

SUSTAINABILITY IN THE RETAIL SUPPLY CHAIN



This report has been endorsed by the National Online Retailers Association and the National Retail Association.



In response to the 'NORA' community's request to form a network of sustainable brand leaders - to promote best practices, innovation across retail and leading partnerships, we have launched the 'RSIN' (Retail Sustainability Innovators' Network).

The goal is to drive momentum across all sectors of the NORA Network to embrace sustainable, circular and ethical strategies

We strive to shift the tide to create a sustainable retail ecosystem and believe every brand has the potential to be a pioneer in this movement

nora.org.au / rsin.com.au



The National Retail Association is a not-for-profit organisation that represents the interests of retailers across Australia.

We exist to support, inform, protect and represent the interests of retailers and quick service restaurants. We understand the issues and opportunities facing retailers every day. Many retailers have been proactive in improving their environmental footprint for many years, providing consumers with access to more sustainable alternatives, in-store recycling, ethical sourcing, and company-wide sustainability policies.

Though most retailers strongly support sustainable initiatives, it is a complex and sometimes overwhelming challenge as they are faced with ever evolving – and sometimes conflicting – research, products, materials, processes and regulations.

The National Retail Association is involved across all jurisdictions, representing retailer perspectives and ultimately encouraging national consistency to prevent negative impacts and confusion.

www.nra.net.au

SUSTAINABILITY = PROFITABILITY?

The skyrocketing growth of humanity and its influence on global warming, food and water shortages in Africa and floating waste in the Pacific are on everyone's mind today. And most of us, when we are faced with information about the real impact of our decisions, want to preserve our world.

"Consumers are aligning their personal values with those of the brands they buy, and this is especially apparent when it comes to their concerns about climate change. A clear majority of consumers (**over 70 per cent**) indicate that they are willing to switch to, and pay a higher price for, products and services that are environmentally more responsible than alternatives. Research conducted by Harvard University's STAR Lab has shown that this is not just cheap talk: when companies can differentiate themselves and their products based on improved sustainability standards, they attract more consumers and boost sales. In rigorous trials we have conducted with leading companies in the United States and Australia, we have found that sustainability initiatives have lifted in-store sales by **7-17%** in the grocery and apparel sectors. In the travel industry, we have found that carbon offset initiatives have large positive impacts on customer loyalty," said Michael J. Hiscox, Clarence Dillon Professor of International Affairs in the Department of Government, Harvard University.

"What we have seen in the past ten years is a fundamental shift in knowledge, beliefs, and values among consumers, shaping views about the importance of environmental sustainability and consumption patterns.

The latest research shows that a large majority (**81 percent**) of surveyed consumers in Australia see climate change as a major cause for concern that is linked to human and feel that businesses (**86 percent**) and individual consumers (**90 percent**) have roles to play in reducing its impact.

Most Australian consumers report that they want to reduce their carbon footprint (**83 percent**) and that they prefer to purchase products made in more environmentally responsible ways (**77 percent**)," added Michael.

A dozen years ago or so, the idea of sustainability within the supply chain emerged, with many ideas to make a difference in our impact, as a species, on the planet.



Numerous approaches were offered to explore efficiencies in fully utilising transport equipment to make fewer trips. There was a focus on better routing to drive fewer miles and perfecting tire pressure to use less fuel. We even had a few speakers from the retail and logistics industry on stage with us at Momentum, our annual user conference, to explore ways to move goods in a more sustainable manner. All of these initiatives have the potential to make an impact on carbon emissions around the world. However, over the past decade we have not heard much about sustainability within the supply chain. Why not?

Well, it turns out that in nearly every instance, the drive to be more profitable coincided with sustainability — not only were they not mutually exclusive, but they were also symbiotic! Every time we optimise to drive fewer miles or dispatch fewer trucks, we are both saving cost and reducing the carbon impact.

Even the initial rise of ecommerce helped drive down the carbon impact of all of us individually out shopping, driving around from place to place. According to MIT's Centre for Logistics and Transportation, traditional retail store customer travel accounts for more than **75 percent** of greenhouse emissions in the offline shopping process, emitting **3.1kg** of carbon dioxide per journey on average for the traditional urban shopper. They go on to say that shoppers who complete their journey completely online generate a carbon footprint approximately **50 percent** lower. But that was when deliveries took five to seven days and there was a cost for shipping and returns, before "showrooming" and before expectations decidedly changed.

Over the past decade something changed. Something has gotten in the way of that symbiotic relationship. There is a new entity that has exerted its influence to artificially break the natural relationship between profitability and sustainability. It is you. And me — the connected consumer. The meteoric rise in influence has created a situation where every single great shopping experience we have resets our expectations for all experiences that will follow. And we now have the power and social media tools to artificially influence the natural balance of sustainability and profitability — and most of us do not even realise we are doing it.



TWO-DAY SHIPPING

The emergence of two-day shipping for “free” became mainstream in 2005, with the release of Amazon Prime, and it started a chain reaction. Those who paid the annual membership would be guaranteed two-day delivery for every order at no cost. The removal of shipping costs inadvertently hid the impact of the change in delivery timeframes from the customer. As a result, behaviour began to change, as did expectations.

Fast forward about 10 years, and the delivery expectations jumped to one-day delivery and included free returns, still without any real impact felt by the consumer. Today, half of all consumers expect not to be charged for “standard” two-day delivery, and **62%** say free delivery is their top consideration. However, in that same survey, **70%** say they are prepared to pay extra for speed and convenience, such as one-hour, same day or Sunday delivery².

The impact behind the scenes on the supply chain and on the planet has been staggering. Global parcel shipments have grown from **44 billion** in 2014 to **132 billion** in 2020 and are projected to approach **266 billion** in 2026.

Then there is the resource capacity crunch — there simply are not enough trucks and drivers to deliver all of these packages and get them where they need to go on time. In fact, industry professionals rate the issue as the biggest challenge for supply chains in 2019. This has led to the rise of the gig economy, leveraging services like Uber and other courier-on-demand services, to fill the gap. But filling the need for capacity causes even more vehicles to be on the road, which leads to more traffic and more idling and even more carbon emissions. For retailers and shippers, the race to get things out of the door as soon as possible has led to inefficient packaging. We’ve all gotten the gigantic box, only to open it and find a lot of bubble wrap and filler because the item we ordered was significantly smaller than the box it was shipped in. Not only does this waste packaging materials but also such packaging takes up more space in the delivery vehicle, which means other items could not be delivered on the same delivery route.

The lack of any restrictions to rapid online delivery have allowed our penchant for instant gratification to run wild. How often have you ordered something, then realised you needed something else to go with it and ordered again for the same delivery day to the same location? That lack of planning and impulsiveness often causes multiple packages to be delivered to the same location at the same time.

There is also a massive trend of ordering items in multiple sizes and colours and simply returning the items we don’t want for free, causing multiple round trips just to create a home-based changing room. In fact, the abuse of return service has gotten so bad that some habitual returners have started to be banned from some brands and services.

Another impact of expedited shipments is the inability to consolidate at the distribution centre. When we place a two-day order for five items and all five are not available in the same warehouse, the retailer must source those items from multiple places around the country, creating multiple packaging, distribution and delivery events for a single order, without having the time to optimally consolidate those items along the way.

And let’s be honest: nobody selects the “get it to me whenever you can with the least number of packages” option, do they? We have no incentive to do that. But what if we did?



CHANGING OUR BEHAVIOUR

What if we could see the impact of our decisions on the planet. Would it make us rethink the need to have toilet paper overnighted? Would it change the way we shop and consume?

If you knew that selecting to receive an item in four days instead of one day would result in a **70%** reduction in carbon impact, would you be more likely to make that choice? Probably, right? But peer pressure also helps, as it is not always in our nature to be purely altruistic. It turns out we actually care what others think about our choices!

Rob Hango-Zada, CEO of Shippit joins the call for more sustainable shipping options. "We've seen that consumer choices around speed, cost and now sustainability have had a significant impact on driving growth. Optionality is a win for the whole industry - consumers get to make informed decisions around impact, carriers get better freight choices and merchants increase repeat business with happy, reliable customer experiences. We believe that merchants should make conscious choices on behalf of their customers hence why we offset emissions for every delivery sent on our rates"

Shippit has collected data from deliveries across Australia, spanning over **2.2 billion** kilometres to measure how much carbon is generated by its courier partners from the moment a parcel is picked up to when it's delivered. It was found that these deliveries contribute to approximately four thousand tonnes of carbon emissions.

In order to reduce these carbon emissions, businesses must accept that purchasing products online is part of a

new normal. So, the core infrastructure of shipping and logistics must innovate to keep up with the increase in demand without increasing waste.

Let's unpack what we mean by "without waste." In shipping and logistics, waste goes beyond excess packaging and plastic materials. Consider the waste and carbon emissions being generated by sending multiple cars to the same pick-up points, increase in drivers on the road to cover dispersed deliveries from local to rural areas (and back again), network delays, missed deliveries, bulky freight items that reduce the volume of freight being transported in one trip. In order to reduce carbon emissions, we need to challenge the status quo of order fulfilment. Shippit is positioned uniquely at the intersection of supply and demand, so we can reduce waste throughout the delivery process- from collection and storage bottlenecks to the time spent waiting for deliveries to arrive.

"We believe that sustainability in retail starts with the delivery experience. We allow parcels to flow through networks more efficiently, by removing waste and inefficiencies across the supply chain," says Rob.

"We see the trend of great dispersion as an opportunity."

Great dispersion is the ability to send and receive goods from anywhere, resulting in the distribution of products and services across a wider area region. Online retailers are receiving orders from consumers across the country, including an increase in orders shipped out to regional areas.

When compared a standard week of shopping prior to covid lockdowns to a standard week in April, volumes to regional NSW/ACT/SA/TAS have increased by **80%**, and volumes to country VIC/QLD/WA have doubled!

The increase in dispersed deliveries doesn't change how the flow of goods continues to come through the traditional networks and hubs based in one or two centralised locations near city hubs. Orders often take a lengthy detour to get to a centralised hub, only to end up being shipped back out across the country again. This model is unsustainable and carries a lot of waste. There is room for improvement with solutions like micro-hubs and urban fulfilment to service areas based on locality.

The key here is to consolidate and eliminate duplication in the first and last-mile delivery experience to reduce waste in the retail industry.



As online shopping rates remain high due to the impacts of COVID-19, sustainability is more important to Australian consumers than ever before, with **63%** stating they would pay extra for a delivery service that was more environmentally-friendly. The new research from Manhattan Associates, Shippit and Greener also revealed **60%** of Australian consumers are open to receiving a delivery at a later date if it meant that it was delivered more sustainably.

“Due to the ongoing impacts of the pandemic and its convenience, home delivery is now the preferred delivery option for **69%** of Australian online shoppers,” said Raghav Sibal, Managing Director, ANZ, Manhattan Associates. “However, consumers are not prepared to just accept the convenience of delivery at the cost of the environment, and they are increasingly aware of the growing impact the eCommerce sector is having on CO2 emissions.”

All of this raises the question of – if instead of receiving a rush delivery at home, we were given the option of picking it up at the entrance to our office complex, where hundreds of deliveries a day could be consolidated? What if we made the conscious decision not to choose two-day delivery for some items, instead opting for a timeframe with less environmental impact? Or what if we accepted slower delivery times for grouped orders so that these could arrive in one shipment, minimising CO2 emissions? How often would we make those choices if given the opportunity and the insight to make an informed decision?

Importantly, local research shows that over half (**60%**) of Australian consumers indicated they often receive their online order in multiple shipments and **81%** of them said

that they think this is an inefficient and unsustainable way of delivering goods. In fact, the same number (**81%**) also said they would prefer to receive their order at a later date if it meant that it would arrive in one consolidated delivery. A further **64%** of consumers stated that they would be even more motivated to accept a longer delivery wait time - with all purchases consolidated into one package - if the delivery fee was free or discounted.

“For many years now, the predominant consumer pressure on retailers across the globe has revolved around how they can deliver goods even faster, leading to massive gains in same or next day delivery windows. Yet, what this research is showing is that the issue of sustainability might be gaining traction as a circuit breaker for this consumer obsession with delivery speed.”

Demonstrating the efforts Australian consumers are already making to be more environmentally conscious, over **45%** of consumers said that after placing an order online, they would usually check to see if the retailer offered a sustainable delivery option, such as carbon offset or order consolidation services.

“As online shopping delivery rates and the corresponding impact on the environment continue to rise, while at the same time the issue of sustainability continues to move to the forefront of consumer’s minds, retailers will need to make sustainability a bigger priority,” added Raghav. “Those retailers who don’t make sustainability a core part of their business will likely find that down the track they lose out on this potential competitive advantage and drive environmentally aware consumers to other retailers who are taking steps to make their delivery services greener.”

Adopting sustainable supply chain practices can actually have tangible benefits for a business's bottom line. Online sales of home fitness and outdoor leisure exploded in Australia in 2020, resulting in Super Retail Group increasing eCommerce sales by **87 percent** to **\$237 million** in the second half of 2020. In an effort to meet this surge in online orders and meet their customer promise around delivery, the company fast-tracked the roll-out of a new omni-channel solution with Manhattan Associates in an innovative, socially distanced manner.

Super Retail Group's previous online order fulfilment system allocated orders based on proximity to customers, without considering the true cost to fulfil. As a result, more than **20 percent** of home delivery orders were shipped interstate at a higher cost, despite the company having the items in stock in the state. Additionally, more than **15 percent** of home delivery orders were split into multiple packages, which also increased fulfilment costs.

"When COVID-19 fully hit and many businesses were consolidating projects, we actually sped up the deployment of Manhattan Active Omni, and it now offers us a single window of visibility and availability of stock across our entire supply chain network. With the new system, we were able to change our fulfilment logic and immediately reduce fulfilment costs – even achieving our 12-month goal on day one, which is a remarkable result," explained Brian Townshend, Super Retail Group's general manager of omni-retail.

As a result of adopting new systems to improve their supply chain Super Retail Group has seen:

- Fulfilment costs were reduced by double digits from day 1
- Within 6 months online sales grew by **87%**
- Within 6 months more than **2 million** online orders were fulfilled, which was an increase of **93%** on previous period
- Within 12 months of implementation, split-order shipments were reduced by **24%**, whilst online sales grew from **\$291m** in **2020** to **\$416m** in **2021**.

The reduction in split-shipments that Super Retail Group achieved was made possible by an advanced allocation algorithm and better inventory visibility delivered by Manhattan Active Omni, which ensures that orders aren't sent to stores for fulfilment that didn't have the inventory available. This new system not only reduces split-shipments, but also improves customer satisfaction, saves delivery costs and benefits the environment.



HOW?

According to research from Manhattan Associates, **67.3%** of Australian shoppers indicated that sustainability and environmental impacts form an important part of your purchasing decision making when buying goods today.

There is some disconnect though between high consumer interest and action on behalf of retailers themselves. Findings from the same research highlighted that only **31%** of retailers view 'doing more to minimise the environmental impact of our organisation' as a top business priority.

Today, consumers expect the ability to choose sustainable delivery options and retailers must work to meet shopper demands. But in order to provide both continual improvements to operational efficiencies and insights so consumers have what they need to make an educated decision, supply chains need to become more unified. We need more intelligence, more flexibility and more insight.

In the distribution centre, intelligent warehouse management systems are needed to improve workflow

speed to reduce the need to expedite shipping, optimise carton sizing to maximise vehicle holding capacity, and orchestrate inbound and outbound trailer flow to minimise idle time and backlogs.

On the road, transportation management systems with machine learning are needed to load vehicles more efficiently, optimise routes to drive fewer miles, model optimal consolidation and backhaul opportunities to reduce the number of vehicles traveling.

Order Management Systems (OMS) are critical to help minimise split shipments, intelligently source from all inventory, including alternate store pickup locations like lockers, to minimise travel distances, while inventory optimisation technology ensures that supply is more accurately placed where the demand will be, to reduce the amount of store transfers or unexpected replenishments.

With innovations like advanced OMS, retailers are also able to navigate disruptions caused by COVID-19 by reviewing the rules of stock allocation, temporarily giving priority to in-store stock over warehouse stock, thus, freeing up any trapped inventory confined within closed stores. This is a great advantage for retailers whose physical stores have close for lockdowns or have their business operations disrupted for other reasons.

Optimising order sourcing allows retailers to use the stock available in their entire network, wherever it is located. A smart OMS allows retailers to use the 'pool' of physical stores in large urban areas to consolidate group orders to offer more efficient and sustainable delivery options, compared to sending individual items from disparate locations. This increased delivery efficiency

will also help build a stronger connection and more favourable brand perception amongst consumers.

In addition to using store level inventory to ship orders to a customer's home, it can also be deployed for click-and-collect orders. With new fulfilment options enabled by the store, consumers can click, collect, and return goods at their own convenience, eliminating courier runs and lessening CO2 experience in the supply chain.



WHAT'S NEXT

As individuals become more aware of their environmental footprint, they will look to brands who prioritise environmental and social responsibility. New innovations on the market like the Greener App which provides consumers with personalised recommendations for more sustainable store purchases are being embraced by consumers and forward-thinking retailers alike. Just like how restaurants provide the calorie count of a meal to help reduce obesity, Greener provides consumers with an impact rating next to each of their purchases, so they can easily understand if what they're buying is helping or harming the planet. The goal in this instance, to help reduce climate change.

"At T2 we are always looking for ways to make our business operations more sustainable, but also support our customers and employees with opportunities to reduce their impact. The Greener app helps educate consumers and provides a convenient, fun and engaging platform to help them reduce their carbon footprint. As it will be our combined efforts that help reduce the effects of climate change, it was an important partnership for us to connect our customers to," Kathryn Goodwin, Sustainability Manager, T2 Tea.

The retail sector is beginning to move towards sustainable supply chain options. Amazon.com, the world's largest retailer, recently introduced new shipping option menu's with "no rush" bundled shipping for multiple items in Nth America that reduce packaging waste and emissions associated with delivery.

"Amazon has also created "Amazon Day" as a free perk for Prime customers that allows them to select a specific day on which all items and recent orders can be delivered at the same time. to help encourage take-up of lower-impact shipping. Amazon does nothing at scale without exhaustive A/B testing and analysis of evidence, so we are confident that the consumer responses to these initiatives has been overwhelming positive,"observed Michael J. Hiscox, Clarence Dillon Professor of International Affairs in the Department of Government, Harvard University.

In the future, we all need to work together and support retailers to provide eco-friendly delivery assessments during checkout that reveal the real-world impact to selecting same-day, next-day or next-week shipping. And retailers should explore the use of promotions to incentivise pickup or delivery options that both benefit the environment and result in higher profitability.

Ultimately, retailers will offer what consumers want and if sustainable delivery options become a priority, any business that doesn't align itself with buyer desires will lose out.

"The next few years presents an unprecedented opportunity for brands that are taking genuine action to reduce their emissions. For those helping their customers do the same, it's a competitive advantage. For those who aren't, it's a strategic risk," said Tom Ferrier, Founder of Get Greener.

The only way that retail supply chains will become more sustainable in the future is through collective efforts. That means consumers making their purchasing and delivery choices taking environmental impacts into consideration and retailers offering new solutions that meet those needs.



This report was commissioned by Manhattan Associates, Shippit and Greener.



Manhattan Associates makes commerce-ready supply chains that bring all points of commerce together so you're ready to sell and ready to execute. Across the store, through your network or from your fulfilment centre, we design, build and deliver market-leading solutions that support both top-line growth and bottom-line profitability. Operating in Australia and New Zealand for more than 20 years we have more than 50 employees supporting over 60 customers in Australia we are one of the only technology companies listed on the NASDAQ that has been profitable since day 1 we invest everything back into our people and products.

Our supply chain software solutions including Order Management and Warehouse Management technology revolutionise organisations driving growth and profitability.

www.manh.com.au



Shippit is a powerful technology engine for eCommerce that is revolutionising how the world sends anything, to anyone, located anywhere.

From humble beginnings in 2014 working with a handful of fashion and homeware boutiques in Sydney's Surry Hills, Shippit now powers delivery for thousands of retailers of all sizes across Australia and New Zealand sending millions of deliveries every single month. And since July 2020, our software has also been powering eCommerce fulfilment across Singapore and Malaysia.

www.shippit.com.au



Greener is on a mission to bring organisations that are genuine about helping end the climate crisis together to create a new economy.

A green economy.

One where people know that every dollar they spend is carbon neutral to help end climate change.

By bringing organisations and conscious customers together, we can create real impact at scale by surfacing brands that are doing more for the planet such as reducing their carbon emissions, diverting food waste from landfill and ditching plastic.

www.getgreener.com

