



## SUPPLY CHAIN INSIGHTS **ENVIRONMENTAL SUSTAINABILITY THAT PAYS OFF**

Sustainable logistics solutions that reduce the environmental impact of your supply chain can help you achieve your ESG targets – but they can come at a short-term cost. We look at three examples of sustainable solutions that promise long-term gain.

**DHL Supply Chain – Excellence. Simply delivered.**



Despite its complexities and challenges, sustainability is a must to future-proof businesses and their supply chains. Consumers increasingly demand sustainable products and services, even amid the looming threat of economic recession. Governments and regulators continue to put forward more legislation related to sustainability, from efforts to curb emissions to how industries ensure human rights along the supply chain. And while investors often worry about the trade-off of implementing more sustainable practices against short-term returns, they also recognize sustainability as a non-negotiable requirement to ensure the long-term viability of their investments.

### **SUSTAINABLE LOGISTICS TO ACHIEVE YOUR DECARBONIZATION TARGETS**

Not only do businesses need to approach their sustainability strategy through tangible action, visibility and continuous improvement of their direct operations, but they must also consider upstream and downstream operations within their supply chain. The most recent Global CPD Supply Chain report estimates there are 11.4 times more emissions in a company's supply chain than in its own direct operations<sup>1</sup>. Therefore, alignment with partners who can further the business' sustainability ambitions along the supply chain is a critical success factor. One KPMG supply chain trends report predicts that regulators and other important stakeholders will likely demand more focus on scope 3 emissions<sup>2</sup> – the indirect emissions from the transport of products, usage of sold products and product disposal – in 2023.

One way to address the scope 3 emissions of your business is by understanding the environmental

impact of your logistics operations. Whether you are at the early stages of your sustainability journey or leading the way, there are multiple sustainability levers available to improve the footprint of your warehousing, transport and packaging operations.

The alignment of sustainable logistics solutions to where you are in your sustainability journey will be crucial to achieving the success of your roadmap. Not all sustainability investments are created equal. Some solutions require a certain degree of maturity in the sustainability journey as multiple variables can impact their ability to deliver on longer-term ESG goals.

Here are some ways sustainable logistics solutions are making strides in achieving long-term environmental goals – and delivering great returns on investment

### **1. THE FUTURE OF SUSTAINABLE WAREHOUSING**

A good example is the implementation of solar panels (PV) as a source of clean, renewable energy in warehousing operations. Solar PV systems can have an average investment payback period of 7-10 years, depending on the location, CapEx, OpEx, available subsidies and electricity tariffs. Geographies that receive higher solar radiation will benefit from shorter payback periods. One of our success stories includes the construction of a 1.7-megawatt Dynamic Urban Power Station powered by 5,500 solar panels at the largest pharmaceutical-grade cold-chain warehouse in Australia. The warehouse uses 49% of the electricity generated daily and the remaining 51% goes to the grid, yielding over €180,000 in energy cost savings annually<sup>3</sup>.

<sup>1</sup> [https://cdn.cdp.net/cdp-production/cms/reports/documents/000/006/106/original/CDP\\_SC\\_Report\\_2021.pdf?1644513297](https://cdn.cdp.net/cdp-production/cms/reports/documents/000/006/106/original/CDP_SC_Report_2021.pdf?1644513297)

<sup>2</sup> <https://home.kpmg/xx/en/home/insights/2022/12/the-supply-chain-trends-shaking-up-2023.html>

## 2. THE ROAD AHEAD FOR SUSTAINABLE TRANSPORT

A similar situation applies to logistics transport, a key sector in the fight against climate change. According to the World Economic Forum, the road transport sector must almost entirely decarbonize by 2050 to meet the goals of the Paris Agreement. Today, medium and heavy-duty trucks are a disproportionate source of global greenhouse gas (GHG) emissions. These trucks represent just 4% of road vehicles, yet account for 40% of road transport emissions<sup>4</sup>. Alternative drive vehicles, such as electric and biofuel-powered vehicles, show great promise in helping to achieve some of those decarbonization targets, particularly when tackling short and medium-distance hauls. For example, for one of our global consumer sector customers, we implemented a dedicated intra distribution center eTruck to facilitate the movement of finished goods across the customer campus. The eTruck travels roughly 35 kilometers transporting 150 shipments a week, with an average of 2,550 pallets of finished goods. This solution contributed to our customer's sustainability agenda by saving approximately five tons of CO<sub>2</sub> per year, maintaining the cost level of the specific service, reducing contractual complexity and creating a reliable shuttle service to handle daily operations.

## 3. SUSTAINABLE PACKAGING THAT REDUCES EMISSIONS

Packaging that delivers material reduction, recyclability and reuse doesn't just minimize waste and the overall environmental footprint of finished products, it also decreases transport-related CO<sub>2</sub> emissions. For example, for one of our leading chocolate confectionery customers, we implemented a series of sustainable packaging solutions. These included the switch of the traditional plastic vacuum formed trays used to transport the product inbound into the warehouse, for reusable trays that can be returned to the manufacturers. Through packaging material reductions, consolidation of wholesale and retail shipments and adding an extra layer on inbound and outbound pallets, we have increased unit fill on trailers. That means less time on the road and translates to approximately 9 tons fewer CO<sub>2</sub> emissions each month<sup>5</sup>. Outbound shipment consolidation has also generated over €190,000 worth of savings for our customer.

<sup>4</sup> [https://dhlinsights.dhlsupplychain.dhl.com/ao-esg/case-study\\_dhl-goes-green-with-australias-first-urban-dynamic-power-station](https://dhlinsights.dhlsupplychain.dhl.com/ao-esg/case-study_dhl-goes-green-with-australias-first-urban-dynamic-power-station)

<sup>5</sup> <https://www.weforum.org/projects/decarbonizing-road-freight-initiative>

<sup>6</sup> [https://dhlinsights.dhlsupplychain.dhl.com/ao\\_packaging/case-study\\_its-beginning-to-look-a-lot-like-christmas-packaging](https://dhlinsights.dhlsupplychain.dhl.com/ao_packaging/case-study_its-beginning-to-look-a-lot-like-christmas-packaging)

**Picking up the pace in your decarbonization efforts will require collaboration and continuous improvement of sustainable solutions with partners along the supply chain who align with your own ESG ambitions. As the first logistics company to commit to a zero-emissions target in 2017, we continue setting the standard, leading our industry – and your business – to a greener, more sustainable future.**

**LEARN MORE ABOUT HOW WE CREATE GREENER PROCESSES FOR YOUR BUSINESS THAT SAVE YOU MONEY, TOO.**

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