 35, 121.
- Tsoufas, G. T., & Pappis, C. P. (2006). Environmental principles applicable to supply chains design and operation. *Journal of Cleaner Production*, 14(18), 1593–1602.
- Ulrich, D., & Barney, J. B. (1984). Perspectives in organizations: Resource dependence, efficiency, and population. *Academy of Management Review*, 9(3), 471–481.
- United Nations Conference on Sustainable Development (UNCSD). (2012). Canada's national submission to Rio + 20. Retrieved March 29, 2012 from <http://www.uncsd2012.org/rio20/index.php?page=view&type=510&nr=33&menu=20>.
- Vachon, S., & Klassen, R. (2006a). Green project partnership in the supply chain: The case of the package printing industry. *Journal of Cleaner Production*, 14(6–7), 661–671. (special issue).
- Vachon, S., & Klassen, R. D. (2006b). Extending green practices across the supply chain. *International Journal of Operations & Production Management*, 26(7), 795–821.
- van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics*, 44(2), 95–105.
- van Tulder, R. (2010). The collaborative paradigm: Dealing with the increasing role of partnerships in sustainable development. Working Paper Series, 001 (The Partnerships Resource Centre, Rotterdam) 1–14. Retrieved November 26, 2011 from <http://www.partnershipsresourcecentre.org/>.
- van Tulder, R., van Wijk, J., & Kolk, A. (2009). From chain liability to chain responsibility. *Journal of Business Ethics*, 85(2), 399–412.
- Veleva, V., Hart, M., Greiner, T., & Crumbley, C. (2003). Indicators for measuring environmental sustainability: A case study of the pharmaceutical industry. *Benchmarking*, 10(2), 107–119.
- Vermeulen, W. J. V. (2010). Sustainable supply chain governance systems: Conditions for effective market based governance in global trade. *Progress in Industrial Ecology, An International Journal*, 7(2), 138.
- Vermeulen, W. J. V., & Seuring, S. (2009). Sustainability through the market—the impacts of sustainable supply chain management: Introduction. *Sustainable Development*, 17(5), 269–273.
- Vurro, C., Russo, A., & Perrini, F. (2009). Shaping sustainable value chains: Network determinants of supply chain governance models. *Journal of Business Ethics*, 90(4), 607–621.
- Walker, H., Di Sisto, L., & McBain, D. (2008). Drivers and barriers to environmental supply chain management practices: Lessons from the public and private sectors. *Journal of Purchasing and Supply Management*, 14(1), 69–85.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171–180.
- Whitehouse, L. (2003). Corporate social responsibility, corporate citizenship and the global compact. A new approach to regulating corporate social power? *Global Social Policy*, 3(3), 299–318.
- World Commission on Environment and Development. (1987). *Our common future*. New York: Oxford University Press.
- World Economic Forum (WEF). (2010). The global enabling trade report 2010. Retrieved December 1, 2011 from http://www3.weforum.org/docs/WEF_GlobalEnablingTrade_Report_2010.pdf.
- Yakoleva, N. (2007). Measuring the sustainability of the food supply chain: A case study of the UK. *Journal of Environmental Policy & Planning*, 9(1), 75–100.
- Yin, R. K. (2010). *Case study research: Design and method* (4th ed.). Thousand Oaks: SAGE.
- Zhu, Q., Geng, Y., Fujita, T., & Hashimoto, S. (2010a). Green supply chain management in leading manufacturers. *Management Research Review*, 33(4), 380–392.
- Zhu, Q., Geng, Y., & Lai, K. H. (2010b). Circular economy practices among Chinese manufacturers varying in environmental-oriented supply chain cooperation and the performance implications. *Journal of Environmental Management*, 91(6), 1324–1331.
- Zhu, Q., & Sarkis, J. (2004). Relationships between operational practices and performance among early adopters of green supply chain management practices in Chinese manufacturing enterprises. *Journal of Operations Management*, 22(3), 265–289.

- Zhu, Q., Sarkis, J., & Lai, K. H. (2008). Green supply chain management implications for “closing the loop”. *Transportation Research Part E*, 44(1), 1–18.
- Zutshi, A., & Sohal, A. S. (2003). Stakeholder involvement in the EMS adoption process. *Business Process Management Journal*, 9(2), 133–148.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.