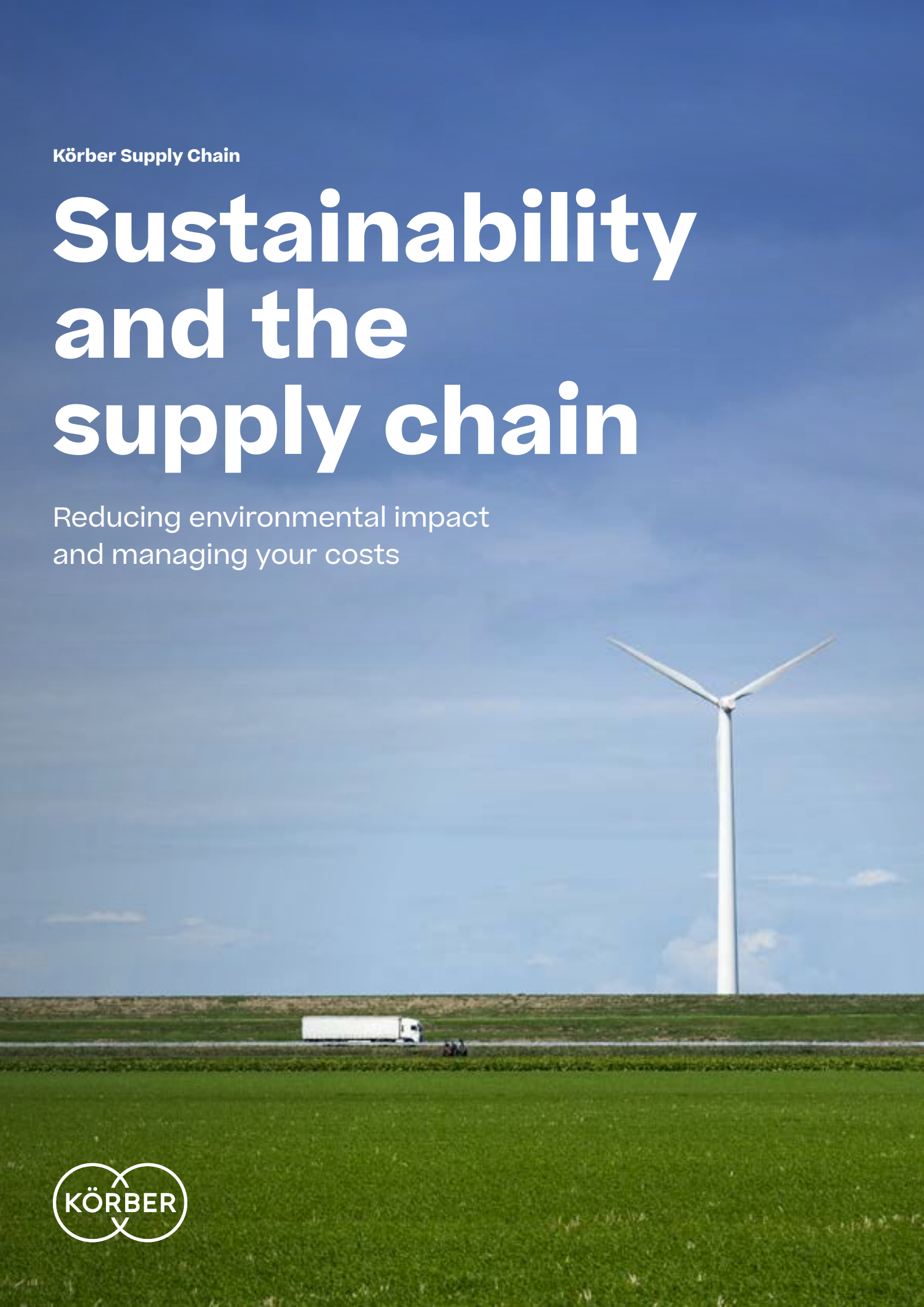
Körber Supply Chain

Sustainability and the supply chain

Reducing environmental impact and managing your costs



Introduction

Sustainability is fast becoming the key driver for business success and the positive public image of organizations. The growing pressure on companies to take action on sustainability means their supply chains are expected to be greener too. As larger companies make public promises to become more eco-friendly, they hold their suppliers to the same standards.

To facilitate this, there are several practical solutions to make your supply chain more sustainable, reducing both your waste and your carbon footprint, and managing costs – all while increasing profitability.

BVL International asked logistics workers how they felt about sustainability in the supply chain. **59% said sustainability has an important impact on warehouse strategy**, including business models, organization and processes. **93% recognized environment, economy and society as the three key aspects of sustainability.**

What does "sustainability" mean to the supply chain?

While it's true that companies are under pressure from both competitors and national and international regulations to meet better sustainability standards, no global key performance indicators (KPIs) have been established yet.[1]

However, supply chain management faces the biggest sustainability challenges in three areas:

- **Environmental:** energy efficiency, regarding energy consumption and its costs; and material efficiency, such as going paperless and cutting down on packaging
- **Social:** health and safety within a warehouse
- **Economic:** stability and profitability, making operating costs sustainable and addressing issues related to the total sales/revenues

These allow supply chain leaders to identify specific sustainability goals and find their unique KPIs. As environmental sustainability is the most urgent factor affecting supply chain, we'll focus on how supply chain solutions can help you improve it and meet your personal targets.

The environmental impact

Governmental agencies, the Paris Agreement and consumer demands make the environmental goal more evident than others, reducing your carbon footprint. This affects the entire supply chain, including distribution and transportation. More than two-thirds of global carbon dioxide emissions are generated by transportation, and the generation of electricity and heat at different stages of distribution and production.[2]

Sustainability solutions

Companies of all sizes and industries can introduce a variety of supply chain software and automation options in their supply chain to reach their environmental sustainability goals.

Supply chain network design
34% of the participants in BVL's survey believed the greatest potential for sustainability to be in transport. To minimize trucks' travel times and costs, our supply chain network design tools help determine the best location for your warehouses, taking into consideration your unique supply chain requirements and goals. By optimizing transportation routes, you save time and resources and can significantly reduce carbon emissions.

Warehouse Management Systems (WMS)
Our WMS automates warehouse processes and makes them more efficient. It helps optimize resources, processes and placement of goods inside the warehouse. A better use of existing space cuts unnecessary tasks, transports and cost. It also reduces waste and energy usage.

Warehouse automation
Automation equipment and material handling equipment (MHE) allows for areas and selected processes to be operated without human interaction, allowing them to be run in "dark mode" to reduce energy usage.

Transportation Management Systems (TMS) and Distributed Order Management (DOM)
TMS plan and monitor truck routes daily to help minimize vehicle use and reduce wait times and time on the road. This cuts down resource use and cost, in addition to lowering carbon emissions. Even more so when used with DOM solutions, which calculates and adjusts the quickest transportation routes across an organization's different locations.

Autonomous Mobile Robots (AMR)
Paper pick lists are often the biggest source of supply chain waste, and with the added use of ink cartridges, they can cause a huge financial and ecological impact. AMR cuts out the need for paper and reduces waste.

Voice-Directed Work (VDW)
VDW lets team members in the warehouse receive instructions via a headset, allowing them to focus on their tasks by keeping their hands and eyes free. VDW improves fulfillment accuracy, which reduces the need for customer returns and unnecessary shipping. The rugged devices can last for 12 years or longer, which conserves materials and cuts the need for maintenance shipments.

Conclusion

Advanced software and automation technologies offer solutions to reduce energy waste in warehouses, shrink the carbon footprint and decrease costs for both energy and materials. This way, your organization can meet regulations, increase profitability and build a more sustainable supply chain to make the world a greener place.

Find out more
Visit our website to read more on how Körber's solutions can help to build a more sustainable supply chain.

Read more →

References
1. Saeed MA and Kersten W. (2020), *Supply chain sustainability performance indicators – A systematic literature review*. Available at: https://www.bvl.de/lore/all-volumes--issues/volume-13/issue-1/supply-chain-sustainability-performance-indicators---a-systematic-literature-review. Accessed January 2021.
2. Fitzpatrick P and Raman K. (2019), *Designing an Environmentally Sustainable Supply Chain Network*.

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