# Corporate Sustainability Lessons Learned

Going circular:

Towards 100% reuse and recycling

PwC in the UK November 2015





Our 'Lessons Learned' series is designed to share our experiences of implementing our sustainability strategy, in order to allow others to learn from our successes – and our mistakes.

Our strategy includes actions to alleviate pressure on materials, water and the climate. Having gone 'zero to landfill' in 2012, we're now working towards an aspirational goal to reuse or recycle 100% of our waste by 2017, as well as exploring fully 'circular economy' solutions, in the longer term.

This 'Lessons Learned' document is the first in a new series focusing on that 'going circular' story. We hope it will provide a useful resource for others looking to take a similar approach.

## Corporate Sustainability Lessons Learned Going circular | Towards 100% reuse and recycling www.pwc.co.uk/goingcircular

# What do we mean by the 'circular economy'?

The 'circular economy' (see Chart 1) is a conceptual model used to underpin decision-making for sustainable development. It's intended to replace the existing, linear, 'take-make-dispose', global system of production and consumption, by which we extract resources (by mining or growing them), and then manufacture, transport and use products, before disposing of them. This system has been enabled by a century of declining commodity prices but is no longer viable.

First, the global population is set to rise from seven to nine billion by 2050, putting pressure on global stocks of raw materials. Second, the upstream stages of primary extraction and manufacturing often require large quantities of energy and water (known as embodied carbon and water) which could be avoided by using resources more efficiently. Third, traditional methods of waste management are not always well-regulated and can cause pollution, or – at least – lock materials away in landfill, where they are no longer available to the economy.

In contrast, the circular economy is driven by innovation and entrepreneurship. It involves change at each stage of the value chain:

- Improving extraction and production processes for greater efficiency, or switching to the use of alternative, renewable materials;
- Reducing consumption by, for example, encouraging consumers to buy products that are more durable, or moving away from 'products' towards 'services' (i.e. providing customers 'access' to products when needed rather than having to own them): this shift is being enabled through new technology, and there are already established models for peer-to-peer accommodation, car sharing, and clothing rental via 'sharing' platforms<sup>1</sup>;
- Moving to systems where products are repaired, reused or remanufactured to give them a second-life; and
- Improving waste collection and recycling systems so that materials are recovered in a way that enables them to be put back into the economy as useful inputs.

1. pwc.co.uk/issues/megatrends/collisions/sharingeconomy



# Chart 1 'Going circular' explained

The circular economy is often depicted as a series of loops, each representing a different way of managing products that are no longer required by their owners (because they are damaged, defective, or simply unwanted). The loops represent a hierarchy. The closer to the centre the loop is, the less waste and environmental pollution created and the more economic value retained in the product or materials.

### 1. Recycling

Recovering materials from end-of-life products for use as raw materials in another process, excluding incineration to generate energy. May lead to materials of the same quality, lower quality (down-cycling) or higher quality (upcycling). For organic matter may refer to composting or anaerobic digestion.<sup>1</sup>

### 2. Remanufacturing

Disassembling products at the component level rather than into separate materials, replacing broken or out-dated parts to make a new product for sale or lease. This avoids a new product having to be manufactured.

#### 5. Redesign

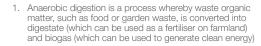
Developing products that use fewer materials or have a smaller environmental footprint, that are designed to be more durable, or to be offered as a service through a leasing/take-back model. Also includes adaptations to make products easier to repair or disassemble at end of life. Aims to tackle the most material impacts, based on lifecycle analysis.

#### 3. Reuse

Selling or donating a product on in its original form, or with little change, which avoids a new product having to be manufactured May also include redistribution of unwanted food.

#### 4. Maintenance

Extending the life of a product with its first owner, either via a repair service or making it easier for users to do so themselves. This delays the purchase of a replacement product.



# Why 'go circular'?

The circular economy requires a change in mind-set towards 'materials stewardship', focusing on the protection and renewal of resources. At a macro level, it's a timely concept, as it will not only help nations and businesses to improve their resource resilience, but will foster economic growth, and create new jobs. This is true globally, and also in the UK.

But why would PwC want to 'go circular'? Well, there are three main reasons:

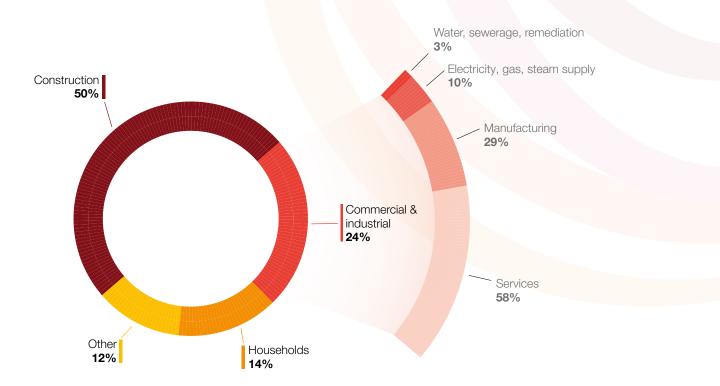
### Walking the talk

The circular economy is a compelling vision of the future and an area where business can make a big impact. This means that it's an opportunity for us. Our Sustainability and Climate Change practice includes experts who are helping several leading clients to innovate, adopting circular solutions by incorporating them into their business models and operational processes. Wherever possible, we try to apply the same best practice advice that we recommend to our clients to ourselves, and circular economy principles are no exception.

### Tackling environmental issues

Carbon emissions, waste and water are important global issues so our sustainability strategy includes actions to reduce our negative impacts, both in our operations (as measured in our sustainability scorecard¹) and in terms of our total impact². It's easy to assume that the majority of the UK's waste emanates from households, when in fact that only represents 14% of the total, with businesses (commercial and industrial) accounting for another 24% and construction (much of which is commissioned by businesses) for 50% (see Chart 4). And, even though our sector – professional services – is itself resource-light, we procure services from companies with a bigger waste footprint, so we have a considerable impact upstream and feel it's important to play our part, pioneering new processes and contributing to new markets.

Chart 2
UK waste, by type (with commercial & industrial breakdown)



**Source:** Eurostat 'Generation of waste by economic activity and hazardousness (2012)' dataset

### **Stakeholder expectations**

Our business depends on our people and our reputation, so it's important that we meet the expectations of our stakeholders, wherever possible. Our clients expect us to have high standards in relation to resources and waste, and our people, too, have strong views on the topic: waste is a visible and symbolic workplace issue, which they expect their employer to be tackling. Business is also expected to play its part in achieving government targets, whether at EU, UK or city level; while NGOs expect us – as a big business – to be doing our part, too.

- pwcannualreport.co.uk/files/PwC-UK-sustainability-performance-andcommitments-2015.pdf
- 'Total impact' refers to a methodology created by PwC to measure the impact on society, good or bad, by business operations or specific decisions. It includes economic, tax, environmental or social impacts. For more on the methodology, see pwc.com/totalimpact. For PwC's own impacts, see pwc.co.uk/who-we-are/corporate-sustainability/valuing-our-total-impact.html

"The professional services sector has relatively low direct impacts, so the challenge is probably to work jointly with others, such as clients or suppliers, to reduce collective impacts."

Dustin Benton, Green Alliance

"I want to do my bit for the environment, so it's important that I can recycle at work."

Adam Blacklay, employee, PwC

# Where we've come from and where we're going

Our work on materials and waste is progressive, and we're evolving our approach over three successive stages as we pilot new solutions and build momentum (See Chart 3).

### Stage 1 – Zero waste to landfill

2007-2012 was the period in which we first made waste a real focus area in our sustainability programme. We were unsure what was possible, so set targets to reduce our waste and consumption that were relative to our size, and focussed on change in the core part of our operations – our practice floors. Removing desk-side bins, we implemented recycling hubs with segregated waste streams, which forced our people to separate out paper, plastics, metals, glass and – later – food waste. Our primary goal was 'zero waste to landfill' which we achieved in June 2012, having collaborated with our national waste management provider to source appropriate waste collection and recycling services for all of our c. 30 offices in the UK. We also worked with them to improve our methods for estimating waste volumes and weights, improving our measurement and reporting.

We established a 'waste to energy' solution for materials that couldn't be recycled. We also tested a couple of 'loops', working with suppliers to convert our archive paper into hand-towels for use in our washrooms, and to refine the used cooking oil from our on-site restaurants to make biofuel that we can burn in our tri-generators to generate heating, cooling and power for our buildings.<sup>2</sup>

We shared the lessons from this stage, including the cost savings and tips for overcoming the challenges we experienced, in a previous Lessons Learned document, available on our website.<sup>3</sup>

## Stage 2 – 100% reuse and recycling

In 2012, we reset our ambitions and goals. With the confidence that came from our successes of the first five years we moved to absolute decoupling of our growth

**Chart 3**Our three-stage approach to the circular economy



"Reuse and recycling is a useful stepping stone. Companies need to go through 'zero waste' to get to 'circularity'."

Sophie Thomas, RSA

and our impacts – setting targets to reduce our material consumption (e.g. paper, water) and our waste generation by 50% versus our 2007 baseline. We also set a new aspirational goal to achieve 100% recycling of our hub waste – a target designed to encourage us to think differently about our operations, and set about finding solutions for the outstanding waste streams.

In parallel, we expanded our work with our suppliers, and engaged our c. top 100 suppliers on waste as part of our overall supply chain sustainability programme. We're encouraging them to help us find solutions, and embedding collaboration and innovation in our contractual arrangements.

This document sets out what we've done so far, and what we've learned as a result.

### Stage 3 – Fully circular solutions

Even before we reach 2017, we're looking ahead to the next stage of our waste strategy. We envisage that it will take a further five years to achieve our long-term aspiration to set up fully circular solutions, engaging with suppliers to comprehensively tackle upstream impacts and identify sustainable designs that can complement or supplant our current, end-of-pipe solutions. We're putting the foundations of this in place, even now, by including circular economy requirements in relevant supplier evaluation and selection processes, as contracts come round for renewal, to identify partners who can help create sustainable solutions even if they are not yet available in the market.

- 1 Hub waste and waste from on-site catering facilities only.
- 2 For more on this innovative collaboration, see our video: https://vimeo.com/29806824
- 3 Lessons learned Zero waste to landfill: towards 100% recycling pwc.co.uk/who-we-are/corporate-sustainability/downloads.html

# Our stage two story to date – what we've done

### Driving waste down, recycling up

Over the past three years, we've taken further steps to reduce our hub waste and increase our recycling. We finished the rollout of centralised, multifunctional devices for printing, copying and scanning, to replace desk-side printers. With secure printing and a default, double-sided print-setting, this has been one of the major contributors to reducing our paper consumption by more than half (55%) since our baseline year of 2007, and avoided costs of just over £1m.

Because wax cups used for hot drinks by our staff during the day were a large percentage of our non-recycled hub waste, we'd already found a recycling solution for those generated in our largest offices, in London, during stage one of our Going Circular programme, sending them off to be used in the making of building materials. More recently, however, we decided to replace all the cups and food packaging issued by our main, on-site hospitality supplier with biodegradable alternatives, so that they can be composted along with any waste food. This has helped increase the proportion of our hub waste that is recycled from 68% to 72% in the last year alone. Because we made this change less than a year ago, we're expecting further improvements in our recycling rates in the coming year.

Overall, we're now generating 48% less hub waste than eight years ago, well on our way to our target to halve it by 2017.

But some items remain challenging. There's no mainstream market solution for composite food packaging from eateries in the streets near our offices, for example, yet this now represents a large part of the waste we send to incineration. Meanwhile, stationery items such as staplers and hole punchers, although durable, cannot be easily recycled if they eventually break, because they're made from multiple materials and cannot easily be disassembled. We're trying to identify solutions to both.

### Taking stock

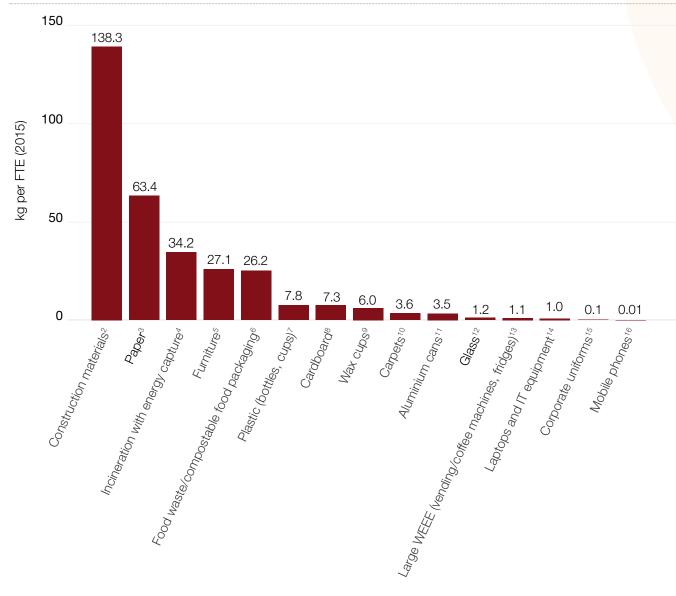
This year, however, mid-way through stage two, we decided to take stock and check we were on track. Part of this was to refresh our understanding of what stakeholders expected, interviewing key groups – internal and external.

We conducted research amongst our people to understand their perceptions of PwC's current waste management, and their expectations of the firm, as well as identifying barriers to behaviours that would help us achieve our goals. A couple of lunchtimes stopping people on the way out of the work restaurant and a simple set of survey questions yielded interesting findings that have helped shape our campaign and will make it more effective.

A key discovery was that people have strong and personal connections with waste, especially in a services business, as it's tangible and they interact with it on a daily basis. They have an inherent interest in waste and recycling, and want to do the right thing, but are often confused about what that is. So, we're planning to launch a campaign called 'Let's Talk Rubbish' early in 2016, focussed on clarifying the right way to treat items that cause confusion, as well as sharing where our waste goes and how it's reused or recycled, to build confidence in the value of their efforts. We believe this will significantly increase our recycling levels.

Meanwhile, interviews with around a dozen clients, waste experts and NGOs reminded us that our business is associated with items beyond our operational hub waste. As a result, we've extended the scope of our business-as-usual waste measurement in order to better understand the annual volume of other items we dispose of, including electronic goods such as PCs, laptops, and mobiles, and the furniture and carpets used in our offices. Uniforms worn by suppliers providing security, catering, hospitality and cleaning services on our sites are also included, in light of the priority being placed on textiles in EU and UK circular economy plans. Our discussions also caused us to expand our horizon to assess the waste impact of our construction projects.

**Chart 4**Kg per full time equivalent (FTE) by waste stream<sup>1</sup>



- Includes combination of hub and non-hub waste. Hub waste is accurately
  measured and assured as part of our sustainability reporting each year. Nonhub waste is currently estimated only.
- Includes gypsum, metals, wood, packaging, general waste etc. Significant real estate programme underway in period in question. May be lower for organisations with no renewals.
- Includes shredded paper from offices and archive files. Volume has been reduced by move to multifunctional devices. May be higher for organisations who have not put such programmes in place.
- 4. Mostly comprises composite consumer food packaging from external eateries.
- Includes workstations, chairs, cabinets. Some correlation with significant office moves. May be lower for organisations where furniture is only being replaced when broken.
- Includes food waste from onsite restaurants/cafes, and post consumer food
  waste from meals purchased offsite and eaten in offices. Partial year for
  compostable packaging, which is expected to increase now we've finished
  substituting our internal, wax cups and food packaging.
- 7. Mostly PET bottles, some single-material plastic food packaging, and cups from vending machines.
- Includes packaging for products used to run our buildings, and post-consumer packaging from e-commerce deliveries to staff at office sites. May be lower if organisation policy does not allow personal deliveries.
- Includes wax cups and soup pots from external and internal restaurants.
   Internal items were phased out and replaced with compostable alternatives during 2015. Other organisations may have slightly higher volumes as a result.
- Some correlation with significant office moves. May be lower for organisations where carpet is only being replaced when worn out or other flooring materials are used.
- 11. Drinks purchased on site and at external retailers and consumed on site.
- Primarily post in-office hospitality events (e.g. wine bottles) and packaging from on site catering facilities.
- 13. Offices have coffee machines, vending machines and fridges on all floors. May be lower for organisations without this facility within their buildings or higher for those with equipment nearing end of servicable life.
- 14. Includes laptops, PCs, and all peripherals as well as servers. Renewals for laptops every 2-3 years. Other organisations may find volumes are higher or lower if their replacement programme has different schedule.
- 15. Uniforms for suppliers providing hospitality, welcome, cleaning, and other services on site. Take-back system being set up.
- 16. Programme to issue phones to all members of staff has only recently been initiated, so organisations which already do this may have higher volumes.

### **Approximating volumes**

Over the past few months, we've interviewed various managers around our business – in the facilities, real estate and IT teams - to find out current practices for all the new waste items identified. Fortunately, we found that good practice had already been set up in each area, although data was not always being systematically captured.

So, we set about gathering and collating figures for all our non-hub waste. Where actual data was not available, we estimated the number of units disposed of and weighed items, to be able to aggregate volumes and establish an approximate annual tonnage. We asked the service owners in the business how the items were treated at end-of-life, and found that processes were already well-established to ensure that as many items as possible are reused, and residual items are disassembled to recover all the materials.

Sometimes – such as for our IT waste – specialist organisations provide a reuse and recovery service. In other cases – such as our furniture - an employee is responsible for distributing items to charities, as part of their job, supported by the Community Affairs team which runs a 'furniture exchange' programme, offering items to social enterprises in the PwC Social Entrepreneurs' Club. In yet other areas – such as our office carpets – we send old products to a take-back scheme run by the original manufacturer, which repurposes what they can for new carpet manufacture, and down-cycles the rest to make other building materials.

One of the few areas where we did not have a circular solution in place was the uniforms worn by catering, cleaning and hospitality staff in our offices. Disposal of corporate

Table 1
Waste volumes (tonnes) and designated treatment

Waste category	Total tonnes (annual, estimated)	Percentage reused	Percentage recycled	Percentage incinerated	Percentage sent to landfill <sup>1</sup>
Construction waste	2,400	-	97%	-	3%
Paper	1,100	-	100%	-	-
Composite food packaging (and other miscellaneous)	594	-	-	100%	-
Furniture	471	95%	4.5%	-	0.5%
Food waste/compostable food packaging	455	-	100%	-	-
Plastic (bottles, cups)	136	-	100%	-	-
Cardboard	126	-	100%	-	-
Wax cups <sup>2</sup>	73	-	100%	-	-
Carpets	62	-	98%	-	2%
Aluminium cans	61	-	100%	-	-
Glass	22	-	100%	-	-
Large WEEE (vending machines, coffee machines, fridges)	19	03	100%³	-	-
Laptops and IT equipment	18	78%	22%	-	-
Corporate uniforms	0.9	n/a <sup>4</sup>	n/a	n/a	n/a
Mobile phones	0.2	75%	25%	-	-
Total	5,615	8%	81%	10%	1%

<sup>1.</sup> All waste, including hub, on-site catering facilities and non-hub waste.

<sup>2.</sup> London only. Wax cups in other offices are included in the 'composite food packaging' figures.

<sup>3.</sup> Treatment in line with maximising value and minimising environmental impact, but split across reuse/recycling not currently known. Here, recorded as 100% recycled on a conservative basis."

<sup>4.</sup> Not yet available.

workwear is currently left to the individuals who receive them via municipal waste collection systems. We're now engaging with the suppliers in question to establish a takeback scheme, so that all old items are returned when new uniforms are issued, and we're exploring possibilities for maximising reuse and value retention. A key challenge, yet to be resolved, is how to remove embroidered logos.

Finally, we also investigated what happened to waste generated during our recent, large-scale real estate projects – our completely new office at London Bridge, and the refit of our existing headquarters at Charing Cross. We decided to treat the waste from construction as 'project-based' rather than as 'business as usual' (i.e. ongoing waste), due to the fact that the schedule of building works is ad hoc. Nevertheless we still view it as our responsibility to influence any construction we commission and encourage the highest standards possible. Here, too, we discovered that good practice had been followed with our real estate development partners delivering high levels of recycling of all materials (including significant quantities of gypsum and metals). The overall recovery rate was between 95% and 100% depending on whether it was strip-out or fit-out waste and depending on the building. Plus, driven by the BREEAM sustainable buildings standard – where both London buildings won the first 'outstanding rating' in their category – innovative practices were deployed to reduce waste in the first place, including offsite, custom, made-to-measure cutting of key materials, such as partition wall plasterboard, flooring and audio-visual cables.

Our non-hub waste mapping exercise was conducted by a full time individual from the sustainability team, over several months, and allowed us to see the relative size of each waste stream (Chart 4) and to conclude that we had a good solution in place for most of our material items. (See Table 1)

# Triple bottom line benefits

We wanted to understand the benefits of reusing and recycling our waste, so we could share the successes with our people, to build confidence and pride in PwC and motivate them to help us reduce contamination in our hub waste – an important step in getting as close as possible to our aspirational 2017 goal of 100% recycling. We also wanted to be able to share the findings with others who are looking to articulate the business case for reuse and recovery.

#### Financial benefits

One area we were keen to understand better was where there were financial benefits associated with circular solutions. IT waste proved to be the most valuable in this sense, delivering cash revenues of approximately £500k to the business every year. Of course, recycling and reusing waste helps to reduce landfill tax, which at £82.60 per tonne<sup>1</sup>, can help offset any costs required to set up better waste treatment processes, and can render some of the solutions (such as distribution of furniture to charities) cost neutral. This means that any organisation looking to make a business case for an overall recycling programme should consider their waste treatment provision holistically, allowing the revenue from one waste stream to offset costs and resources required for others.

#### **Environmental benefits**

To estimate the greenhouse gas emissions associated with all this waste, we first looked for Defra consumption and waste factors, but found that in some cases none were available. In particular, the prevailing greenhouse gas accounting factors available in UK do not incentivise reuse in either procurement or end of life treatment, and do not provide carbon factors for some items such as furniture and carpets. We sought individual analyses by credible organisations to fill the gaps so we could map the approximate environmental benefits of each solution we'd put in place. This shows that the highest environmental impacts are



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associated with aluminium, as well as plastics, food waste and, perhaps surprisingly, furniture.

#### Social benefits

We found that many of our solutions create social value, too, providing valuable resources to charities that might otherwise not be able to afford them, in a period when government funding is being cut. Or, circular solutions can provide employment to disadvantaged or hard-to-reach groups. For example, our IT waste refurbishment provides work experience to offenders with training that leads to an NVQ, helping them get back on their feet and reducing reoffending rates once they leave prison.

Businesses could consider all three benefits when shaping their strategy, as it may be possible to collaborate across different departments, drawing on different budgets to get a holistic programme in place.

# Our stage two story to date - what we've learned

#### **Interim findings**

We typically analyse our programmes and publish our insights once they're complete. However, given the market interest in the circular economy, and the desire of our people to know more about our waste practices, we've decided to share our interim findings even though we still have two years to go to our target date. There are some interesting reflections:

- As discussed earlier, some waste streams are surprisingly big – construction and furniture, for example – and consequently merit attention.
- Some waste streams can generate significant financial value from reuse and recycling, notably electronic goods, such as standard PCs, laptops and phones.
- It's not as hard as you might imagine to find ways to reuse many waste items, if you're willing to go beyond the traditional solutions, and create a portfolio of providers.
- Like us, other organisations may find that there is good practice underway, but not being measured.
- We also learned that there are no easy, existing, costeffective market solutions for some hub waste, especially
  composite materials that are not standardised and of low
  value (e.g. food packaging, stationery, and corporate
  merchandise). Solving for these will probably require
  market level change.

Combining our experience in this phase of our 'Going circular' programme with that from our first five years, we've summarised a table of lessons which we hope will be helpful for others thinking of starting or accelerating their own journey towards the circular economy. See Table 2.

"At PwC, you're already down to the difficult bits"

Charlie Devine, Zero Waste Scotland

<sup>1</sup> Since 1 April 2015.

### Table 2 Lessons learned

Take baby steps	Although the circular economy is a simple concept, its breadth can be overwhelming, making it hard to know where to start, especially when there are so many views about the right thing to do. Businesses should feel comfortable to 'start small', and take pride in each tangible achievement in their journey towards a more circular business.
Estimate the 'material materials' and check what stakeholders think you should focus on	Organisations should focus on their material impacts, of course. But since lifecycle analyses are not easily and cheaply available for all products and services, it's pragmatic to start with waste streams that are likely to be biggest for you. Chart 4 sets out figures for the weight of each waste material generated by our business, per full time equivalent, which other non-manufacturing organisations may find useful to get a first, rough estimate of how much waste they have – just by identifying the materials they know they throw away and multiplying the number of their staff by the per capita weight provided (adjusted, if necessary, for the notes accompany the chart). In addition, asking stakeholders about their expectations can be quick, and ensure you're covering all bases.
Create a business case by combining waste streams	Whilst reductions in consumption of, or increased recycling and reuse of any items in a business has an environmental benefit, and can generate a positive social impact, not all have a financial value strong enough to merit attention in isolation. By including several waste streams in the same programme, the financial returns of one waste stream can offset the costs of others.
Set targets to create momentum	Targets help to focus teams on action and empower individuals to find solutions. Set modest goals for the short term, whilst you test what is possible, and increase the number of targets, or the level of ambition expressed by them, once you gain confidence in what's achievable.
Make circularity part of your contracts	Including service level agreements in key supplier contracts sets an agenda for collaboration, but takes time. Start with the most strategic suppliers, and extend coverage to new categories, progressively. Sustainability teams can have a valuable role helping procurement and facilities with guidance on circular economy concepts and solutions.
'Choice edit' first	It's far easier, and quicker, to make changes for the whole business than to engage employees in behaviour change. Wherever possible, make central 'choices' such as removing unnecessary items to reduce consumption/waste, or substituting others to enable recycling.
Test, then do	Setting up a part of the business as a 'test environment', where you can assess employee reactions to changes (such as new waste hub configurations, product substitutions etc.) before roll-out minimises resistance when you introduce new initiatives at scale. A test environment also allows you to get basic measurement in place and identify approximate volumes for problem items, which will help in discussions with new, circular solution providers as you seek to set up reuse and recycling arrangements.
Spot synergies	Sometimes the solution just requires connections to unusual parts of the organisation e.g. linking the facilities department to your community team can accelerate reuse by leveraging existing charity relationships.
Tell the story to maximise the business benefits	Employees care about waste: it's a tangible item they deal with every day. Telling them about any recycling achievements builds engagement and pride – delivering business benefits.

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## Next steps

As described in the previous sections, we still have lots of work to do.

Our employee engagement and the new, circular solutions we've already identified will necessitate a reconfiguration of our office recycling stations, and we'll be working to set up processes to capture data on all our waste on a regular and more rigorous basis. We'll continue to test and implement new solutions for outstanding, non-hub waste, and are searching for better quality loops for some items that already have a basic solution in place. And, as we outlined above, we're also engaging our suppliers in readiness for stage three. Finally, we'll share our thoughts with relevant bodies on how the measurement frameworks relating to business waste need to be refreshed if they are to support the transition to a circular economy.

Our client-facing teams continue to advise and support clients in manufacturing, retail and other sectors to pioneer circular solutions, which we hope we will – in due course – be able to make use of ourselves.

The circular economy is a concept whose time has come, and every business should be actively seeking to implement better practices to safeguard resources, water and energy, and to mitigate climate change. We hope that this document will help many wondering where to get started to do precisely that.

# About sustainability at PwC

For more information on our corporate sustainability agenda, visit pwc.co.uk/corporatesustainability.

Or, for more details on aspects of PwC's Going Circular programme, search Twitter for #GoingCircular, follow @BridgetHJ, or visit pwc.co.uk/goingcircular.

We welcome input from any interested parties, so do feel free to get in touch with our Director of Corporate Sustainability at bridget.h.jackson@uk.pwc.com.

For more on our circular economy work for clients, please visit pwc.co.uk/circulareconomy.

"I am proud to work for a firm which... cares about the environment."

Employee, PwC

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