

# Defining the balance in Recycling

Why Quality cannot be compromised in the  
face of increasing demand for Recycling





About

The DS Smith Group is a leading provider of corrugated & plastics packaging, supported by paper & recycling operations

Through our joined-up thinking, from design to manufacturing, delivery to recycling, we will take a look at the entire Supply Cycle of our customers ensuring their products perform at their moments of truth. That's what we're about- less complexity at every point in that Supply Cycle to make our customers successful.

DS Smith's recycling division provides integrated recycling and waste management solutions. Using what we call 'The Power of Less', we're experts in helping our customers get the best value from their recycling and waste management services through less waste, less cost and less complexity. Our customers range from small businesses right the way through to public sector organisations and some of the best known brands and blue chip companies.

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# REALISING THE WASTE HIERARCHY

The circular economy demands that producers and consumers think about dealing with waste from the very start - not just the end - of a product's life

According to the Global Footprint Network, Earth Overshoot Day for 2015 (the point at which humanity went into ecological debt, having consumed the current year's supply of natural resources) was Thursday 13 August - six days earlier than in 2014. Pretty startling stuff considering the focus we are putting on environmental best practice both in the workplace and in our homes.

Up until the latter part of the last century, disposal - and the loss of resource inherent in that - was the overwhelming route for all materials once they had reached their end of life. Across the globe, albeit to differing degrees, there has been a revolution in how we view the waste streams we create, both as citizens and organisations.

Growing understanding of the impact of waste on the environment, the value contained within the waste stream, and an increasing awareness of global resource constraint driven by a burgeoning global population has resulted in awareness that continuing to dispose of waste in landfill is unmanageable and unsustainable. Landfilling is banned for many materials and the licensing for new landfills is either fiercely curtailed or even non-existent in many parts of Europe. That being the case, it becomes important to understand the different models

around recovery and recycling and about which of these can provide the greatest benefit to society overall.

**ONE SIZE DOESN'T FIT ALL**

There are various possible approaches to materials recovery, with valuable lessons learned from countries around the world. In Sweden, for example, the effectiveness of its bottle deposit system sees the country recycle 90 per cent of its drinks containers. These are then either made into new containers or, in the case of some plastic bottles, into clothing, bags and other goods. Zero Waste Scotland concluded its own successful bottle deposit pilot and is

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The right model to pursue is one where we follow the principles of the waste hierarchy to reduce and reuse the waste we produce  
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now reviewing evidence of its performance, with a view on expansion.

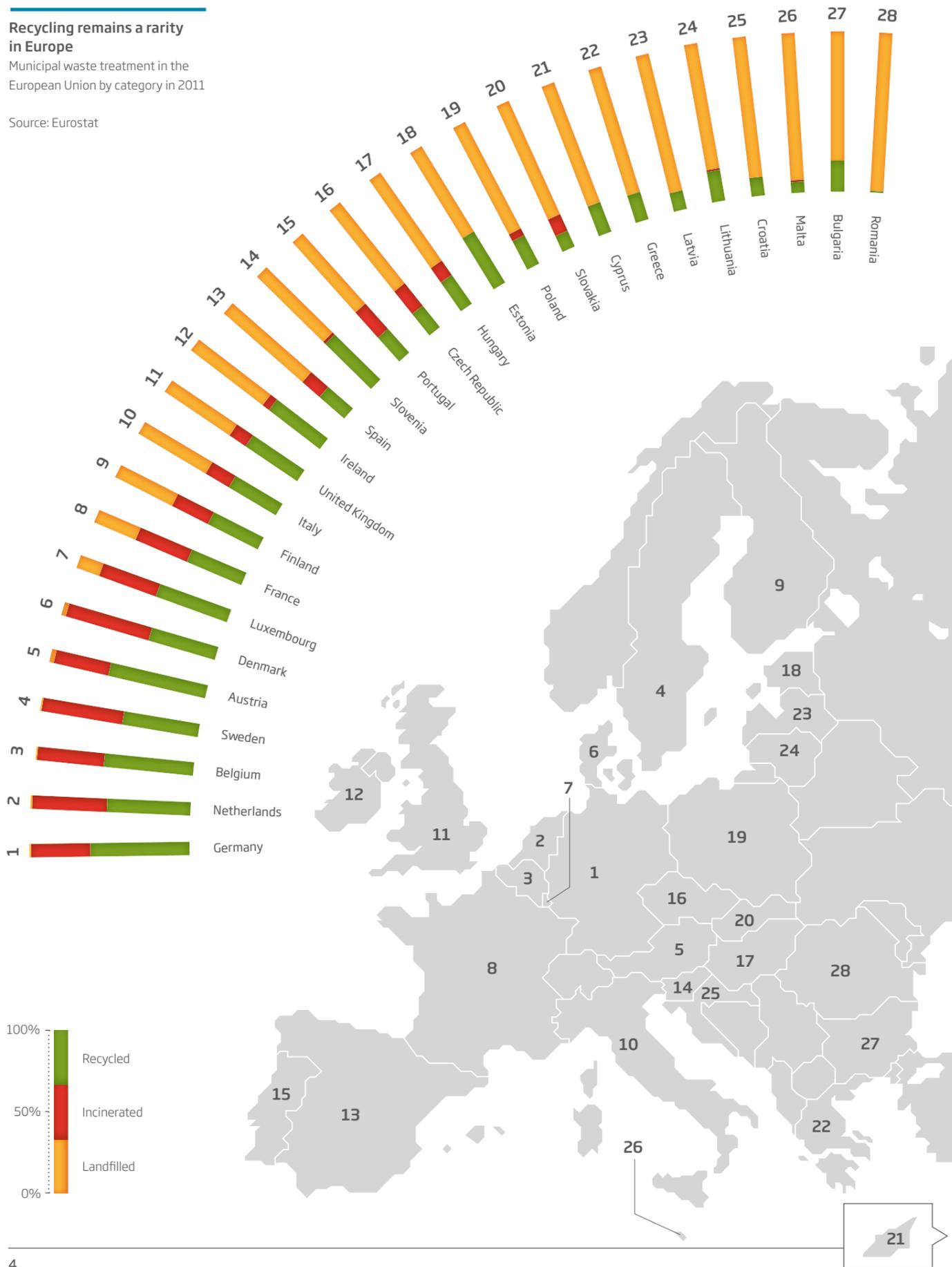
Traditionally, the issue of waste was only ever considered once it had already been generated - at the point of disposal. If we absolutely want to hold onto the value of material for as long as we can, waste must be considered at the very start of the process - when products are designed, produced and bought. It doesn't matter if that process is an individual shopping in a local supermarket or a global brand designing its next groundbreaking product to market. It's about understanding that the lifecycle of any product is indeed a cyclical, not linear, process.



**Recycling remains a rarity in Europe**

Municipal waste treatment in the European Union by category in 2011

Source: Eurostat



The right model to pursue is one where we follow the principles of the waste hierarchy to reduce and reuse the waste we produce: where we recycle what we can't reuse and we recover what we can't recycle. That is a clear set of hierarchical priorities - but it's a hierarchy we can only realistically follow if we adopt an approach that considers waste long before it is produced.

**NEW APPROACHES**

Evidence of this new perspective can be seen in new business models across a number of sectors, with products being designed for remanufacturing or recovery of valuable components. Recent focus on whole-lifecycle ownership has seen companies like Hewlett Packard (HP) deploy new models of materials management. For HP this has meant exploring ways of reclaiming the waste created in its goods by picking up old computers. There are a number of approaches that can be taken in design and manufacturing that can result in higher percentages of a material being available for harvest at product end-of-life.

Scottish company Juice is taking a new approach by leasing its lighting to customers. This new model stems from circular economy thinking, where the aim is to keep resources in use as long as possible, and then (at end-of-life) recovering and regenerating products and material. WRAP (the UK Waste & Resources Action Programme) rightfully tells us that a circular economy is an alternative to a traditional linear economy (make, use, dispose). Copier and printer manufacturer Ricoh, for example, has set a goal to reduce

the input of new resources by 25 per cent by 2020 and by 87.5 per cent by 2050, compared with 2007 levels. Under its GreenLine label, copiers and printers returning from Ricoh's leasing programme are inspected, dismantled and go through an extensive renewal process. This includes key component replacement and software updates - and then reuse of the product in the market.

Recycling, as a waste management model, is an important pillar in realising a circular economy, but the quality of recycling streams is critical to its success. Closed-loop recycling, where high-quality materials, resulting from quality recycling streams, are put back into the same or equivalent manufacturing applications, provide the best opportunity for keeping value inside supply-cycle models for longer.

**RECOVER, RECYCLE, REUSE, REDUCE**

What makes this so important is that if we accept that landfill is no longer an option, we need to ensure that waste streams are pushed further up the waste hierarchy. The next step up from landfill is recovery - ie, recovering energy from waste. This can be done through a range of technologies that can offer more environmentally sustainable options over landfill.

Recovery can play an important role in providing energy and other consumables, but only if the waste produced cannot be recycled or reused. Indeed, any potentially recyclable material that ends up being processed through energy recovery is a missed

opportunity. If we put waste material into recovery - in many cases incinerating it - we can only extract energy from it once. Any intrinsic value the material previously had cannot be realised again.

Once a product has reached the end of its life, and if it can no longer be reused or remanufactured, the most sustainable model is to capture that product in high-quality recycling streams that will not end up in recovery technologies. If we can recycle a waste material then we can hold onto that material's value for longer.

However, we need to look at models, both as waste producers and managers that reduce and reuse waste before presenting waste for recycling. Better still, we should be looking to design waste out altogether in the first place.

**TOWARDS A CIRCULAR ECONOMY**

In a short space of time we have talked about moving away from linear models and moving toward the grand idea of a circular economy. Traditional supply chains are linear: materials come in, are processed and move out. With no real end-to-end transparency or consequence, such linear models are exposed to multiple material leakage points - they do not lend themselves to reducing and recycling the waste produced.

A move to a more circular model, where the concept is one of a supply cycle rather than a supply chain, shifts focus to a concentration on resource management. Put simply, that is the case for an alternative waste and recycling model.

**Today 54% of the paper industry's raw material comes from recovered paper and board. Paper is the most recycled product in Europe, and Europe is the global champion in paper recycling with a rate of 72%. (CEPI)**

**Definitions**

**RECYCLE**

to treat or process (used or waste materials) so as to make suitable for reuse

**REUSE**

to find a use for something before it becomes waste

# WASTE LEGISLATION: WHERE TO NEXT?

After two decades of EU directives to promote sustainable waste practices, Europe's lawmakers are now focussed on enabling a truly circular economy. Can they succeed?

Increasing demands for environmental stewardship have seen government agencies, businesses and communities demanding a more sustainable model of waste management. Recent years have seen the development of a thematic waste legislation framework, based on the waste hierarchy, using legal drivers to encourage more sustainable waste management practices such as reducing the volume of material sent to landfill. The goal has been to turn the perception of waste from something to be disposed of to something that can be made use of - a resource.

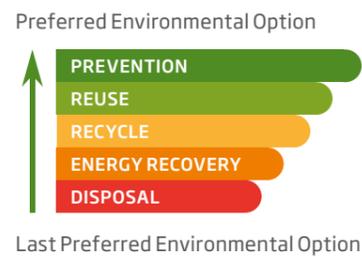
The legal framework for the management of waste in Europe was established in the **EU Waste Framework Directive** that encouraged the application of the waste hierarchy. The **Landfill Directive** requires member states to minimise waste going to landfill, pushing waste up the waste hierarchy towards recovery, recycling, reuse and prevention (often termed 'reduce'). In its **Packaging and Packaging Waste Directive**, the EU set out measures for the prevention, reuse and recycling of packaging wastes in member states. The **WEEE (Waste Electrical Electronic Equipment) Directive**

was intended to incentivise improvement in the design of electrical and electronic equipment to facilitate more recycling. Similar measures have been implemented in transport with the **End of Life Vehicles Directive** promoting the reusability, recyclability and recoverability of cars and light commercial vehicles.

These are five examples of how the European Commission has deployed a thematic waste legislation framework with a very clear theme: to encourage sustainable practice and discourage - even penalise and outlaw - more unsustainable practices.

Now the Commission is taking a step further with a proposal for a new legislative package on the circular economy to enshrine in law the importance of materials use within the supply cycle. This is intended to drive movement away from traditional linear supply chains, where materials are used and then discarded, to a supply-cycle model where materials are kept in use for longer after their initial consumption. This means reducing or eliminating waste at the design stage, reusing materials where practical, and recycling materials that have reached their end of life,

## THE WASTE HIERARCHY



“Part of the problem is in relating the principles of the waste hierarchy with economic value”

turning them into something useful to be used within the supply cycle again and again.

### CHALLENGES AHEAD

To achieve circular-economy aspirations on a pan-European basis, there are a number of challenges that must be addressed, not least the different ways in which member states implement European legislation. As recently as July 2015, the Commission took Spain to court for failing to take measures to close, seal and restore 61 illegal landfills.

At the same time, there has been a failure to clearly define how some materials and waste products are defined across Europe.

The issue is not simply one of definitions or differences in interpretations, but also of different practices on a national basis. One of the key areas of variance between member states, especially in terms of increasing recycling and reuse rates, is the role of separate collections. Here the EU Waste Framework Directive sets out the ground rules for waste across Europe. After

much debate in the UK (in and out of courtrooms), since the beginning of 2015 it has been mandatory to provide, where technically, environmentally and economically practicable, separate collections for at least four material streams: paper, plastic, metal and glass. Yet there remains uncertainty on how this has been interpreted and implemented locally, and even how it will be effectively policed.

Part of the problem here is in relating the principles of the waste hierarchy with economic value. Mark Greenwood, Group Health, Safety & Environmental Director at DS Smith, says that businesses don't recycle only to be environmentally friendly, but also because they can see the value to their bottom line. "It's about optimising a system that already works. Our view

is that we lend material to customers and consumers for a while, and then we take it back for recycling into our primary raw material."

As with any manufacturing process, the raw materials presented for recycling must reach a high quality standard, often one defined by legislation. If that standard is not met then material is less likely to be recycled. "Materials presented for recycling could be cleaner, which would result in a better quality product in the end," Greenwood explains. "The extent to which this can be achieved is often dependent on the calculation of collection cost versus processing cost versus end material value."

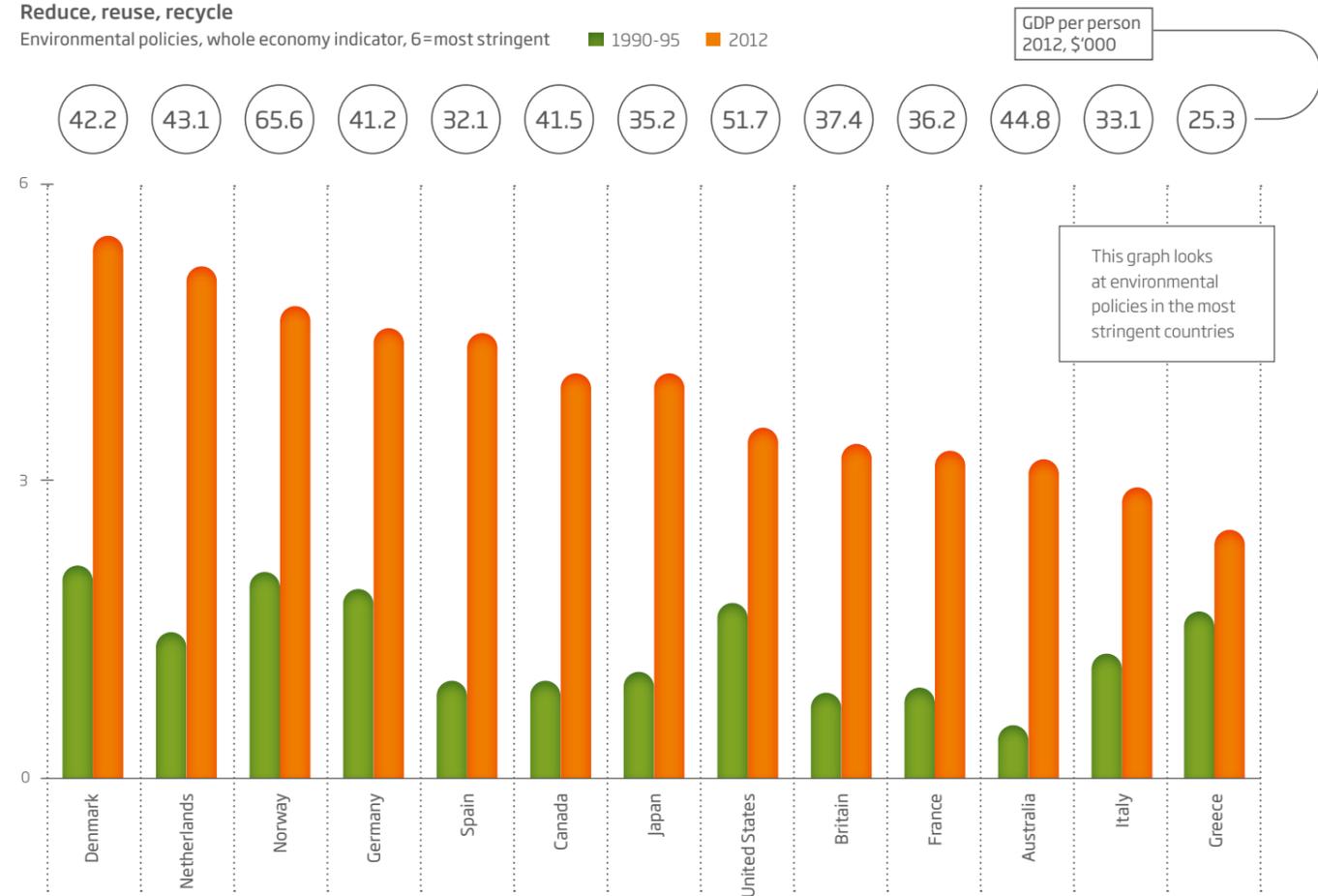
There are concerns that the new more ambitious circular economy package may only

require voluntary action. If this were to be the case, it would almost certainly have a detrimental impact on the development of the circular economy.

While European Commission directives can be interpreted differently by member states, a legislative framework provides industry with a clear framework and signals, enabling companies to develop their businesses appropriately. For new measures to be effective there needs to be a combination of both carrot and stick. Stability and legislative enforcement will play a key role in enabling industry to put in place the systems that will make the economy truly circular.

## Reduce, reuse, recycle

Environmental policies, whole economy indicator, 6=most stringent ■ 1990-95 ■ 2012



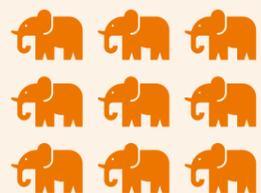
source: OECD

# VALUE AND THE WASTE HIERARCHY

The waste hierarchy guides the DS Smith strategic approach to achieving zero waste. This principle drives out unnecessary costs and ensures you get maximum value for your waste.

## The Problem:

In 2012, the total waste generated in the EU-28 by all economic activities and households = 2,514 million tonnes



Roughly equivalent to weight of 457 million elephants

1.8 tonnes

Total annual waste per person living in the EU  
Source: Eurostat, Waste Statistics (2012)



29 times our own body weight

In 2012, almost 1,115 million tonnes of waste landfilled in the EU-28



Source: [http://ec.europa.eu/eurostat/statistics-explained/index.php/Waste\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Waste_statistics)

## The Challenge:

50% EU target for 2020 household waste recycling

85% EU Packaging Recycling rate for paper and cardboard by 2030

50% reduction in EU food waste by 2030

Minimise your total waste stream

Extend the life of products

Make materials useful once more

Extract value such as energy from unrecyclables

## The Solution:

### Reduce

Benefit equivalent to

1 IN 4

cars taken off the road if we all stopped wasting edible food

Source: Love Food Hate Waste



### Reuse

53%

beer now sold in returnable bottles or kegs

Source: Sustainable Development Summary Report 2015, SABMiller

Non-returnable bottles produce greenhouse gas emissions over 6 times higher on average than a returnable bottle. New 'super-returnable' bottles in Columbia are refilled an average of 44 times!



### Recycle

Estimated value of worldwide recycling market in 2015 is

€21 BILLION

Source: Size of global recycling market 2020 Statista



### Recover

Enough energy generated for

2,500 HOMES

by Sainsbury's supermarkets anaerobic digestion programme, with its Cannock store the first to come off-grid and be powered by its own food waste alone

Source: 'Running on rubbish', Sainsbury PLC



# VOICE OF THE PAPER MILLS

Within the recycled materials market, paper packaging is the largest sector, with revenues forecast to reach \$139 billion in 2018.<sup>1</sup> Understanding the perspective of the mills purchasing these recycled volumes, then producing paper to use and sell, is key to unlocking the circular economy potential.

Here, **Jim McClelland** speaks to three of the leading voices in the industry, for whom one word is fast becoming the focal point for change: Quality.

Michele Bianchi is Managing Director of DS Smith Paper Sourcing, set up as a central

hub operating out of the Netherlands to manage all paper bought, made and sold. The organisation as a whole consumes around 3.8 million tonnes of material, with 2.8 million tonnes production capacity, active exclusively in recycled fibre-based papers.

According to Mr Bianchi, getting the balance of paper sourcing right is a constant juggling act in a dynamic market: "Depending on forecasts and demand on the packaging side, we decide what to make using internal assets and paper mills, what to buy from the external market and what

## CEPI Exports of Paper for Recycling to Other Regions

'000 Tonnes	2005	2010	2014
<b>Other Europe</b>	444	373	575
<b>North America</b>	22	27	5
<b>Latin America</b>	5	21	13
<b>Asia</b>	7087	9157	8952
<b>Rest of the World</b>	140	14	13
<b>Total</b>	7698	9592	9557

to sell in terms of remaining capacity - it is an equilibrium of supply and demand."

Operating in such a fluid trading environment, he explains that it is important to understand the influence of key global players:

"The market in Europe is well developed in terms of collection and processing, so a significant proportion of recycled fibre ends up being exported to the Far East and China. Demand from China can impact volume, availability, quality and, of course, price. When they buy, they buy big. However, their purchasing activity has become increasingly sophisticated as their global trade profile matures, which is positive. Now, they not only appreciate the relationship between moving large volumes and price stability, but

their quality demands have also advanced."

This upwards trend in performance demands, as evidenced in China, is becoming common for most countries, concludes Mr Bianchi, "The quality of fibres is really the big question, going forward".

For Jonathan Scott, Operations Manager - Recycling, based at Kemsley Paper Mill in the UK, economics are a key driver of this quality shift: "Cost pressures are ever present, which can bring process challenges and raise quality issues. We are becoming less reliant on traditional corrugated case material (nice, clean retail waste) and starting to use more and more mixed papers, which come with greater variability. "Accordingly, we have done a lot over the last 18 months to



improve the quality testing of grades coming into the mill and ensure the initial specification issued fits with what is actually needed."

With an annual production capacity of around 800,000 tonnes, Kemsley is the second biggest recovered fibre-based paper operation in Europe. It also produces Light Medium, the first recycled lightweight paper manufactured in the UK. With this size of operation, managing quality is critical to mitigating risk, explains Mr Scott:

"It only takes a slight increase in the wrong sort of contamination in the waste paper for the effect on production to be very disruptive. In order to protect operations and meet production targets, this rigorous and consistent approach to quality helps to maximise use of lower-cost fibres, whilst preserving efficiencies of manufacturing." This degree of control calls for close collaboration, he adds: "The last couple of years have witnessed manufacturing

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At the moment, producers are understandably taking most of the risk and shouldering the quality burden of the finished goods. However, there are limits.”

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working more and more closely with recycling. Adopting a more proactive approach, we have definitely seen the value of getting it right at the gate."

Niels Flierman, is Operations Director at DS Smith Paper Division. With ten paper mills reporting into him, employing 2,300 people across seven countries, he is in a position to see the big picture: "If you look at the landscape, in general, Europe is a market in oversupply. There is a big focus on performance of papers and the trend is definitely for grammage going down. "This trend puts pressure on our mills: with grammage down and revenue squeezed, performance requirements are still going up, as are the associated production cost incurred maintaining strength levels."

"My personal conviction is that this pressure will get even greater. We will be driven towards sourcing stronger fibre and therefore see more money invested in research

and innovation in treatment techniques. Long term, we will be seeking game changing solutions." Looking ahead, Mr Flierman issues a call to collaborate: "There will have to be a different dialogue between recycling and the paper producers. At the moment, producers are understandably taking most of the risk and shouldering the quality burden of the finished goods. However, there are limits. "Dialogue needs to start now and we need input from recycling. The challenge is to get that happening all along the supply chain, with the likes of smaller collection companies supplying to big players such as DS Smith, who can take a leading role."

**1 'Briefing: The Current State of the Paper Packaging Market', Smithers Pira, 2014**  
<http://www.smitherspira.com/news/2014/june/current-state-of-the-paper-packaging-market>



# QUALITY FIRST IN SECONDARY MARKETS

Markets for secondary materials have endured tough conditions of late, but growing evidence suggests quality remains the key to success

The recent downturn in the global commodities market, coupled with falling oil prices, has impacted negatively on many recyclers over the past 12 months. Conversely, others such as DS Smith continue to experience strong growth - the company's 2015 annual report details that operating profits are up 17 per cent on the previous year at £335 million. It is clear that focusing on providing quality, recovered fibres into the papermaking and packaging production process has played a significant role in achieving that result.

"There's still a huge global market for materials of the right quality," asserts DS Smith's general manager for external affairs, Peter Clayson. "The key for paper is not that the value of the raw material has fallen in the secondary markets, it's the fact that those who are collecting and sorting it are now having to pay the true cost of producing a quality product."

The reasons behind this are multifaceted. 'Operation Green Fence' - China's 2013 campaign to enforce stringent waste quality legislation - provided the trigger, effectively clamping down on imported shipments of poorly sorted recyclable waste. With customer buying policies becoming more

stringent on material specification, UK recyclers are finding they can no longer rely on secondary sorting undertaken overseas.

Looking ahead, there are positive signs for those who can place quality materials on the market - particularly for fibre. Last year a study by RISI, an information provider for the global forest products industry, forecast that demand for global recovered paper will accelerate again over the next five years.

RISI predicts that developing regions will account for about 90 per cent of this demand. "We are expecting to see growth in global recovered paper demand averaging 2.5 per cent per year, reaching 346 million tonnes by 2029," says senior recovered paper economist, Hannah Zhao, who led on the report.

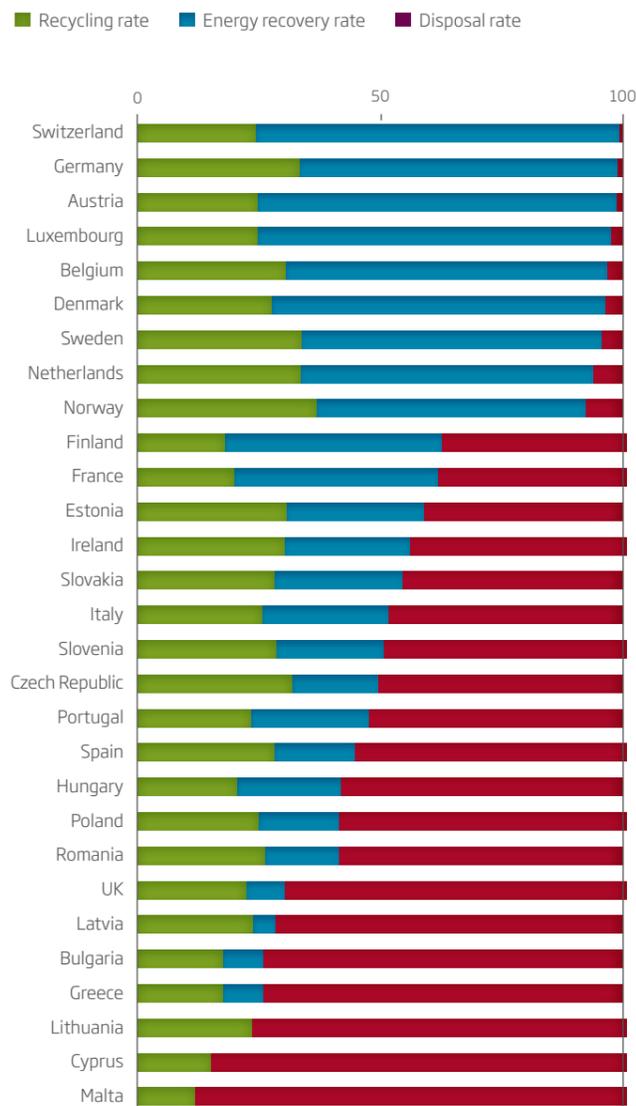
### DELIVERING HIGH QUALITY

Meanwhile data presented at the Bureau of International Recycling's (BIR) World Recycling Convention in Prague in October indicates that despite China's economic slowdown, the country's imports of recovered paper from Europe mounted a stout recovery in 2015.

Speaking at the event, BIR's world president and honorary president of its paper division, Ranjit Singh Baxi said China imported 19.24 million tonnes of recovered paper in the first eight months of the year. This compared with 18.607 million tonnes over the same period in 2014, with Europe posting the biggest increase - from 5.136 to 5.923 million tonnes. Baxi emphasised that "quality is and must remain the central focus" for any business with China.

Treatment of post-consumer plastics waste 2012 by EU-27+2

Source: Consultic



In terms of improving quality yields - not just for paper but for other materials like plastics, metals and glass - Mr Clayson believes the debate must shift back to collection methods. In England, for example, the Government has recently tasked the Waste & Resources Action Programme (WRAP) with exploring opportunities to standardise household recycling collections. However, Mr Clayson thinks a greater focus on eco-design and education could unlock most benefit.

"We've all got to become more engaged in the circular economy and emphasise designing materials for recyclability," he says. "Materials have got to be easy to recycle to minimise public confusion on the issue. In terms of the systems, it has been proven that you can separate municipal materials to produce a high-quality recycle relatively easily. Addressing contamination issues through better design and improved communication would help greatly here."

**We've all got to become more engaged in the circular economy and emphasise designing materials for recyclability**

# BLUE, YELLOW AND GREEN

Global homewares giant IKEA is making big strides in reducing waste and creating a more circular supply cycle

Securing future access to secondary raw materials is a strategic priority for global retailer IKEA. According to the company's latest sustainability report, in 2012 IKEA established a resource chain project with the aim of developing a framework for how used materials can re-enter its supply cycle.

The report also sets out a goal that by August 2020, 90 per cent of waste generated from the company's own operations will be recycled or sent for energy recovery. Retaining material value by moving waste up the hierarchy remains the key focus here. IKEA has targeted that 80 per cent of waste arising at both its stores and distribution centres is 'material recycled' rather than lost through incineration.

In the UK and Ireland, IKEA is making good progress on this front. In the past financial year (FY15) the company recycled 89.32 per cent of store-level waste. "By the end of August 2016 we aim to recycle 95 per cent of our waste and send nothing to landfill," says Michelle Keam, IKEA's resource and energy leader for the UK and IE.

### EFFECTIVE WASTE MANAGEMENT

Ensuring that stores have effective waste management systems in place has been in-

**Many stores that work with waste effectively have been able to reinvest income generated into their business**

strumental in achieving such high recycling rates. Keam says all of IKEA's UK stores have installed balers and compactors back-of-store to enable better source-segregation of key materials such as paper, cardboard, glass, metals, plastics and wood.

"A basis for effective, economic waste management is that all sorting takes place at source," Keam explains. "Once the waste is in condensed form, we can minimise the impact of transport, our impacts on the environment and also reduce our costs."

She further hints that the company's zero-waste aspirations are becoming cost-positive. "Waste is a resource, and of course certain materials have the potential to generate income if managed well. Many stores that work with waste effectively have been able to reinvest income generated into their business."

Maintaining consistent levels of material quality is pivotal to maximising revenue opportunities. The company recently completed a waste mapping project, which highlighted areas of best practice in this regard. "We are now working to share these examples across all stores so we have a standardised and consistent way of working with waste," says Keam. Asked how IKEA deals with any preventable contamination issues that might occasionally arise, Keam says she believes that all IKEA staff "have the best of intentions when they dispose of their items, but sometimes we get it wrong. We are currently reviewing the more problematic streams and looking at ways we might improve the signage in the back-of-store areas."

### TRAINING STAFF

Staff training and education is also key - not just for waste, but for IKEA's wider sustainability drive. The company has developed a sustainability training package, which includes introducing co-workers to waste operations back-of-store. The goal is to induct 100 per cent of employees on the programme.

In terms of data management, recycling performance across all stores is continually monitored, helping to track performance levels and identify any inconsistencies. "We use this data to communicate stores' performance on a monthly basis," Keam explains. "This helps to create a bit of friendly competition between stores about their recycling percentage and ultimately improves performance."

**Maxine Perella**

# A PAPER MODEL

As EU policy moves towards better supporting circular economy sectors, the achievements of the paper and packaging industry can serve as a powerful exemplar

Some ten years ago, the European Union started modernising waste legislation. The paper industry was then a key stakeholder advocating for separate collection and good quality of paper for recycling. Most importantly, we argued, waste should be seen as a resource rather than a problem for safe disposal, as it had been since 1975 when the first European waste legislation was adopted. All these elements were included in the EU's waste directive of 2008, a milestone.

In our advocacy, the industry demonstrated its good practice and excellent track record. This included setting ambitious voluntary targets for recycling, working with a European standard for collected paper (EN 643), and organising the whole value chain, along the entire lifecycle of paper, to support recyclability and recycling. These and many other points are common practice in the paper industry but not achieved by many others yet. This gave us credibility above most industries and we could see the policy slowly start to reorient towards preserving and remobilising resources in waste. Now, the European Union is ready to move further and is about to adopt ambitious policies to make the economy truly circular. Again, the paper industry has been actively

involved in the debate and, for the first time, the EU policy acknowledges renewability as the natural and very powerful starting point for circularity. Bio-based materials combine the best of both 'technosphere' and 'biosphere' in paper, where sustainable forest management supplies cellulose to a system that, through many cascades and recycling loops, makes the most of the material before it is again returned to the biosphere as nutrients, ready for another natural cycle. Already, a cubic metre of wood in Europe is used two and a half times (obviously, the number of uses is higher in the paper industry than, for example, direct energy generation) and the bar can be raised still higher.

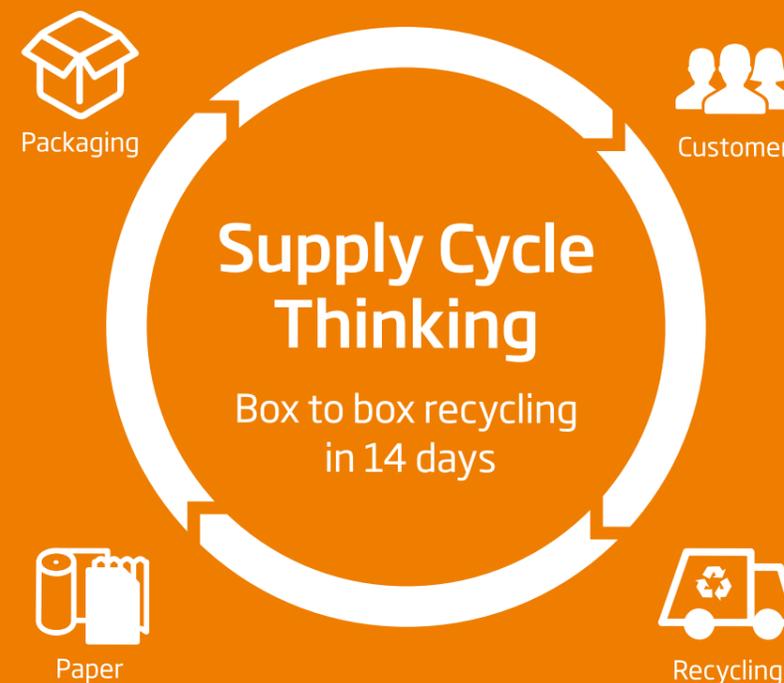
### FROM PROBLEM TO SOLUTION

In circular thinking, we are not only concerned about making the best use of fibres in mul-

tiple lifecycles, but also about ensuring that water in paper mills is recycled and reused as well as possible and finally returned to the source in good quality. The same applies for any process waste and by-products: what cannot be used by the paper mill can be used in industrial symbiosis by others. Paper - and packaging made of paper - is renewable, biodegradable and recyclable, making it a truly circular material, including its sources. Rather than being part of the problem, we are part of the solution with true 'sustain-abilities'. In the circular economy, it seems, the policymakers are gradually starting to acknowledge this and will set the policy framework to allow the industry to generate more value to be shared with society.

**Jori Ringman**, sustainability director, Confederation of European Paper Industries (CEPI) @EUPaper | @RBjori | www.cepi.org

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The EU is ready to move further and is about to adopt ambitious policies to make the economy truly circular  
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If you would like to find out more about quality in recycling get in touch via

[www.dssmith.com/recycling](http://www.dssmith.com/recycling)

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