

3 key approaches to maintaining sustainable logistics in 2023

 By [Liam Connors](#)

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In recent years, sustainability has become a major focus globally. Organisations across most - if not all - industries are demonstrating the steps they are taking to reduce their carbon footprint and begin relying on renewable energy sources.



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This applies to the logistics industry, considering that they are a significant contributor to global emissions. In fact, if strong and effective actions are not taken, [the European Environment Agency expects global logistics will account for up to 40% of global carbon dioxide emissions by 2050](#). And it's not just international pressure pushing sustainability to centre stage. There are two other factors as well. First, the [rise of the conscious consumer](#) is compelling logistics companies to be able to demonstrate transparency and map their emissions across their networks.

Second, sustainability is now a strategic business issue as well as a reputational one. According to a [recent report](#) by Gartner, for the first time in the history of the survey, environmental sustainability was identified as being amongst the top 10 strategic business priorities by CEOs. Environmental, Social and Governance (ESG) has also become a [top-level consideration](#) for many organisations. This is particularly important for those with investors who want to see that an organisation is cognisant of its environmental impact - and proactively taking steps to reduce it.

The good news is that logistics companies are not alone in their efforts, as there are three key approaches that can greatly assist them in their carbon reduction and thus sustainability efforts.

1. Leveraging IoT

Logistics companies can use computer modelling software with integrated IoT sensors across their fleets, which enables them to better calculate emissions based on journey time, speed, distance, the weight of loads and the type of fuel used. This then assists them in their carbon reporting and provides a clearer picture of their annual consumption.

2. Streamlining shipment consolidation strategies

Logistics companies can also adopt a more collaborative, networking-led approach to shipping, by using cargo

consolidation strategies to combine multiple orders from different companies into aggregated loads and integrated delivery routes. This smart scheduling is often powered by algorithms and requires integration between organisations' management platforms. The caveat is that this isn't possible without digitalisation.

Furthermore, in some cases, IoT cameras using computer vision are deployed in containers and trucks to notify other organisations of available freight space. Companies are also offering consumers the option to consolidate their own fulfilment and opt out of receiving multiple, unnecessary deliveries, thus enabling the customer to be an active participant in improving sustainability efforts.

3. Embracing green packaging and smart recyclables

Single-use plastic packaging is one of the major culprits of long-term damage to the environment and secondary packaging for safe transportation has a particular reputation for excessive waste. So odious is its use that a global [report](#) released by consulting company Ipsos earlier this year found that 82% of those surveyed want to only buy products that use as little single use plastic as possible.

Therefore, many companies are limiting their use of plastic, using recyclable or reusable packaging, or seeking biodegradable alternatives. Additionally, much like with the transparency objective of carbon reports, companies are also aiming to disclose the origin of their raw materials.

Some types of green packaging now include a digital watermark called the [Digimarc](#) that enables traceability of raw material origins and improves the accuracy of plastic sorting to help create higher quality recycled materials.

For logistics companies that have embraced digitalisation, their digital transformation efforts can be harnessed to support sustainability. Firstly, by using intelligent demand forecasting to improve supply chain planning and optimise inventories.

Secondly, companies can utilise their AI-based fleet management software to reduce empty miles and eliminate unnecessary journeys, thus both reducing their impact from emissions and reducing costs. Third, logistics organisations can also avail themselves of alternative transportation such as smart-charging electronic delivery vehicles.

Much as digital transformation is an ongoing journey that logistics companies need to undertake, so too is sustainability. Based on the progress that has been made in the past two and a half years with the acceleration of digital transformation, it is reasonable to expect that sustainability-enabling technologies will also increase. The onus is on logistics companies to commit to this endeavour now and in the future.

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