

WHITEPAPER

15 ways to boost sustainability

How to make your supply chain greener

Introduction

The art of running a business sustainably has always been a balancing act. But with environmental concerns high on the global agenda, this is becoming tougher than ever.

Until recently, sustainability initiatives have been focused on the manufacturing side of the supply chain. But the spotlight is now on warehouse and transportation, and the measures companies can put in place to reduce their ecological impact.

There are a number of ways you can cut your carbon footprint, while simultaneously improving the cost-effectiveness of your whole operation.



To cut emissions in line with the Paris Agreement, while increasing sales at the projected rate of 5.3% a year, CPG companies would have to lower their carbon intensity by more than 90 percent between 2015 and 2050.¹

McKinsey & Company

Strategy and planning

1. Map your supply chain

Before you can introduce any sustainability processes, you need to map your whole supply chain. This detailed view, accounting for both people and other resources, will help you identify the causes, risks and impacts of any environmental, economic and social issues in your operations.

2. Change hearts and minds

It's important to get buy-in from staff and suppliers ahead of putting any measures in place. Sustainability is a cultural change which calls for collaboration at every level, across the chain. However, it's not always easy to push your environmental objectives on suppliers. Performing audits and enforcing codes can help promote your sustainability efforts, as can pushing training and rewards.



Of the companies that report their greenhouse-gas emissions, only 25 percent say they engage their suppliers in an effort to reduce emissions.¹

McKinsey & Company

Transportation and distribution

3. Location is everything

When looking for a new distribution building, you should consider ways to minimize transport to and from it. Opt for one near major highways, railways, docks and airports. When your warehouses are closer to cities and other “access hubs,” your trucks will have less distribution distance, and your team can use public transport to get to work. A more centralized location also cuts the need to install extra utilities, since water and power lines already exist.

4. Switch to omnichannel

Rather than using a dedicated distribution center for each sales channel, consider distributing both online and offline orders from one single fulfillment center. Your full inventory will be under one roof, avoiding the need to travel between centers and making you more able to react to changes in demand.

5. Optimize routes and loads

Reorganizing your transport networks, whether it's through the use of a transport management solution or collaboration with a third-party carrier, can pay dividends economically and environmentally. Changing distribution centers and sharing loads can reduce empty mileage and therefore emissions for the same cargo volume.

6. Reorganize your inventory

It's crucial to review the efficiency of your inventory. The way your stock is organized could be leading to errors and repeated trips, increasing transportation. A clothes retailer, for example, may find it more efficient to pack and pick by color than by size.



Robots at Anheuser-Busch InBev aim to reduce the brewery's carbon footprint by 605 tons, by reducing transport between warehouses.²

Food Drink & Franchise

Buildings and contents

7. Feel good in and out

When your warehouse is sufficiently insulated, less energy is wasted. This reduces your carbon footprint and your energy overheads, and has the benefit of limiting the strain on your heating system. It also keeps your team warmer in the winter.

In the summer, coating your warehouse roof in reflective paint can help keep the heat out, saving you the cost of running the air con 24/7. To help improve the efficiency of both your heating and cooling solutions, destratification fans are a great investment for everyone's comfort.

While it sounds simple enough, it's important to be mindful of the materials you use. Some paints, adhesives and sealants have lower polluting properties than others.

8. Switch up your lighting

Revising your lighting set-up is one of the simplest ways to improve sustainability, especially for larger warehouses. Although LEDs cost more than traditional light bulbs, they last a lot longer and use far less energy, saving your electric expenditure and the planet.

Sensors set to switch on only when a team member is in the vicinity can also be used to reduce lighting use. The same technology can also monitor and control other resources such as gas, water, refrigeration and machinery.

9. Get low-carbon kit

Every warehouse depends on vehicles and equipment to function, which means using gas and electricity. When it's time to replace your kit, check the miles per gallon and the wattage of each item. You should also consider the product lifespan and any ongoing maintenance which could impact long-term efficiencies.



10. Rethink your packaging

Companies like Amazon are regularly called out by consumers and environmental groups for delivering small items in huge boxes. As well as cutting down on waste and complaints, efficient packaging is more lightweight and takes up less space, reducing transportation costs.

Excess packaging is one issue; recyclability is another. To raise your sustainability credentials, opt for biodegradable packaging over plastics.

11. Reuse and recycle

The recycling effort should extend to the warehouse floor. To avoid sending huge amounts of waste to landfill, collect the discarded cardboard and paper.

But before you recycle, items such as boxes and pallets should be reused, wherever possible. You should even reuse packaging sent to you by suppliers and encourage customers to return packaging. These practices reduce the environmental impact of manufacturing and save you money too.

Technology and data

12. Streamline your operations

So-called “lean” warehouse solutions can be instrumental in addressing both the environmental demands and the complex inventory management requirements of market globalization. Drawing on data from across your operations, these systems can calculate the optimal handling and loading requirements for each container, truck and warehouse.

This data can be used to avoid unnecessary transportation and stock replenishment, while simultaneously improving the reliability of the picking and packing process.

13. Make your data work harder

As well as identifying inefficiencies and optimizing your operations, data can be used to automate decision making around sustainability.

For example, it could:

- Track your assets and deliver maintenance at the right moment
- Track your shipments and benchmark carrier performance
- Optimize your routes and fuel efficiency
- Analyze and adapt your inventory to reduce environmental impact

At the very least, these machine-learning-based solutions can paint a clear picture of the sustainability in your supply chain, flagging any issues.



According to The Sustainability Consortium, less than one-fifth of respondents said they have a comprehensive view of their supply chains' sustainability performance, with more than half unable to determine sustainability issues in their supply chains.¹

McKinsey & Company





14. Upgrade with robotics

Automated robotics are a great way to reduce transportation between and inside warehouses, as they can work rapidly and effortlessly across miles of multi-story racking. While initial investment is required, the long-term financial benefits of robotics cannot be denied.

Going one step into the future, automated delivery robots, unmanned delivery trucks and drones could offer savings in both costs and emissions.

15. Go paper-free with voice

Paper pick lists are often the biggest source of supply chain waste, since each list can be several pages long, and with ink cartridges a huge financial and ecological burden. Voice technology is key to reducing this waste, requiring absolutely no paper to operate, and very little to set up.

With voice, the need for pick lists is completely removed as your team will receive all instructions from a headset. It not only removes paper from the process, it also improves picking speed and accuracy. The location is identified on every pick through the system, which means there is no need to reprint rack labels. You will only need to print additional labels when you expand or rearrange racks. Voice also reduces the need to print new labels every time a barcode or SKU is updated.

Light-based picking technology does also remove the need for paper, but it has components that are non-recyclable, and requires regular maintenance to remain functional. The only investment voice requires is the headsets, which all run on recyclable, rechargeable batteries.

Sustainability support

Cost is often cited as the biggest barrier to sustainability. And whilst there will always be an initial hit on your bottom line, the new measures often pay for themselves.

If you are struggling to justify the expenditure, look to government agencies for support. The European Union, for example, offers businesses incentives to cut carbon emissions.

To ensure the success of any new measures, it's important to identify the right partners—ideally those that support your goals for sustainability. It's important to not only look to your partners in your supply chain, but also to an experienced logistics partner for any necessary warehouse management technology.



The European Union has provided funds to several companies to enable logistics collaboration, as part of its directive to cut carbon emissions by 40% by 2030.³

European Commission

CONCLUSION

As more companies acknowledge the impact their supply chains have on the environment and undertake measures to reduce it, other businesses will follow. With so many new sustainability tools and strategies available, there are countless opportunities for consumer firms and suppliers to work together. After all, if done correctly, the business need for profitability can go hand in hand with the environmental need for sustainability.

See how Infios can improve both efficiency and safety across your warehouse operations:

Learn more about Voice:

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