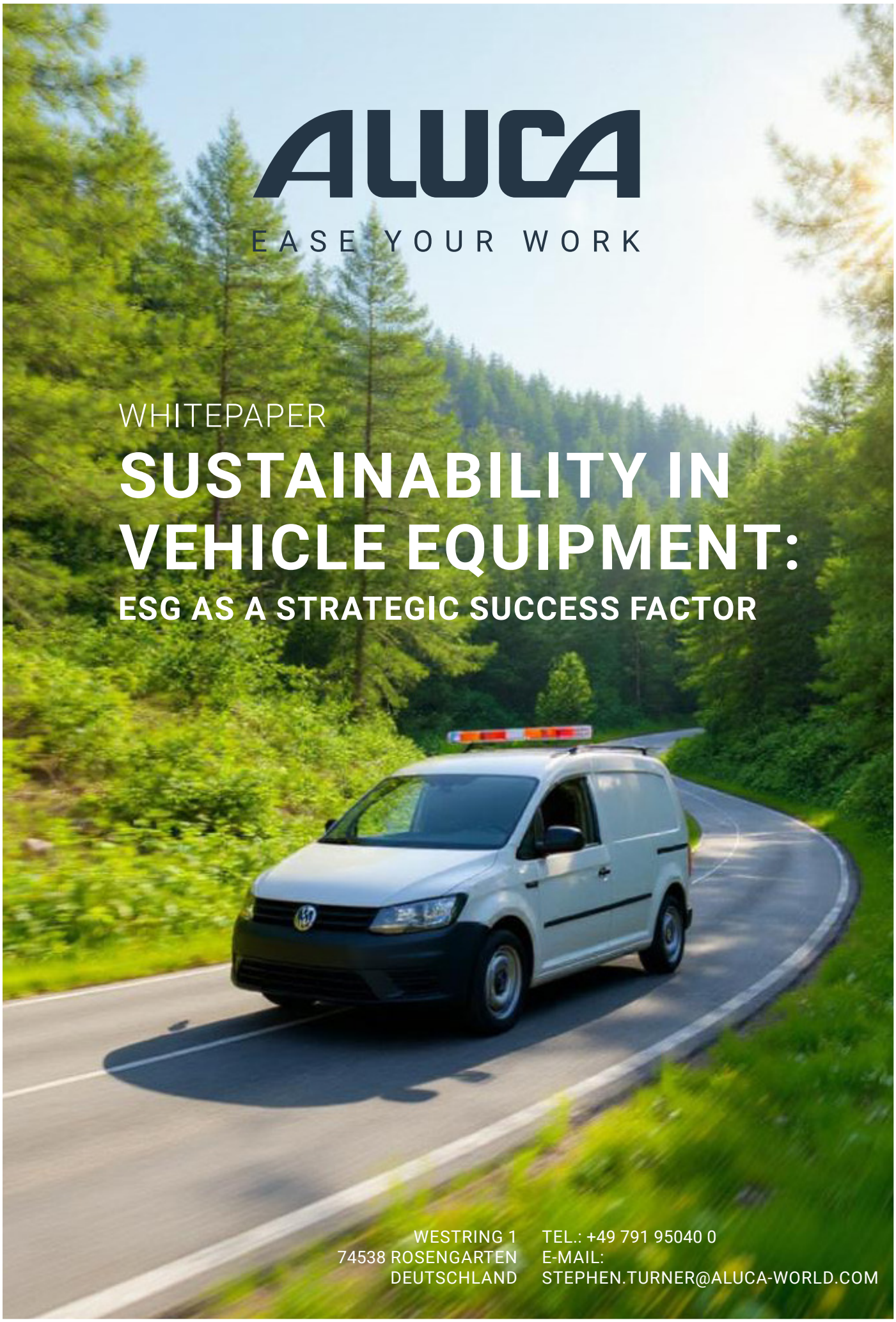
ALUCA

EASE YOUR WORK

WHITEPAPER

SUSTAINABILITY IN VEHICLE EQUIPMENT:

ESG AS A STRATEGIC SUCCESS FACTOR



WESTRING 1
74538 ROSENGARTEN
DEUTSCHLAND

TEL.: +49 791 95040 0
E-MAIL:
STEPHEN.TURNER@ALUCA-WORLD.COM

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TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

1.0. INTRODUCTION: WHY SUSTAINABILITY MATTERS TODAY



Nowadays, sustainability is not just a buzzword, but a decisive factor for the success of companies, and this also applies to the field of vehicle equipment. The ecological imperative is forcing companies to rethink their business models and integrate sustainable practices in order to meet the demands of society and the environment.
This also applies to manufacturers and suppliers of service vehicles, who must design their products and services in such a way that they minimise their ecological footprint while increasing efficiency. The promotion of sustainable technologies, such as the use of lightweight and recyclable materials, the electrification of vehicle fleets and the pursuit of lower environmental impact, is central to reducing environmental pollution and meeting the demands of modern mobility. For industries that use service vehicles, these measures are crucial to achieving sustainability goals and securing long-term competitive advantages. (Verso, 2024).

1.1.THE ECOLOGICAL IMPERATIVE – ALSO FOR SERVICE VEHICLES

The ecological imperative refers to the urgent need to take ecological responsibility and integrate sustainable practices into all areas of life and the economy. It requires individuals, businesses and governments to make decisions and take actions that protect the environment and conserve natural resources. The ecological imperative is based on the recognition that the Earth has limited resources and that human activities have a significant impact on the climate and ecosystems.

People expect companies to demonstrate corporate social responsibility (CSR). Corporate social responsibility (CSR) addresses the desire for social and environmental justice. CSR encourages companies to look beyond mere financial gain and take responsibility on their own initiative. This includes treating employees with respect, social engagement and protecting the environment (DIHK, 2024).
The urgency of taking on ecological responsibility is therefore particularly pronounced in industries where service vehicles are used intensively . Companies are faced with the challenge of designing not only their own processes but also their products in such a way that they meet ecological requirements.

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TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

2. SUSTAINABILITY IN THE ECONOMY – AN INSEPARABLE CONNECTION

The relationship between the economy and the environment is complex and profound. In recent years, the highest temperatures since weather records began have been observed worldwide, posing a significant risk to the climate and potentially leading to environmental disruption and an increasing number of weather-related disasters (Statista, 2025). These climatic changes are closely linked to economic activities and global development.

2.1 ECONOMIC DEVELOPMENT AND ENVIRONMENTAL IMPACT

With the growth of the world's population and economic development, demand for goods and services has increased. This has led to higher energy consumption and a collective increase in the carbon footprint. The increasing combustion of fossil fuels to meet this demand has led to an approximately 50% increase in annual greenhouse gas emissions worldwide over the past 30 years (Statista, 2025).

2.2 INDUSTRY AND AIR POLLUTION

A significant proportion of environmental pollution is attributable to industrial activities. Just 100 industrial plants are responsible for 50% of the damage caused by air pollution in Europe (European Environment Agency, 2024). This damage costs the EU around 600 billion euros annually (Bruegel, 2024).

2.3 POTENTIAL FOR EMISSION REDUCTION

However, there are also positive developments and potential for reducing emissions. By 2030, corporate greenhouse gas emissions could be reduced by 3.7 billion tonnes of CO_2 equivalent per year worldwide, which corresponds to around 60% of the emission reductions pledged under the Paris Agreement through NDCs (Nationally Determined Contributions) (United Nations).

2.4 FUTURE CHALLENGES

By 2050, humanity is expected to produce 27 billion tonnes of solid municipal waste (SpringerLink, 2018). This forecast underscores the need to develop and implement sustainable practices to reduce environmental impact and align economic development with environmental goals.
The close link between the economy and the environment requires a rethink and adaptation of economic practices in order to tackle the challenges of climate change and biodiversity loss. Only through joint efforts can we secure a sustainable future.

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TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

2.5 ECONOMIC ADVANTAGE FOR COMPANIES

Cost savings through sustainability: Around 36% of companies expect to achieve cost savings through their sustainability efforts over the next five years (Deloitte, 2024). These savings can come from a variety of areas, including improved energy efficiency, reduced material costs and optimised production processes.

Economic growth and emissions reduction: The majority of business leaders are optimistic about the link between economic growth and emissions reduction. Around 92% of CEOs believe their companies can achieve economic growth while reducing greenhouse gas emissions (Deloitte, 2024). This conviction reflects the trend of viewing sustainability not as an obstacle, but as a catalyst for innovation and growth.



Savings potential through energy efficiency: Global industry could save around 437 billion US dollars by 2030 through improved energy efficiency (Reuters, 2023). These savings are a strong argument for investing in sustainable technologies and processes that have a positive long-term impact on both the environment and the company‘s balance sheet.

ESG standards and corporate performance: Numerous studies underscore the importance of ESG standards for corporate performance. According to a review of academic literature on sustainability initiatives and corporate performance, 90% of 200 studies conclude that good ESG standards reduce capital costs. In addition, 88% of studies show that incorporating good ESG practices into corporate strategy leads to better operational performance (Harvard Business Review, 2016).

Share price performance and sustainable business practices: The positive correlation between sustainable business practices and share price performance is also well documented. 80% of studies show that share price performance correlates positively with sustainable business practices (Harvard Business Review, 2016). This finding underscores the importance of sustainability as a strategic factor that not only improves a company‘s image but also supports its financial success.

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TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

3. ESG AND SUSTAINABILITY – AN OVERVIEW

ESG (environmental, social, governance) and sustainability are key issues for companies that want to fulfil their environmental, social and economic responsibilities. This chapter highlights regulatory drivers such as the Corporate Sustainability Reporting Directive (CSRD), the EU Taxonomy and the Supply Chain Act, which require companies to make their sustainability performance transparent. It also highlights the relevance of ESG for manufacturers and suppliers of service vehicles, who must address environmental, social and governance requirements throughout the entire value chain.

3.1 WHAT IS BEHIND ESG – AND WHY IS SUSTAINABILITY AT ITS HEART?

ESG stands for Environmental, Social and Governance and provides a framework for making sustainability measurable and controllable in companies (Haufe, 2024). Sustainability is at the heart of ESG, as it ensures a balance between environmental, social and economic goals, known as the „triple bottom line" or 3-pillar model (Verso, 2024). This balance is crucial to ensuring long-term value creation and minimising the impact on the environment and society.

3.2 REGULATORY DRIVERS: CSRD, EU TAXONOMY, SUPPLY CHAIN LAW & UK DEVELOPMENTS

Regulatory drivers such as the Corporate Sustainability Reporting Directive (CSRD), the EU Taxonomy and the Supply Chain Act (LkSG) require companies in the EU to make their sustainability performance transparent and promote sustainable economic activities (Greenly Earth, 2025). The CSRD requires many companies to systematically collect and report ESG data, while the EU Taxonomy defines clear criteria for climate-friendly and sustainable economic activities (Verso, 2024).
The Supply Chain Act obliges companies to comply with social and environmental standards along their supply chains (Haufe, 2024).
Similar developments are underway in the United Kingdom (UK), with the UK developing its own sustainability and reporting requirements after Brexit that differ from EU regulations but are similarly ambitious in some respects (Morgan Lewis, 2023). The CSRD affects British companies with EU business activities, which must comply with the requirements for their EU branches (Sweep, 2025). The UK is developing its own updated sustainability reporting regime, which provides for extensive ESG reporting requirements (Morgan Lewis, 2023).
ESG criteria are becoming increasingly important in the EU and the UK as investors and financial markets increasingly favour sustainable business models, which influences credit terms and company valuations (Deloitte, 2023). These developments reflect the global trend towards establishing sustainability as an integral part of corporate governance and reporting.

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TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

3.3 RELEVANCE FOR MANUFACTURERS AND SUPPLIERS OF COMMERCIAL VEHICLES

ESG and sustainability are becoming increasingly relevant for manufacturers and suppliers of service vehicles, as they must address environmental, social and governance requirements throughout the value chain (ESGVolution, 2023). For manufacturers and suppliers of service vehicles, this means in concrete terms:

Environmental aspects:
Development and use of vehicles with lower energy consumption, e.g. electric or hybrid vehicles, to reduce the ecological footprint (Ayvens, 2023).
Use of sustainable materials and technologies that minimise environmentally harmful substances.
Integration of recycling concepts for vehicle components (Plan A, 2024).

Social aspects:
Improvement of working conditions, e.g. through company offers such as childcare or relief for employees in their everyday work (Pakadoo, 2023).
Training employees on sustainability issues so that they can provide competent advice to customers (ESGVolution, 2023).
Promoting diversity and social responsibility within the company (Ayvens, 2023).

Governance:
Implementation of data protection and data security measures, especially with increasing digitalisation around and in vehicles (Deloitte, 2023).
Transparent reporting and compliance with ESG standards and ratings (Plan A, 2024).
Development of take-back programmes for old vehicles or vehicle components for environmentally sound disposal (Pakadoo, 2023).

Companies that comply with ESG criteria benefit from a number of advantages. They often enjoy a better reputation and greater trust among customers, investors and the public, which strengthens their reputation. Studies show that such companies often achieve better financial performance because they are able to manage risks more effectively and exploit opportunities in a targeted manner. In addition, the increasing importance of ESG criteria among investors facilitates access to capital, as investors are increasingly looking to invest in companies that pursue sustainable and responsible business practices. These advantages make ESG criteria a strategic tool that helps companies secure long-term competitive advantages.

For the industry, the transition to sustainable processes and products is therefore a key lever for meeting ESG criteria. Not only direct emissions (Scope 1) are relevant, but also indirect emissions from energy consumption (Scope 2) and the entire supply chain (Scope 3) (Ayvens, 2023). Taking these emissions into account is becoming increasingly mandatory and ultimately influences the selection of offers and service providers (Deloitte, 2023).

Overall, the integration of ESG criteria is leading to a sustainable and transparent transformation in the industry, combining environmental responsibility, social justice and good corporate governance, thereby securing long-term competitive advantages (ESGVolution, 2023).

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TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

3.4 SUSTAINABLE TRANSFORMATION OF SERVICE VEHICLE FLEETS: A STRATEGIC GUIDE

Implementing a sustainability strategy is crucial for companies with service vehicles in order to achieve environmental, social and economic goals. This chapter provides practical steps and recommendations for developing and implementing an effective and comprehensive sustainability strategy.

1. Analysis of the current status

Inventory: Record the current status of your vehicle fleet, including energy consumption, emissions and materials used. This inventory forms the basis for all further steps and helps to understand the starting point.
ESG assessment: Conduct an assessment of environmental, social and governance practices to identify weaknesses and areas for improvement. This assessment should consider all aspects of the value chain.

2. Goal setting

Long-term goals: Define clear, measurable goals for reducing emissions, using renewable energies and improving social responsibility. These goals should be ambitious but achievable and based on industry best practices.
Short-term milestones: Set realistic interim targets to regularly review and adjust progress. These milestones help to break down the strategy into manageable steps and make success visible.

3. Action planning

Vehicle fleet: Plan to switch to electric or hybrid vehicles to reduce energy consumption and emissions. This measure is often the first and most visible step towards sustainability.
Material selection: Focus on sustainable materials that are recyclable and resource-efficient. The choice of materials not only affects the environmental balance, but also the quality and durability of the products.
Energy sources: Integrate renewable energies such as solar or wind power into your business premises and vehicle fleet. This not only reduces operating costs, but also your ecological footprint.

4. Implementation

Training: Train your employees in sustainability issues to raise awareness and competence. Training is crucial to embedding the strategy throughout the company.
Technology integration: Use digital tools and systems to monitor and optimise sustainability performance. Modern technologies offer numerous opportunities for increasing efficiency and data collection.
Partnerships: Work with suppliers and partners who also follow sustainable practices. A sustainable supply chain is an essential part of a comprehensive strategy.

5. Monitoring and reporting

Data analysis: Implement systems for collecting and analysing ESG data to monitor progress. This data is crucial for evaluating the strategy and identifying opportunities for improvement.
Transparent reporting: Communicate your sustainability performance regularly to stakeholders and customers. Transparency builds trust and can serve as a differentiator in the market.

ALUCA
TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

4. ALUMINIUM AS A SUSTAINABLE MATERIAL

The global aluminium industry is one of the most important metal markets, with the sectoral distribution of aluminium consumption showing complex industrial interdependencies and regional differences. The global aluminium market size was estimated at USD 178.5 billion in 2024 and is expected to grow at a compound annual growth rate of 5.9% from 2025 to 2034 (Global Market Insights, 2025). This development reflects not only the steady demand for this versatile light metal, but also structural changes in various industries that are increasingly relying on aluminium as a key material. Sectoral analysis shows that the construction industry consumes about 25% of the aluminium produced worldwide, followed by the transport industry with 23% and the packaging industry with 17% (Voronoi, 2024). This distribution underscores the central role of aluminium in modern economic systems and its importance for technological innovation and sustainable development.

4.1 THE ADVANTAGES OF ALUMINIUM IN VEHICLE INTERIORS

Aluminium is a key material in vehicle construction, offering numerous advantages thanks to its unique properties. Aluminium is known for its lightness, corrosion resistance and good electrical conductivity, making it ideal for use in vehicles. These properties help to reduce the overall weight of vehicles while ensuring structural integrity (Mercedes Benz, 2025). By using aluminium, manufacturers can increase the efficiency of their vehicles while minimising their environmental impact.

4.2 LIGHTWEIGHT CONSTRUCTION AND CO_2 SAVINGS IN VEHICLE OPERATION

Lightweight construction with aluminium is a decisive factor in reducing CO_2 emissions in vehicle operation. Aluminium is significantly lighter than steel, which leads to a considerable reduction in fuel consumption (Euroguss, 2024). This improves energy efficiency and increases the range of electric vehicles (Federal Institute for Geosciences and Natural Resources, 2020). The use of aluminium in lightweight construction thus makes a significant contribution to achieving climate targets and promoting sustainable mobility.

4.3 RECYCLABILITY AND RESOURCE CONSERVATION IN THE CYCLE

Aluminium is characterised by its exceptionally high recyclability. Recycling aluminium saves up to 95% of the energy required for primary production, which significantly improves resource conservation (Aluminium Deutschland, 2024). In Europe, there is a growing focus on climate-friendly aluminium production using renewable energies and low-carbon technologies in order to improve sustainability along the entire value chain (Springer Professional, 2024). These circular economy approaches help to reduce environmental impact and increase resource efficiency.

4.4 DURABILITY AS A SUSTAINABILITY FACTOR

The durability of aluminium is another important sustainability factor. Aluminium is resistant to environmental influences and offers high strength at low weight, which extends the service life of vehicle components (Euroguss, 2024). This reduces the need for frequent replacement and contributes to resource conservation (Federal Institute for Geosciences and Natural Resources, 2020). The durability of aluminium makes it a sustainable material that offers both ecological and economic advantages.

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TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

5. SUSTAINABILITY USING ALUCA AS AN EXAMPLE – A SYSTEMIC APPROACH

ALUCA pursues a holistic approach to sustainability that integrates ecological, social and economic principles into all areas of the company. This chapter shows how ALUCA promotes sustainability along the value chain through the use of renewable energies, ISO 14001 certification and the electrification of its vehicle fleet. ALUCA's systemic approach reduces emissions, conserves resources and strengthens the „Ease your Work" corporate strategy, which combines efficiency and environmental awareness



5.1 USE OF RENEWABLE ENERGIES: GEOTHERMAL ENERGY & PHOTOVOLTAICS

ALUCA pursues a comprehensive approach to sustainability that includes the use of renewable energies such as geothermal energy and photovoltaics. At its production site in Rosengarten near Schwäbisch Hall, ALUCA uses these technologies to meet its energy needs and reduce CO_2 emissions. The integration of geothermal energy and photovoltaics into the production processes ensures an environmentally friendly and sustainable energy supply that improves the company's ecological balance.

5.2 ISO 14001 CERTIFICATION: SYSTEMATIC ENVIRONMENTAL MANAGEMENT

ISO 14001 certification confirms that ALUCA has implemented a systematic environmental management system that continuously monitors and improves environmental aspects. This certification is proof of ALUCA's commitment to complying with environmental standards and promoting sustainability in all areas of the company. The environmental management system enables ALUCA to identify and minimise environmental risks while increasing efficiency.

TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

5.3 ELECTRIFICATION OF THE VEHICLE FLEET

ALUCA has electrified its vehicle fleet in order to actively support the operational mobility transition and reduce emissions in its fleet. This measure is part of a comprehensive mobility concept that also includes leasing solutions for electric vehicles and other sustainable forms of mobility. The electrification of the vehicle fleet helps to reduce the company‘s environmental footprint and achieve its sustainability goals.

5.4 SUSTAINABILITY ALONG THE ENTIRE VALUE CHAIN

At ALUCA, sustainability is pursued along the entire value chain, from development and production to sales and service. The company integrates ecological and social criteria into all processes and focuses on modular, durable vehicle equipment that promotes efficiency and resource conservation. These measures are embedded in the „Ease your Work“ corporate strategy, which defines sustainability as a core objective alongside efficiency and ergonomics.

Overall, ALUCA thus demonstrates a holistic, systemic approach to sustainability that encompasses environmental management, renewable energies, sustainable mobility and value chain integration.

5.5 SUSTAINABLE VALUE CREATION AND CUSTOMER FOCUS

ALUCA attaches great importance to offering its customers solutions that are not only attractive in terms of price, but above all valuable. This approach is reflected in the philosophy that quality and sustainability are decisive factors for long-term success. ALUCA relies on high-quality materials and innovative technologies that not only reduce the ecological footprint, but also increase the service life and efficiency of its products.

A central aspect of the company‘s strategy is local and regional adaptation to customer needs. ALUCA understands that every market and every customer has unique requirements and offers tailor-made solutions to meet them. By working closely with local partners and suppliers, ALUCA can respond flexibly to regional conditions while pursuing its sustainability goals.

This customer-centric approach enables ALUCA to build strong customer loyalty and act as a trusted partner in the vehicle equipment industry. The focus on value creation and local adaptation is an integral part of ALUCA‘s systemic approach, which combines efficiency, environmental awareness and customer satisfaction.

ALUCA
TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

6. CONCLUSION: TAKING RESPONSIBILITY – SHAPING CHANGE

Sustainability is more than just a buzzword today; it is a key success factor for companies, especially in the field of vehicle equipment. The ecological imperative requires companies to rethink their business models and integrate sustainable practices in order to meet the demands of society and the environment. Manufacturers and suppliers of service vehicles face the challenge of designing their products and services in such a way that they minimise their ecological footprint while increasing efficiency.

The promotion of sustainable technologies, such as the use of lightweight and recyclable materials and the electrification of vehicle fleets, is of central importance in reducing environmental impact and meeting the demands of modern mobility. These measures are crucial to achieving sustainability goals and securing long-term competitive advantages.

This white paper has highlighted the importance of ESG (environmental, social, governance) as a strategic success factor and offers companies valuable insights and practical recommendations for integrating ESG criteria into their business models. Through detailed analysis of current trends and technologies in the field of sustainability, manufacturers and suppliers of commercial vehicles can secure long-term competitive advantages and promote sustainable transformation in the industry. Sustainability is not only an obligation, but also a strategic opportunity that combines environmental responsibility, social justice and good corporate governance.

ALUCA
TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

7. SOURCES

Haufe, ESG – Definition und Bedeutung für Unternehmen und Investoren, 14.06. https://www.haufe.de/sustainability/strategie/esg-definition-und-bedeutung-fuer-unternehmen-und-investoren_575772_625088.html

Verso, CSR, ESG, Nachhaltigkeit – Was ist der Unterschied? 29.01.2024 - https://verso.de/blog/csr-esg-nachhaltigkeit-was-ist-der-unterschied/

Greenly Earth, ESG-Kriterien: Nachhaltigkeit auf allen Unternehmensebenen, 2025 https://greenly.earth/de-de/blog/company-guide/esg-kriterien-nachhaltigkeit-auf-allen-unternehmensebenen

Haufe, ESG – Definition und Bedeutung für Unternehmen und Investoren, 14.06. https://www.haufe.de/sustainability/strategie/esg-definition-und-bedeutung-fuer-unternehmen-und-investoren_575772_625088.html

Verso, CSR, ESG, Nachhaltigkeit – Was ist der Unterschied? 29.01.2024 - https://verso.de/blog/csr-esg-nachhaltigkeit-was-ist-der-unterschied/

Greenly Earth, ESG-Kriterien: Nachhaltigkeit auf allen Unternehmensebenen, 2025 https://greenly.earth/de-de/blog/company-guide/esg-kriterien-nachhaltigkeit-auf-allen-unternehmensebenen

ESGVolution, Wie beeinflusst Nachhaltigkeit die Automobilindustrie? 2023, https://www.esgvolution.com/de/wissen/esg-blog/esg-automobilindustrie/

Pakadoo, CSR und ESG – was ist der Unterschied? https://www.esgvolution.com/de/wissen/esg-blog/esg-automobilindustrie/

Ayvens, Flotte und ESG: Was Sie wissen müssen, 2023, https://www.ayvens.com/de-lu/uber-uns/blog/fleet-management/fleet-and-esg/

Deloitte, 7 ESG-Herausforderungen für den Automobilsektor, 2023, https://www.deloitte.com/de/de/issues/sustainability-climate/esg-automobilsektor.html

Plan A, ESG-Leistung: Definition und Best Practices, 2024, https://plana.earth/de/academy/esg-performance

Mercedes Benz, CO_2-Reduktion in der Aluminium-Lieferkette, 2025, https://group.mercedes-benz.com/nachhaltigkeit/ressourcen-kreislaufwirtschaft/materialien/hydro-gruenes-aluminium.html

Euroguss, Aluminium: Ein Material verändert die Mobilität, 2024 - https://www.euroguss.de/de-DE/euroguss-365/2024/news/aluminium-ein-material-veraendert-die-mobilitaet

Bundesanstalt für Geowissenschaften und Rohstoffe, Aluminium, Informationen zur Nachhaltigkeit, 2020 - https://www.deutsche-rohstoffagentur.de/DE/Gemeinsames/Produkte/Downloads/Informationen_Nachhaltigkeit/aluminium.pdf?__blob=publicationFile

Aluminium Deutschland, Dokument Standortbestimmung Aluminium und Nachhaltigkeit der Aluminium Deutschland, 2024 - https://www.aluminiumdeutschland.de/2021/12/10/standortbestimmung-aluminium-und-nachhaltigkeit/

TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

Springer Professional, Klimafreundlicheres Aluminium für die Autoindustrie, 2024, https://www.springerprofessional.de/metalle/werkstofftechnik/klimafreundlicheres-aluminium-fuer-die-autoindustrie/50247082

Haufe, ESG – Definition und Bedeutung für Unternehmen und Investoren, 14.06. https://www.haufe.de/sustainability/strategie/esg-definition-und-bedeutung-fuer-unternehmen-und-investoren_575772_625088.html

Verso, CSR, ESG, Nachhaltigkeit – Was ist der Unterschied? 29.01.2024 - https://verso.de/blog/csr-esg-nachhaltigkeit-was-ist-der-unterschied/

Greenly Earth, ESG-Kriterien: Nachhaltigkeit auf allen Unternehmensebenen, 2025 https://greenly.earth/de-de/blog/company-guide/esg-kriterien-nachhaltigkeit-auf-allen-unternehmensebenen

Autozum, Nachhaltigkeit als Wettbewerbsvorteil, 2024 - https://www.autozum.at/de/news/nachhaltigkeit-als-wettbewerbsvorteil-382/

Atreus, Wie Automotive-Unternehmen nachhaltiger agieren können, 2025 - https://www.atreus.de/medien/nachhaltigkeit-in-der-automobilbranche/

Proalpha, Wie die Autoindustrie beim Thema Nachhaltigkeit von ERP-Systemen profitiert, 2024 - https://www.proalpha.com/de/blog/erp-nachhaltigkeit-automobil-industrie

Plan A, Nachhaltigkeitsvorschriften in der Automobil- und Flottenindustrie, 2023 - https://plana.earth/de/academy/sustainability-regulations-automotive-fleet

Beschaffung Aktuell, Entwicklung der Lieferketten in der Automobilindustrie, 2023 - Entwicklung der Lieferketten in der Automobilindustrie

Haufe, ESG – Definition und Bedeutung für Unternehmen und Investoren, 14.06. https://www.haufe.de/sustainability/strategie/esg-definition-und-bedeutung-fuer-unternehmen-und-investoren_575772_625088.html

Verso, CSR, ESG, Nachhaltigkeit – Was ist der Unterschied? 29.01.2024 - https://verso.de/blog/csr-esg-nachhaltigkeit-was-ist-der-unterschied/

Greenly Earth, ESG-Kriterien: Nachhaltigkeit auf allen Unternehmensebenen, 2025 https://greenly.earth/de-de/blog/company-guide/esg-kriterien-nachhaltigkeit-auf-allen-unternehmensebenen

Autozum, Nachhaltigkeit als Wettbewerbsvorteil, 2024 - https://www.autozum.at/de/news/nachhaltigkeit-als-wettbewerbsvorteil-382/

Atreus, Wie Automotive-Unternehmen nachhaltiger agieren können, 2025 - https://www.atreus.de/medien/nachhaltigkeit-in-der-automobilbranche/

Voronoi, China Dominates Global Aluminum Production with Nearly 60% Share, 2024 - https://www.voronoiapp.com/markets/China-Dominates-Global-Aluminum-Production-with-Nearly-60-Share-1096

Global Market Insights, Aluminiummarkt – Nach Produkt, Nach Verarbeitungsmethode, Nach Anwendung – Globale Prognose, 2025 – 2034, 2025 - https://www.gminsights.com/de/industry-analysis/aluminum-market

ALUCA

TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM

Springer, Environmental Sustainability—necessary for survival, 2018 - https://link.springer.com/article/10.1007/s42398-018-0013-3

Umweltprogramm der Vereinten Nationen, BUILDING BIODIVERSITY, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://wedocs.unep.org/bitstream/handle/20.500.11822/35972/BDNR.pdf

Bruegel, How much does Europe pay for clean air? , 2024 - https://www.bruegel.org/working-paper/how-much-does-europe-pay-clean-air

Europäische Umwelt Agentur, The costs to health and the environment from industrial air pollution in Europe – 2024 update, 2024 - https://www.eea.europa.eu/publications/the-cost-to-health-and-the

Statista, Greenhouse gas emissions worldwide - statistics & facts, 2025 - https://www.statista.com/topics/5770/global-greenhouse-gas-emissions/#dossierKeyfigures

Statista, Global climate change - statistics & facts, 2025 - https://www.statista.com/topics/1148/global-climate-change/#topicOverview

Deloitte, Deloitte 2024 CxO Sustainability Report Signs of a shift in business climate action, 2024 - https://www.deloitte.com/content/dam/assets-shared/docs/about/2024/deloitte-2024-cxo-sustainability-report.pdf

Harvard Business Report, The Comprehensive Business Case for Sustainability, 2016 - The Comprehensive Business Case for Sustainability

Reuters, Energy efficiency could offer major climate wins. But what is it?, 2023 - Energy efficiency could offer major climate wins. But what is it?

Sweep, What does the CSRD mean for UK Companies? -2025 - https://www.sweep.net/blog/what-does-the-csrd-mean-for-uk-companies

Morgan Lewis, CORPORATE SUSTAINABILITY REPORTING OBLIGATIONS IN THE EU AND UK – 2023 - chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.morganlewis.com/-/media/files/publication/morgan-lewis-title/white-paper/2023/corporate-sustainability-reporting-obligations-in-the-eu-and-uk.pdf?rev=-1&hash=95758DE1E233AB23F38BC10B4AB8F28C

DIHK, Junge Menschen erwarten Corporate Social Responsibility – 2024 - https://www.dihk.de/de/themen-und-positionen/fachkraefte/aus-und-weiterbildung/junge-menschen-erwarten-corporate-social-responsibility-109140#:~:text=CSR%20fordert%20Firmen%20auf%2C%20%C3%BCber,oder%20soziale%20Aktivit%C3%A4ten%20von%20Mitarbeitern.

TEL.: +49 791 95040-321 E-MAIL: STEPHEN.TURNER@ALUCA-WORLD.COM


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