



Reduce Emissions from Freight and Goods Transport

GHG emissions category

Owned fuel vehicles: Scope 1

Owned electrical vehicles: Scope 2

Supplier managed shipping: Scope 3, Category 4 Upstream Transportation and Distribution

Introduction

This guide covers how to reduce emissions from shipping and goods transportation. Right now, this sector is responsible for eight percent of global carbon emissions. But there are already solutions that companies can roll out to dramatically lower these emissions. The transportation industry is changing fast and the coming decade will likely see the growth of technologies like e-fuels and electric trucks that can further accelerate the shift to sustainable practices.

Measure and understand

To figure out emissions from your shipping and freight, you can use a method that combines the distance travelled, the weight of the goods (when relevant), and an emission intensity factor, which depends on the type of vehicle, fuel, and region. If a supplier handles your shipping, they should be able to give you this information.

If you don't have access to this data, you can find several online calculators that can estimate your shipping emissions (see one example [here](#)).

Key Actions

Choose Suppliers Aligned with Your Climate Goals

When picking a freight provider, make sure they're committed to cutting emissions by half by 2030 and achieving net zero by 2050, and are actively working toward that goal. A reliable sign of this commitment is if the company is part of the UN-backed Race to Zero campaign through recognized initiatives like the SME Climate Hub, Exponential Roadmap Initiative, or the Science Based Target Initiative (SBTi). Companies, organisations and cities with a validated commitment can be found [here](#).

Opt for Low-Emission Transport Methods

The way you transport your goods will significantly influence your emissions. Air freight has the highest emissions, followed by heavy trucks. Rail and ocean shipping have the lowest emissions, so opt for these where possible. Limit air transport for urgent, time-sensitive deliveries only. Switching entirely from air to ocean freight would reduce your freight emissions by 98 percent. You don't have to do this all at once, however. You could start with a partial shift, say 50 percent.

Usually, the choice of transport method depends on the required delivery time, with air transport being the go-to for fast deliveries. To avoid high-emission air transport, plan your deliveries according to when they need to arrive. In some sectors, this will allow the use of slower, but low-emission transport. Consider also if delivery times can be extended to make shipping more sustainable. When you introduce slower forms of transport (sea and rail freight), communicate to your customers that one of the reasons behind the change is reducing climate emissions. This can help customers accept slightly slower deliveries.

Electrified Transport

All companies will at some point require road transport for their transportation of goods, and should demand electrified vehicles, especially for last mile deliveries. This not only addresses your emissions but reduces air pollution in cities.

Use Sustainable Fuels

Whenever feasible, use sustainable fuels or electricity for your freight.

- **Road Transport** When electric vehicles are not possible, select transportation using biofuels. This is particularly vital for 'last mile' deliveries in cities, where air pollution is an acute and immediate issue.
- **Railway Transport** Using rail transport is a great low-carbon solution. However, you can lower emissions even further by choosing trains that run on electricity.
- **Ocean Freight** When it comes to sea freight, look for shipping options that use a blend of biofuels.
- **Air Freight** If air freight is unavoidable, choose Sustainable Aviation Fuel (SAF) and consider investing in certified carbon removal projects. Keep in mind that while carbon credits can't offset your transport emissions, they can help address emissions that can't be eliminated right now. Find guidance on what carbon credit providers to select [here](#).

Engage with Employees

Make sure your team understands the varying emission impacts of different freight options. Cross-departmental coordination is necessary to balance delivery needs with your company's climate goals. It's important to align climate targets across your organisation and involve the right people, to ensure these targets are met in the most effective way.
