# Cutting CO2 from the supply chain:

## a How To guide

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# Today's supply chain is unsustainable

## Ask any supply chain leader about their strategic priorities, and the chances are that sustainability will be somewhere near the top of the list.

Sustainability is no longer an optional extra. A sustainable supply chain is a mark of operational excellence – but it's also a legal and moral imperative.

Sustainability can mean many things, from reducing waste to using ethical suppliers. Perhaps the most critical element of it is reducing carbon emissions.

To avoid global temperature rises of above 1.5°C (beyond which we risk devastating climate collapse), $CO_2$ emissions need to reach net zero by 2050, and to be cut in half within the next decade.

That represents a significant challenge for us all, but for supply chain leaders in particular.

**Transport accounts for over 25% of the world's $CO_2$ emissions, and is the sector with the fastest-growing rate of pollution.**

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# Cutting $CO_2$ makes commercial sense

Supply chain leaders know that reducing carbon emissions and committing to sustainability is business-critical. But with the industry still reeling from the after effects of the pandemic, some are reluctant to spend money on expensive environmental initiatives.

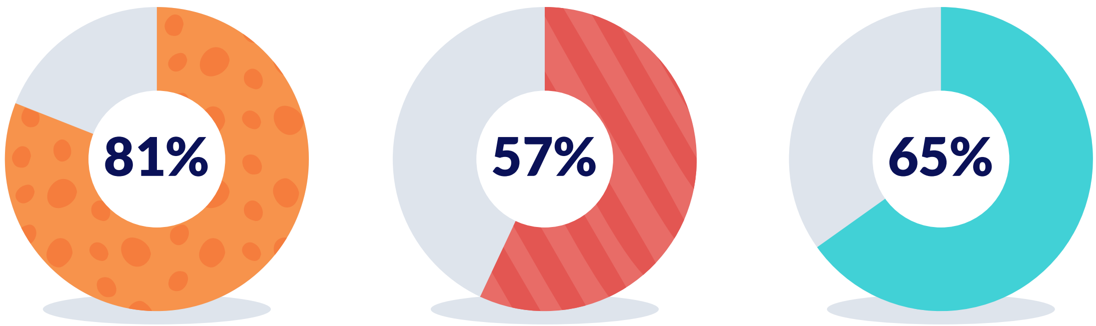
The good news is that cutting $CO_2$ doesn't have to create negative commercial impacts. In fact, a thoughtful strategy can drive positive outcomes across the entire business.

Increasingly, market-leaders are adopting sustainability as a core part of their ethos. They see people, planet and economic prosperity as a Venn diagram, understanding that the three elements can work together to create not only a better world, but a more competitive business.

BREWDOG

Take Brewdog as an example. The UK's leading craft beer brand, it took 20% of all craft beer sales in 2019. It's also carbon negative – meaning Brewdog offsets more carbon than it contributes to the environment. That's thanks to a number of initiatives, including wind-powered offices, breweries and bars, using 'reject' fruit that would otherwise be wasted, and an effort to plant 2,000 hectares of forest in the Scottish highlands.

Brewdog's success proves that sustainability doesn't have to come at the expense of the bottom line. It's quite the opposite: sustainability is rising up the agenda for forward-thinking businesses because it matters to their most important stakeholders.




81% of consumers believe businesses should help improve the environment.

57% of investors say they would move to a 100% sustainable portfolio.

65% of workers are more likely to work for a company with strong environmental policies.

Done well, reducing carbon emissions isn't a question of making trade-offs. Instead, it can be used as a lever to create a wide range of significant value-adds across every stakeholder group.

## Shareholders

### Higher valuation premium

Historically, sustainability initiatives have been seen as expensive to implement. Today, the opposite is true: investors are willing to pay a 10% premium for companies with a strong ESG (Environmental, Social and Governance) record.

### Big brand domino effect

Supply chain leaders have the power to create knock-on effects up and downstream. Implementing policies that incentivise partners and smaller players to follow suit compounds positive impacts across the ecosystem.

### Stay ahead of regulation

The political landscape is evolving, and sustainability and emissions targets are becoming more stringent by the day. Bluntly, building processes now is cheaper than dealing with non-compliance fines later.

## Customers

### Increased product demand:

Today's consumers care about sustainability. 70% say they would pay an average of 35% more for products made by responsible brands.

### Better brand loyalty:

Sustainability is now the second most important factor in consumers' purchasing decisions, after product quality. That means companies with green credentials are at a significant competitive advantage.

## Employees

### Attract and retain talent

Nearly 40% of millennials have chosen a job because of company sustainability. When competing for talent, it's no longer just a question of salary and title, or even role – employers need to prove their commitment to ESG to win the best candidates.

### Take habits home

Embedding a culture of sustainability in the workplace increases engagement with green issues, and amplifies impact by encouraging positive behaviours.

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# The 4 foundations of a sustainable supply chain

**Understanding why sustainability matters is easy. Knowing what to do about it is much harder – and something supply chain leaders can struggle with as they juggle competing priorities.**

So what does a good sustainability strategy look like, where's the best place to get started, and what will give initiatives the best chance of success? Effective strategies share the same four foundational principles...

# Effective strategies share the same four foundational principles:


## Measurable

That which can't be measured, can't be managed. To make and prove impact, businesses need to set clear goals for cutting carbon emissions, and hold themselves accountable to them.
CO2 reduction should be considered alongside other sustainability goals, like waste reduction and ethical sourcing, and have specific numbers and KPIs attached to it. But for those KPIs to be met, they also need to be prioritised, supported by processes, and given equal weighting with other top-line business metrics, like revenue and profit margin. That comes from the top-down. C-suite endorsement is critical for the success of carbon reduction initiatives.

Some leading businesses have also started publishing their CO2 KPIs, in an effort to hold themselves accountable to customers and other shareholders. The combination of competition, support and scrutiny can be powerful motivators when it  comes to businesses achieving their sustainability goals.


## Inclusive

Likewise, establishing a shared commitment with suppliers is key. Understanding and reducing carbon emissions requires businesses to take a holistic approach, and look at the breadth of their operations. That means not only measuring the impact of their own $CO_2$ emissions, but those of the markets they play in, customers they sell to and suppliers they buy from. Under mandatory Greenhouse Gas reporting rules, all businesses are required to report on their Scope 1 and 2 (direct and indirect) emissions. Much harder is the measurement of their Scope 3 emissions – associated emissions up and down the value chain. But this is also almost always the biggest category, and where the most impact can be made.

We mentioned the big brand domino effect in the last section. Leaders in the supply chain are going beyond simply monitoring the emissions of their suppliers and partners, and investing in training, infrastructure and capacity-building to support them. By introducing efficiency gains up and downstream, they can meet their own targets more easily, and extend the positive impacts of sustainable behaviour far into the ecosystem.

A large part of that effort is ensuring that partners across the value chain are not only educated and equipped, but incentivised to reduce their carbon emissions. Tying sustainability outcomes to commercial outcomes is one way to do this. Increasingly, carbon metrics are making their way into procurement strategies. No longer only competing on price and product, suppliers now need to show commitment to carbon reduction in order to win tenders.

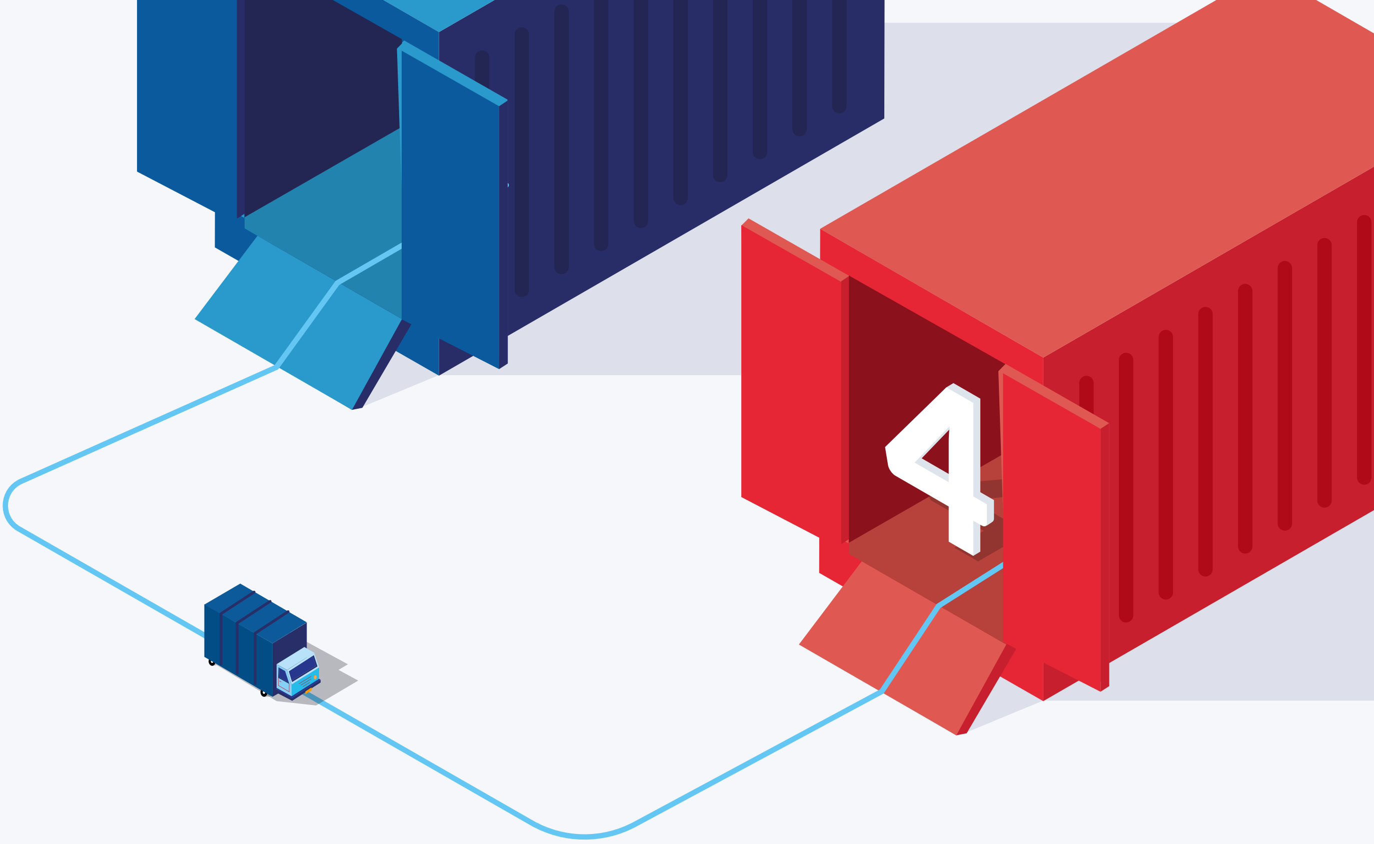
## Technology-driven

Inevitably, investment in technology is needed for businesses to build – and see the commercial benefits of – carbon reduction programmes. Both hardware and software can help.

On the hardware side, there are already major initiatives underway to decarbonise road freight, through the use of electric and hybrid vehicles, and a decarbonised electricity supply.

On the software side, more digital platforms emerge every day, and are seeing uptake from market leaders who want to measure and offset their emissions. In today's marketplace, true competitive differentiation lies in the intelligent use of data. Technology that gives a holistic view of costs and opportunities across the business enables better decision-making, faster.

That's imperative, because driving greater operational efficiencies leads to lower carbon emissions. Take container fill as an example. Software that can identify where fill can be maximised not only cuts the cost, but the environmental impact of sending two boxes where one would suffice. Similarly, tech that gives better visibility over where stock is in the supply chain can reduce the use of air freight. It prevents cargo from being expedited unnecessarily, and helps with forward planning so more can be sent by ocean.




## Collaborative

Supply chain is a team sport. Cutting carbon emissions from it in a meaningful way requires orchestration and coordination across the entire market.

As sustainability becomes more important to stakeholders, businesses that operate with lower emissions are standing out from the pack. But that's hard to do. Air freight is popular because it's quick and easy. Sending multiple, small shipments requires less logistical and strategic effort than planning ahead to optimise container fill. When there are so many discrete parties across the supply chain, it takes a huge amount of planning to ensure best practices are met. Timelines have to be tight, communication clear and processes shock-proof to make it all work.

The best-performing businesses take it one step further. They collaborate within the supply chain, but also with a wider network of academics, standards-setters, regulators and non-profits. By engaging with and taking advice from the whole market, they're better able to understand what appropriate goals should be, and take the action that's needed to achieve them.

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# An action plan to cut carbon emissions

Cutting carbon emissions is a big job, and as a global society, we have ambitious targets to hit. But it can be done – and represents a huge commercial opportunity for those that do it well. For supply chain leaders, there are 3 areas that should be the focus of attention when it comes to building out a sustainability strategy.

Culture

# Exhibit a sustainable mindset

**Before getting into the how of cutting carbon emissions, the whole organisation needs to be educated to understand the why. Without business buy-in at every level, even the strongest sustainability initiatives are being set up to fail.**

Ownership over and accountability for carbon emission targets starts with the C-suite. If those targets aren't seen as being at least as important as other business-level KPIs, then workstreams will be de-prioritised and tasks pushed to the bottom of to-do lists. Elect champions within the senior leadership who can help find budget for and promote educational activities, and ensure sustainable behaviours are recognised and rewarded internally.

Publishing and reporting against targets can also be an effective motivator – but that needs to happen as well as, not instead of, tangible resource commitment. More and more businesses are making dedicated sustainability hires, who are responsible for setting cascading and cross-functional targets, building processes, and executing on key projects as a focus, not a side-project. Making those hires sends the message that the business takes sustainability seriously, and encourages top-down culture change.

## Actions for exhibiting a sustainable mindset:

- Develop internal **messaging** about carbon emissions targets that highlights both the individual and business benefits. Ensure it's communicated consistently and comprehensively.
- Create **educational programmes** for both internal teams and external partners. Consider building sustainability training modules into employee onboarding.
- Ensure team-members are meaningfully **incentivised** to develop personal behaviours and prioritise projects focused on the reduction of carbon emissions.
- Establish **responsibility** for hitting emissions targets across every level of the business. Sharing KPIs publicly can help build accountability.

Data

# Understand where opportunities lie

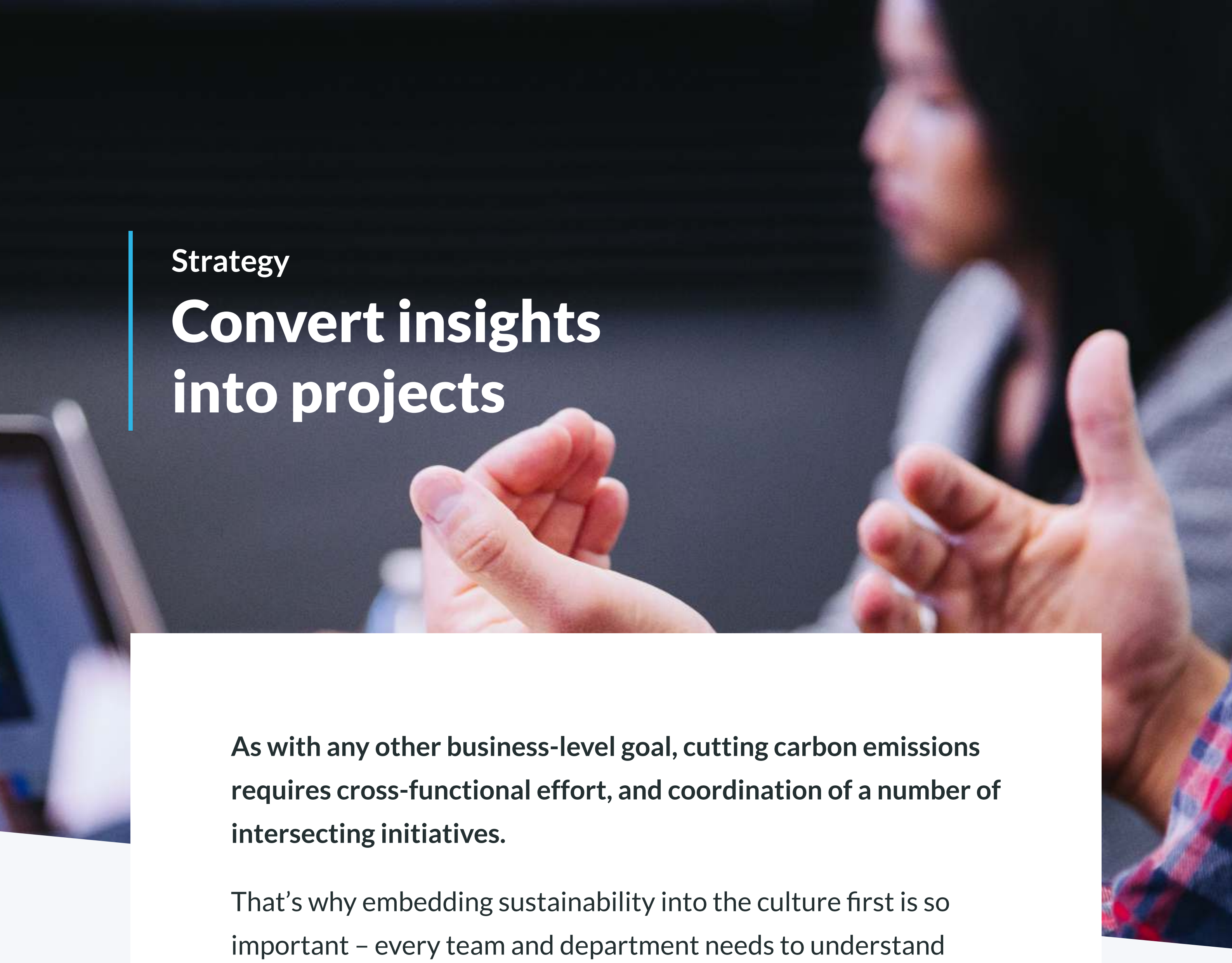
**Making measurable improvements means first benchmarking where the business is today. That requires good quality data, which reveal how the businesses compare against the best-in-class, and where strengths and weaknesses lie versus competitors. With that information, it's possible to identify where headroom exists to take impactful action, without too much extra time, human resource and cost.**

Being realistic about what's achievable is important – especially in fast-growing companies where there are a lot of competing priorities. Too ambitious, and carbon reduction programmes risk derailing other business-critical workstreams. Not ambitious enough, and they'll fail to create commercial value.

Typically, there are 3 main areas that businesses can look at to understand their carbon footprint, and find relatively easy ways to reduce it. Product production, transportation, and offices and people are usually the biggest producers of $CO_2$. They're where the low-hanging fruit is most likely to be found: small operational changes that could make an outsized impact on emissions.

## Actions for understanding where opportunities lie:

- **Identify** which parts of the business are responsible for the most $CO_2$ emissions. These may vary according to industry.
- **Monitor** emissions within each segment to understand the scale of the problem. Consider tracking monthly carbon emissions for specific modes and trade lanes – breaking emissions down can make it easier to find opportunities for improvement.
- For those already tracking emissions, **interrogate the data** to see where initiatives are under-performing, and what new ideas could be introduced.



Strategy

# Convert insights into projects

**As with any other business-level goal, cutting carbon emissions requires cross-functional effort, and coordination of a number of intersecting initiatives.**

That's why embedding sustainability into the culture first is so important – every team and department needs to understand both their individual goals, and how they feed up into shared KPIs. Failure to align might result in projects being cannibalised.

To prevent this, create layered responsibility within each of the different parts of the business. Assigning owners for emissions targets can help drive towards outcomes more effectively, and facilitate inter-departmental collaboration. Those target owners should be continuously looking at the data to understand how effective programmes are, and where there's further room for improvement. They can then work together and with the C-suite to develop strategic initiatives, and pull on the right operational levers to create change.

## Actions for converting insights into projects:

- Look for where there is **waste** in the supply chain, like underutilised freight or excess packaging. This is low-hanging fruit, likely to help with both cost and emissions reduction.
- **Replace** unnecessary air shipments with less carbon-intensive road or ocean shipments
- Get **visibility** over the supply chain to understand where air freight is necessary. This will help with building processes to avoid those eventualities in future.
- **Offset** what can't be reduced. Consider participating in programmes that help neutralise emissions through the supply chain.

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# Start building a more sustainable supply chain today

At Zencargo, we're committed to helping our clients become more operationally efficient and by extension, more carbon-efficient.

We give supply chain leaders the tools to measure, understand and offset their carbon emissions.

Thanks to increased visibility and control over their supply chain, Zencargo customers are able to reduce stock held, release working capital and improve lead times.

To find out how Zencargo could help you build a more sustainable supply chain, **get in touch.**

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