



Press Release

Automobile industry

Big Data Can Support Corporate Environmental Management

Potsdam, September 15, 2020. **Faced with the challenges of digitalization and the climate crisis, many companies are keen to improve their sustainability. In a new [study](#), researchers examine the potential uses of data analysis to strengthen corporate environmental management in the automotive industry. As part of the study, the researchers interviewed corporate sustainability officers and invited data analysis experts to evaluate their key statements. The study reveals that Big Data could enhance corporate environmental management in a variety of ways and that many of these opportunities are going untapped.**

The term "Big Data" refers to a variety of methods and applications for the processing and evaluation of very large data sets from diverse sources with the aim of distilling relevant insights to enhance decision-making and business processes. In corporate environmental management contexts these insights are generated using data relating to production and manufacturing processes from internal sources as well as data sourced from suppliers.

"Targeted analyses of these data can not only enable companies to gain competitive advantages but can also help them to make their business practices more environmentally friendly. The sustainability officers interviewed for this study have developed some ideas how Big Data could benefit their companies. However, few of the respondents had developed concrete plans for the implementation of Big Data solutions. Only one of the six companies surveyed currently uses Big Data in the context of its environmental management activities – in this case, with the specific aim of improving energy efficiency," says lead author and IASS researcher Grisca Beier, who noted that energy consumption was an important focus for all of the respondents.

Study offers ideas to improve corporate environmental management

Big Data analyses can also help companies reduce their carbon emissions, improve water usage, and implement more resource-efficient approaches to waste management. The respondents also suggested that Big Data could be used to optimize life cycle assessments (LCAs) by facilitating a more accurate assessment of the environmental impact of products across the entire lifecycle – from the extraction of raw materials through to the disposal or recycling of retired products.

The study aims to help companies discover the potential benefits of digitalization for sustainability performance by providing real-world examples of how the use of big data can strengthen corporate environmental management.



Publication:

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Funded by the ministries of research of the Federal Republic of Germany and the State of Brandenburg, the **Institute for Advanced Sustainability Studies** (IASS) aims to identify and promote development pathways for a global transformation towards a sustainable society. The IASS employs a transdisciplinary approach that encourages dialogue to understand sustainability issues and generate potential solutions in cooperation with partners from academia, civil society, policymaking, and the business sector. A strong network of national and international partners supports the work of the institute. Its central research topics include the energy transition, emerging technologies, climate change, air quality, systemic risks, governance and participation, and cultures of transformation.