

Redefining packaging for a changing world



Sustainability Report 2019

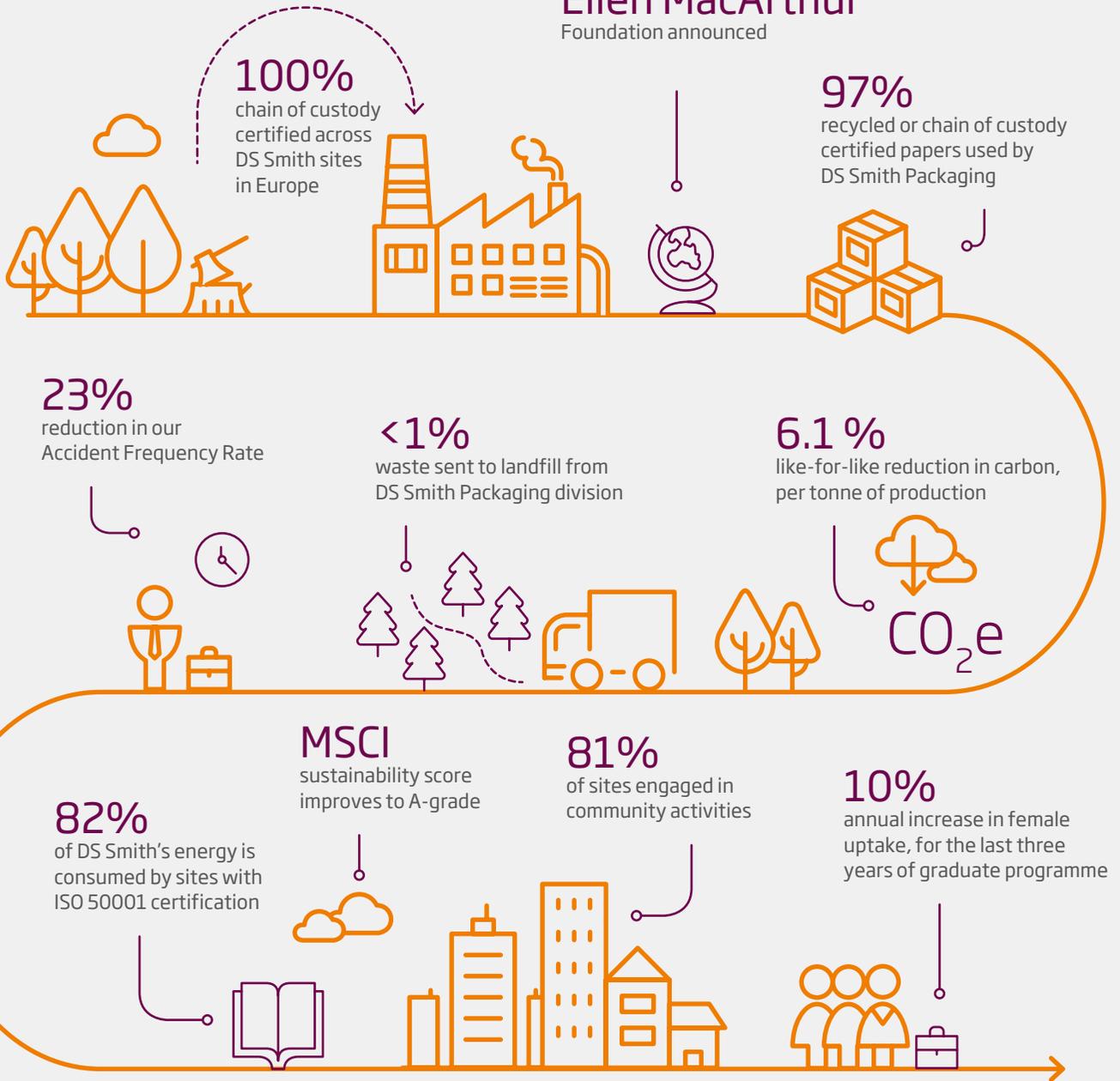
The Power of Less®



Our performance highlights

Highlights from 2018/19

Global Partnership with the
Ellen MacArthur
Foundation announced



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An introduction from our Group Chief Executive

Packaging must be redefined



“Above all else, packaging must be redefined in the face of global sustainability challenges. From recyclability, to climate change, to pressures on water sources, packaging must play a role in facilitating a more circular global economy.”



The world has always been changing. Now, facilitated by new global networks built on technology and communication, the world is changing faster than ever before.

Nowhere is this more visible than in the ways we now shop. Where we shop is changing, as bricks and mortar retailers compete with the growth of e-commerce. What we shop for is changing, as the rise of digital consumption drives the rental and subscription economy and the rise of conscious purchasing decisions drives demand for sustainable, recyclable, low waste and reusable products and packaging. How we shop is changing. From premium meal recipe kits to mailbox flowers to subscription shaving packages, in our busy lives shopping is either an experiential and recreational activity or something to be automated.

Packaging is being redefined continually to cope with these changes.

At DS Smith, one of our four strategic goals is to lead the way in sustainability. This is why we believe that above all else, packaging must be redefined in the face of global sustainability challenges. From recyclability, to climate change, to pressures on water sources, packaging must play a role in facilitating a more circular global economy and we must tackle systematic sustainability challenges.

We have ambitious, long-term sustainability targets to address these issues; many of which are featured in this report. I particularly wanted to highlight our carbon target, which we are currently reviewing in line with the Paris Accord.

I would also like to draw your attention to our industry leading position on recyclability, discussed on pages 2, 13 and 15. It is because of our leadership in the industry that I think our new Global Partnership with the Ellen MacArthur Foundation is such a natural fit. They will not only continue to challenge our thinking, but also connect us to other sustainability leaders, so we can drive genuine, systemic change.

Each chapter showcases global challenges we all face, our contributions to tackling these issues and our progress on targets. Our performance tells a positive story, but there is still more to do, both in our core business and in establishing a strong culture of sustainability in our new acquisitions. I hope you enjoy reading this Sustainability Report.

MILES ROBERTS,
Group Chief Executive



Download our Sustainability Report 2019:
dssmith.com/company/sustainability/sustainabilityreport



Download our Annual report & accounts 2019:
dssmith.com/investors/annual-reports



Access results, presentations, investor and shareholder information:
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Our changing world

Sustainability challenges

In a rapidly changing world, four key sustainability trends stand out to us as crucial challenges for the packaging industry to address in the coming years.

Circularity and recyclability

Dubbed the “Blue Planet effect”, the past 18 months has seen increasing public dissatisfaction with plastic. Numerous global brands, retailers and manufacturers have committed to use 100 per cent reusable, recyclable or compostable packaging by 2025. As the momentum around transitioning to the circular economy grows and phrases such as ‘single-use’ have become increasingly widespread, the packaging industry in particular has become deeply engaged in a debate about the definition of recyclability. ‘Technically recyclable’, used by many plastic manufacturers, is now seen as an avoidance of responsibility. ‘Likely to be recycled’ provides some assurance but depends on the lottery of local authority waste collections (read our report ‘[Tipping Point](#)’). The ideal solution, ‘certain to be recycled’, is difficult to guarantee with current infrastructure but is pivotal if we want a future of fully circular material flows.

Organisations like the Ellen MacArthur Foundation have been fundamental in driving the transition to a circular economy. It is clear that we need universal definitions, standards and measures of recyclability and circularity. Companies can no longer stand up to scrutiny if their product and packaging is recyclable in Europe but not in Asia. We need to harness alternative materials, create systemic change in collection infrastructure and consider opportunities for radical redesign (read our report ‘[Transforming the supermarket aisle](#)’). Defining recyclability in a way that is realistic for brands, retailers and manufacturers; credible for the public; and ambitious enough to protect the environment is vital.

 See how DS Smith is tackling this issue on pages 12-15

 What if society went beyond recyclability to fully embrace the circular economy? Watch Scenario video: [Materials passport](#)

Climate change

The world needs an 80 per cent reduction in emissions by 2050 to limit warming to 1.5°C. Warming above this threshold would result in catastrophic climate change, as evidenced by the United Nations’ Intergovernmental Panel on Climate Change (IPCC) report, 2018. The next decade will be crucial.

Across the world, students are walking out of classrooms on climate strike and the public are frustrated that current commitments fail to deliver real change. Employee activism is forcing global companies to consider their own carbon reduction plans. Over 550 companies have set science-based emissions reduction targets to align their own carbon reduction strategy to limit warming to 1.5°C. In the UK, the independent Committee on Climate Change (CCC) has called for the government to commit to net zero emissions by 2050.

The requirement is clear. Rapid, widespread decarbonisation of our economy is needed. New technologies and financial mechanisms will increasingly drive change as investment in low-carbon technologies must become more attractive. The green bond market grows each year (source: World Bank) and the price of carbon credits continues to rise (source: Bloomberg). Under shareholder pressure investment funds are reducing fossil fuel holdings (source: Morgan Stanley) and the allocation of capital is beginning to move in a direction that supports rapid decarbonisation of our economy. As the IPCC report says: there is time, but we need to move fast.

 See how DS Smith is tackling this issue on pages 20-24

 Could the growing power of the digitally connected, ethical purchasing decisions drive more sustainable, local economies? Watch Scenario video: [It’s personal](#)

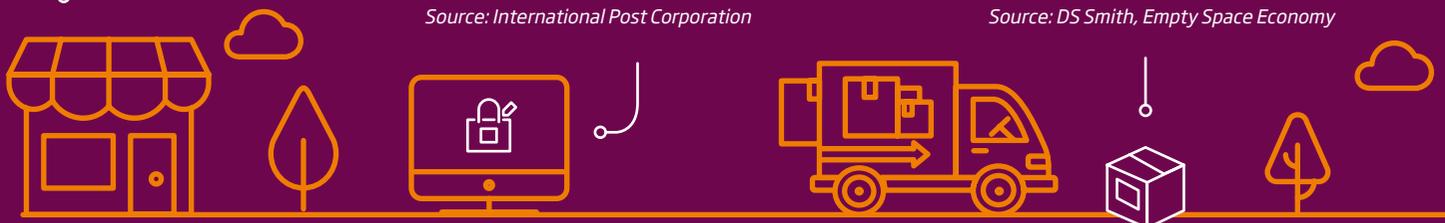
 **Up to 29%**
of supermarket packaging is not recyclable
Source: Which?

39%
of online shoppers are concerned by excess packaging
Source: Mintel

47% of online shoppers want the delivery of their parcels to be carbon-neutral
Source: International Post Corporation

170kg
The average European generates 170kg of packaging waste per year
Source: Eurostat

50% of e-commerce packaging is more than a quarter empty
Source: DS Smith, Empty Space Economy



What are the 2030 scenarios?

As part of our continued strategic planning we have created four plausible scenarios of the world in 2030. These are not predictions. Scenarios like this are used to rehearse the future and stress-test strategies by extrapolating emerging trends we see today.

Protecting forests

In 2010, the Consumer Goods Forum approved a resolution to achieve zero net deforestation by 2020, focusing on the responsible sourcing of palm oil, soy, beef and pulp and paper. Some view the pending 2020 deadline as a watershed moment. What happens if companies fall short? What enforcement options exist? What role does the investment community have in holding companies to account in the same way it would regarding share price, working capital or EBITDA?

Chain of custody certification schemes have been the key mechanism used by organisations seeking to ensure deforestation-free supply chains. However, according to The State of The World's Forests report, only 38 per cent of global industrial wood production is certified and the latest report by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) suggests 10-15 per cent of global timber comes from illegal forestry, particularly from Asia.

Forests are recognised as one of a few global carbon sinks, absorbing over 2.4 billion tonnes of carbon from the atmosphere per year (source: CSIRO). As such, the protection, restoration and growth of forests is crucial in combatting climate change. Although global forests have lost more than 120 million hectares since 1990, the net loss of forest area has slowed to 0.08 per cent over the last five years and European forests have increased in size by over 3 per cent since 2010 (source: FAO). The challenge is to balance demand for fibre against the preservation of forests' natural capital value.

 See how DS Smith is tackling this issue on pages 16-17

 What if the value of virgin and recycled materials was transformed? Watch Scenario video: Better green than dead

Urban air quality

The impacts of poor air quality on our health are truly shocking, causing an estimated 400,000 premature deaths per year in Europe (source: World Health Organisation) and placing a significant cost on strained healthcare systems. As a result, a growing number of world cities are banning, restricting or taxing the use of high emitting vehicles and creating ultra-low emission zones in urban areas. Postal companies are trialling e-bikes, sales of electric cars are booming as the sales of diesel cars continue to fall sharply. Even the iconic London bus is trialling the use of hydrogen fuel.

In parallel, the global e-commerce market is booming, growing at a rate of 17 per cent annually (source: ACEA) and the world is becoming increasingly urbanised. However, to meet the insatiable need for on-demand consumption, urban roads are becoming increasingly congested by a growing fleet of e-commerce delivery vehicles. Unsurprisingly in the face of these environmental, social, and new financial implications of running delivery vehicles in cities there is rapidly increasing scrutiny on the efficiency and impact of last mile deliveries.

With more than half of global packaging filled with 25 per cent air (read our report ['Empty Space Economy'](#)), how can we use packaging to minimise space and weight and minimise vehicles on the road? What does the future of last mile delivery, or collection, look like? Could delivery vehicles also be used as mobile e-commerce packaging recycling points so that the return journey is not a wasted one?

 See how DS Smith is tackling this issue on page 14

 Is it possible that cities could ban e-commerce deliveries from city centres? Watch Scenario video: Your planet needs you

€24bn
investments in low-carbon technology are needed in the pulp and paper industry to reach Paris Accord ambitions

Source: CEPI

81%
of the world's energy mix still comes from fossil fuels

Source: International Energy Council

90%
of pulp used by European paper mills originates from forests in Europe

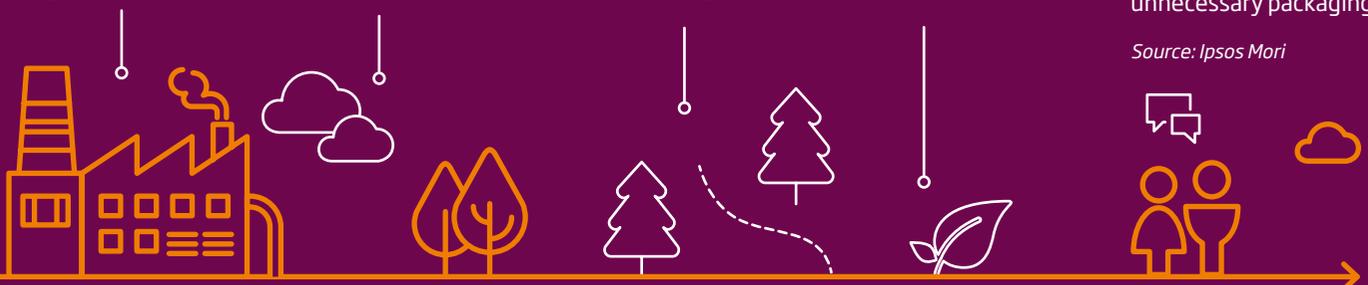
Source: CEPI

2bn
Forests absorb 2 billion tonnes of carbon from the atmosphere per year

Source: FAO

37%
of the public believe there is a joint responsibility between governments, brands and manufacturers to reduce unnecessary packaging

Source: Ipsos Mori



DS Smith at a glance

Our vision

To be the leading supplier of sustainable packaging solutions.

Our purpose

Redefining packaging for a changing world.

Our strategic goals

To redefine packaging for a changing world.



To delight our customers.



To realise the potential of our people.



To lead the way in sustainability.



To double our size and profitability.

Our culture

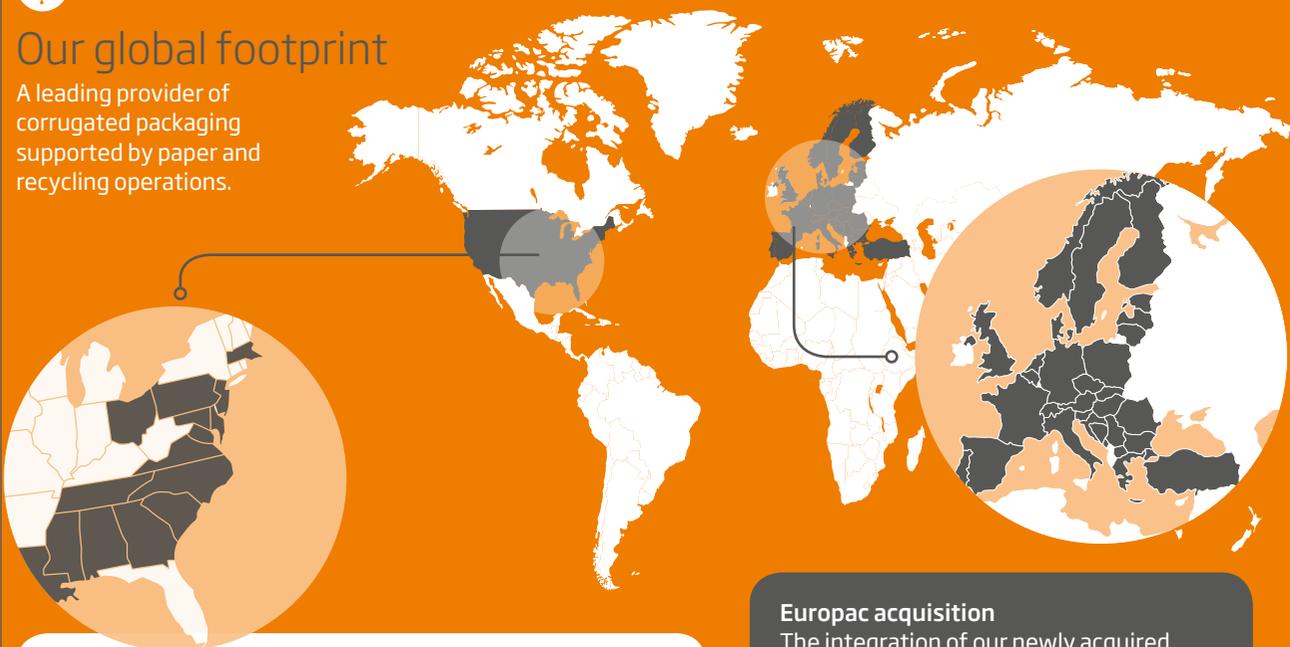
We have a clear set of values that we expect all our employees to own and live by.

- **Be caring:** we take pride in what we do and we care about our customers, our people and the world around us.
- **Be challenging:** we are not afraid to constructively challenge each other and ourselves to find a better way forward.
- **Be trusted:** we can always be trusted to deliver our promises.
- **Be responsive:** we seek new ideas and understanding and are quick to react to opportunities.
- **Be tenacious:** we get things done.

Find out more at dssmith.com/people/culture

Our global footprint

A leading provider of corrugated packaging supported by paper and recycling operations.



North America Packaging and Paper integration

The past year has been focused on building the necessary organisational structure, governance and accountability required to embed our sustainability targets. This report contains explanations about the performance of our North American operations. However as they are in the middle of being integrated into our sustainability programme, this year their performance data is not included in our target key performance indicators, only in our full data disclosure on page 44. Greenfield development will be a key growth area in this region. Wherever we explore greenfield sites, we will ensure environmental considerations are embedded into the design and build programme.

Europac acquisition

The integration of our newly acquired, ex-Europac sites in France, Portugal and Spain is ongoing. Therefore they will not yet be included our sustainability reporting. We will include their performance data in our 2020 report.

Plastics division disposal

In March 2019 the sale of our Plastics division was announced. We have included their performance data in our reporting, but it is not focused on in the descriptions.

Our business operations



Packaging

We are a leading international packaging company, delivering sustainable packaging solutions and the highest quality service across Europe and North America.

c. 24,000
employees

34
countries



Paper

We are a leading global manufacturer of sustainable corrugated case material, operating 14 recycled fibre mills, two virgin fibre mills, and over 14,270 ha. of forest.

c. 3,100
employees

11
countries



Recycling

We are Europe's largest cardboard and paper recycler: managing circa five million tonnes per annum. We provide integrated recycling and total waste management services.

c. 900
employees

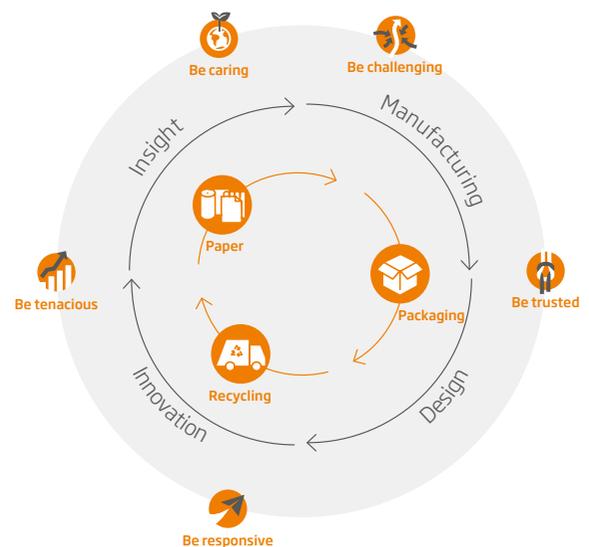
15
countries

Our circular business model

Our integrated Recycling, Paper and Packaging divisions work together to drive fibre around the circular corrugated system. The recycling rate for corrugated board is 85.8 per cent in Europe (source: Eurostat) and fibres can be recycled to create value up to 25 times (source: Technische Universität Darmstadt).

Across Europe, we harvest quality paper and cardboard for recycling from a range of sectors, including retailers, manufacturers, local authorities, print, recycling and waste management companies. This provides raw material for our 14 recovered fibre mills where we manufacture 100 per cent recycled papers. These papers become the primary raw material for our packaging sites, who source 97 per cent recycled or chain of custody certified papers. Across Europe the average recycled content of corrugated fibre packaging in Europe is 88 per cent (source: FEFCO). Sustainable design ensures the packaging protects the product, uses no more material than is necessary, optimises logistics and can be fully recycled at end of life.

This is the journey of a Box to Box in 14 days at DS Smith.



Watch our 'Follow the fibre' video:
[youtube.com/watch?v=wkOePLDjp9c](https://www.youtube.com/watch?v=wkOePLDjp9c)



Find out more, download the Annual report & accounts 2019
[dssmith.com/investors/annual-reports](https://www.dssmith.com/investors/annual-reports)

Our sustainability journey

Our past, present and future

Interview with Emma Ciechan,
Director of Planning, Performance
Management and Sustainability



Q. In the last review you launched nine new targets. Tell us where you are, one year on.

Over the past year we have made excellent progress regarding roles, responsibilities, internal performance reporting and on developing our long-term roadmaps to achieve each target. Embedding accountability mechanisms into established business processes is essential if we are to achieve the long-term progress we desire. Having sustainability firmly cemented as one of our four strategic goals and as a core theme of our Purpose ensures that it is front of mind for everyone.

Q. What has been your biggest success, or the achievement you are most proud of?

I am particularly pleased with the success on our Fibre Sourcing target. Achieving 100 per cent chain of custody certification and 97 per cent sustainable

papers used is so important, as our stakeholders target zero deforestation by 2020. We have also had resounding support for our ambition and the pilot study conducted for our Packaging Impact target.

Q. What challenges have you faced, and how have you tackled them?

Growing rapidly through acquisition provides many challenges. As the number of sites in scope for targets changes, our goal-posts move. Year on year perceived progress can be impacted quite significantly. Establishing sustainability as a workstream in our acquisition and integration process has therefore been an important step. We have embedded a procedure and agreed timelines for bringing all integrated businesses into scope for our targets and core projects.

Our sustainability journey



1940

David Smith starts manufacturing cartons in London.

1986

First recycling operations purchased.

1998

First paper mill purchased.

2010

First Carbon Disclosure Project submission.

2012

SCA acquisition completed.

2013

First sustainability policy.



2014

First annual sustainability review.

DS Smith signs up to UN Global Compact.

2015

First DS Smith sustainability team is formed.

DS Smith becomes a Sedex A/B member.



Find out more about our partnership:
dssmith.com/company/ellen-macarthur-foundation-partnership



Visit the Ellen MacArthur Foundation website:
ellenmacarthurfoundation.org

Q. What does the next year hold? Where will your team focus their efforts?

We have three goals with a 2020 deadline. As these become business as usual, we will be exploring what new targets we can set and how we can extend the level of ambition in these areas. As always, we continue to review whether our focus areas are appropriate, especially in light of our rapidly changing industry and the profile of our business. Therefore, we will also formally refresh our materiality assessment. Finally, we excitedly await the new opportunities our global partnership with the Ellen MacArthur Foundation will bring.

EMMA CIECHAN,
 Director of Planning, Performance Management and Sustainability.



ELLEN MACARTHUR FOUNDATION

Our new partnership with the Ellen MacArthur Foundation

In May 2019, we were delighted to announce that we would be becoming a Global Partner of the Ellen MacArthur Foundation. Through the partnership we will be exploring opportunities to redefine packaging together.

“We are delighted to welcome DS Smith as a Global Partner of the Ellen MacArthur Foundation. Building on the company’s strong history of innovation across its supply chains, our partnership will focus on identifying opportunities to redesign materials, business models, and problematic waste



streams, to create solutions that are aligned with the principles of the circular economy.

By applying innovation and creativity, and taking a whole systems approach, we have a huge opportunity to redesign our economy so that it can work in the long term.

I look forward to exploring what our partnership can do to accelerate this shift.”

DAME ELLEN MACARTHUR,
 Founder of the Ellen MacArthur Foundation.



2016

- DS Smith sustainability review receives ‘Best sustainability report in FTSE250’ award by PwC.
- First cross-functional Sustainability Steering Group is formed.
- First materiality analysis.



2017

- DS Smith achieves carbon reduction target three years early.
- DS Smith is highly commended by World Economic Forum in ‘The Circulars’ awards.
- DS Smith achieves EcoVadis gold for the first time.
- DS Smith becomes a FTSE100 organisation.

2018

- DS Smith sets new sustainability targets.
- Board-level Health, Safety, Environment and Sustainability committee formed.
- Interstate Resources acquisition completed.
- First virgin paper mill owned by DS Smith.
- First forestry and timber operations owned by DS Smith.

2019

- DS Smith launches Purpose.
- DS Smith becomes Global Partner of the Ellen MacArthur Foundation.
- Proposed sale of Plastics division announced.
- Europac acquisition completed.
- First European virgin paper mill owned by DS Smith.
- New sustainability policies published.

Our sustainability strategy

Leading the way in sustainability

At DS Smith, sustainability is the foundation of our overall business strategy. We want to become a trusted and strategic partner to our customers, providing innovative, sustainable packaging solutions for all their needs.

Our strategic goal to lead the way in sustainability

One of our four strategic goals is to lead the way in sustainability. Last year we launched ambitious, long-term targets to underpin this strategic goal and focus on the areas where we believe we can have the greatest impact.



To lead the way in sustainability

- Building sustainability into our decisions
- Growing our recycling platform
- Delivering against our range of long-term sustainability targets

Our Purpose

Our Purpose, launched earlier this year, is 'Redefining packaging for a changing world'. It is our reason for being, it is why we exist as an organisation and it captures the value we bring to all our stakeholder groups and the wider world.

All our sustainability targets link back to at least one of the core ways we will deliver our Purpose:



Thinking differently.



Innovating together.



Putting sustainability at the heart.



Developing the right strategies.

Our pillars of sustainability

To us, truly sustainable value is found when balancing the needs of Our Business, Our Environment and Our People.

By aligning our targets equally against the three pillars below, we ensure our activities deliver long-term sustainable value to all stakeholders.



Our Business

Creating shared value through responsible recycling, paper and packaging.



Our Environment

Minimising our impact, from design to production and supply to recycling.



Our People

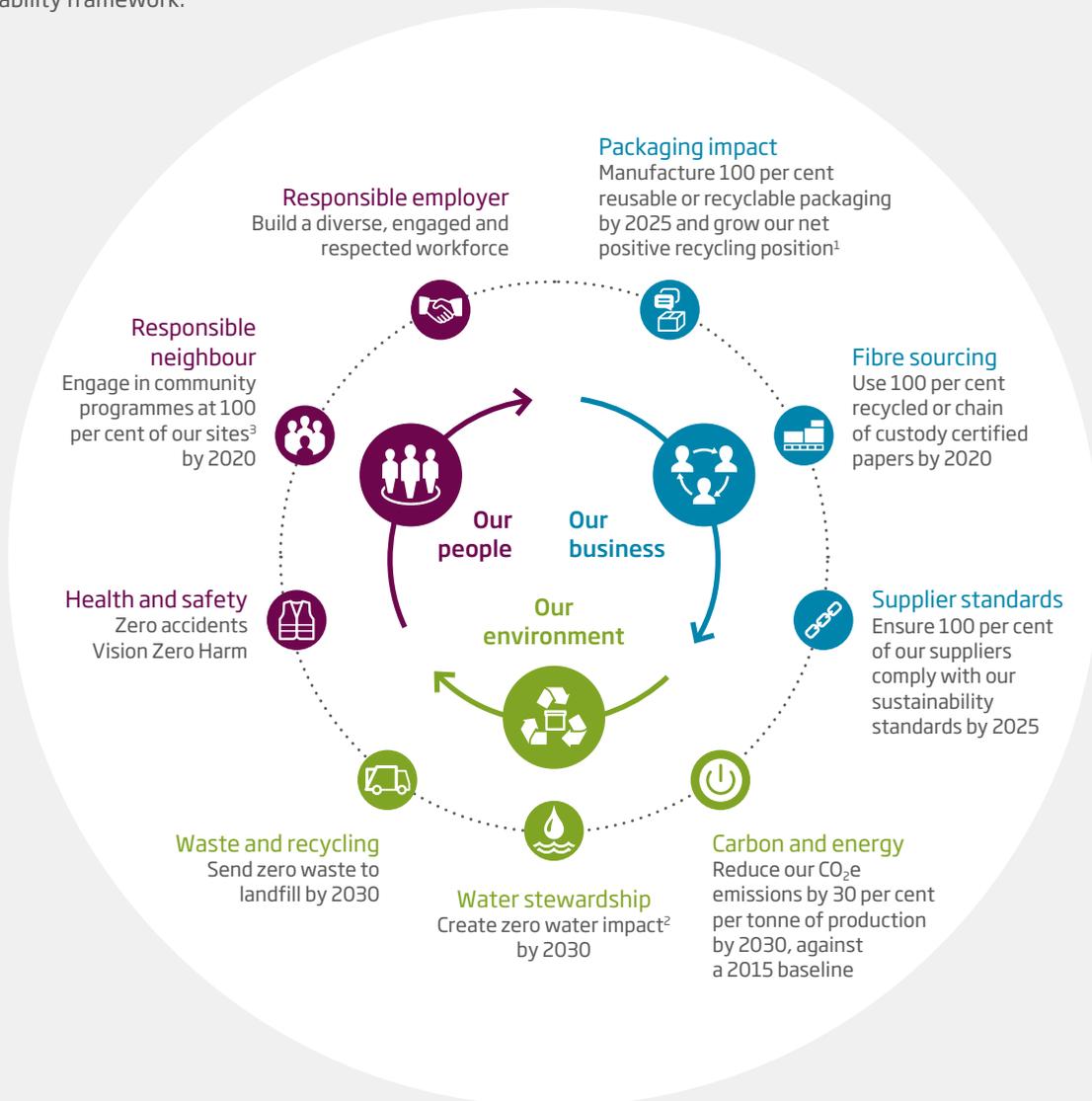
Ensuring the safety, wellbeing and development of colleagues and contributing to our communities.

“Our sustainability targets demonstrate our ongoing commitment to building sustainability into our core business processes. From sourcing to operations, from human resources to how we integrate acquisitions and from designing packaging to dealing with suppliers, these targets put sustainability considerations front and centre.”

MILES ROBERTS, GROUP CHIEF EXECUTIVE

Our targets

Our ambitious, long-term targets underpin our strategic goal to lead the way in sustainability. Ownership, measurement and progress reporting are embedded into each division and core functions to provide a robust and transparent accountability framework.



1. Involved in all or in part of collecting, sorting, reprocessing, managing and/or transporting a greater tonnage of material through our Recycling division than we place on the market through our Packaging division.
2. To include water quality, water stress improvements and water reduction (where feasible).
3. Sites with greater than 50 employees.

Our performance against targets



Performance summary

Having launched new sustainability targets last year, this is the first time we are reporting comprehensively on progress.

You may not have noticed, but this year we are referring to this document as a 'report'. In previous years we have called it a 'review', however given our increased focus on performance reporting against our range of targets we felt that 'report' was more appropriate. A small but important change.

Over the past year we have made great progress in many areas.

The following pages of the report provide a more detailed description of key performance indicators and a robust explanation of status and performance. A summary can be found below.

Theme	Target	Status	Page(s)	
 Packaging impact	Manufacture 100 per cent reusable or recyclable packaging by 2025.	→ on track	12-15	
	Grow our net positive recycling position ¹ .	→ on track		
 Fibre sourcing	Use 100 per cent recycled or chain of custody certified papers by 2020.	↑ exceeding	16-17	
	Maintain 100 per cent of sites holding chain of custody certification.	✓ complete		
 Supplier standards	Ensure 100 per cent of our suppliers comply with our sustainability standards by 2025.	→ on track	18-19	
 Carbon and energy	Reduce our CO ₂ e emissions by 30 per cent per tonne of production by 2030, against a 2015 baseline.	→ on track	20-23	
	Ensure 100 per cent of our energy is consumed by ISO 50001 certified sites.	→ on track		
 Water stewardship	Create zero water impact ² by 2030.	All recycled paper mills to perform at or below our benchmark of 6.5 m ³ /tonne of production.	→ on track	24-25
		All virgin paper mills to perform at or below our benchmark of 30 m ³ /tonne of production.	→ new target	
		All operational sites in water stressed areas to have a mitigation plan in place.	→ on track	
		Zero non-conformances with consents to discharge.	↓ behind	
 Waste and recycling	Send zero waste to landfill by 2030.	↓ behind	26-27	
 Health and safety	Zero accidents. Vision Zero Harm.	→ on track	28-29	
 Responsible neighbour	Engage in community programmes at 100 per cent of our sites ³ by 2020.	↑ exceeding	30-31	
 Responsible employer	Build a diverse, engaged and respected workforce.	→ on track	32-35	

1. Involved in all or in part of collecting, sorting, reprocessing, managing and/or transporting a greater tonnage of material through our Recycling division than we place on the market through our Packaging division.
2. To include water quality, water stress improvements and water reduction (where feasible).
3. Sites with greater than 50 employees.

Packaging impact

Context

More than ever before, the role of packaging in society is being scrutinised. We are seeing rapid change in public sentiment, customer expectation and legislative drivers. Across Europe, new measures to incentivise good and deter bad packaging are being proposed, from bans on single use plastics to taxes for hard to recycle materials to higher mandatory recycling rates. Packaging must adapt. The packaging of tomorrow must be simple, mono-material, recyclable in theory and recycled in practice.

How we apply our Purpose:



Innovating together.



Thinking differently.

The average European generates

170kg

of packaging waste per year

Source: Eurostat

Of all the plastic waste produced since 1950, only

9 per cent

has been recycled

Source: Royal Statistical Society

85.8 per cent

of corrugated packaging in Europe is recycled

Source: European Paper Recycling Council



Our targets:

100 per cent

Manufacture 100 per cent reusable or recyclable packaging by 2025

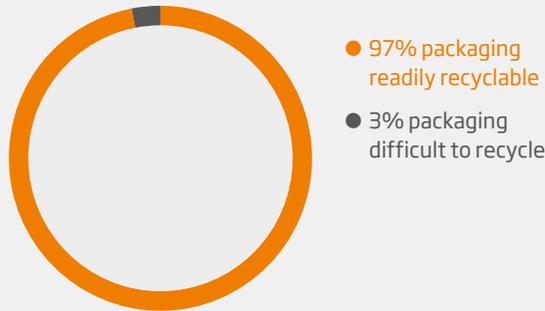


Grow our net positive recycling position

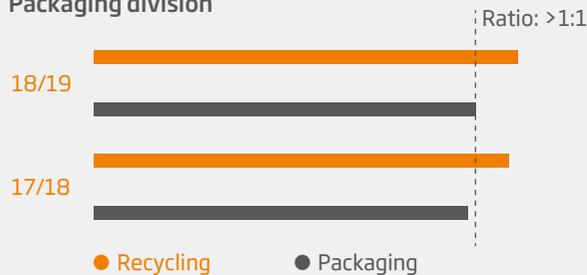
Our Key Performance Indicators:

Recyclability of fibre packaging across the industry (%)

(source: CPI Paper and Board Packaging Recyclability Guidelines)



Tonnes of material managed by our Recycling division versus tonnes manufactured by our Packaging division



Our next steps:

1. Review data and definitions from pilot study, ensuring alignment with industry guidance.
2. Roll out data collection to rest of business, including North America.
3. Innovate with partners and customers to find alternatives for unrecyclable products.

Performance

Reflecting the shift to a more circular economy and our focus on creating sustainable value-adding packaging for our customers, we have set an ambitious goal that not only drives the sustainability of our packaging but reflects our commitment to making recycling real. In the past year our work towards our packaging impact target has focused on definitions and data.

Definition of recyclability

Across the packaging value chain there are ongoing discussions regarding the recyclability of various materials. One of the key factors in these discussions is the difference between 'technically recyclable' and 'likely to be recycled'.

DS Smith is leading industry conversations to determine consistent, accurate and authentic definitions, such as the development of the Confederation of Paper Industries (CPI) Packaging and Paper Recyclability Guidance and similar discussions at a European level. We are also supporting multiple customers develop their own internal guidance on packaging materials and recyclability.

Data

During the last year, we have conducted a data collection pilot at several of our manufacturing sites, representing a cross-section of product mix and geography. Building our technical expertise on the definition of recyclability has been crucial during this time and we are leading the industry by moving away from 'recyclable in theory' to 'recycled in practice'. This is a fundamental principle of the circular economy.

Based on our initial data pilot and projections, we are encouraged to report that we anticipate our baseline to be very close to the percentages reported by the CPI in the Paper and Board Packaging Recyclability Guidelines. We plan to undertake a full data collection exercise during the next 12 months. Any products in our portfolio which do not meet our high standards regarding recyclability will be our focus going forward to 2025.

We will harness our expert designers, deploy our innovation, research and development workstreams and utilise our partnership with the Ellen MacArthur Foundation to find innovative solutions to any recyclability challenges we identify.

“The overwhelming majority of the packaging we manufacture is 100 per cent recyclable. As a leader in sustainability, our target is focused on actively challenging the areas that are not recyclable and working with our customers to identify viable alternatives.”

ALAN POTTS

Design and Innovations Director

Our performance: Packaging impact (continued)

Net positive recycler

DS Smith continues to grow a strong net positive recycling position. During 2018, over 5.1 million tonnes of recyclable material was collected, sorted, reprocessed, managed or transported by our Recycling division. This outweighs the packaging we put on the market.

Beyond our targets

Plastic replacement

DS Smith is actively working to reduce plastic packaging by innovating and focusing research and development on sectors where fibre-based alternatives can create real value. Some of the challenges and opportunities of this workstream are explained on page 15.

PackRight Centres

Through our network of PackRight Centres we are working closely with customers to maximise the opportunities to use packaging to protect products, optimise supply chains, and find unique solutions to replace plastic on-shelf and in the supply chain. Reducing cost, the carbon impact of the just-in-time supply chain and reducing the end-of-life impact of their packaging are top priorities. Food safety is a key concern at this stage, and our teams are working extra hard to ensure the highest safety standards are upheld whilst we innovate.

Impact Centres

The innovation days we hold at our Impact Centres challenge the status quo, exploring how packaging can perform better for our customers and their brands. With the sustainability of packaging at the forefront of public awareness, on-shelf impact and the sustainability credentials of packaging are inseparable.

Performance packaging

Our focus is on packaging specified by performance, not by weight, which enables us to use no more material than necessary. Using our cutting-edge performance packaging technology and understanding specific supply chain variables we can more scientifically identify the most appropriate specification for a particular pack. With ever increasing scrutiny on the use of packaging in society, optimisation and efficient use of resources are key. Our PACE offering ensures our customers protect their products without waste or excess, supports them to achieve their corporate goals on packaging sustainability and to prepare for likely future legislation in this area.



Case studies: Plastic replacement

Corrugated tray

In Greece, our designers have partnered with a customer to replace single-use plastic trays with a corrugated alternative. These fully recyclable trays bring greater stability, improve recycling rates within retail stores and offer new opportunities for a larger marketing canvas.



Reusable corners

DS Smith has developed a simple, reusable and 100 per cent recyclable packaging solution which can replace expanded polystyrene and other plastic protection materials inside exterior packaging.



Zero tape

In Germany and the UK our teams have been working on box designs which eliminate adhesive plastic tape - innovating with different closure mechanisms. Implementing of these designs with one of our customers has already eliminated 18,000km of plastic tape, enough to stretch halfway around the world.

Fruit punnets

In the UK, collaboration between DS Smith, retailers and fruit suppliers has led to the development of a corrugated plastic-replacement fruit punnet. This solution is predicted to save 12 tonnes of non-recyclable plastic packaging per year, for just one of our customers.



More information and policies

- [Confederation of Paper Industries \(CPI\) Paper and Board Packaging Recyclability Guidelines](#)
- [DS Smith PackRight Centres](#)
- [DS Smith Impact Centres](#)
- [PACE performance packaging](#)
- [Chemicals management](#)
- [Product safety](#)

Recyclability and innovation

Interview with Alex Manisty,
Group Head of Strategy



Q. DS Smith has a target to manufacture 100 per cent reusable or recyclable packaging – is not all corrugated recyclable?

The majority of fibre-based packaging is fully recyclable. DS Smith was a major contributor to the Confederation of Paper Industries' Paper and Board Recyclability Guidelines, published in February 2019, which found that approximately 3 per cent of fibre-based packaging is difficult to recycle – usually because of plastic layers, metallic or plastics laminated packaging and moisture-resistant coatings – for example wax coated boxes. In North America, our Greencoat® boxes are hugely successful in offering a recyclable alternative to wax coated boxes. In Europe we are advising our customers on how to minimise laminates down to less than 5 per cent of pack weight – the threshold at which the CPI guidelines state paper mills can effectively recycle a piece of packaging – or design-out these features completely.

Q. Plastic packaging has been a key topic in the media – is this an opportunity for DS Smith?

According to our recent white paper, over 80 per cent of industry leaders say reducing plastics is their top packaging sustainability priority. Plastic will clearly always have a role to play in a world of convenience, however with 8 million tonnes of waste plastics already entering the sea every year, it is not going to be enough to wait for reforms to

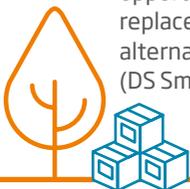
recycling infrastructure. We should be looking to leverage existing infrastructure and proven technologies without delay. Fibre-based packaging provides an obvious choice. At DS Smith we estimate that, using current capabilities, over 1.5 million tonnes (70 billion units) of plastic packaging in our supermarket aisles could be replaced with fibre-based alternatives.

Q. How do you see your partnership with the Ellen MacArthur Foundation complementing your work in this area?

One of the key challenges with plastics replacement is avoiding the tendency to get distracted with short-term innovations. No single part of the supply chain can hope to solve these truly global problems alone. Change must be coordinated, must be led by experts across the industry and must be truly systemic. This can only be achieved through multi-stakeholder partnerships, like the one we have begun with the Ellen MacArthur Foundation, and in due course with the many other world-class organisations that align with the Ellen MacArthur Foundation vision. Our focus will be on designing for circularity – something we are already very strong on – and creating and improving systems for high quality collection and reprocessing, especially in cities. Improving recycling will not solve the problem alone, we are working to develop products and systems where we retain the full value of materials for re-use time and time again.

1.5 million

tonnes market opportunity for plastic replacement with fibre alternatives by 2030 (DS Smith white paper)



81%

of UK public are focused on reducing plastic packaging purchases in fresh fruit and vegetables (YouGov Poll)



Download our white paper:
dssmith.com/company/ellen-macarthur-foundation-partnership

Fibre sourcing

Context

As with any manufacturing process, the quality of materials used has a significant bearing on the quality of the finished product. The same is true of the manufacture of quality paper and packaging. Both the quality and the sustainability of our core raw material, fibre, are key to our operation.

With a significant number of brand owners - including many of our customers - committed to zero net deforestation by 2020, it is critical to preserve threatened forests globally. It is important to make the distinction between those forests threatened by deforestation and the use of sustainably managed forests that provide vital social and economic benefits.

How we apply our Purpose:



Putting sustainability at the heart.



Developing the right strategies.

3.2 million

seedlings are planted every day in the United States of America

Source: American Forest and Paper

The world would run out of recycled fibre in

6-18 months

without virgin fibre

Source: Two Sides North America

90 per cent

of pulp used by European paper mills originates from forests in Europe

Source: CEPI

DS Smith performance highlights

100 per cent

of sites hold chain of custody certification

100 per cent

recycled or chain of custody certified papers bought by our central paper sourcing function



Our targets:

2020

Use 100 per cent recycled or chain of custody certified papers by 2020

100 per cent

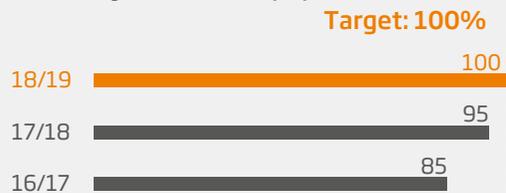
Maintain 100 per cent of sites holding chain of custody certification

Our Key Performance Indicators:

Percentage of papers used that are recycled or chain of custody certified (%)



Percentage of sites holding chain of custody certification (%)



Our next steps:

1. Continue our ambition to buy all papers sustainably through our centralised paper sourcing function by focusing on the remaining three per cent.
2. Maintain the same standards as newly integrated businesses in North America and France, Spain and Portugal are brought in scope of the targets.

Performance

We are delighted to report that we have achieved our target of ensuring 100 per cent of in-scope sites hold chain of custody certification.

Significant progress has also been made towards our target of using 100 per cent recycled or chain of custody certified papers by 2020. An internally audited, data gathering process has confirmed that 100 per cent of the papers bought by our central paper sourcing function are sustainably sourced from recycled or chain of custody certified sources. We have established firm procedures in our central paper sourcing function to achieve this, however the challenge remains in the balance of papers which are bought locally by recently acquired box plants in the Packaging division. This is why our Group performance for this target remains at 97 per cent.

We are confident we will meet this target by 2020. Based on preliminary data, we believe the remaining three per cent are sustainably sourced papers. However we need to verify this and establish robust local controls over the next year to confirm.

Beyond our targets

Forestry

Since the acquisition and integration of Interstate Resources and more recent acquisition of Europac, DS Smith now owns over 14,270 hectares of forest assets across North America, Portugal and Spain. The overwhelming majority - 88 per cent - of the forest holding in Portugal and Spain has a sustainable forest management certification and we are in the process of obtaining certification for our forests in North America.

We are now developing an internal standard on forestry and will soon launch a new target to achieve sustainable forest management certification across all our owned forests.

Quality recycled fibres

Our network of paper mills predominantly use old corrugated case (OCC) material and other fibre recycle which has been collected by our Recycling division. This raw material must meet high quality controls, especially in the face of Chinese restrictions on OCC imports, which has been increasing contamination in Europe. Near Infra-red technology in our mills has been introduced to measure fibre quality more accurately. In our recycling depots, introducing an 'eight must haves' quality process has allowed us to reduce contamination in OCC bales to 0.5 per cent and maintain our exports to China. New shift patterns have also transformed depots, handling capacity, rising to 60,000 tonnes per annum (up by 50 per cent since 2018). DS Smith will continue to drive improvements in local recycling infrastructure and challenge the industry, participating in consultations on recycling reform and publishing thought leadership pieces such as the most recent 'Tipping Point' report.

More information and policies

- [DS Smith Group Sustainable Fibre Sourcing Policy](#)
- [DS Smith Recycling division report: Is the UK reaching a recycling 'tipping point'?](#)
- [Paper mill certifications](#)



Forestry assets in Portugal (source: CentroPinus)

Our performance



Supplier standards



Context

As organisations' efforts to operate more sustainably mature there is increasing focus on supply chain impact. Much like an iceberg, the most visible elements of an organisation's environmental impact only tell part of the story. Even the supply chains of small and medium sized businesses can have vastly complex international supply chains. To that end, efforts to operate sustainably must involve using scale and purchasing power to influence suppliers and drive the highest social and environmental standards.

How we apply our Purpose:



Developing the right strategies.

Largest retailer in the world has over

100,000
suppliers

Source: Forbes

DS Smith performance highlights

EcoVadis

established as method to assess supplier sustainability performance

Our target:
2025

Ensure 100 per cent of our suppliers comply with our sustainability standards by 2025

Our Key Performance Indicators:

Percentage of critical suppliers that comply with our sustainability standards (%)



Percentage of strategic suppliers that comply with our sustainability standards (%)



Our next steps:

1. Ensure all strategic and critical incumbent suppliers digitally sign up to our supplier standards.
2. Assess sustainability performance of strategic and critical incumbent suppliers via EcoVadis.
3. Embed sustainability standards into all business procurement processes and assess effectiveness across geographies.

“Ensuring our supplier base is managed in a responsible manner is of the utmost importance to us. We have set an ambitious target and our stakeholders can have complete confidence that DS Smith is only working with suppliers who match our high ethical standards.”

MARTIN SPICE
Procurement Director

Performance

Strong progress towards the long-term target has been made over the past year. Initial work focused on categorising suppliers. Given the scale of our supply chain and the variety of suppliers within it we have decided to drive our sustainability standards into our supply base using a variety of tools, with suppliers subject to an assessment commensurate to their categorisation. Our supplier categorisation process was a key foundation to build from. Following on from this, we engaged with several third parties in order to find new or existing software solutions that will enable us to embed sustainability factors within a broader supplier relationship management programme. Two software systems have been identified; one to act as a general supplier qualification system, and EcoVadis to act as a rigorous sustainability rating system for suppliers categorised as either high or critical risk, or strategic. Both systems are currently being rolled out. Our Global Supplier Standards and Global Supplier Requirements are also becoming embedded as standard in our new supplier onboarding processes.

Beyond our targets

Palm oil

In our North America Packaging and Paper business we use very small quantities of palm oil, approximately 3,000 tonnes per annum, as a substitute for wax coatings for boxes. Whilst wax coating renders a box unrecyclable due to the problems it causes in the pulping process, our alternative coating is fully recyclable. To ensure sustainable sourcing of this material, over the course of the past year we have developed and implemented a palm oil policy stipulating the use of segregated palm oil wherever possible. Unfortunately, in the US we do not purchase palm oil in sufficient quantities to qualify for segregated volumes. As a result, we source palm oil to the mass balance standard, the next most sustainable option, and will review this as availability changes.

More information and policies

- [DS Smith Group Supplier Standards Policy](#)
- [DS Smith Global Supplier Standard](#)
- [Supplier landing page](#)



Case study: supplier reduction

Since its launch in 2018, DS Smith's supplier reduction initiative has had excellent results. The programme is live in eight countries: UK, Nordics, Germany, France and Spain. To date, over 11,000 suppliers have been made unavailable to purchase from as part of the drive to have fewer, more responsible suppliers. In addition to bringing significant working capital benefits to our business, it has also reduced the sustainability risks associated with sourcing. This will allow us to focus on the sustainability standards and performance of the remaining suppliers.

Carbon and energy

Context

Climate change is one of the biggest global issues of this century. It presents policy makers and businesses of all sizes and in all industries with both a unique range of market opportunities and a significant array of challenges. Public demand for action continues to be on the rise, with an estimated 1.4 million pupils going on school strike across the world in the past year, a swathe of citizen-led lawsuits and continued increases in emissions.

A combination of efficiency, financial and moral incentives to reduce emissions exist, but access to finance and investment cycles continues to pose the biggest challenge to the paper industry. The Confederation of European Paper Industries (CEPI) has recently published a 2050 Roadmap; mapping the decarbonisation pathway to 80 per cent emission reduction. They estimate an extra €24 billion of low-carbon investments will be required across energy efficiency, fuel switching, demand-side flexibility and emerging technologies to meet this target.

How we apply our Purpose:



Putting sustainability at the heart.

€24 billion

investments in low-carbon technology are estimated to be needed in the pulp and paper industry to reach Paris Accord ambitions

Source: CEPI

81 per cent

of the world's energy mix comes from fossil fuels

Source: International Energy Council

DS Smith performance highlights

6.1 per cent

like-for-like reduction in carbon emissions per tonne of production

82 per cent

of DS Smith's energy is consumed by sites with ISO 50001 certification

Our targets:

30 per cent

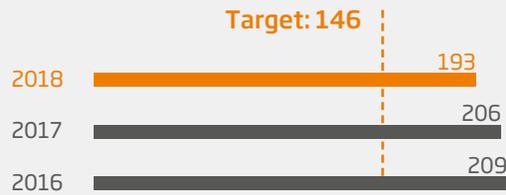
Reduce our CO₂e emissions by 30 per cent, per tonne of production, by 2030 against a 2015 baseline

100 per cent

Ensure 100 per cent of our energy is consumed by ISO 50001 certified sites

Our Key Performance Indicators:

CO₂e emissions per tonne of production (kg CO₂e/tonne nsp)



Percentage of energy consumed by ISO 50001 certified sites (%)



Our next steps:

1. Continue implementation of energy efficiency programmes including LED lighting, CHP installations and fuel switching projects.
2. Complete roll out of ISO 50001 in Europe and North America.
3. Conduct scoping exercises and collaborate with CEPI on breakthrough carbon reduction technologies to identify opportunities.

“Reducing our carbon emissions is not just about meeting legal targets or moral imperatives; it is just good business. The cost of energy and carbon is significant; it makes financial sense for us to invest to operate more efficiently.”

JIM MORGAN

President and CEO, North America Packaging and Paper

Performance

At DS Smith we are committed to reducing our emissions. Our approach to achieving our ambitious emissions reduction target is split into two areas:

- fuel switching
- energy efficiency initiatives.

On a like for like basis our net carbon figures for 2018 fell by 5.1 per cent on 2017 values, with emissions relative to production falling by 6.1 per cent. Energy efficiency initiatives continue to make strong progress. The global programme to replace high bay lighting with LED lamps is complete in the UK, Italy, Iberia and Poland, with progress continuing across Germany, France and Eastern Europe. Fuel-switching projects take much longer to implement but have higher carbon returns in the long term.

Our strategic goal to lead the way in sustainability drives investment in low carbon technology. For example, our UK paper mill, Kemsley, is installing a new Combined Heat-Power (CHP) plant which will save 36,000t of CO₂e per annum and is in the process of switching to a third-party heat supplier which will save 62,000t of CO₂e per annum. ISO 50001 is our management mechanism for monitoring progress against targets at a site-level, whilst we also look to identify breakthrough technologies in collaboration with the industry.

It is of note that the increased outputs of lighter, higher performance packaging have a negative impact on carbon emissions relative to production tonnage. Required energy inputs, the single biggest component of our carbon figures, do not change in direct correlation with the grammage of paper outputs. In this context the past year’s reduction is an excellent achievement.

As expected, our absolute CO₂e emissions have risen by 13.2 per cent since the inclusion of North America Packaging and Paper division in our carbon reporting. The two paper mills in this division are now scoping out investment opportunities for carbon reduction. Our approach to acquisitions means we often integrate businesses that have not had the same environmental focus, which can have a negative impact on our net and relative emissions. We view this as a healthy challenge, and part of our Purpose, to implement the right strategies and put sustainability at the heart of newly acquired sites.

Long-term confidence

We remain confident in our ability to reach our long-term target which we believe to be aligned with the Paris Accord - however we are in the process of verifying this and will amend if necessary.

Our carbon intensity like-for-like is 7.5 per cent lower (6.8 per cent lower including North America)

Our performance: Carbon and energy (continued)

against a 2015 baseline, although we expect this to increase next year as new paper mills come in scope. The energy intensive nature of paper mills remains a challenge for the whole industry, therefore the next steps of our strategy are crucial.

Beyond our targets

Climate-related Financial Disclosures

DS Smith supports the recommendations published by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). These are a series of recommendations, aimed at addressing the financial impact of climate change on businesses worldwide. Our analysis (see table below, or page 35 of DS Smith Annual report and accounts 2019) confirms that we are delivering against seven recommendations and expect to meet more next year.

The principal climate-related risks we identified are carbon pricing regulation and customer behaviour, which are now integrated into our Group risk practices and governance structure. We are now working to quantify the financial impacts of these risks, based on several climate change scenarios, and will set plans to mitigate them.



Case study: paper power

DS Smith's Kemsley paper mill in Kent, which reprocesses 30 per cent of the UK's recycled paper and card, has signed an agreement with energy provider E.ON to construct a state-of-the-art Combined Heat and Power (CHP) facility. The new plant will reduce carbon emissions by 36,000 tonnes per year and will have an electrical capacity of c. 75MW. The mill has also recently installed a new Anaerobic Digestion plant which will turn waste into gas and grow the site's renewable energy consumption.

More information and policies

- [DS Smith Carbon and Energy Efficiency Policy](#)
- [DS Smith CDP Climate Change submission](#)
- [CEPI Investing in Europe for Industry Transformation 2050 Roadmap](#)
- [TCFD website](#)

	Disclosure	Reference
Governance		
Describe the board's oversight of climate-related risks and opportunities.	Annual report and accounts 2019	pg 34, 55
Describe management's role in assessing and managing climate-related risks and opportunities.	Annual report and accounts 2019	pg 34
Strategy		
Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	Website article on climate risks CDP Climate Change	Website Website
Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	Website article on climate risks CDP Climate Change	Website Website
Describe the potential impact of different scenarios, including a 2° c scenario, on the organisation's businesses, strategy, and financial planning.	-	-
Risks and opportunities		
Describe the organisation's processes for identifying and assessing climate-related risks.	Website article on climate risks	Website
Describe the organisation's processes for managing climate-related risks.	-	-
Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	Annual report and accounts 2019 Sustainability Report 2019	pg 49 pg 39
Metrics and targets		
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	-	-
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	CDP Climate Change Sustainability Report 2019	Website pg 44
Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Annual report and accounts 2019 Sustainability Report 2019	pg 32 pg 9, 21, 22

Financing the low carbon economy

Interview with Adrian Marsh,
Group Finance Director



Q, What are the pressures driving increasing investor and business interest in climate change?

Investors and insurance companies are increasingly aware of these emerging risks which have the potential to disrupt operations or create stranded assets. This requires a much longer-term and holistic outlook on investments. Investors are therefore increasingly moving beyond only financial measures, and are increasingly integrating ESG (Environmental, Social and Governance) factors into their portfolios. At DS Smith, we perform well in these, including our recently improved score of A-grade in MSCI and inclusion in the FTSE4Good indices again.

Pressure from governments is also a significant driver, through regulations such as the Non-Financial Reporting Directive and through bespoke institutions being formed to tackle climate change issues, such as TCFD and the UK Green Finance Institute. In Europe, the carbon price has tripled since this time last year. This is a significant financial driver for our energy and climate change strategies.

Q, You have a carbon reduction target for 2030. How are you thinking beyond this?

Given the long capital cycles of equipment in the paper industry, it is imperative for us to have a much longer-term outlook with regards to energy and low carbon investments. The CEPI '2050 Roadmap to a low-carbon bioeconomy' report articulates this very well. To achieve the required emission reduction pathways mapped out in the Paris Accord, the

industry must invest in four areas: energy efficiency; demand-side flexibility and price hedging; fuel switching; and breakthrough technologies. DS Smith is aligned with this roadmap, including the 80 per cent by 2050 target, and is already implementing most of these strategies. However we are dependent on long-term technological innovation. It is also interesting to see the growth of sustainability-related financing, such as green bonds and other ringfenced funds, which could provide future opportunities. As the price of renewables achieves cost parity with fossil fuels and carbon prices rise, the roadmap to operating low carbon or carbon-neutral facilities becomes clearer and more feasible.

Q, People often focus on the challenges of climate change. What opportunities do you see?

We are ready to capitalise on the growing demand for more carbon efficient products and packaging. Our partnership with the Ellen MacArthur Foundation will help us maximise these. As an industry based on biomaterials, we believe there is a great opportunity to become more sophisticated in our understanding of carbon cycles. We are continuing to evolve our understanding of how our ventures into forest ownership provide new opportunities in carbon sequestering and offsetting. In the US, we have a huge opportunity to lead the way in sustainability through greenfield sites; to build state-of-the-art, efficient, low carbon facilities which are resilient to future climate-related risks.

\$1 trillion

capital secured by ESG portfolios to date (Reuters)



75%

of investors are seeking to address climate change in their funds and portfolios. (Global Impact Investing Network)



Download the CEPI 2050 Roadmap: cepi.org/publication/investing-europe-industry-transformation-2050-roadmap-low-carbon-bioeconomy

Our performance



Water stewardship



Context

From drinking and growing food to mixing cement and cooling data centres, water is a vital and increasingly strained resource. By 2050 about 500 million people are likely to be living in water-stressed areas, according to the Stockholm Resilience Centre. Such issues are not likely to be confined to commonly perceived arid regions of the world. For example, the World Wildlife Fund has recently reported that the UK could run out of freshwater in 25 years, Spain and South Africa have both faced water emergencies in the last five years.

In the paper and corrugated production process, water is critical. Fibres are suspended in water as they are transported through production, from pulp into paper and then superheated steam is used to dry the paper. In our corrugated plants, water is also used to dilute starch and bond layers of paper together to create corrugated board.

How we apply our Purpose:



Putting sustainability at the heart.

25 years

until the UK could run out of freshwater

Source: World Wildlife Fund

500 million

people are likely to be living in water-stressed areas by 2050

Source: Stockholm Resilience Centre

DS Smith performance highlights

40 per cent

of our mills are at or below our water consumption benchmark



**Case study:
copper-free inks**

Green and gold inks lead to higher copper levels in wastewater. Growing awareness of this environmental impact has led DS Smith sites in the UK and Nordics to alter their sales and specification strategy. These sites are now offering copperless and EKO-gold inks to customers.

Our targets:

Water stewardship

Create zero water impact by 2030

- **Water efficiency:** all paper mills to perform at or below our benchmark of 6.5 m³/tonne of production for recycled paper mills and 30 m³/tonne of production for virgin paper mills
- **Water quality:** zero non-conformances with consents to discharge
- **Water stress:** all operational sites in water stressed areas to have a mitigation plan in place

Our Key Performance Indicators:

Percentage of paper mills performing at or below our benchmark (%)



Number of non-conformances with consents to discharge



Percentage of water stressed sites with mitigation plans in place (%)



Our next steps:

1. Develop three-year plan for each paper mill to reach the target, including new virgin mills.
2. Initiate projects in paper mills operating above water consumption benchmark.
3. Develop methodology to stress-test the water contingency plans.

“Water is a limited resource in Italy. Our mitigation plan focuses on implementing the most efficient water treatment and recirculation technology whilst maintaining strict controls on connected issues.”

LIDO FERRI,
Environmental Manager, Lucca Paper Mill

Performance

As a water-intensive business, it is important that we consume, recycle and treat the water we use responsibly and efficiently, so that we minimise our impact when we return water to the natural environment. To that end we have specific targets on water efficiency, quality and stress.

Based on industry Best Available Techniques (BAT), we have identified an efficient level of water use of 6.5m³/tonne of production for recycled mills and 30m³/tonne of production for virgin mills. Against a long-term target of 100 per cent, 40 per cent of our mills operate at or below this benchmark. There is a delicate and technical balance to be maintained, as reducing water, offset with chemical use, can lead to an increase in energy consumption. Sites operating above the benchmark are now exploring water efficiency opportunities and developing three-year plans.

Over 80 per cent of the water we extract for our own purposes is returned to be treated via our own or municipal effluent treatment. The remaining water is lost by evaporation or through starch dilution. During 2018 we had no major non-conformances with consents to discharge and 59 minor non-conformances. Incidents are reported centrally and to local authorities where appropriate. Investigations are carried out and lessons learned disseminated through the business. An ongoing challenge we faced across multiple sites was to reduce copper levels in wastewater, caused by certain printing inks - this has been a focus of our efforts this year. All our sites monitor COD, BOD and AOX levels, pH and suspended solids to ensure the waste water is purified, ecologically safe and meets regulatory requirements.

Our final water stewardship priority is water stress. Using the World Resources Institute (WRI) methodology, we have assessed all of our sites through this robust methodology and created a water stress map. It has been identified that 24 out of 250 our sites (four mills and 20 corrugators) are located in current or potentially future water stressed regions. In line with our target, 70 per cent of our sites have already created water stress mitigation plans.

Beyond our targets

In addition to managing our own wastewater, we also provide additional wastewater treatment services to local communities at some of our sites. In 2018, we treated over 556,690m³ on behalf of third-party organisations.

More information and policies

- [DS Smith Water Stewardship Policy](#)
- [DS Smith CDP Water Security submission](#)
- [WRI Water Stress methodology](#)

Our performance



Waste and recycling

Context

Rising raw material prices, landfill taxes, the growth of energy-from-waste, ambitious legislative and voluntary recycling targets; changing shopping habits and public outrage over ocean plastic pollution; it is a period of intense focus for recycling, waste and resource efficiency. As a manufacturer, we are acutely aware of our responsibility to reduce waste and create closed-loop systems which extract the maximum value from resources through the waste hierarchy of reduce, reuse, recycle and recover.

How we apply our Purpose:



Putting sustainability at the heart.

OECD countries generate
4.6 billion
tonnes of waste, per annum

*Source: Accenture Strategy,
Waste to Wealth*

\$1 trillion
annual lost value through
waste which could be
recycled but is not

*Source: Accenture Strategy,
Waste to Wealth*

DS Smith performance highlights

<1 per cent
waste to landfill in the DS Smith
Packaging division

63 per cent
of total waste arisings sent
for recycling

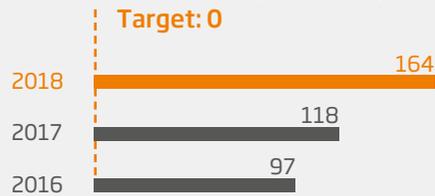
Our target:

Zero waste to landfill

Zero waste to landfill by 2030

Our Key Performance Indicators:

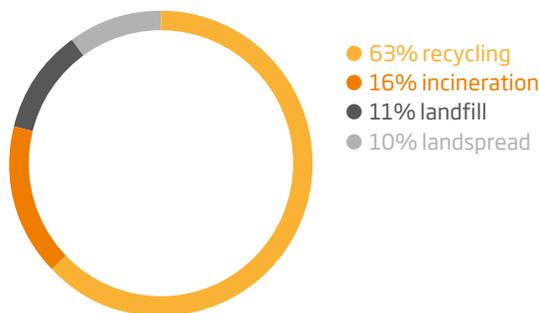
Total waste to landfill (kilotonnes)



Our next steps:

1. Create a common set of standards for waste segregation, reuse and recycling to implement across all locations.
2. Develop three-year road map for all paper mills.

Group waste management, by end destination (%)



“Colliding market factors – social, economic and geopolitical – continue to have a lasting impact on the waste performance of our own facilities, and the state of recycling in the countries where we are based. The UK in particular is facing a tipping point as recycling performance stagnates.”

JOCHEN BEHR
Head of Recycling



Find out more, download our report:
dssmith.com/recycling/insights/recycling-tipping-point

Performance

Waste is a resource at DS Smith. We apply this principle not only to our circular business model, but also to our everyday operations.

As a Group, we sent 63 per cent of our waste to recycling, 16 per cent to landfill, 11 per cent to incineration and 10 per cent to landspread during 2018. Whilst we have a developed roadmap of strategic projects, we have not made the progress towards our zero waste to landfill ambition that we would have liked. Our net landfill figures have increased by 39 per cent like-for-like.

Most of this impact comes from our paper mills where we have several difficult to recycle waste streams – including approximately 32,000 tonnes of plastic contamination which is extracted from our pulping process every year – and some unanticipated disruptions from old waste-handling machinery. As has been widely reported in the media, Chinese waste import restrictions have had a significant impact on waste management in Europe, resulting in an increase of higher contamination fibre bales. Inclusion of the North America Packaging and Paper division has also had a significant impact on our net and relative landfill figures, as we have inherited an on-site landfill at the paper mill in Georgia. National recycling infrastructure is more limited in the US, compared to Europe. In our Packaging division, performance is much stronger. Waste to landfill is less than one per cent of total waste arisings and are equipped with underfloor conveyor belts, which transport pre-consumer off-cuts back to paper mills as high-quality pre-consumer feedstock.

We continue to strive towards zero waste to landfill. Despite the results, we firmly believe in our responsibility to minimise our impact and believe our Recycling division is a key part of the solution. Recognising that waste challenges are often best addressed locally, our focus next year is to create paper mill-specific, long-term zero waste to landfill roadmaps in Europe and North America.

More information and policies

- [DS Smith Zero Waste to Landfill Policy](#)



Case study: unrecyclable plastic transformed

We are closing the loop on plastic waste streams from paper mills. Our De Hoop mill has partnered with Fermacell, a subsidiary of James Hardie, which uses paper and magazines as a raw material to produce their gypsum boards. As these types of paper are getting more scarce, this partnership has been investigating the use of 4,000 tonnes per year of paper mill rejects as a substitute.

Health and safety

Context

With global consumption of products growing at a rate of three per cent per year over the last 30 years (source: World Bank), and e-commerce experiencing exponential growth, industry has never had to work harder. Meeting high expectations around on-time delivery in full, speed to market demands, quality and profit expectations without exploiting energy, resources and employees is an enormous challenge.

There is a changing mindset. The average person spends 90,000 hours of their life working (source: Forbes). However, growing research and awareness around wellbeing, mental health and happiness is now driving businesses to consider the softer impacts which the workplace can have on human health. Employers are recognising their responsibility to not only prevent physical harm, but also to provide advice and support on health and wellbeing.

How we apply our Purpose:



Developing the right strategies.



Thinking differently.

Mental health problems in the workplace cost the global economy

€900 billion
per year in lost productivity

Source: World Health Organization

Every year in the European Union, there are around

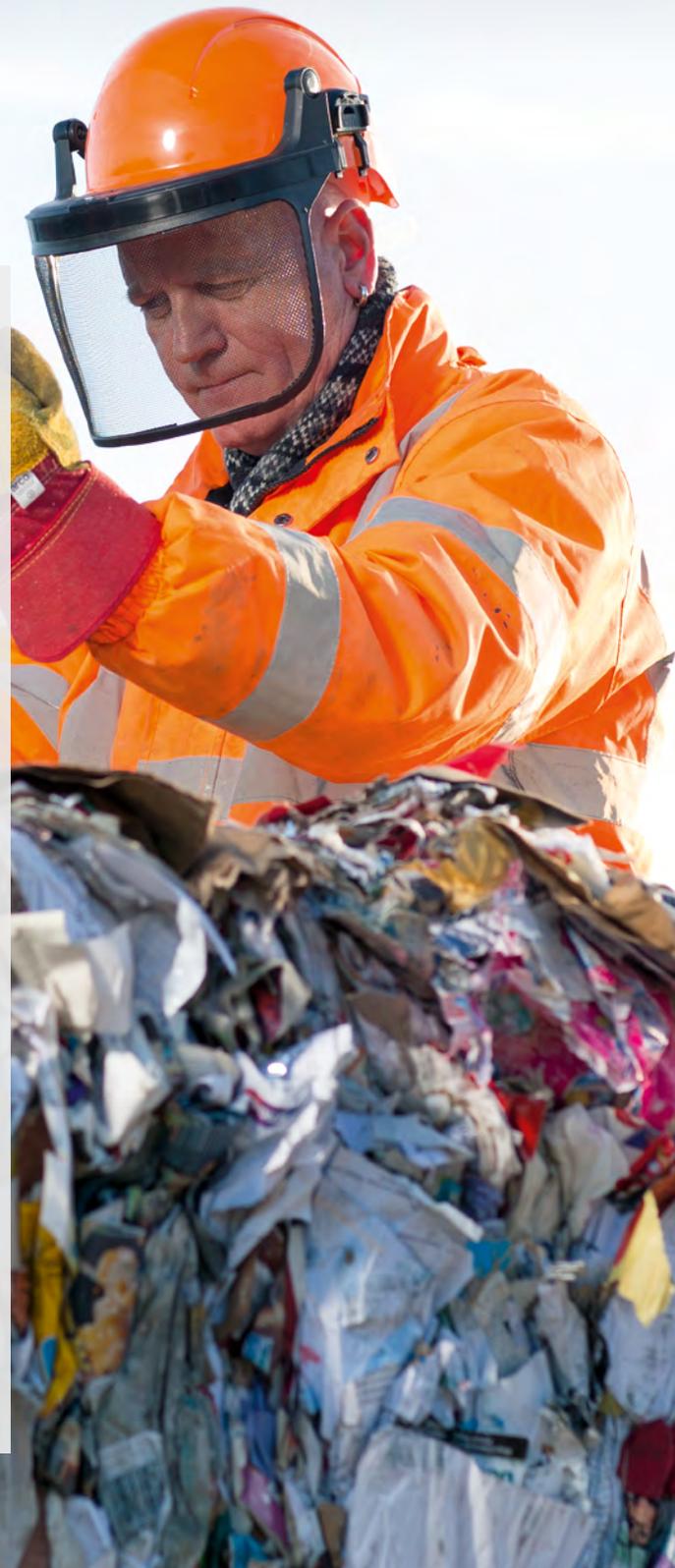
5,600
fatal work-related accidents

Source: EU-OSHA

DS Smith performance highlights

23 per cent
reduction in our Accident Frequency Rate

3 per cent
improvement in positive employee survey responses to "My Manager shows a commitment to H&S"

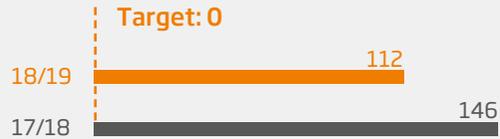


Our targets:

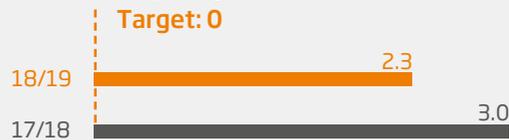
Zero Accidents. Vision Zero Harm.

Our Key Performance Indicators:¹

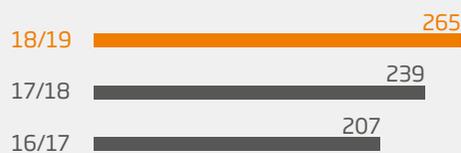
Lost Time Accidents (LTAs)



Accident Frequency Rate (AFR)



Number of sites with zero LTAs



Our next steps:

1. Integrate pro-active indicators, designed to achieve zero harm, into health and safety award criteria.
2. Focus on line manager ownership and accountability.
3. Introduce cross auditing.
4. Implement our Zero Harm cultural tool to encourage sites to assess their current state and provide guidance on how to move to the next.

1. Based on inclusion of North America.

Performance

Welcome to our renewed health and safety strategy- Vision Zero! At DS Smith we aim to foster a culture where both health and safety are an integral part of our business activities and where we strive to ensure people are not harmed. The health and safety of all people – employees, agency workers, contractors and visitors – is our top priority.

Our Vision Zero strategy consists of four key areas – leadership; engagement; processes and systems; and culture. Each of these has a goal, with annual activities and KPIs. The Leadership Goal – ‘All Managers Lead by Example’ – resulted in more than 170 of our existing site managers completing our bespoke health and safety Leadership on-boarding Programme this year. The learning from this programme contributed to a Group-wide 3 per cent improvement in positive employee survey responses to “My Manager shows by his / her behaviour, a commitment to health and safety”.

This year we have also implemented our first Group-wide auditing programme, created and deployed four new technical health and safety minimum standards and introduced a new pro-active KPI – our HS Engagement Rate. This measures the number of near misses and safety observations per person across the Group – hence our people’s engagement with seeing and raising health and safety issues.

This activity, commitment and drive have resulted in us achieving all our annual Vision Zero Goal KPIs for the year and a 23 per cent reduction when including businesses acquired in our Accident Frequency Rate. In addition, 265 sites achieved a zero accidents award and we are seeing exceptional progress in our North America Packaging and Paper division. Our aim is to continue the journey towards a sustainable world-class performance. However, a tragic accident in our Tallinn plant, that resulted in the fatality of a colleague, has overshadowed all our performance improvements. Our thoughts are with their family, colleagues and friends as we support them and the local authority investigation.

“Everyone who comes to work in our sites should go home healthy and safe. Aspiring to Zero Harm means expanding our vision to include accidents, incidents, health and wellbeing.”

JULIE WESCOTT,
Group Health and Safety Director



Case study: Health MOTs for employees

For the third year running our UK paper mill, Kemsley, has set up a best practice ‘Health MOT’ programme for its employees. This consists of regular cholesterol and glucose testing, BMI measuring, and blood pressure checks. All employees receive a personalised report with their results and advice to support them in any areas highlighted or in their overall health.



Responsible neighbour

Context

The digital age, and in particular social media, has given every member of the public a voice and the opportunity to hold business, politicians and institutions to account. This has led to much higher expectations on business. In communities, companies – particularly large manufacturing operations – have a significant impact on local life through many areas including employment, transport and infrastructure. Businesses are expected to clearly communicate the nature of their business, the scale of their operations but critically what they are giving back to society. A company will draw on local skills, infrastructure and resources to build a successful, profitable business so it must show how it also contributes to a prospering community. Communication with all stakeholders in the community is vital in creating strong relationships and shared objectives in a growing and thriving local economy.

How we apply our Purpose:



Putting sustainability at the heart.

53 per cent

of Americans expect companies to improve the local community

Source: Mintel

25 per cent

of charitable giving in Europe comes from corporations

Source: Ernop

DS Smith performance highlights

81 per cent

of sites engaged in community activities



Case study: poster challenge

In 2019, DS Smith held a global poster challenge for school-age children of our employees and their families. This kickstarted our Communities Programme and raised awareness of the programme, generating a buzz of activity. Across the business we received 694 poster submissions from 23 countries across Europe and North America.

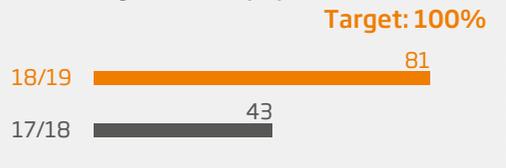
Our target:

100 per cent

Engage in community programmes at 100 per cent of our sites by 2020

Our Key Performance Indicators:

Percentage of sites taking part in community activities (%)



Our next steps:

1. Implement divisional action plans to achieve 100 per cent and share progress via a calendar of Group-wide activities.
2. Provide support to regions, countries and sites with lower engagement.
3. Work closely with newly acquired businesses to integrate them into the programme.

“As a business that operates in hundreds of communities across the world, we have a responsibility to clearly communicate what we do, how we do it and vitally, what we are contributing to local life. Our employees’ skills and knowledge can contribute significantly to many of the communities where we operate. We actively participate with schools, governments and partners to tackle environmental issues and support local causes.”

GREG DAWSON,
Corporate Affairs Director

Performance

To be a responsible neighbour we want to empower employees to solve sustainability challenges and inspire future generations within our local communities. Our Purpose puts sustainability at the heart, which not only applies to our own operations, but also by using our expertise and knowledge to support and educate our customers, local schools, governments, friends and families.

This is another area in which we have had great success over the past year. Almost doubling our performance from the previous year, 81 per cent of our sites are now active in their local communities. In January 2019 we launched the DS Smith Community Programme which has received great internal and external support with an informal network of divisional leads. The consistent, Group-wide community programme is facilitated by local budgets set aside at each site to develop activities in two key areas:

- **Environment:** supporting the improvement and protection of the environment
- **Future generations:** inspiring and educating future generations in a growing digital world by using our industry expertise and knowledge

During the first six months of the new programme, over 30 sustainability and recycling school sessions have been organised, engaging children around the world in protecting the environment. Encouraged by this achievement in a short space of time, we eagerly await the continued growth of this initiative.

Beyond our targets

DS Smith also operates a Charitable Foundation which provides financial support to charities that align with our own activities and values. The foundation primarily supports individuals and groups with charity and community activities outside the scope of the official DS Smith community programme. These include groups which are:

- engaged in improving or conserving the environment
- providing training and educational opportunities

In 2018/19, over £250,000 was donated. In May 2019, to reinforce the value of sustainability education, DS Smith Charitable Foundation announced it will be making over £1 million available. This will provide a significant boost to current funding and will kickstart more local projects that will make a real difference.

More information and policies

- [DS Smith Group Community Engagement Policy](#)
- [DS Smith Charitable Foundation website](#)
- [Announcement on £1 million fund](#)

Our performance



Responsible employer

Context

The global workforce is changing. Today, people expect to enjoy several different careers, with a variety of companies often across geographies. Today's workforce demands responsible employers, and companies need to respond in order to attract and retain the best talent by creating working environments in which everyone has equal opportunities, feels valued and can fulfil their potential.

How we apply our Purpose:



Developing the right strategies.



Putting sustainability at the heart.

10 per cent

of the workforce of FTSE 100 companies are of BME (black or minority ethnic) origin

Source: Hays

88 per cent

of millennials want to work for purpose-driven companies whose values reflect their own

Source: PwC, Workforce of the Future survey

DS Smith performance highlights

>50 per cent

female uptake in 2018 graduate programme

Our target(s):

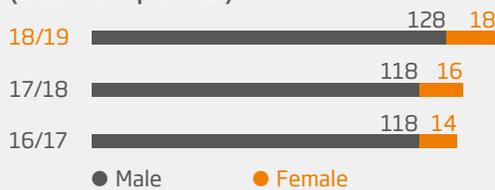
Our workforce

Build a diverse, engaged and respected workforce

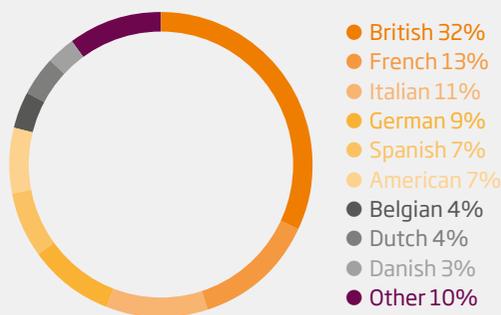
- Annual improvement in the diversity of senior management
- Continuous improvement in employee engagement and enablement
- Embed best practice ethical, labour and employment standards

Our Key Performance Indicators:

Gender diversity of senior management (number of persons)



Ethnic diversity of senior management



Our next steps:

1. Develop new measures to track diversity of talent attraction and recruitment processes.
2. Roll out unconscious bias awareness training to senior management and embed this into the Management Fundamentals course for all new joiners.
3. Develop employee engagement action plans for all divisions and regions.
4. Embed employee engagement common and core objectives into the Personal Development Review of all people managers.
5. Establish accountability structures for new target on zero non-conformances in ethical audits.

Performance

At DS Smith, we provide direct employment and livelihoods for over 28,000 people. However, the impact we have is much more wide-reaching, extending out to the communities in which our employees live and work, and to our contractors, suppliers, customers and charitable partners. We are connected to a truly global community. Our Responsible Employer target is split into three focus areas which address diversity, engagement and treating our people with respect.

Diversity

In our business, we seek to attract, recruit and retain people from diverse backgrounds and build upon their range of skills and strengths. Whilst metrics around gender are relatively well established, this is not the case for a wider range of diversity topics. Therefore, over the past year we have challenged ourselves to focus on identifying relevant metrics beyond gender, establishing our baselines and determining methods for measuring progress. The measures we will take forward are:

- Improvement in the gender, ethnic origin and nationality diversity of our Board and senior management
- Improvement in the Hampton Alexander Review

Our Diversity and Inclusion (D&I) forum has representatives from every division, and our Minorities Working Group within the European Works Council (EWC) has been set up to grow knowledge, drive awareness, challenge the status quo and develop recommendations for future activities.

In addition, we are delighted to report that our graduate programme has increased female representation by approximately 10 per cent per year, reaching over 50 per cent female uptake in 2018. Similarly, our Global Leadership Programme has increased female representation to 31 per cent.

We have not set targets for female representation, in order to avoid positive discrimination. However we see these results as an encouraging sign that our hiring and career progression opportunities are unbiased and are genuinely focused on the best talent.

Our performance: Responsible employer (continued)

“We are building a diverse, engaged and respected workforce who are agile and forward leaning to innovate and deliver for our customers. In order to create meaningful change, this needs to be role modelled at the highest levels of our business.”

JACKY WEARN,
Group Head of Talent

Engagement

Evidence shows that an engaged workforce leads to a more productive, happier, safer workforce. Our biennial employee survey is a crucial measure for how engaged our workforce is and provides valuable insight into how we can continue to build a culture of engagement.

Everyone in the business has a part to play in building a culture of engagement and our continued focus is on addressing the feedback from the survey across all divisions, regions, countries and sites.

Respect

DS Smith and its subsidiaries are committed to the highest ethical standards and full integrity in the way in which we engage with each other and our customers, staff, shareholders, suppliers and other stakeholders. This is the first and foremost way we show respect. As a strategic supplier to many of the most recognisable FMCG brands, we have a duty to provide the highest level of assurance that their packaging is ethically sourced and that we operate in line with the International Labour Organization. We have a number of different ways in which we embed respect for our people into our business. These are detailed below.

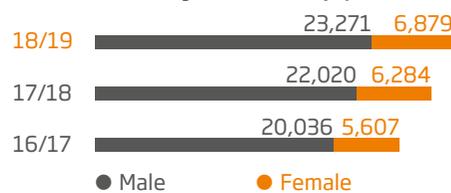
European Works Council

The purpose of our European Works Council (EWC) is to bring together employee representatives from the different European countries where we operate and discuss business decisions which affect the workforce and impact on the interest of employees. Representatives are informed and consulted by Group management on transnational issues.

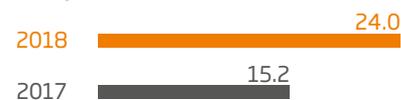
Gender diversity of the Board (number of persons)



Gender diversity of the Group (number of persons)



Hampton Alexander Review score



Two years ago we launched our Employee Charter, which was a huge step forward in employee relations and provides greater clarity in what is expected from employees of DS Smith - and what they can expect in return. This continues to be the bedrock of all our activities in this area.

This year, we worked closely with the 43 EWC members to review and revise our joint voluntary agreement to create a simpler EWC model that is more closely aligned to our business, with flexibility to adapt as we continue to grow to meet the changing needs of our customers. This revised voluntary agreement will last five years.

Code of Conduct

The DS Smith Code of Conduct sets out one common ethical standard for our business. It describes common rules which apply to all of our employees, and provides guidance on our approach to ethical business practices, environmental values, and human and labour rights. It is made available to all employees as part of their induction, and has been translated into 27 languages.

Verifying our ethical standards

For all 3,000 line managers across DS Smith, alignment with our company values and Code of Conduct is monitored via self-assessment against our nine Management Standards.

For sites, alignment against these standards is monitored via the Supplier Ethical Data Exchange (Sedex), on which 100 per cent of our sites are registered and are required to complete the self-assessment questionnaire (SAQ). This provides direct and transparent insight into the ethical management practices at every site.

Next year we will be taking this target to a new level of ambition. We will be aiming towards zero non-conformances in third party ethical audits. These audits currently take place across a third of our sites and, modelled on our approach to health and safety, we are confident that this new approach will drive a culture of best practice in ethics, labour and employment practices.

Modern Slavery

Our approach is governed by the DS Smith Anti-Slavery and Human Trafficking policy and a Modern Slavery Committee which meets once per quarter, and our progress is outlined in our annual Modern Slavery and Human Trafficking Statement.

Activities are focused on two areas: our own business and in our suppliers' businesses, where we seek to implement and enforce effective controls to ensure Modern Slavery is not occurring. The resulting projects are tightly aligned with and embedded within the action plans for the sustainability targets: Supplier Standards (see pages 18-19) and Responsible Employer.



Download our [Code of Conduct](#)



Download [DS Smith UK Gender Pay Gap report 2018](#)



Download [DS Smith Modern Slavery Statement 2017/18](#)

More information and policies

- [Code of Conduct](#)
- [DS Smith Modern Slavery Policy](#)
- [DS Smith Modern Slavery statement](#)
- [DS Smith UK Gender Pay Gap report](#)

Our next challenge



“The pressures to operate sustainably across the value chain are greater than they have ever been, from sourcing paper in a way that protects forests, minimising emissions from manufacturing to ensuring our products are recyclable and recycled in practice. Our targets and the progress we have made in the past year are evidence of our focus on managing these issues. However, as a leader in our sector, our aim is to take advantage of the opportunities, not just manage the risks.

How can we use our skills and expertise not just to align with, but to facilitate, the shift to a circular economy? That is the next challenge.”

SAM JONES

Sustainability Strategy and Communications Manager

Transparency and good corporate governance



“DS Smith’s sustainability activities have reached new levels of maturity over the last couple of years. We are challenging ourselves every day, across the whole business, to put sustainability at the heart of what we do.”



Letter from Iain Simm, Chairman of the Sustainability Steering Group

DS Smith’s sustainability activities have reached new levels of maturity over the last couple of years. This is reflected in our excellent progress against sustainability targets; through the launch of our Purpose and the announcement of our new partnership with the Ellen MacArthur Foundation. We are challenging ourselves every day, across the whole business, to put sustainability at the heart of what we do.

In particular, we continue to make progress on carbon reduction and our work on chain of custody certification and purchasing sustainable papers has been better than expected. Our engagement with local communities has also had incredible traction both internally and externally. I am also particularly pleased with how we continue to integrate newly acquired businesses and bring them into line with our high sustainability standards. Our North America Packaging and Paper division will begin to deliver against our targets in financial year 2019/20 and our ex-Europac sites in Iberia and France will come in to scope the following year.

Once again we have maintained or improved our scores in a range of customer and ESG benchmarks, including EcoVadis, CDP and MSCI, and I am proud that we have again produced a Sustainability Report that is aligned with the Global Reporting Initiative (GRI) best practice sustainability reporting guidelines, reflecting both our commitment to operating ever more sustainably, and to being transparent about the progress we make.

As part of the wider business community, I am pleased to reaffirm DS Smith’s commitment to the following high-level international standards:

- United Nations Global Compact
- United Nations Declaration of Human Rights and the Convention on the Rights of the Child
- International Labour Organization Eight Fundamental Conventions
- Organisation for Economic Co-operation and Development Guidelines for Multinational Enterprises
- United Nations Sustainable Development Goals

Looking forward, three of our sustainability targets have 2020 deadlines. As these become business as usual, we will go through the exciting process of setting new ones. Therefore, in late 2019, we will conduct a full materiality refresh to give us valuable insight into further topics and trends we need to address. The Sustainability Steering Group will then assess and advise on the next projects required to further embed and improve the maturity of our programmes to bring us ever closer to our goal to lead the way in sustainability.

IAIN SIMM,
Chairman of the Sustainability Steering Group

Sustainability governance

Since the launch of our sustainability targets in July 2018, we have strengthened the governance of sustainability in our divisions, embedding accountability for performance across the business and ensuring decisions on key issues are made at the correct level.

At DS Smith, the ultimate accountability for our sustainability strategy and performance is with the Group Chief Executive. However, responsibility for making certain strategic decisions, achieving targets and progressing projects is delegated to various other groups as described in the chart below.

Sustainability topics discussed by the Board in financial year 2018/19 include:

- Purpose
- Performance against targets
- Performance in benchmarks
- Performance in health and safety
- Sustainability maturity
- Carbon pricing
- Modern slavery
- Gender pay gap

Managing compliance

Ethical business conduct and compliance with local, national and international legislation are fundamental to our way of doing business. Embedding an ethical approach to business is increasingly a licence to operate and a condition

of trading. Building trust in our stakeholders and protecting our reputation are crucial, as they lead to repeat business and sustainable financial growth. Monitoring ethics and compliance and providing annual training to our employees are the responsibility of our legal teams. All employees are encouraged to report suspected misconduct or unethical behaviour via our SpeakUp! policy.

Managing sustainability risks

At DS Smith, sustainability-related risks are embedded in everything we do. Our management teams in legal, risk, safety and sustainability within the Corporate Services function provide guidance and oversight on such topics which allows the Group to respond to the complexities of operating in an ever-changing world. The creation of the HSES committee last year is an example of the importance and the increasing internal and external stakeholder interest in not just what we do but how we do it: our ethics, how we manage emerging risks such as water stress and the impacts of climate change, the way we deliver our results and live up to our sustainability commitments.

We support the TCFD recommendations and have integrated climate risk into our Group risk practices and governance. Through our business processes, we routinely look to identify risks and uncertainties and gather timely information allowing us to implement

mitigation plans, report on and monitor the adequacy of management controls, and assign roles and responsibilities.

With these practices, we are becoming ever more resilient. We also see a growing interplay between how we manage our principal risks and our sustainability priorities. Specifically, our efforts enable us to:

- minimise business disruption due to tightening regulations on energy, water and fibre usage
- avoid the impact of prolonged labour unrest, or failure to maintain satisfactory labour relations
- prevent reputational damage due to the increasing public concern surrounding packaging
- minimise the increased costs arising from climate change, extreme weather events and the impact of our approach to energy management.

Using the above criteria and our biennial materiality analysis, our risk management and sustainability teams work together to apply the precautionary principle. Through the guidance of our executive management, including the Group Operating Committee and Group Strategy Committee, we identify and classify sustainability risks which could impact the integrity of our operations, whilst seeking to harness opportunities to operate more sustainably.

Sustainability governance framework



Our stakeholder engagement

Understanding and influencing

Communication with our stakeholders is an essential building block of our sustainability strategy and activities. Engagement with a wide range of stakeholders enables us to highlight key topics to further develop or validate, and enables us to influence policy, standards and expectations across our industry.

Stakeholder	Who we engaged with	What they told us
Customers 	DS Smith has seen brand and retailer interest in sustainability double over the last three years. As a result, the sustainability team has gained insight from over 150 companies per year across FMCG, pharmaceutical, industrial, electronics and retail sectors.	Driven by consumer trends and government regulations, customers are digging deeper into the sustainability comparisons of different product specifications. Technical expectations around sustainable design are on the rise.
Investors 	We have engaged with a significant portion of our largest shareholders, as well as some smaller shareholders, on topical issues of particular interest to them.	Investors' top priority is honest and transparent communication. Their primary focus has been on plastics, forestry and carbon.
Regulators and policy makers 	<ul style="list-style-type: none">• President of Croatia• European Commission representatives, including Director General Environment, and various Ministers of the European Parliament• UK Ministers of Parliament• Policy advisors and researchers• Local councillors	Driven by consumer trends, the primary focus of regulators and policy makers has been on: <ul style="list-style-type: none">• plastic• waste• eco-design• Extended Producer Responsibility for packaging
Trade associations and cross-industry groups 	<ul style="list-style-type: none">• FEFCO (European Federation of Corrugated Board Manufacturers)• CEPI (Confederation of European Paper Industries)• CPI (The Confederation of Paper Industries)• The Packaging Federation• INCPEN (Industry Council for Research on Packaging and the Environment)• EUROPEN (The European Organisation for Packaging and the Environment)• WRAP (Waste and Resources Action Programme)• BPF (British Plastics Federation)• FCCG (Food Contact Coordination Group)• National trade associations	Driven by government and policy makers, trade associations have been focused on: <ul style="list-style-type: none">• plastic• waste• recyclability• awareness of the benefits of corrugated• implications of the above on product design
Media, consultancy and education 	<ul style="list-style-type: none">• Forbes• University of Arts London (UAL)• White Space• CNN, BBC and other reporters and editors	Our interactions with media and consultants have been focused on: <ul style="list-style-type: none">• company financial performance• company acquisitions• trends in plastics, e-commerce and recycling
Non-governmental organisations and charities 	<ul style="list-style-type: none">• Ellen MacArthur Foundation• British Heart Foundation• Keep Britain Tidy	The charities which we engaged with have been focused on environmental education; biodiversity and monoculture; healthy lifestyles; and encouraging future generations.

What we did

Experts across DS Smith have been formalising sustainability positions on:

- biodegradability and compostability
- recyclability claims and labelling
- inks and adhesives

Our Capital Markets day, in October 2018, showcased our latest plastic replacement projects and innovations.

We are developing a forest management policy as we deepen our understanding of current management practices.

DS Smith responded to a range of government consultations, including:

- EU Consultation on single-use plastics
 - UK Consultation(s) on Waste and Resources Action Plan and Plastics Tax
- Sites also hosted over 20 visits for regulators and policy makers.

Technical experts across our business were heavily involved in the following:

- the 'Paper and Board Recyclability Recommendations' (CPI and CEPI)
- the life-cycle assessment of corrugated board 2018 (FEFCO)
- the 'Food Contact Guidelines for the compliance of paper and board materials and articles' (FCCG)
- multi-departmental teams hosted various workshops, including Eunomia workshop on modulated recycling fees and FEFCO Influence the Influencers day

Our campaigns this year focused on:

- 'The Empty Space Economy', in collaboration with Forbes
- 'Tipping Point' white paper, in collaboration with UAL

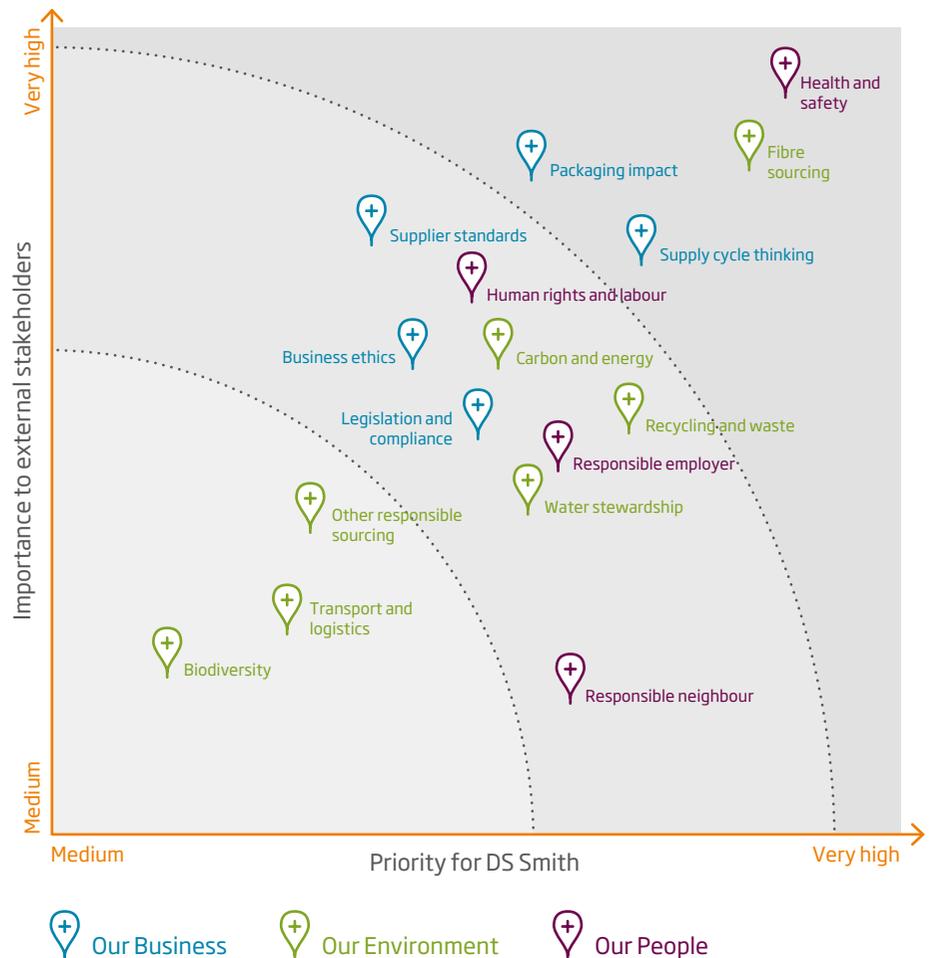
Our community programmes have supported and donated to more than 50 charities during financial year 2018/19.

What matters most

Our sustainability strategy (see pages 8-9) is based on a range of strategic measures with medium-term targets, priority projects and relevant action plans. These measures were developed based on the top current concerns of our customers, investors, banks, regulators and employees in relation to our business. Their opinions enable us to challenge and validate our priority areas of activity and focus, or even initiate, new projects.

To complement the strategy, we also conduct a biennial stakeholder engagement exercise, called a materiality analysis. This allows us to recognise areas for further development and identify emerging issues and trends. Our first materiality exercise was refreshed in last year's report. However, with three of our targets ending in 2020, next year will be a crucial time for us to re-evaluate our priority projects. Therefore, DS Smith will be conducting a complete overhaul of our materiality in financial year 2019/20.

Materiality analysis



Our performance in benchmarks

Performance in benchmarks

We value the chance to have our performance assessed by external organisations and benchmarks. It is important to maintain a balance between reviewing our own performance, being assessed through external benchmarks and sharing our leadership expertise.

Performance in benchmarks



Increased assessment score to A-grade. DS Smith participates in the annual MSCI assessment, demonstrating good corporate governance to investors.



Maintained a leading position in EcoVadis, achieving Gold once again and putting us in the top five per cent of all manufacturing companies who submitted.



Maintained performance with a strong score of 'Management B' in CDP (formally the Carbon Disclosure Project) for each of the three assessments (climate change, forests and water).



Included in the FTSE4Good Global Index, indicating DS Smith as a long-term, sustainable investment.



Continuously utilised the Sedex platform to ensure compliance with international labour standards.

Aligning with the global goals

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in September 2015, uses 17 Sustainable Development Goals (SDGs) aimed at tackling some of the world's more pressing issues for people and the planet.

Whilst not formally integrated into our overall business strategy, our ongoing work in sustainability aligns with a number of the UN's SDGs. Following a prioritisation analysis of how our operations relate to the SDGs, we have explored which of the goals we can make the greatest contribution to.

At DS Smith, we are committed to operating sustainably, supporting our customers, and collaborating with our stakeholders to achieve the best results. Therefore we hope to integrate these fully into the sustainability strategy and programmes next year, after a deep analysis of stakeholder interest during the full materiality refresh we will conduct in financial year 2019/20.

DS Smith's sustainability activities are most strongly aligned with the following SDGs:



About this report

This report provides a comprehensive description of the governance of sustainability issues within DS Smith, and how our strategy, targets and performance are monitored.

Commitment to transparent reporting and benchmarking

DS Smith remains committed to transparent reporting on progress to stakeholders. This year, in the lead up to reporting on progress against our nine targets for the first time since their launch in July 2018, we have once again been challenging ourselves on our data process and robustness.

Statutory data is reported in both the Annual report & accounts 2019 (see page 34) and Sustainability Report 2019 (see page 44), and further data and breakdowns by region and country can be found in our online environmental databook, Modern Slavery Statement and Gender Pay Gap report.

For the third year running, this report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option, in line with best practice. We also continue to submit to a wide range of highly reputable third-party platforms including CDP, EcoVadis, FTSE4Good and Sedex, which allow us to sense-check our performance against the industry.

Statistics and scope

Unless otherwise specified, any statistical information referred to in this report covers the calendar year January to December 2018 and refers to all 248 manufacturing sites that we have owned since January 2018. The following indicators have been externally verified:

- energy consumption
- greenhouse gas emissions
- raw material usage
- water consumption
- waste
- discharge to air and water; and
- production

Data not in scope of the Bureau Veritas audit has been subject to a robust internal audit by the Group Finance team.

Environmental incidents

During the year, we received notification of breaches or minor environmental incidents at 41 sites. There were two major incidents (defined as incidents of significant impact reportable to local or national authorities, or incidents potentially resulting in legal prosecution) reported for the period of this report.

Assurance Statement

Bureau Veritas UK Limited (Bureau Veritas) has been commissioned by DS Smith Plc. (DS Smith) to provide an independent opinion on the following environmental performance indicators: total energy consumption; total energy exported; Scope 1 and 2 greenhouse gas (GHG) emissions; raw material usage; water consumption; total water effluent; landfill waste; discharge to air and water; and total production, for calendar year 2018. The reporting boundaries cover DS Smith's global operations.

Based on our verification activities and scope of work, nothing has come to our attention to suggest that the reported data do not provide a fair representation of environmental performance across the DS Smith group for the defined period.

DS Smith should be commended on its approach to environmental data collection, including the use of a central reporting system, clear responsibilities at Head Office and site levels, frequent data gathering, and the existence of an audit trail from source evidence to reported data at the sites visited.

A full verification statement including methodology, limitations and exclusions can be found on the DS Smith website.

DS Smith website:

 dssmith.com/company/sustainability/our-environment/performance



**BUREAU
VERITAS**

Bureau Veritas UK Limited
May 2019

Data and performance

Environmental indicators

A summary of our environmental performance can be found below.

For further detail, please find our data book available to download:

dssmith.com/company/sustainability/our-environment/performance

Indicator	Unit of measurement	2015 (baseline)	2017	2018 (like-for-like)	2018 (with acquisitions)	% variance (like-for-like)	% variance (with acquisitions)
Scope 1	Kt CO ₂ e	1,678	1,660	1,604	1,750	-3.4	5.4
Scope 2 (market)	Kt CO ₂ e	355	352	385	527	9.5	49.7
Emissions from energy exports	Kt CO ₂ e	348	317	381	381	20.1	20.1
Total CO ₂ e (net)	Kt CO ₂ e	1,686	1,695	1,609	1,897	-5.1	11.9
Total energy exported	GWh	962	892	861	905	-3.5	1.4
Total energy consumption (net)	GWh		8,667	9,396	10,947	8.4	26.3
Total production	Kt nsp	8,059	8,234	8,325	9,734	1.1	18.2
Total waste to landfill	Kt	87	118	164	210	39.1	77.6
CO ₂ e per tonne of production	kg CO ₂ e/tonne nsp	209	206	193	195	-6.1	-5.4

Comments on the data:

1. Based on data from 248 in-scope sites. There are 126 sites which require fossil fuels for their production process (paper mills, corrugators, plastics plants) and the remaining 122 smaller sites use just electricity in their processes (sheet plants, recycling and logistics depots and warehouses).
2. Figures from all years are based on data from sites we owned for the entirety of that year. The 2018 data is based on sites we have owned since 1 January 2018. We have shown the 2015 published figure, as it is the baseline year for our targets, and the published figure for 2017 to show the performance of the business from last year.
3. Total production is the sum of printed reels and paper reels from our paper mills; plastics production (all types) from our Plastics sites; recovered fibre and other materials collected and processed through our Recycling depot network; finished wood products from our timber business; and boxes and sheets sold to third parties from our Packaging sites and other types of packaging production from these sites.
4. DS Smith collects and reports environmental data in accordance with the guidelines of the Global Reporting Initiative and the Greenhouse Gas Protocol (GHGP), to the extent that this is practicable.
5. The CO₂ and CO₂e emissions were calculated using the UK DECC 2017 factors for all fuels.
6. Where available, we use the emissions factor for bought electricity from the supplier of energy to our business (Scope 2 Market Value). If this figure is not reported, the country emissions factor from the IEA is used instead (Scope 2 Location Value). Emissions from national grids use the AIB Residual Grid Emissions Factors for those European countries for which they are available, otherwise they use the previous location emissions factors from the International Energy Agency (IEA) 2017 v1.03 (AR5 Applied).
7. The CHP that supplies our Witzenhausen paper mill with steam is fired predominantly by biogenic fuels. The emissions factor for this site has been estimated as 32.77 kg/MWh of CO₂e.
8. The CHP that supplies our Belišće paper mill and corrugator with steam and electricity is fired by a combination of natural gas and flare gas. The emissions factor for flare gas is estimated to be 240 kg/MWh of CO₂e.
9. The waste figures relate to waste generated by our operations; they do not include waste that is collected from external sources for recycling.



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