

# Challenges of Responsible Supply Chain Management

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## SUMMARY

*Many firms are increasing their focus on their Supply Chain as a strategic factor. This focus has primarily emphasized cost reducing and risk minimizing, although some proactive companies began to manage their supply chain in a responsible way several years ago. This paper provides a comprehensive review of the part of the Corporate Social Responsibility literature that introduces responsibility to the field of supply chain management; furthermore, it processes public documents and Internet sites of major global firms suggesting a framework to implement RSCM practices. The aim of this article is the theoretical and practical foundation of potential research in the field of Responsible Supply Chain Management.*

*Keywords: business ethics, corporate ethics, corporate social responsibility (CSR), responsible supply chain management (RSCM), Sustainable Supply Chain management (SSCM).*

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## INTRODUCTION

In recent years, companies have faced increasing challenges in their ability to manage their supply chains. Long and complex supply chains are significant parts of our global business life as a result of vertical disintegration, product proliferation, focus on core activities, multichannel set ups and global sourcing (Balasubramanian and Tewary, 2005). According to an executive, "The purchasing power of a corporation can become a unique driver for bringing about positive change in society. Companies must use this power to achieve a purpose and make their supply chain a vehicle for inclusive growth" (United Nations Global Compact, 2010, p. 15). In order to achieve this purpose companies need to manage their supply chains in a responsible way. The first part of the article introduces Supply Chain Management, Responsible Supply Chain Management and related terms.

## SUPPLY CHAIN MANAGEMENT

According to Handfield and Nichols (1999, p. 2) "the supply chain encompasses all activities associated with the flow and transformation of goods from raw materials' stage (extraction) through to the end user, as well as the associated information flows". Mentzer et al. (2001, p. 4) defined supply chain as "a set of three or more entities (organisations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and / or information from a source to a customer".

The term Supply Chain Management (SCM) appeared in the beginning of 1980s and was described from the theoretical standpoint a decade later (Cooper et al., 1997). Performance and competitiveness are key factors in supply chain management. This means the integration of the supply chain activities to achieve a sustainable competitive advantage (Handfield and Nichols, 1999). It can be defined as "the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of

improving the long-term performance of the individual companies and the supply chain as a whole" (Mentzer et al. 2001, p. 18).

In recent years, several trends have been observed in relation to the Supply Chain Management. Firstly, competition has become a high dimension; it evolved to an inter-supply-chain level so SCM has have more and more importance and it has become a central part of the strategic management process (Hult et al., 2007). Secondly, it has become clear that effective supply chain management provides the possibility to deliver increased revenue (extended markets and accelerated product/service innovation), lower costs (lower cost for materials, production, inventory, transportation, or taxes), reduced assets (leveraging outsourcing or improved asset utilization), but successful supply chain strategies require more than the traditional cost-reducing focus (Linton et al., 2007). Thirdly, more and more scholars and practitioners have thought that Supply Chain Management has to integrate responsibility into its process and has to relate to sustainability management (e.g. Linton et al., 2007; Corbett, 2009; Mueller et al., 2009; Gold et al., 2010; Closs et al., 2011).

## RESPONSIBLE SUPPLY CHAIN MANAGEMENT AS A KEY COMPONENT OF CORPORATE SOCIAL RESPONSIBILITY

Responsible Supply Chain Management (RSCM) embodies an interaction between Corporate Social Responsibility (CSR) and Supply Chain Management (SCM). A practical guide for continuous improvement of Supply Chain Sustainability emphasises that "more and more companies are extending their commitment to responsible business practices to their value chains, from subsidiaries to suppliers" and introduces supply chain sustainability as a key component of corporate responsibility (United Nations Global Compact, 2010, p. 2).

Several articles have been written over the years that examine various aspects of Responsible Supply Chain Management. There are different terms regarding this issue with similar content. The most common expressions are Responsible

Supply Chain Management and Sustainable Supply Chain Management. In literature there is no one univocal definition of Responsible Supply Chain Management. The articles show the same tendency in the field of Supply Chain Management, like articles which deals generally with Corporate Social Responsibility and Sustainable Development.

Both terms have a long history in the literature. The term sustainable development entered onto the scientific and business agenda in 1987 when the the UN Report "Our Common Future" (the Brundtland report) defined sustainable development (SD) as "Development that meets the needs of current generations without compromising the ability of future generations to meet their needs and aspirations" (WCED, 1987, p. 43).

The long history of Corporate Social Responsibility began in the 1950s, and expanded in the next decades (Carroll, 1999). Carroll's well-known definition of CSR is "The social responsibility of business encompasses the economic, legal, ethical and discretionary expectations that a society has of organizations at a given point in time." (Carroll, 1979, p. 500). In the last years the definition of CSR has become broader. CSR is "the responsibility of a company for the totality of its impact" (Chandler, 2001). According to a brief definition, "CSR is about treating all stakeholders responsibly or ethically" (Hopkins, 2011). The European Commission defined CSR as "the responsibility of enterprises for their impacts on society". (European Commission, 2011, p. 6).

Steurer et al. (2005) made clear the connections between sustainable development, corporate sustainability and corporate social responsibility. These are closely connected, but on different levels of specification. Sustainable Development can be regarded as the normative societal concept behind CS and CSR, in which Corporate Sustainability is the corporate concept and CSR as the management approach (Steurer et al., 2005).

## DEFINITION OF RESPONSIBLE SUPPLY CHAIN MANAGEMENT (RSCM)

Responsible Supply Chain Management (RSCM) emerged in the 1990s as a corporate response to human rights violations (e.g. sweat shops, child labour, forced labour, no living wage, discrimination and safety and health neglect) appearing in the supply chain (GLOBAL CSR and Copenhagen Business School, 2011).

According to the International Chamber of Commerce (2007, p. 2), "Supply chain responsibility, also referred to as responsible sourcing, can be broadly defined as a voluntary commitment by companies to manage their relationships with suppliers in a responsible way. As a result of their purchasing activities, companies may have some opportunities to influence constructively their suppliers' social and environmental performance. This can be done using several incentives, including information and training, as well as audits of suppliers' practices. Whatever mechanism is used, the most effective way to achieve sustained improvement over time is through the development of a long-term collaborative relation between corporate buyers and their suppliers, through which suppliers can internalize change by participating in the shaping of social and environmental performance objectives, based on their own perception of their business capacity and needs."

The United Nations Global Compact (2010, p. 7) refers to supply chain sustainability and defines this as "the management of environmental, social and economic impacts and the encouragement of good governance practices, throughout the lifecycles of goods and services. The objective of supply chain sustainability is to create, protect and grow long-term

environmental, social and economic value for all stakeholders involved in bringing products and serves to markets."

These definitions are quite general and leave room for many different approaches. Van Opijnen and Oldenziel (2011) emphasize the importance of the volunteering and the cooperation between companies and their suppliers and other stakeholders in the well-known definitions. In this paper we consider Responsible Supply Chain Management and Sustainable Supply Chain Management as synonymous terms.

## ADVANTAGES OF RESPONSIBLE SUPPLY CHAIN MANAGEMENT

Based on articles published in the field of Responsible Supply Chain Management (Worthington et al. 2008; Mueller et al., 2009; United Nations Global Compact, 2010; Closs et al., 2011) we summarize its main advantages:

- > Create sustainable products - Meeting evolving customer and business partner requirements and innovating for a changing market.
- > Increase legitimacy among stakeholders – Implementing CSR standard in supply chains has a positive impact on ensuring legitimacy among supply chain partners as well as towards other stakeholders.
- > Protect the company's reputation and brand value - Reputation is a very sensitive asset of companies. Reputation problems can cause competitive disadvantages, as has happened in the past in the case of some companies.
- > Minimize risks - RSCM provides the possibility to avoid social and environmental problems in pre-stages, bringing new criteria into supplier evaluation and monitoring.
- > Business benefits - In the supply chain system responsibility can increase profit through significant operational efficiency gains, reducing global waste and the cost of material inputs, energy, and transportation.
- > Enhancement of people and their communities - Commitment to acceptable global working conditions and compliance with regulatory requirements.
- > Minimize reliance on scarce environmental resources - While minimizing waste of water or raw materials, ensuring long-term global viability.
- > Improve supplier performance - This helps to build increased commitment and trust in the buyer/supplier relationship that can lead to increased labor productivity or creating efficiency across supply chains, or directly to improved levels of supplier performance.
- > Creating better conditions for small and medium-sized enterprises and firms in developing countries on key social and environmental issues.
- > Competitive advantage - If RSCM is not simply window dressing but can provide the organization with both tangible and direct benefits, which may ultimately lead to a competitive advantage for their firms.
- > Positive environmental impact - Companies protect the environment.
- > Positive social impact - Companies can promote human rights, improve labor conditions and support ethical business conduct.
- > Efficiency and profitability over the long term - Focusing on economic, social and environmental performance (profit, people, and planet) will lead to improved efficiency and profitability over the long term.
- > Support further economic development - Economic development has secondary impacts on socioeconomic

development and the environment and is therefore a critically important aspect of sustainability.

## CHALLENGES OF RESPONSIBLE SUPPLY CHAIN MANAGEMENT

Linton et al. (2007) call attention to the fact that the interaction between responsibility and the supply chain is the critical next step in the development of Corporate Social Responsibility or Corporate Sustainability. Supply Chain Management must integrate special issues and CSR or CR also must integrate new areas. The open issues are fundamentally interdisciplinary in nature, which makes them real challenges.

Companies face many challenges when trying to manage social and environmental issues in the supply chain. These include, for example, a lack of traceability of raw materials and products in the supply chain, the large number of supply chains a company may be part of, and the lack of legislation or enforcement of legislation in some of the supplier countries (International Chamber of Commerce, 2007).

Authors emphasise several problems and challenges of the RSCM (Van Opijnen, M. and Oldenziel, J. , 2011; GLOBAL CSR and Copenhagen Business School (2011 p. 10)) :

- > As each supply chain has its own specific characteristics, it is difficult to find a general approach.
- > Successful implementation of sustainable practices in supply chains depends on different actors. Many companies have thousands of suppliers. Rapid changes of suppliers erode the effectiveness of certification systems. There is no unambiguous definition of the ‘scope of responsibility’.
- > It is difficult to provide transparency with regard to the operational practices of all suppliers. Companies publish their sustainability information in many ways, including sustainability reporting, provision of information on websites, and disclosure through labelling and certification.
- > Accountancy firms may not have the necessary competences to detect all matters related to working conditions. The audit methodologies can also contribute to a failure to determine the true working conditions. Monitoring and auditing have a relatively minor actual impact on or benefit to workers and other stakeholders.
- > Mainstream RSCM Generation 1.0 approaches lead to “code mania.”
- > Traditional corporate sourcing strategies and purchasing practices are the primary impediments to ensuring adequate standards with suppliers.
- > Most Responsible Supply Chain Management approaches limit themselves to a few basic human rights.
- > SMEs are excluded from global supply chains as a result of RSCM practices.

Closs et al. (2011) described three leadership categories of implementing sustainability: Reactor, Contributor and Innovator. The Reactor’s investment decisions are primarily driven by short-term goals. These firms comply with laws and regulations, but rarely will behave proactively. Contributors apply more proactive initiatives; they focus on their own supply chain and often rely on industry or cross-industry sustainability benchmarking to identify potential initiatives for their organization. Innovator firms establish sustainability as a strategic priority and often seek best practice performance; their behavior is creative, proactive and cooperative.

## BUSINESS INTEGRATION OF CSR

The main challenge of CSR is its integration into business practice. The second part of the article introduces some possible practical approaches and methods of Responsible Supply Chain Management. According to an empirical study of Baldwin and Strandberg (2010) from Canadian Business for Social Responsibility about best CSR practices at MNCs, when companies decide to integrate CSR into their daily business the approach normally follows the upcoming sequence:

### Phase 1 - Forming

1. Identification of the desired CSR approach and its integration into the company’s mission and values
2. Management Commitment towards CSR (an agreement on CSR definition, business value of CSR and CSR policy)
3. Assignment of a committee with CSR responsibility
4. Education of the board on CSR risks and opportunities
5. Involvement of CSR issues into management decisions
6. Sensitization of staff towards enterprise risk management
7. Commitment on CSR goals, incorporation of objectives and targets into the business plan and strategy (including social and environmental considerations in risk identification)
8. CSR risk management and monitoring
9. CSR factors in major business decisions (risk, opportunities, and impacts of acquisitions, mergers, business partnerships and divestitures)
10. Regular review and disclosure of CSR performance to stakeholders
11. Review and approval of CSR reports, ensuring that CSR disclosure covers material risks and complies with CSR reporting standards.

### Phase 2 - Sophistication

1. Ensure effective CSR management systems (ensure that policies, processes and data systems exist to support CSR and that CSR guides decisions across business units and regions).
2. Incorporate CSR into the company Code of Conduct/Ethics to provide overarching guidance on the significance and role of CSR as a factor in decision-making.
3. Provide formal mechanisms for stakeholder input
4. Incorporate CSR factors into director and CEO recruitment (e.g. director diversity, values alignment and knowledge of or expertise in CSR issues/management; when recruiting a new CEO, ensure candidates are assessed for CSR competency and values alignment)
5. Reward executives for CSR performance (incorporate non-financial objectives into executive compensation. Ensure that the company’s performance management systems reward CSR performance)
6. Review the board’s own operations to identify and implement measures to align board operations with CSR (e.g. emissions from board travel, green meeting procedures, green accommodations, sustainable food services, etc.)
7. Ensure continuous improvement of CSR Governance practices
8. Incorporate CSR questions into the annual board evaluation. Conduct a peer review to identify emergent CSR governance considerations and keep abreast of best practice.

## THE WIDESPREAD FRAMEWORKS: UN GLOBAL COMPACT AND GLOBAL REPORTING INITIATIVE

UN Global Compact is the world's greatest voluntary corporate responsibility initiative, which provides corporate principles based on categories including human rights, labor, environment, and anti-corruption. According to its website this initiative has over 8,700 corporate participants and other stakeholders from over 130 countries.

*Table 1*  
*The Ten Principles (United Nations, 2012)*

Field	Principles
Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights. Principle 2: Businesses should make sure that they are not complicit in human rights abuses.
Labour Standards	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; Principle 4: Businesses should uphold the elimination of all forms of forced and compulsory labour; Principle 5: Businesses should uphold the effective abolition of child labour; and Principle 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation.
Environment	Principle 7: Businesses should support a precautionary approach to environmental challenges; Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility; and Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies.
Anti-Corruption	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Reporting leads to improved sustainable development outcomes because it allows organizations to measure, track, and improve their performance on specific issues. "The Global Reporting Initiative is the most widely used standardized sustainability reporting framework for performance on human rights, labor, environmental, anti-corruption, and other corporate citizenship issues in the world. One of its main goals is to support transparency of supply chains of large multinational buyers". The main parts of its system are as follows (GRI, 2011):

### Part 1 - Introduction

Following the framework of this initiative, companies first make a written commitment to integrate their sustainability goals into their vision and strategy. They clearly define key CSR impacts, risks and opportunities. Describe organizational profile, markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries), scale of the reporting organization, etc.

### Part 2 - Governance

This part contains the performance of the companies at several fields like economic, environmental, Labor Practices and Decent Work, Human Rights, Society and Product Responsibility.

### Performance: Economic

- > Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.
- > Financial implications and other risks and opportunities for the organization's activities due to climate change. Coverage of the organization's defined benefit plan obligations.
- > Policy, practices, and proportion of spending on locally based suppliers at significant locations of operation. Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.
- > Understanding and describing significant indirect economic impacts, including the extent of impacts.

### Performance: Environmental

- > Materials used by weight or volume. Percentage of materials used that are recycled input materials. Direct energy consumption by primary energy source. Indirect energy consumption by primary source. Energy saved due to conservation and efficiency improvements.
- > Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives. Initiatives to reduce indirect energy consumption and reductions achieved.
- > Total water withdrawal by source. Water sources significantly affected by withdrawal of water. Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas. Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas. Habitats protected or restored. Strategies, current actions, and future plans for managing impacts on biodiversity. Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk. Total direct and indirect greenhouse gas emissions by weight. Other relevant indirect greenhouse gas emissions by weight. Initiatives to reduce greenhouse gas emissions and reductions achieved. Emissions of ozone-depleting substances by weight. NO<sub>x</sub>, SO<sub>x</sub>, and other significant air emissions by type and weight.
- > Total water discharge by quality and destination. Total weight of waste by type and disposal method Total number and volume of significant spills. Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation. Percentage of products sold and their packaging materials that are reclaimed by category. Significant environmental impacts of transporting products and other goods and materials used for the organization's operations and transporting members of the workforce.

### Performance: Labor Practices and Decent Work

- > Total workforce by employment type, employment contract, and region. Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region. Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases. Average hours of training per year per employee by employee category.

- > Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.
- > Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.

#### Performance: Human Rights

- > Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken. Total number of incidents of discrimination and actions taken.
- > Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.
- > Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.
- > Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.

#### Performance: Society

- > Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.
- > Percentage of employees trained in organization's anticorruption policies and procedures. Actions taken in response to incidents of corruption.
- > Public policy positions and participation in public policy development and lobbying.
- > Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.

#### Performance: Product Responsibility

- > Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures. Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements
- > Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.

Application Levels – A, B and C – define the parts of the GRI Guidelines that have been covered in a sustainability report. They are intended to motivate reporters to enhance the quality and transparency of their reporting over time. Application Levels provide a system to objectively confirm reporters' use of GRI's Guidelines.

## ELEMENTS OF RESPONSIBLE SUPPLY CHAIN MANAGEMENT

The sustainability benchmarking provides practical information regarding Responsible Supply Chain Management. SAM Corporate Sustainability Assessment compares corporate sustainability performance of more than 2,000 companies. The Dow Jones Sustainability World Index (DJSI) was launched in 1999 as the first global sustainability benchmark and provides an effective engagement platform for companies who want to adopt sustainable best practices. As of 2012 SAM offers detailed reports of the so-called 19 supersector leaders (SAM, 2012).

According to these reports ten of the supersector leaders have an excellent performance in Supply Chain Management as well. Table 2 shows the score of the supersector leaders, DJSI average scores and the score of the best company within sectors. The reports contain several best practices in Supply Chain Management as well. Unilever extended sustainability to its raw material sourcing practices, and transparency along the whole supply chain plays an important role. Repsol introduced a comprehensive supply management process to track its suppliers' performance. The supply chain management of Koninklijke Philips Electronics N.V. fully integrates Environmental, Social and Corporate Governance criteria to identify key supply chain risks and the company collaborates with suppliers to resolve the problems. Supply Chain Management of Siemens focuses on the potential human rights abuses among further factors (SAM, 2012).

Based on the websites of supersector leaders we have collected the main elements of Responsible Supply Chain Management (Table 3). Most of the companies set special standards for their suppliers in a form of Code of Conduct, sustainability standard or supplier declaration. Companies offer workshops and training courses for their suppliers in order to make them familiar with the required norms. Further common elements of the Responsible Supply Chain Management are a supplier self assessment and supplier audit, which can be internal or external. Some of the studied companies have dialogues with their suppliers and implement special awards to improve the CSR performance of their suppliers.

## GOOD PRACTICES

According to CSR Europe the companies of HP, L'Oreal, Titan and Volkswagen play a leading role in the European CSR Laboratory on Responsible Supply Chain Management. The Portal for Responsible Supply Chain Management contains information for practitioners to further develop their own approach to Corporate Social Responsibility in the Supply Chain (CSR Europe, 2008). Based on GRI reports of these companies we have summarized some important characteristics of their supply chain management.

### *Hewlett-Packard Company (HP, 2011)*

The company is an American multinational hardware and software corporation headquartered in Palo Alto, California, United States. It provides products, technologies, software, solutions and services to consumers, small and medium-sized businesses (SMBs) and large enterprises, including customers in the government, health and education sectors.

Tools in use are external and internal audits. HP makes sure third-party auditors regularly verify its global Greenhouse gas (GHG) emissions measurements and annual reporting under the GHG measurement and reporting protocols of the World Resources Institute and World Economic Forum. Further product reuse and recycling is regularly monitored by third-party auditing firms, and 14 reuse and 39 recycling vendor facilities were assessed in 24 countries in 2011. In addition, HP's supply chain responsibility ensures that external audit firms conduct necessary verification of suppliers' self assessments. On the field of HSE the company is regularly assessed by independent accredited auditors according to ISO 14001 and Occupational Health and Safety Assessment Series (OHSAS) 18001.

As a self-regulatory function qualified HP professionals conduct internal audits of the environmental, health, and safety

management systems at its operation sites, and they report the results to senior management. Compliance and ethics, privacy, and environment, health, and safety may be evaluated, depending on the nature of the operation being audited.

HP is a signatory to the United Nations Global Compact, a

set of voluntary commitments for companies to improve human rights, labor conditions, the environment, and anti-corruption controls. HP implemented Global Reporting Initiative to enhance the quality and transparency of their reporting on CSR topics. HP self-declares this report to GRI Application Level B.

Table 2  
Supply Chain Management Scores of Supersector Leaders

Name	Super sector	Country	Supply Chain Management Score of the company DSI sector average score Best company within sector	Name	Super sector	Country	Supply Chain Management Score of the company DSI sector average score Best company within sector
Bayerische Motoren Werke AG (BMW)	Automobiles & Parts	Germany		Roche Holding AG	Health Care	Switzerland	
Australia & New Zealand Banking Group Ltd	Banks	Australia	n.a.	Siemens AG	Industrial Goods and Services	Germany	
UPM-Kymmene OYJ	Basic Resources	Finland		Swiss Re	Insurance	Switzerland	n.a.
Akzo Nobel NV	Chemicals	Netherlands		Telenet Group Holding NV	Media	Belgium	n.a.
GS Engineering & Construction Corp	Construction & Materials	South Korea		Repsol SA	Oil & Gas	Spain	n.a.
Itausa - Investimentos Itau SA	Financial Services	Brazil	n.a.	Koninklijke Philips Electronics N.V.	Personal & Household	Netherlands	
Unilever NV	Food & Beverage	Netherlands		GPT Group	Real Estate	Australia	n.a.
				Lotte Shopping Co. Ltd.	Retail	South Korea	
				Alcatel-Lucent SA	Technology	France	n.a.
				KT Corp.	Telecommunications	South Korea	
				Air France-KLM	Travel & Leisure	France	n.a.
				Iberdrola SA	Utilities	Spain	n.a.

Source: Dow Jones Sustainability Indexes, Supersector Leaders 2012

Table 3.  
Elements of Responsible Supply Chain Management

Company	BMW	UPM-Kymmene OYJ	Akzo Nobel NV	GS Engineering & Construction Corp	Unilever NV	Roche Holding AG	Siemens AG	Koninklijke Philips Electronics N.V.
Standard	Supplier Sustainability Standards	Supplier Code	Vendor Policy Declaration	n.a.	Supplier Code Standards guide for supply partners	Supplier Code of Conduct	Suppliers Code of Conduct	Supply Management Code of Ethics, Supplier Sustainability Declaration,
Training	Workshop, training, best practice case studies	n.a.	n.a.	Great Partnership Package	Training,	Workshop, training	Web Based Training for Suppliers	Training a capability building
Risk monitoring	Sustainability Risk Filter	n.a.	n.a.	Supplier Risk Management	Risk assessment	n.a.	n.a.	Risk assessment
Supplier Self-assessment	Supplier sustainability self-assessment questionnaire	Supplier Code Questionnaire	Vendor Checklist	n.a.	Self-assessments	n.a.	Corporate Responsibility Self Assessment	Self assessment
Supplier audit	Sustainability audit	n.a.	Supplier support visits	Supplier evaluation	Audit within Supplier Ethical Data Exchange (SEDEX)	Audit	External Sustainability Audits, Incident Driven Inspections, Supplier Quality Audit - CR module	External Audit
Other	Ideas competition for sustainability solutions, Supplier Innovation Award in the category "Sustainability".	n.a.	Key Supplier Management Program	Enhanced Online Communication	n.a.	n.a.	Dialog, Program Towards a green supply chain	Constructive dialogue, Electronics Industry Citizenship Coalition, Sustainable Trade Initiative IDH

*Titan (WBCSD Cement Sustainability Initiative, 2011)*

Titan Cement Company S.A. is one of the world's eight largest cement producing companies, based in the Ano Patissia suburb of Athens, Greece. In 1999 a group of leading cement companies came together and created the Cement Sustainability Initiative (CSI), under the auspices of the World Business Council for Sustainable Development (WBCSD). This is a voluntary, continuous improvement approach focused on making the cement industry and business in general, more sustainable.

The main issues of the initiative are Climate Protection, Fuels and Materials, Health & Safety, Emissions Reduction, Biodiversity, Sustainability with concrete KPIs: The Getting the Numbers Right (GNR) system is a sector-wide global information database that provides accurate, verified data on the cement industry's CO<sub>2</sub> emissions and energy performance like Specific heat consumption of clinker production; Alternative Fuel Rate; Biomass Fuel Rate; Alternative Raw Materials Rate; and Clinker/Cement Ratio.

*Volkswagen (Volkswagen, 2011)*

Volkswagen (abbreviated VW) is a German automobile manufacturer and part of the Volkswagen Group. The Volkswagen Group provides an update on the sustainability of the business once a year in the form of a Group sustainability report. This report outlines key strategic principles and presents examples of specific activities performed by the individual Group brands with regard to sustainability. When it comes to creating the report, they draw guidance from the internationally recognized G3 sustainability reporting guidelines provided by the Global Reporting Initiative (GRI). Certification: Level A+.

Aside from financial indicators, the following social and environmental indicators are highlighted in VW's Sustainability Report: social - female employees in the Volkswagen Group, participation ratio in employee opinion survey, absenteeism, fluctuation rate, number of accidents; environmental - energy consumption, CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub> and VOC emissions, freshwater and wastewater usage, chemical oxygen demand, waste in tonnes and expenditure on environmental protection in million euros. The overall GRI certification of Volkswagen Group is Level A+.

*L'Oréal (L'Oréal, 2011)*

The L'Oréal Group is the world's largest cosmetics and beauty company. With its registered office in Paris and head office in the Paris suburb of Clichy, Hauts-de-Seine, France, it has developed activities in the field of cosmetics. Concentrating on hair color, skin care, sun protection, make-up, perfumes and hair care, the company is active in the dermatological, tissue

engineering and pharmaceutical fields and is the top nanotechnology patent-holder in the United States. L'Oréal makes use of the structured GRI. The company's certification is Level B.

By taking a proactive role to collect, analyze, and report those steps taken by the organization to reduce potential business risks, companies can remain in control of the message they want delivered to their shareholders. Public pressure has proven to be a successful method for promoting transparency (behavior) and disclosure of greenhouse gas emissions and social responsibilities. As well as helping organizations manage their impacts, sustainability reporting promotes transparency and accountability.

**CONCLUSION**

Companies must develop and support a broader responsibility and sustainability perspective towards their supply chains to ensure that their consumer, business, supply chain, community and environmental relationships and interactions remain viable in order to be able to face challenges for globalizing markets. Experience shows that it is a complex and long process to integrate Responsible Supply Chain Management in all levels of the organization. In this process companies are facing many challenges to overcome and it requires continuous improvement. But RSCM can provide the organization with both tangible and direct benefits, which may ultimately lead to a competitive advantage.

Our further research aims to develop an auditing system framework, which will enable MNCs to monitor their supplier base for ethical and sustainability criteria and to generate a self-regulating mechanism along the supply chain which again minimizes CSR risks in accordance with the United Nations Global Compact of sustainability efforts. The research will contain secondary and primary methods as well. After reviewing available literature about mainstream initiatives in the fields of Corporate Social Responsibility (CSR) and the Responsible Supply Chain Management (RSCM), an analysis of UN Global Compact's focal topics will be compared with the latest generation of the Global Reporting Initiative's assessment methods. Secondly, as a comparative analysis, the cooperation level with affected NGOs and CSR activities and commonly set goals of leading global players of the sector will be examined. The primary research will focus on the CSR awareness of 20 suppliers of an MNC from Eastern Europe and the Asia-Pacific area to identify their grade of maturity in responsible sustainability issues. The approach is an in-depth interview with predefined questionnaire.

The outcome of the research is expected to reveal differences between assumed and real CSR risks and to enhance future supplier assessments through proper adjustment of the audit approach. The refined questionnaire will serve as a basis for supplier self assessments and external CSR audits.

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