



PROVIDING ANSWERS FOR RETAIL SUSTAINABILITY


A RETAILERS GUIDE TO ACHIEVING AND
EVIDENCING SUSTAINABILITY GOALS

SUSTAINABILITY IS THE WORD OF THE DAY

Sustainability is the watchword of the day. Politicians, the media and consumers agree that the environment is the top priority of our times. Businesses are looking to drive change and have started incorporating recycling, sustainable materials, and are setting ambitious sustainability goals.

A key part of any emissions reduction strategy is reducing the direct impact of the supply chain on air pollution. Tackling pollution from the transport supply chain is a big opportunity for businesses and can tick two vital objectives. Firstly, transitioning to clean, low impact deliveries will result in lower polluting emissions and a reduced climate impact. This is perfect for organisations working towards net-zero goals that include Scope 3 emissions from the supply chain. Secondly, these changes will directly improve local air quality resulting in a healthier and cleaner local environment for workers, customers and local communities.

The pollutants which directly damage respiratory health are different from those which impact global warming, but are just as critical. NO₂, PM_{2.5}, PM₁₀ and ultra-fine particles are emitted from petrol and diesel engines.¹ Unlike CO₂, these pollutants directly harm humans in the local area creating an exposure risk for the workforce, local community and even customers.



**TRANSPORT
ACCOUNTS FOR
54% OF NOX
POLLUTION
(2019)¹**

1. https://naei.beis.gov.uk/overview/pollutants?pollutant_id=6

Creating healthy communities

Analysis by the UK government has found that a major threat to respiratory health is posed by traffic emissions, particularly commercial vehicles, with the most dangerous pollutants being NO₂, PM_{2.5}, and PM₁₀. All can cause serious, irreversible heart and lung damage.² The biggest contributor is logistics operations supporting big cities, including deliveries for retail and manufacturing.

National and local government are looking to drive change to reduce pollution through regulation while local communities and customers are using their purchasing power to demand sustainable products. Businesses need to lead by example and whilst many are willing, they lack the knowledge of their specific pollution problems to know how to address it.

Business Impact

The **challenges** to businesses of not taking action are significant:

1. Businesses have limited data on pollution and can't tie this to a specific vehicle or delivery activity, making pollution reduction difficult to pin-point.
2. Retailers risk losing sales due to a poor sustainability reputation
3. Competitors are busy making sustainability claims so there is a need to differentiate your business' approach by actually evidencing improvements
4. Complaints from the local community about excessive air or noise pollution can be challenging for small teams to manage, especially if teams lack targeted data.
5. Current fleet replacement to cleaner alternatives is slow and expensive, but action is required today.



A focus on reducing pollution can have 5 main business **opportunities**:

1. Reducing pollution from logistics activity can help you achieve Scope 3 emissions reductions and net-zero targets.
2. Improve consumer preference by taking effective and rapid action on pollution
3. Increase sales by taking it away from competitors through a differentiated and evidence based approach to sustainability
4. Improve relations with local community by proactively mitigating pollution
5. Start taking action towards zero-emission goals today

2. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf

TACKLING TRANSPORT SUSTAINABILITY

Many businesses are setting out sustainability targets to reduce their environmental impact. These goals might include full decarbonisation, achieving net-zero and a commitment to reduce pollution from their own fleet or to only contract suppliers with a strong environmental record. However, without real-time data of site and vehicle performance, retailers can lack the tools they need to effectively reduce pollution.

In an attempt to meet regulatory requirements and prepare for inevitable legislation, many businesses may have invested in upgrades to existing diesel engines such as Euro VI diesel vehicles or compressed natural gas. However, they haven't been able to prove the improvements or track the reduction in their operating emissions as a result of these costly changes.

The latest figures from the UK government also show GHG falling across every sector except transport.³ CO₂ attributed to vehicles has risen since 1990. In fact, transport is the

biggest source of air and noise pollution in the UK.

It is in this context that many businesses have declared their intention to be net-zero. The UK retail industry through the British Retail Council has declared its ambition to reach net-zero deliveries and operations by 2035-2040.⁴ For teams looking to achieve net-zero, taking responsibility for Scope 1 emissions from their company fleet and Scope 3 emissions from the supply chain, there is a massive challenge.

Without targeted monitoring and insight, teams have no way to identify when pollution is occurring, what is causing it and moreover they can't do anything about it. What is really needed is the ability to attribute pollution to specific vehicles or drivers. Enabling them to take quick and robust action to reduce pollution at the source.

Once you identify the vehicle or driver that has caused pollution you identify the problem. This enables you to take mitigating action to reduce pollution, record it, report it and prove environmental credentials.

3. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/984685/transport-and-environment-statistics-2021.pdf

4. <https://brc.org.uk/news/corporate-affairs/retail-to-hit-net-zero-by-2040>

<https://www.environmental-protection.org.uk/policy-areas/air-quality/air-pollution-and-transport/>



**CO₂ FROM
TRANSPORT HAS
RISEN SINCE
1990³**

SUSTAINABILITY – WHAT THE CUSTOMER WANTS

Sustainability is a huge environmental concern for consumers as people are aware that their behaviour, and the businesses they choose to purchase from, is impacting the environment. Sustainable consumption has become inextricably linked to health and overall wellbeing. Increasingly consumers are motivated to reduce their own impact and are making conscious decisions around which products they purchase.

79%

Customers say they are switching to businesses who promote social responsibility and sustainability.⁵

77%

Retailers say that sustainability leads to increases in customer loyalty.⁵

53%

Consumers overall and 57% in the 18–24 age group have switched to lesser known brands because they were sustainable.⁵

EMSOL conducted research with King's College London to understand how sustainability would influence customers when making deliveries and discovered:

- 64.7% said cleaner air would greatly influence their choice of delivery providers
- 75% would advocate for a more environmentally-friendly delivery service
- 89.3% would pay more if they could see it was more environmentally friendly⁶

The findings highlight an unserved appetite for green delivery options. Meaning the switch to more eco-friendly delivery services will deliver benefits that go beyond just reducing your carbon footprint, it is also important for winning customer preference.

Organisations need to clearly evidence sustainable practices and a green supply chain as pressure increases from all stakeholders. Businesses need to understand how this will inform decision across the supply chain with everything from delivery of goods to a warehouse, store, or customer's address needing to be evidenced as low-impact.

What does this mean for businesses? Retailers have already taken opportunities to source more sustainable products, but it is essential to look at the impact of business operations. The transport supply chain is a significant contributor to poor air quality and Scope 3 emissions. There is a major opportunity to drive increased sales and customer preference by taking responsibility and mitigating this source of pollution.

5. https://www.capgemini.com/wp-content/uploads/2020/07/20-06_9880_Sustainability-in-CPR_Final_Web-1.pdf

6. <https://emsol.io/smart-mobility-challenge-consumers-demand-more-sustainability/>

SUSTAINABLE COMPETITION

90% of the largest 500 companies by market cap in the Russell index⁷ published sustainability reports in 2019. Businesses are setting out their sustainability goals and aiming to reduce pollution, while this is laudable (and required to tackle our urgent environmental challenges) it makes it difficult for organisations to set themselves apart.

In 2022, making press releases and media statements about environmental commitments is no longer enough as 49% of consumers say they do not have any information to verify retailers sustainability claims and worse yet 44%⁸ say they do not trust product sustainability claims. This highlights a potential sustainability information gap with customers aware of past 'greenwashing' campaigns.

Being able to evidence and demonstrate a sustainability approach at all levels of the organisation is a way for businesses to meaningfully engage with their customers and differentiate themselves from competitors. To do this, businesses need a way to plug the sustainability information gap and build trust that they can evidence low impact delivery and avoid greenwashing their progress.

A person is shown from the chest up, holding a white tote bag. The bag has the text "SAVE THE EARTH" printed on it in large, bold, black capital letters. To the right of the word "THE" is a small black icon of a globe showing the continents. The person is wearing a blue long-sleeved shirt and blue jeans. The background is dark with some green foliage visible on the left.

**"CUSTOMERS ARE
INCREASINGLY
EXPECTING THAT
EFFORTS ARE
BACKED UP BY
DATA,"⁹**

McKinsey senior partner

7. <https://www.sustainability-reports.com/65-of-the-russell-1000-index-published-sustainability-reports-in-2019/>

8. <https://www.capgemini.com/gb-en/news/sustainability-in-cpr/>

9. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/nef-spotlight-the-path-forward-for-retails-sustainable-future>

CARING FOR THE COMMUNITY

By the nature of retail operations they are often embedded in urban environments which leads to complaints from the community at stores or depots about excessive air or noise pollution. Dealing with complaints is challenging and time consuming for small teams to manage. In many cases, teams might be under-resourced or completely lack real-time data meaning that complaints cannot be dealt with quickly and effectively.

Urban sites can struggle with complaints from the local community. EMSOL's customers report that complaint handling is a considerable draw on already stretched resources, particularly when timeframes expand with the involvement of local authorities. Small teams don't have the time, capacity, or data to deal with these complaints efficiently and effectively.

Real-time targeted data ensures that the source of pollution can be identified and, if required, mitigations can be made immediately. Mitigations might include vehicle maintenance, driver retraining or enforcing policies to prevent vehicle idling. Once a mitigation is made it can be easily evidenced and shared to maintain a positive relationship with the local community and boost your environmental credentials. Sharing your improvements, successes and progress with your stakeholders all backed up with scientific pollution data brings confidence in your brand, improved community relations, happier working environments and adds credibility to your financial and ESG reporting.



RESPONDING TO COMPLAINTS QUICKLY IMPROVES RELATIONSHIPS WITH THE COMMUNITY

INSTANT ACTION

Businesses need to receive high volumes of deliveries every day to operate effectively. However they are being pressed by regulators and consumers to ensure that they handle these deliveries sustainability. There are two common reactions to this challenge, the first is to shift to alternative means of transport and the second is to wait for zero-emission vehicles.

In urban areas there has been a huge growth of alternative transportation options from cargo bikes and small vans. These options work great for short-distance deliveries, potentially delivering into a local neighbourhood. The co-op has opted to use cargo bikes to facilitate small online deliveries and operators such as Deliveroo often use pedal power. However, relying on cargo bikes or small vans can be ineffective and unsuitable when a business requires high volume deliveries.

The second option is to wait for electric vehicles. Put simply, full electrification across the supply chain isn't a commercially viable solution and it is predicted diesel trucks are likely to remain for decades. Only 1% of the total van fleet is today powered by electric.¹⁰

While we should expect to see electric cars changing personal transport, electric trucks face a series of technical and structural challenges. Electric trucks have a very high upfront cost, require a rollout of nationwide charging infrastructure, and a survey of retailers suggest they are also worried about vehicle maintenance. Another challenge is the weight of on-board battery packs which increase weight and reduce load.¹¹

In short, full-fleet transition for complex supply chains is a challenge but one that needs to be successfully navigated in the long-term to achieve net-zero. How businesses choose to manage pollution in the short to medium term is therefore essential. It would be irresponsible to delay until electric trucks are commercially viable. Action is required today.

Technology can help businesses take accountability and control of their pollution today. Helping to take steps to reduce emissions from their supply chain to achieve and meet their sustainability goals.

10. <https://about.bnef.com/electric-vehicle-outlook/>

11. <https://www.c2es.org/wp-content/uploads/2020/02/Insights-On-Electric-Trucks-For-Retailers-And-Trucking-Companies.pdf>



SETTING YOUR PRIORITIES

Sustainability is now a strategic priority for businesses, so they must start tracking, mapping, identifying and mitigating the impact of their operations on air pollution levels where transport pollution is a major cause. With the right data and insight, daily opportunities can be found across the supply chain to prevent pollution.

Our research shows that customers are engaged and willing to pay a premium for environmentally sound practices. A staggering 89.3% of those surveyed said they would choose a more expensive service if it was environmentally friendly.⁶

Quick and effective action on pollution can also support broader goals within a business' strategy such as net-zero, reducing Scope 3 emissions, and ESG reporting.

With climate change and clean air firmly at the top of the agenda, businesses need to proactively investigate their own emissions, and develop sustainable mitigation strategies – doing so is not only the right thing for public health but can also drive sales and customer preference.




ABOUT EMSOL

EMSOL offers a solution that can help address the pain retailers are feeling today when trying to achieve their sustainability targets. Providing retail with real-time, real-world data that allows them to quickly identify pollution problems is a game changer. With targeted data on the specific source of pollution, you also have real actionable insights which take the guesswork out of reducing pollution. This helps you identify which vehicles are in need of maintenance, which drivers may require retraining, or which fleet operators are helping you meet your Scope 3 targets.

EMSOL can alert you instantly when there is a problem through early-warning notifications. This means less time is spent reporting and monitoring and more time actually reducing emissions.

EMSOL is working alongside household names such as John Lewis, CEVA Logistics, HS2, NHS, and the City of London Corporation to reduce air pollution. Our work with customers has shown the potential to enable reductions in CO₂e, NO₂, and PM_{2.5}. This means reducing harmful air pollutants while also taking action on climate change and achieving net zero.

Find out more about EMSOL's proactive pollution solution for the retail sector.

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