



## How car producers are driving toward sustainable supplier development

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### Abstract

Sustainable supplier development helps to improve mutually the supplier's as well as the buying company sustainability performance. The producer could choose guidance, compliance or capacity building activities to develop its supplier or implement them all. This paper aims to present how the car producers practice sustainable supplier development taking into account different types of approaches and implementation tools. The authors applied content analysis to investigate approaches of six car producers from EU member states. The data was collected from the sustainability reports and complemented with the available information of the supplier sustainability requirements and the code of conduct of each car producer. The findings revealed that analysed car producers use similar approaches to develop their suppliers in the context of sustainability. All of them use mix of activities from all identified categories and collaborate within industry initiatives devoted to spread sustainability in supply chain.

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## 1. Introduction

Sustainability has become a strategic priority for automotive industry due to growing concerns of climate change and environmental degradation (Janik and Ryszko, 2017). Many of the stakeholders groups, governments, consumers, investors, NGOs are pushing automotive sector companies to change the way they running the business. Sustainability efforts of companies must be enhanced to meet the requirements but to face the challenges of a sector change is needed in the whole supply chain (Cierna and Sujova 2020). This paper tries to present how car manufacturers are responding to this challenge by developing their suppliers.

Supplier development is a process which is aimed to improve suppliers' performance to bring benefits for buying company. Therefore supplier development activities have an effect on both suppliers and manufacturing companies results. Improved supplier performance is important to satisfy manufacturers' expectations (Routroy and Pradhan, 2011). The same mechanism works for sustainable supplier development process. It enables extension of sustainability performance to

suppliers which is nowadays an indispensable element of ensuring sustainability within supply chain. We can define sustainable supplier development as efforts of a buyer to improve the suppliers' ability to improve sustainability of their operations. Inter-firm development activities enable organisations to share sustainability risks associated with their supply base while also benefiting from suppliers' inherent expertise to mutually improve their performance (Luzzini et al. 2015). While developing suppliers buying companies are offering them training, exchange of expertise, joint solving problems, collaboration on projects and others activities to improve performance. Some popular practices within sustainable supplier development include integrating sustainability in sourcing strategies, supplier's code of conduct, awarding, monitoring and auditing of suppliers, sustainability data collection and participation in collaborative initiatives related to supply chains (BSR/GlobeScan, 2015).

Sustainable supplier development practices of car manufacturers are very often a part of their wider sustainability management system (Hąbek and Lavios, 2021). In automotive industry companies are also involved in different collaboration

initiatives to improve sustainability through supply chain, for example the Drive Sustainability initiative. The partnership enables their members to work together on common projects in order to improve sustainability in automotive supply chains, to share experiences and information on sustainability issues and develop and apply common tools. The increased sustainability risk of automotive supply chain appear with the development of electric mobility and the use of the so-called conflict minerals (tin, tantalum, tungsten, and gold). The high risk has been identified in the area of human rights violation, labor condition breaches, and unethical behavior that could threaten the future of the communities involved. To address responsible mineral sourcing issues car producers are working with the international initiatives and implementing tools and guidelines indicated by them (for example Responsible Minerals Initiative) to prevent or mitigate adverse impact in supply chain.

This paper aims to present how the car producers practice sustainable supplier development taking into account dimensions and types of such activities as well as tools necessary to implement them. The rest of the paper is structured as follows: next section provides an overview of the sustainable supplier development based on previous studies. The methodology used in the research process is then presented. Further section is dedicated to presenting the research findings. The paper ends with summary and conclusion section.

## 2. Literature review

Sustainable supplier development is imperative to organizations, especially those in the automotive industry in today's fast-paced, technology-driven society (Hąbek and Villahoz, 2020; Webb, 2017). The idea of businesses collaborating with suppliers to ensure improved organizational performance, innovation, and a competitive advantage in a highly competitive global market cannot be downplayed (Förster, 2015; Sancha et al., 2015; Sinha and Anand, 2018).

Sustainable supplier development is an approach that helps suppliers build innovative capabilities and proficiencies while also promoting a mutually advantageous culture of collaborative effort and quality improvement with the purchasing organization (Kiwili and Ismail, 2016). Businesses that rely on the services of a diverse supplier base survive and thrive by engaging in this phenomenon (Lagas, 2015; Zielinski and Jonek-Kowalska, 2020). Supplier development can also be described as an organization's investment of time and effort in growing its suppliers over time in order to achieve and preserve the desired level of quality, on-time delivery, and supply chain efficiency (Webb, 2017). Building a sustainable supplier development scheme thus serves as a business strategy that entails incorporating the supplier's expertise and integrating it with the purchasing organization's prime objectives. As a result of such an alliance, enhanced productivity, higher quality finished products, and client satisfaction are achieved, ensuring continued organizational profitability. (Hąbek and Lavios Villahoz, 2018).

The automobile industry is unquestionably one of the world's largest economic sectors, and the influence this industry has in Europe through its premium practices has significant

benefits in encouraging social responsibility. According to McKinsey's vision for the European automotive industry, "customer orientation, environmental awareness, and economic value creation have been the solid foundation for the success of the European automotive industry in the past. These concepts, taken to the next level, also constitute the foundation of the vision for the future that is moving from customer orientation to customer-centricity, environmental awareness to sustainable mobility, and economic value creation to positive economic value. The report asserts that this transition will be fundamental to creating the 2050 target state for the European automotive industry" (Cornet et al., 2019)

Notwithstanding, the transitioning sought by McKinsey's 2050 vision increases the demand for the development of socially responsible, long-term supplier development practices among suppliers, taking into consideration the levels of pollution fossil fuel emissions from vehicles have on the environment. The vision suggests that the European automobile industry, particularly in this frame of reference, would more earnestly have to cogitate sustainable means of increasing mobility. This deliberation is partly due to the disruption of the supply chain and shipping of cars caused by the COVID-19 pandemic and the recorded shortages of semi-conductors, which has pushed the sale of automobiles downward (Pohl, 2021). The expediency and realism of fully embracing electronic vehicles is the way into the future of mobility as the dream of going "green" to avoid environmental degradation is made possible by digitization and the use of renewable energy (Cornet et al., 2019; Pohl, 2021).

Therefore, being socially responsible would mean that suppliers are to act in the best interest of the environment and society (Ganti, 2022). The ability of a business to strike a balance between pursuing quality and profit and complying with societal and environmental issues is critical to the organization's efficiency and effectiveness. Hąbek and Lavios (2021) notes that parts sourced from suppliers account for up to 75% of the cost of a vehicle in the automotive industry. As we anticipate the future of mobility, it becomes critical that car manufacturers collaborate directly with suppliers and demand socially responsible behavior in their supply chains. According to Ganti (2022), more international investors and buyers consider management's commitment to socially responsible practices before making investments or purchasing from firms. Thus proper observation and compliance to socially responsible business practices can benefit the primary directive of maximizing shareholder value and preserving a good corporate brand image strategic for ground-breaking economic exploits and the preservation of the ecosystem from further depletion.

In recent times, the manner in which car manufacturers are constantly striving to safeguard sustainability in their supply chain is through the implementation of socially responsible corporate practices into their supplier development process (Kulkarni and Rao, 2014; Lu et al., 2012; Tian et al., 2020). Automobile manufacturers are increasingly attempting to include such data in their sustainability reports (Coşkun et al., 2022; Hąbek and Lavios, 2021). Furthermore, the findings of the empirical study of Szász et al. (2021) asserted that external

pressure from stakeholders (including government agencies) through legislation of compliance policies (e.g., End-of-life vehicles) has a positive impact on the inclusion of sustainability in the strategic agenda of automotive companies. This, in turn, escalates the effort undertaken by these companies to implement sustainability practices. Additionally, the study emphasized that the implementation of such practices positively influences operational performance in terms of environmental and social sustainability.

According to Tian et al. (2020) the increase in the level of the supplier's corporate social responsibility raises product demand. The results of Alan et al.'s (2016) empirical study also indicated that Corporate Social Responsibility (CSR) is positively associated with environmental supplier development (ESD) and that ESD has a beneficial impact on the financial performance and competitive advantage of the participating firms. The concept of environmental supplier development is akin to sustainable supplier developments, which encompasses the collective effort of suppliers and buying organizations held to reduce the negative environmental and social impact of their production processes. In view of this, scholars have proposed that companies subscribe to strategies such as supplier incentives, supplier assessment, and direct involvement to improve its supplier base. (Epstein and Roy, 2001; Hąbek and Villahoz, 2020; Huq et al., 2016; Klassen and Vereecke, 2012; Krause and Scannell, 2000; Yawar and Seuring, 2017).

Supplier collaboration as a socially responsible development practice has been utilized to facilitate the reduction or elimination of late design changes and assure the supplier is capable of producing the automobile parts for which they were contracted (Denay, 2021; Flanckegård et al., 2021). Supplier collaboration correspondingly enhances communication between suppliers and the buying firm and enables the transfer of accurate information needed to guarantee the product's desired quality. Supplier collaboration has also allowed for the training of suppliers by experts of the purchasing corporation, making suppliers competent to meet the expectations of stakeholders and the demands of socially responsible codes of conduct (Subramaniam et al., 2020). According to Mani et al. (2018), implementing social sustainability by suppliers augments the supply chain's performance. Supplier best practices, such as improving working conditions, adherence to human rights, and safety measures, serve to increase the supplier's social performance, which directly impacts the social performance of the buying firm (Subramaniam et al., 2020).

In addition, the recording of the performance and standardized quality metrics and the performance of periodic quality audit as a supplier development practice promotes continuous product improvement. This assures that quality parts are delivered on schedule and tracks improvements or declines in the supplier's quality over time. Furthermore, it enables enterprises to keep record of the cost of quality, as low-quality manufactured parts can consume a substantial amount of a company's profit margin and annual revenue (Huq et al., 2016; International 2020; Klassen and Vereecke, 2012; Yang and Zhang, 2017).

Serving as a caution to firms against the economic cost accrued to the negligence of socially responsible business practices, the study of Fairhurst and Greene (2022) which examined the relation between CSR and firm value using the takeover market affirmed that "firms with low CSR scores experience a greater likelihood of takeover and lower wealth gains in takeovers".

The car producers in European Union have been practicing sustainable supplier development for a more than a decade and a visible increase has been observed within these activities (Hąbek and Lavios, 2021). In this paper authors want to present the results of analysis of different strategies and types of sustainable supplier development practiced by car producers.

### 3. Methodology

Sustainable supplier development practices study was based on data disclosed in the sustainability/CSR reports of six car producers located in European Union member states. We decided to investigate reports from the EU region as to compare practices of companies that are subject to the same legal conditions and directives, especially those related to disclosing environmental and social issues. As widely used, also within automotive industry, sustainability reporting frameworks (e.g., GRI, UN Global Compact) require to disclose information on supply chain we assumed that using sustainability reports developed based on these frameworks will be a good source of data while exploring sustainable supplier development practices. These reporting frameworks are also recommended by the Directive 2014/95/EU to guide companies' disclosure and provide information about the organization's approach in order to prevent and mitigate negative social and environmental impacts in its supply chain.

The sustainability reports of the car producers from the European Union were downloaded from the Global Reporting Initiative database. We analysed reports from 2020 year. The unavailable and missing reports in GRI database were collected directly from the car producers' websites. Only reports that were published in English were selected for this study. We take into analysis six car producers (BMW, Daimler, Stellantis, PSA, Volkswagen, Volvo). Additional information was retrieved from the car producer's codes of conduct and from their supplier portal.

To study the sustainable supplier development practices of car producers we applied the content analysis method. We searched each report for information related with suppliers and sustainability concern. Based on collected information we categorized identified activities into four groups of sustainable supplier development practices. Within the four groups we identified ten activities (see Table 1).

In the next step we analysed each type of activity practiced by analysed companies. The analysis enable us to find out how the car producers are acting toward sustainable supplier development.

**Table 1.** Structure of sustainable supplier development practices

PROCESS	Activity
PREVENTION	Sustainability requirements and code of conduct
	Self-assessment
	Training
	Sustainability awards
	Blockchain-based material traceability
DETECTION	Assessments and audits
	Risk-based audits and due diligence process
	Whistleblowing system
REACTION	Action plans
SUPPORT	Supplier portal

#### 4. Results and discussion

The results of our study are structured according to the four identified categories of practices. The first one is prevention category which consist of five supplier development activities: sustainability requirements and code of conduct, self-assessment, training, sustainability awards and blockchain-based material traceability. The second category consists of practices focused on detection: assessment and audits, due diligence process and whistleblowing system. The two last categories are dedicated to reaction activities in case of breaches occur and support activities. The results of analysis of all identified practices within these four categories are presented further in this section.

##### *Sustainability requirements and code of conduct*

Each company defines its supplier sustainability requirements in its sustainability policy or standards and the code of conduct. In some cases (Daimler, Stellantis), the car manufacturer's sustainability standards are made extensive to their suppliers, whereas, in others, they define particular requirements for suppliers (see Table 2). These documents are usually available in the car manufacturer's supplier portal.

The supplier sustainability requirements include environmental, social, and governance standards (ESG) that their suppliers must comply with. These requirements can be legal, internal or defined by independent entities and adopted by the industry. Examples of the most typical environmental requirements for car manufacturer's suppliers are:

- Environmental Management System, like ISO 14001, Eco-Management and Audit Scheme (EMAS) or similar.
- Life cycle assessment (LCA) and participation in the CDP supply chain program to reduce CO<sub>2</sub> and greenhouse gas emissions.
- compliance with all applicable laws in safe management of chemicals and materials (e.g. Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) EU regulation).

Examples of environmental requirements for suppliers set by individual car producer are presented in Table 3.

Social requirements include human rights, working conditions and health and safety requirements. Most car manufacturers declare that their social requirements are based on the U.N. Global Compact, and the ILO Declaration on Fundamental Principles and Rights at Work and its Follow up. The ILO conventions include freedom of association and right to collective bargaining, elimination of all forms of forced labor and child labour, discrimination in respect of employment and occupation, working hours and respect for health and safety at work. Some car manufacturers require their suppliers to have an occupational health and safety management system, like ISO 45001 (previously OSHAS 18001), while others do not refer to it explicitly (see Table 4).

In the last few years, with the development of the electric car market, there has been a growing demand for the conflict minerals like tantalum, tin, tungsten and gold (3TG) and other raw materials like cobalt, lithium, copper, among others. However, these minerals, especially those extracted in conflict-affected and high-risk areas (CAHRAs), convey a high risk of human rights violations, labor and environmental abuses, and conflict support. Therefore, requirements are defined to ensure a responsible sourcing of such minerals.

Regarding the governance standards the requirements of all analysed companies include the requirement of conducting their business ethically and with integrity. While some define it broadly and generally, e.g. BMW requires its business partners to implement an adequate and effective Compliance Management System within their organizations. Others, like Volkswagen or Volvo, specify the main themes in governance, e.g. compliance with the law, transparency, fair competition and protection of confidential information and personal data (see Table 5).

##### *Self-assessment*

Self-assessment could be a prevention well as detection tool. In fact, car manufacturers use self-assessment with a twofold objective: to determine the sustainability level and to communicate to the suppliers their expectations regarding sustainability. Car companies have been using their own self-assessment questionnaires for many years (Hąbek and Laviós, 2021), but in the last few years, there has been a convergence of car manufacturers towards the standardization of the sustainability self-assessment process instead of using their own system as they used to do. In fact, in 2020, the car producers analyzed in this paper used the Self-Assessment Questionary (SAQ) delivered by Drive Sustainability (see Table 6). SAQ includes working conditions and human rights; health & safety; business ethics; environment; supplier management; and responsible sourcing of raw materials questions.

##### *Training*

Training is used to communicate to the suppliers sustainability values of buyers. For example, Volkswagen and Stellantis include sustainability in their supplier development training programs. Trainings are also provided in collaboration with different associations. Different forms of trainings delivered by individual car producers are collected in Table 7.

### *Sustainability Awards*

Supplier awards is a practice that recognizes the efforts made by suppliers towards excellence. The creation of a specific category for sustainability is relatively recent for some companies, e.g. Volvo included sustainability as a separate element in 2018, and Daimler created this category (Supplier Sustainability Award) in 2020. Different approaches of analysed car producers to recognize their suppliers sustainability performance are presented in Table 8.

### *Blockchain-based material traceability*

In recent years blockchain technology has been applied to warrant the traceability of materials. This is particularly useful in the case of critical raw material like cobalt, enabling it to be fully traceable from the mine to the melter. Different projects about cobalt sustainable sourcing have been developed in parallel for example Daimler's Ambition 2039 and BMW's PartChain project (see Table 9).

### *Assessment and audits*

The assessment process and audits are a fundamental part of the sustainability assurance in the supply chain. However, it can be a burden for both buyers and suppliers if each car manufacturer designs its own assessment and audit procedures. Consequently, as it happens in other sustainable development practices, companies are tending to standardize the assessment and audit processes. For example, as a result of their collaboration with the German Association of the Automotive Industry (VDA) some of the studied companies have been involved in the development of the Automotive Sustainability Assessment (ASA), a standard that helps to facilitate the sustainability assessment process even for small and medium-sized suppliers. A similar case is when car manufacturers adopt the standards of other industries. For example, this is the case of BMW and Volvo using the audit programme for major suppliers from the electronics industry Responsible Business Alliance (RBA). The car manufacturers evaluate new suppliers on site to verify the compliance with the sustainability requirements before any commercial relationship is started. Later, assessments and audits are made on a risk base. Results of analysis related with using sustainability assessment and audit programmes by individual car producers are presented in Table 10.

### *Due diligence process*

The development of the electric car market has made car manufacturers focus on conflict minerals to facilitate decision-making that supports responsible sourcing. They define processes based on the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. As a general rule, these materials are checked by the Conflict Mineral Reporting Template developed by the Responsible Minerals Initiative (RMI). This process entails third party audits. Various initiatives give support to this (see Table 11).

### *Whistleblowing system*

Car manufacturers use the whistleblowing system to provide a channel to communicate the breaches of their own company's social and environmental requirements and through the supply chain. This can be done anonymously. The whistleblowing system can be managed internally by an independent organizational unit or can be externalized to a third party to guarantee their independence. Each of the investigated car producer has in place whistleblowing system. Volvo and Stellantis have the system externally managed (see Table 12).

### *Action plans*

In their annual report, almost all car manufacturers state that if breaches are detected in the assessment or audit process, the supplier is asked to remedy these deficits. In especially severe cases, this can cause the termination of the business relationship. They follow the general principle of assisting and guiding the suppliers to correct the breaches and leave the cease of the relationship as a last resort. The typical actions of individual car producers are presented in Table 13.

### *Supplier portal*

The supplier portal is the centralized channel car producers use to communicate with their suppliers. Part of the information is available for everyone, and part is under registration. Available information includes general information about the company, purchasing conditions and general requirements for suppliers. In addition, most of them include a specific section about sustainability, with specific requirements, recommendations, and training. Generally, training is available after registration. Table 14 presents website addresses of supplier portals and their contents being offered by analysed car producers.

## **5. Summary and conclusion**

This paper aims to present how car producers are responding to the challenge of improving their sustainability performance by incorporating sustainability into supplier development process. Sustainable supplier development practices study was based on data disclosed in the sustainability reports of six car producers located in European Union member states. This analysis has been complemented with the available information of the supplier sustainability requirements and the code of conduct of each car manufacturer.

The study revealed that the car producers use various types of practices, tools and standards to develop sustainability performance of their suppliers and undertake actions in all identified categories of practices: prevention, detection, reaction and support activities (see Table 15).

The research findings allow to identify the most important trends in sustainable supplier development of the car producers:

- The standardisation of different practices like self-assessment, training, audits usually in collaboration with industry associations. This ultimately reduces the burden for suppliers to adapt to every car manufacturer requirements.

- The adoption of the main sustainable supplier development practices by the car manufacturers, comprising the whole process for the sustainability assurance in the supply chain.
- The application of a risk management approach in the sustainable supplier development process, to optimize the resources.
- The particular focus on conflict minerals and supplies coming from a conflict-affected and high-risk areas.
- The particular focus on the decarbonization of the supply chain.

The identified trends and analysed practices have practical application. The research findings could serve as source of examples, a guidance of possible directions, diverse approaches and tools to spread sustainability within automotive supply chain. Presented in this paper practices may also provide inspiration for companies from other industries.

Suggestions regarding future directions of research may include study of the efficiency of different types of sustainable supplier development activities to answer the question which practices are the most beneficial for both suppliers and buying companies at the same time.

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## Appendix

**Table 2.** Car manufacturers' supplier sustainability requirements and code of conduct

	<b>BMW</b>	<b>Daimler</b>	<b>Stellantis</b>	<b>PSA</b>	<b>Volkswagen</b>	<b>Volvo</b>
<i>Supplier Sustainability Requirements</i>	BMW Group Supplier Sustainability Policy Version 2.0 (2020)	Mercedes-Benz Sustainability standards	Global Responsible Purchasing Guidelines	Responsible Purchasing Policy		
<i>Code of conduct</i>			Code of conduct		Code of Conduct for Business Partners	Code of Conduct for Business Partners

**Table 3.** Examples of the environmental requirements for the suppliers

	<i>Environmental Management System</i>	<i>CDP Supply Chain Program</i>
<b>BMW</b>	Certified ISO 14001 or Eco-Management and Audit Scheme (EMAS)	*In 2020, 79 % of the BMW Group's production-related purchasing volume
<b>Daimler</b>	ISO 14001 or Eco-Management and Audit Scheme (EMAS) or other comparable standards	*In 2020, 76% of the annual procurement volume of Mercedes-Benz Cars & Vans
<b>Stellantis</b>	The Supplier must have an Environmental Management System (EMS) that complies with local law. Certification of the EMS according to international standards (i.e. ISO14001, EMAS or equivalent) is strongly recommended	*In 2020, disclosing suppliers accounted for approximately 65% of FCA annual purchases by value from direct and indirect material suppliers
<b>PSA</b>	The implementation of Environmental Management System (ISO 14001 certification) is required	*In February 2020, Groupe PSA was rated "Supplier Engagement Leader" by CDP for driving the reduction of CO2 emissions in collaboration with its suppliers
<b>Volkswagen</b>	Business partners operating production sites with more than 100 employees must be certified according to the international standard ISO 14001 or the EMAS Regulation of the European Union. *100% by 2025. In 2020, 65%	*In 2020, more than 63% of our production-related procurement spending (excluding services, Volkswagen Brazil and Scania)
<b>Volvo</b>	Certified environmental management system (ISO14001)	* In 2020, for top 95 strategic suppliers based on emission intense product categories as well as expenditures

**Table 4.** Social and working conditions requirements for car manufacturer suppliers

	<b>BMW</b>	<b>Daimler</b>	<b>Stellantis</b>	<b>PSA</b>	<b>Volkswagen</b>	<b>Volvo</b>
<i>Working conditions requirements based on ILO conventions</i>	X	X	X	X	X	X
<i>Requirement of certified health and safety management system</i>	Certified ISO 45001, OHSAS 18001 or similar	--	A certified system for managing employee health and safety	--	--	--
<i>Particular requirements about conflict minerals sourcing</i>	X	X	X	X	X	X

**Table 5.** Governance requirements for car manufacturer's suppliers

<b>BMW</b>	(BMW Group Legal Compliance Code) The BMW Group Legal Compliance Code ask its business partners to implement an adequate and effective Compliance Management System within their organizations	
<b>Daimler</b>	<b>Business Ethics and Compliance</b> 1. Adherence to Laws 2. Fair Competition 3. Avoidance of Conflicts of Interests 4. Safeguarding of Trade Secrets	
<b>Stellantis</b>	<b>Compliance with ethical principles</b> 1. Prohibited substances and materials 2. Fight against the use of conflict minerals 3. Animal Welfare 4. Export Controls	<b>Compliance with Laws</b> 1. Fairtrade practices 2. Retention and use of personal data
<b>PSA</b>	<ul style="list-style-type: none"> <li>• Compliance with law;</li> <li>• Promotion of and compliance with internationally-accepted human rights;</li> <li>• Anti-corruption measures and the prevention of conflicts of interest;</li> </ul>	<ul style="list-style-type: none"> <li>• Suppliers to obtain CSR commitment from their own suppliers;</li> <li>• Storage and use of personal data;</li> </ul>
<b>Volkswagen</b>	<p><b>TRANSPARENT BUSINESS RELATIONS</b> <i>Commissioning business partners:</i> Risk-based integrity due diligence with regard to its business partners. The Group's business partners act with integrity and protect the reputation of the Volkswagen Group. <i>Avoiding conflicts of interest</i> <i>Prohibition of corruption</i></p> <p><b>FAIR MARKET BEHAVIOUR</b> <i>Free competition</i> <i>Import and export controls</i> <i>Money laundering</i> <i>Protection of confidential information</i></p>	<p><b>INTEGRATION OF SUSTAINABILITY REQUIREMENTS IN ORGANIZATIONS AND PROCESSES</b> The Volkswagen Group expects the values anchored in these sustainability requirements to be integrated in day-to-day business through structured and competent management of the business partner.</p> <p><i>Policy statement</i> <i>Documentation</i> <i>Training</i> <i>Responsibility</i> <i>Dealing with misconduct</i></p>
<b>Volvo</b>	<p><b>Business Integrity:</b> Business partners are expected to conduct their business ethically and with the utmost integrity, which includes: <i>Anti-Corruption:</i> zero tolerance for bribery and corruption</p>	<p><i>Conflict of Interest</i> <i>Fair Competition and Business Practices</i> <i>Protecting Volvo Cars' Confidential Information and Intellectual Property Data Protection</i></p>

**Table 6.** Self-assessment questionnaires for car manufacturers' suppliers

	<b>BMW</b>	<b>Daimler</b>	<b>Stellantis</b>	<b>PSA</b>	<b>Volkswagen</b>	<b>Volvo</b>
Self-Assessment Questionnaire SAQ. Drive Sustainability	X	X	X	--	X	X
Others	-	-	-	EcoVadis self-assessment	Sustainability Rating (S-Rating)	-

**Table 7.** Car producers' training for suppliers

	<b>Training</b>
<b>BMW</b>	Training is provided in the form of courses, in the context of industry dialogue as well as, joint events, presentations, industry initiatives and supplier risk assessments.
<b>Daimler</b>	They provide training with their own training modules and as part of their involvement in various associations. e.g. since 2018, they have been cooperating with the Drive Sustainability initiative on the implementation of measures to make suppliers in various focus countries such as India and Argentina more aware of the importance of sustainability.
<b>Stellantis</b>	Supplier training includes sustainability-related topics such as responsible working conditions, environmental impacts, ethics and Conflict Minerals. Part of the training is provided in-house and other in partnership with different associations, like AIAG. Additionally, FCA has adopted World Class Manufacturing (WCM), a structured production system that promotes sustainable and systematic improvements at manufacturing operations. Academy and FCA plant WCM specialists, continued providing WCM methodology and tools to their suppliers.



<b>PSA</b>	Training is understood as a way to provide suppliers with the tools to rapidly identify and properly react to risk situation. The Group’s ambition is to have trained 90% of these suppliers in CSR risks and the Group’s requirements by 2025. They use different tools like monthly briefings, webinars (together with Ecovadis), and e-learning on CSR principles via the dedicated platform.
<b>Volkswagen</b>	Issue-specific sustainability training courses and workshops are organized as a part of their continuous supplier development program. They also collaborate with Drive Sustainability Initiative to provide training to suppliers in focussed countries.
<b>Volvo</b>	No reference to a training program is made in their sustainability report

**Table 8.** Sustainability awards approach of car producers

<b>Sustainability Award</b>	
<b>BMW</b>	-----
<b>Daimler</b>	Daimler Supplier Sustainability Award was created in 2020. It is given to suppliers with outstanding sustainability achievements in climate protection and resource conservation categories.
<b>Stellantis</b>	FCA has a distinct category in the annual Supplier Conference and Award ceremonies that recognizes outstanding suppliers from around the world for their commitment to sustainability
<b>PSA</b>	Suppliers Awards promotes sustainable performance. The Purchasing Department rewarded the best suppliers in several categories, one of them being Corporate Social Responsibility Performance.
<b>Volkswagen</b>	Volkswagen Group Awards (Sustainability among other categories)
<b>Volvo</b>	Volvo created the VQE Awards to acknowledge successful suppliers in all evaluated sets of quality, manufacturing and delivery performance disciplines. Since 2018, sustainability is a new separate element based on the Self-Assessment Questionary.

**Table 9.** Blockchain-based material supply traceability

	<b>BMW</b>	<b>Daimler</b>	<b>Stellantis</b>	<b>PSA</b>	<b>Volkswagen</b>	<b>Volvo</b>
<i>Blockchain based material traceability</i>	PartChain project	Ambition2039	Responsible Sourcing Blockchain Network (RSBN)	--	Responsible Sourcing Blockchain Network (RSBN)	Responsible Sourcing Blockchain Network (RSBN)

**Table 10.** Car producer’s supplier sustainability assessment and audit programmes

	<b>Own sustainability assessment programme</b>	<b>Risk-based audits</b>	<b>ASA-VDA</b>	<b>SAQ Drive sustainability</b>	<b>Responsible Business Alliance</b>
<b>BMW</b>		X	X	X	X
<b>Daimler</b>		X	X	X	
<b>Stellantis</b>		X		X	
<b>PSA</b>	Ecovadis (third-party)	X			
<b>Volkswagen</b>	S-rating	X	X	X	
<b>Volvo</b>	Volvo Cars Sustainability Audit	X		X	X

**Table 9.** Adherence of car producers to due diligence processes and auditing standards

	<b>BMW</b>	<b>Daimler</b>	<b>Stellantis</b>	<b>PSA</b>	<b>Volkswagen</b>	<b>Volvo</b>
<b>OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict</b>	X	X	X	X	X	X
<b>Responsible Minerals Initiative (RMI)</b>	X	X	X	X	X	X
<b>Auditing standard</b>	RCI (Responsible Cobalt Initiative)	RMAP (Responsible Minerals Assurance Process) (by RMI)	RMAP (Responsible Minerals Assurance Process) (by RMI)	Ecovadis Rating Framework	CERA (Certification of Raw materials)	RMAP (Responsible Minerals Assurance Process) (by RMI)

**Table 12.** Car producers' whistleblowing system

	Name/ Responsible	Type	Name, responsible and channels
BMW	BMW Group's Human Rights Contact Supply Chain	Internal	<a href="https://www.bmwgroup.com/en/company/compliance.html">https://www.bmwgroup.com/en/company/compliance.html</a> Phone Email: <a href="mailto:compliance@bmwgroup.com">compliance@bmwgroup.com</a>
Daimler	Whistleblower System Business Practices Office (BPO)	Internal	Reporting form: <a href="https://group.mercedes-benz.com/company/compliance/bpo/reporting-form/">https://group.mercedes-benz.com/company/compliance/bpo/reporting-form/</a> Mail and e-mail: E-Mail: <a href="mailto:bpo@mercedes-benz.com">bpo@mercedes-benz.com</a>
Stellantis	Whistleblowing process Third-party: NAVEX	External	Website: <a href="https://secure.ethicspoint.eu/domain/media/en/gui/102375/index.html">https://secure.ethicspoint.eu/domain/media/en/gui/102375/index.html</a> Telephone (available in the website)
PSA	Whistleblowing System	Internal and External	Several tools are in place to identify potential risks: <ul style="list-style-type: none"> <li>• the discovery report</li> <li>• an early internal warning system</li> <li>• a global external online warning</li> <li>• stakeholder feedback</li> </ul>
Volkswagen	V.W. Whistleblowing System Responsible: - Volkswagen Investigation Office - V.W. Ombudsperson - The Ombudspersons appointed by the Volkswagen Group	Internal	("Compliance & Risk Management" tabs on the Volkswagen website at <a href="http://www.volkswagenag.com">www.volkswagenag.com</a> ) Online reporting channel E-mail 24/7 Hotline Postal address and in-person Ombudspersons
Volvo	Tell Us Reporting Channel Third-party: SpeakUp (People Intouch B.V.)	External	<a href="https://www.volvocars.com/intl/v/legal/tell-us-reporting-line">https://www.volvocars.com/intl/v/legal/tell-us-reporting-line</a> <a href="https://www.speakupfeedback.eu/web/volvocars">https://www.speakupfeedback.eu/web/volvocars</a>

**Table 13.** Actions if sustainability breaches are detected

	<i>If sustainability breaches are detected in a supplier plant...</i>
<b>BMW</b>	'The suppliers are required to remedy these deficits prior to the start of production. The main areas to be acted upon in particular were hazardous materials management, waste management, working conditions and occupational health and safety'
<b>Daimler</b>	'we instruct the supplier in question to improve the relevant processes. If the supplier does not sufficiently remedy the criticized processes, we make individual decisions regarding the next steps. In especially severe cases, these decisions are made by management bodies. As a last resort, this can cause us to discontinue business with a supplier.'
<b>Stellantis</b>	'a gap closure strategy is created to bring the supplier into compliance before business is sourced. Corrective actions, responsibilities, and target dates for resolution can be defined for all identified items.'
<b>PSA</b>	Audits provides a report with any non-compliance encountered and grades them according to four classifications (critical, core, minor and observations only), each requiring corrective action plans
<b>Volkswagen</b>	'A series of measures are available to react to risks identified in the supply chain and concrete breaches by suppliers, and thus to actively bring about improvements. (...) If there are particularly serious breaches, termination of the business relationship is also possible.'
<b>Volvo</b>	<i>No reference to actions</i>

**Table 14.** Car producers' supplier portal

	Supplier Portal	Web contents
BMW	BMW Group Partner Portal <a href="https://b2b.bmw.com/en/web/b2b">https://b2b.bmw.com/en/web/b2b</a>	Purchasing conditions and requirements are available in the supplier portal. Access to the intranet
Daimler	Mercedes-Benz Supplier Portal <a href="https://supplier-portal.daimler.com/portal/en">https://supplier-portal.daimler.com/portal/en</a>	Information about procurement, collaboration with suppliers and a specific section on sustainability, including the standards and requirements for suppliers. Access to the intranet
Stellantis	eSupplier Connect/ FCA's eSupplier Connect portal <a href="https://fcagroup.esupplierconnect.com">https://fcagroup.esupplierconnect.com</a>	General information about the company, the code of conduct and general information about sustainability in the Group. Access to the intranet

PSA	B2B portal http://b2b.psa-peugeot-citroen.com/pages/en-US/home.aspx	General news about the Group. The rest of the information and functions are available under register.
Volkswagen	ONE.Konzern Business Plattform (ONE.KBP) https://www.vwgroupsupply.com	Information concerning communication, collaboration and data exchange with the Volkswagen Corporation Purchasing conditions and requirements, information about sustainability in the Group, S-rating presentation, recommendations training. Access to the intranet
Volvo	Volvo Supplier Portal https://www.volvo-group.com/en/suppliers.html	Purchasing conditions and requirements are available in the supplier portal. Access to the intranet

**Table 16.** Summary of the sustainable supplier development practices used by car producers

	BMW	Daimler	Stellantis	PSA	Volkswagen	Volvo
<b>PREVENTION</b>						
Sustainability requirements and code of conduct	X	X	X	X	X	X
Self-assessment	X	X	X	X	X	X
Training	X	X	X	X	X	--
Sustainability awards	--	X	X	X	X	X
Blockchain based material traceability	X	X	X	--	X	X
<b>DETECTION</b>						
Assessments and audits	X	X	X	X	X	X
Risk based audits and due diligence	X	X	X	X	X	X
Whistleblowing system	X	X	X	X	X	X
<b>REACTION</b>						
Action plans	X	X	X	X	X	--
<b>SUPPORT</b>						
Supplier portal	X	X	X	X	X	X

## 汽车生产商如何推动供应商的可持续发展汽车生产商如何推动供应商的可持续发展

**關鍵詞**

可持续性  
 供应商开发  
 汽车  
 企业社会责任报告

**摘要**

可持续供应商发展有助于相互提高供应商和采购公司的可持续发展绩效。生产商可以选择指导、合规或能力建设活动来发展其供应商或实施所有这些活动。本文旨在介绍汽车制造商如何在考虑不同类型的方法和实施工具的情况下实施可持续供应商发展。作者将内容分析应用于调查来自欧盟成员国的六家汽车制造商的方法。这些数据是从可持续发展报告中收集的，并补充了供应商可持续发展要求的可用信息和每个汽车制造商的行为准则。调查结果显示，经过分析的汽车制造商在可持续发展的背景下使用类似的方法来发展他们的供应商。他们都使用所有已确定类别的活动组合，并在致力于在供应链中传播可持续性的行业计划中进行协作。