

FCC Environment
Corporate Social
Responsibility
Report 2015



Contents


08
Who we are



16
People focus



32
Doing the right thing



04
Foreword from Paul Taylor



06
What we do

10
Highlights and challenges



Introduction

- 04 Foreword
- 06 What we do
- 08 Who we are

Highlights and challenges

- 11 Contract wins and renewals
- 13 Infrastructure investments

People focus

- 17 Health and safety
- 20 Equality and diversity
- 22 Competence Management System
- 23 ABCD Awards

Environmental commitment

- 25 Regulatory compliance
- 26 Reducing our energy use
- 28 Land restoration
- 30 Energy crops

Doing the right thing

- 33 Integrated Management System
- 34 Contributing to communities

Forward thinking

- 39 Introduction
- 41 Industry opinion

Appendix

- 42 Appendix 1: Waste management methods
- 43 Appendix 2: Carbon emissions

24
Environmental commitment



38
Forward thinking



Foreword

As one of the UK's largest waste management and recycling businesses, our corporate social responsibility is a meaningful gauge of FCC Environment's sustainability.

Over the last five years we have transformed our safety culture, improved our standards of working, made strategic investments in infrastructure, supported local communities, developed new revenue streams and significantly reduced the environmental impacts of our activities.

All of this reflects how our core values are driving change within our organisation, and it is rewarding to be part of a workforce that acts sincerely on these values.

Our successes have, in some cases, been in spite of a challenging economic and political backdrop, with commodity price volatility and light touch legislation leading to a lack of confidence in the market. The resulting shortage of inward investment, certainty and direction, means we are likely to encounter more challenges on the road ahead.

The debate about the adequacy of the UK's waste processing infrastructure capacity has become further complicated by questions around the export of refuse derived fuel.

Will demand curtail, or will increased recycling to meet the demands of the Circular Economy Package mean our European neighbours need more fuel to keep their lights on?

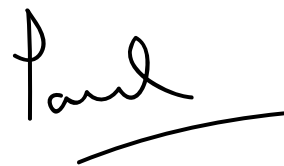
In the meantime, we continue to look ahead and provide leadership in the sector. We have a number of energy from waste facilities in the pipeline in Buckinghamshire, Worcestershire and an expansion at our Eastcroft plant in Nottingham, as well as a new combined heat and power project in Edinburgh and Midlothian. We are planting energy crops to turn our closed landfills into abundant sources of renewable fuel, and in 2015 alone contributed more than £20 million to local communities.

Re-use continues to play a vital role in reducing waste and benefitting society. We have added to our re-use portfolio with new ventures in Hull and Ipswich, and are planning even more in 2016. Our pioneering work in this area has been recognised with a National Recycling Award, along with charity partner Abacus and HMP Rochester.

We look ahead to the future with enthusiasm, despite the uncertainties we face: not least the British referendum on EU membership; the possible adoption of the Circular Economy package; and its undetermined impacts on the marketplace.

With these factors compounding the effects of austerity, the coming years will demand a solid and sustainable business model. Corporate social responsibility is a good place to start.

So for now, let's reflect on our progress over recent years and continue to set the bar ever higher.



Paul Taylor
Chief Executive Officer
FCC Environment

£20m

We are planting energy crops to turn our closed landfills into abundant sources of renewable fuel, and in 2015 alone contributed more than £20 million to local communities.



What we do

FCC Environment is one of the leading waste management and recycling businesses in Britain.

We reclaim the value in household and business waste through recycling, waste processing and green energy programmes. Our activities contribute to the UK's resource and energy security, and reduce the climate change impacts of managing waste.

We drive behavioural and technological change, helping society reduce waste and manage resources sustainably.

Business waste solutions

Business waste solutions offers services for our business and industrial customers to help them save money, waste less and recycle more

Municipal services

Municipal services helps local authorities serve their communities with long- and short-term contracts for collecting, recycling and treating household waste

Recycling

Our recycling and composting technology extracts the maximum value from the waste we collect, with the minimum effort

Green energy

We continue to invest in and expand our range of treatment technologies to recover as much clean energy as possible from waste material

Waste processing

We process all our customers' waste, including chemical and hazardous waste, in a safe, secure and sustainable way avoiding landfill where possible

Appendix 1 (see page 42) shows how we are recovering more and more value from waste.



2,449

FCC Environment employs **2,449 people** across England, Scotland and Wales at more than **200 sites**

6000

We manage waste for more than **6,000 business customers** and **60 local authorities**

8.3m

In 2015 we managed **8,311,639 tonnes of waste** for our customers

Our values
 —
 Delivering clarity and direction

Who we are

Our business values give clarity and direction to our strategic priorities and everyday working practices. Operating according to these values enables us to deliver on our corporate social responsibility commitments, maintaining high standards for our workforce, our customers, and the communities we work with.



Safety, Health, Environmental and Quality Policy Statement 2016
 Our corporate social responsibility activities are underpinned by our Safety, Health, Environmental and Quality Policy Statement 2016, approved by FCC's Board of Directors. To view the policy in full please visit www.fccenvironment.co.uk



People focus

Valuing and investing in the people who work for us is vital if we are to provide our customers with the best possible service



Environmental commitment

Our focus on managing resources sustainably means it is important that we lead by example with activities that conserve and protect the environment



Doing the right thing

Delivering high quality services is the foundation of a secure and successful future, and we pursue continual improvement in everything we do



Forward thinking

We look ahead, prepare for change, challenge the status quo, and provide leadership to drive a more resource-efficient future

Highlights and investments

We have celebrated some major successes in 2015, from contract and award wins to the opening of new re-use and waste processing centres



Contract wins and renewals

Hull and East Riding of Yorkshire

Our new 10 year contracts commenced in April 2015, seeing investment in excess of £4.5m and the redevelopment of our Wilmington waste transfer facilities. We are now responsible for the management of 13 household waste recycling centres and the onward treatment of domestic waste from East Ridings Council.

Falkirk

In May 2015, we launched a new seven year kerbside contract, collecting the contents of residents' recycling boxes, textile sacks and food waste containers. We have developed a new depot to house the collection fleet at Bonnybridge, with Falkirk Collections and Transport Manager Willie Patterson and his team transferred from their previous location at Greengairs Landfill.

Torfaen

Our new contract with Torfaen County Borough Council includes the operation and management of a new household waste recycling centre and waste transfer station at Panteg Way, New Inn, Pontypool. The seven year contract commenced on 1 April and will see us help the Council to achieve its ambitious recycling rates. During the first year of the contract a 75% target has been set, increasing to 80% in years two to four and 85% in year five.

South Ribble

Our new contract with South Ribble Borough Council commenced in June 2015. During the seven year contract we will help the Council save £4.2m. Meanwhile, the Council has pledged to invest £1.5m in next year's budget for five new wagons, creating a fleet of more environmentally friendly waste collection vehicles.

Oxfordshire

Two waste transfer stations, at Sutton Courtenay and Dix Pit are now operational, handling around 45,000 tonnes of Oxfordshire County Council's residual waste per year. The 25 year contract will see the sites bulk up municipal waste for onward transport to an energy recovery facility. Oxfordshire County Council formally sent its thanks to FCC Environment's team for how smoothly the change to the new contract was managed, in recognition of the on-site team's hard work.

Other new contracts

Suffolk County Council
Transfer station and haulage of residual waste

Luton Borough Council
Integrated waste management service extension

Thurrock Council
Treatment and disposal

Conwy
Green waste treatment

Buckinghamshire County Council
Biowaste

North Yorkshire County Council
Disposal and asbestos disposal

Rushmoor Borough Council
Glass recycling

Norfolk County Council
Interim treatment, transfer and haulage

Carlisle Council
Collection of recyclables

Merseyside Recycling and Waste Authority
Interim treatment

National Recycling Award Successes

In July 2015 our bike re-use scheme with HMP Rochester and Abacus Furniture Project won a prestigious National Recycling Award for Best Partnership Project. Our bike restoration and reuse scheme not only sees bikes that would otherwise go to landfill brought back to life, but helps prisoners gain new skills and improve their chances of gaining employment upon their release.

Alongside this success, we were also selected as Finalists for two other National Recycling Awards: Public

Service Recycler of the Year for HMP and Young Offenders Institute Rochester, and Best Energy from Waste Initiative for FCC Environment's Lincolnshire Energy from Waste Facility.

These accomplishments are testament to our commitment to our core values:

- Environmental commitment
- People focus
- Doing the right thing
- Forward thinking

July 2015
National Recycling Award



Infrastructure investments

NEW

Re-use shop East Riding

In July 2015, we opened a new re-use shop in the East Riding of Yorkshire following a £400,000 investment. Working with the local Hull City Council and East Riding of Yorkshire Council, FCC is running the re-use shop which sells products that have been rescued from our recycling centres across the region.

The shop is the first to be run entirely by FCC Environment in support of local charities.

NEW

Re-use shop Ipswich

A new charity partnership between FCC Environment and The Benjamin Foundation has resulted in the launch of another re-use shop in Ipswich, Suffolk. FCC staff salvage re-usable items from the 11 Household Waste Recycling Centres it runs in Suffolk. Local residents are also invited to donate items they no longer want for resale.

The goods are sold from the shop, run by The Benjamin Foundation, and the resulting profits will be used to support the charity's work with families, children and the homeless.

In 2015, FCC Environment's re-use shops raised £484,227 for charity

2015 total
£484k

"We're delighted to have entered into this partnership with Suffolk County Council and The Benjamin Foundation. Our re-use stores have proven incredibly popular across the country and are providing residents with bargains as well as preventing items which are re-usable from being discarded."

Steve Longdon
South Region Director



Infrastructure investments

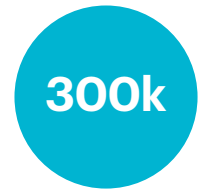
Continued »

Greatmoor Energy from Waste Facility Buckinghamshire

Greatmoor EfW will become fully operational in spring 2016 and will treat up to 300,000 tonnes of residual waste per year. The facility will generate 22MW of electricity, equivalent to the energy required to power 36,000 homes (the total population of Aylesbury and Buckingham combined). Greatmoor EfW will receive waste via FCC Environment's new waste transfer station at High Heavens.

FCC Group Development Director, Richard Belfield, said: "The construction of Greatmoor EfW marks an important step forward for FCC Environment as the business continues to develop, focusing on its customers' requirements for extracting value, in the form of energy, from the waste left over after recycling has taken place. Greatmoor EfW represents an integrated service that the county can be proud of."

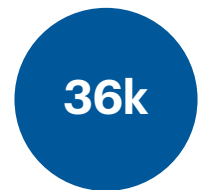
The facility also recently achieved a big milestone – the completion of more than 1 million working hours without a Lost Time accident during its construction. Paul Stokes, Head of Safety, Health, Environment and Quality (SHEQ) at FCC, said: "This is a significant achievement and testament to the commitment of all involved to deliver a safe working environment. I am extremely proud of what has been achieved at Greatmoor EfW."



300,000 tonnes of residual waste per year



The facility will generate 22MW of electricity



Enough energy to power 36,000 homes

EnviRecover Energy from Waste Facility Worcestershire and Herefordshire

With some 300 people working on site, construction of EnviRecover, the 200,000 tonnes per year residual waste treatment plant is making great progress. Construction commenced in May 2014 and handover is due to take place in the spring of 2017. The first waste to be delivered into the plant as part of commissioning trials will be in the autumn of 2016.

Once operational, the facility will generate 16MW power for the National Grid and employ around 50 people.



200,000 tonnes of residual waste per year



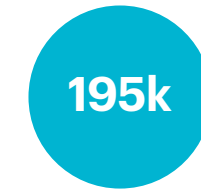
The facility will generate 16MW of electricity

Millerhill Combined Heat and Power Facility Midlothian

In September 2015, FCC Environment was granted planning permission for the Millerhill Recycling and Energy Recovery Centre, which will treat mixed waste derived from City of Edinburgh and Midlothian councils and commercial clients.

The 195,000 tonnes per year facility will be constructed and operated by FCC Environment under a 25 year contract. It will generate approximately 11MW of electricity, which will be exported to the National Grid – enough to meet the needs of approximately 26,000 homes. In addition, the facility could produce up to 20MW of heat, which is enough to meet the average heating needs of approximately 10,000 homes.

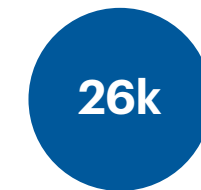
The Centre will mechanically extract recyclables from mixed waste and produce solid recovered fuel to be treated in the energy and heat recovery phase.



195,000 tonnes of residual waste per year



The facility will generate 11MW of electricity

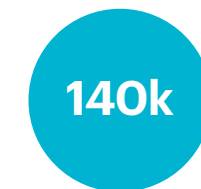


Enough energy to power 26,000 homes

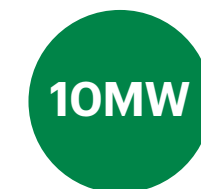
Eastcroft Energy from Waste Facility Nottingham

Following a lengthy application process through 2015, FCC Environment has been awarded permission to almost double the capacity of the 170,000 tonnes per year Eastcroft energy from waste plant in Nottingham.

The expansion will provide an additional 140,000 tonnes of throughput via a third boiler line, exporting around 10MW electricity to the grid. The Combined Heat and Power facility also recovers hot water and steam for the Nottingham district heating scheme, contributing to space heating and power supply in the city.



Permission has been granted to almost double capacity



The expansion will generate 10MW of electricity

People focus

Making FCC Environment a safe, motivating and enjoyable place to work is essential to running a sustainable business. Our people are central to everything we do.



Health and safety

The health and safety of our colleagues is absolutely paramount and always will be.

Our three-year campaign “Don’t gamble with your health and safety” has been successful in reducing workplace accidents and injuries and improving the health and safety culture.

In 2015 we implemented:

- **Safeguard Incident Reporting System to encourage proactive and timely reporting**
- **Proximity Warning System to enhance site safety**
- **Director Incident Review Panels and Director Health and Safety Meetings**
- **Behavioural Safety Programme pilots**



Successful campaign
Our three-year campaign “Don’t gamble with your health and safety” has been successful in reducing workplace accidents and injuries

Wearable tech helps keep everyone safe

Following successful trials at the Bletchley site near Milton Keynes, the new SiteZone Proximity Warning System is being rolled out across the business.

On sites where mobile plant operate, vehicles entering the site are issued with a Site Zone limiter, while those working on foot are provided with a small transponder to wear on their hardhat or sleeve which vibrates if they enter the danger zone of a vehicle.

The system has also been developed to make vehicles stop automatically if someone on foot enters the danger zone – this dramatically reduces the risk of human error.

“We needed a system that would work from the front, rear and sides of mobile plant. CCTV reversing cameras are effective but their peripheral range is limited, so SiteZone’s 360-degree field of vision is a real advantage.”

“We want to make all of our sites as safe as possible, so that at the end of every day, we can all go home to our families. It’s that simple.”

Paul Stokes
Head of Safety Health and Environment and Quality

Be prepared!
Always wear your proximity warning tag, every time.



Safety: Let's keep it going

The "Don't Gamble With Your Health and Safety" campaign encouraged everyone to follow safe working procedures, every day. Keen to maintain this momentum and safety culture, towards the end of 2015 we launched a new campaign, "Safety: Let's Keep It Going."

We are now embarking on regional and divisional roadshows to canvass for grassroots ideas. We are asking Safety Representatives,

Site Supervisors and Managers to pinpoint key health and safety issues to eliminate accidents.

Our plan is to spend 2016 engaging with our workforce to produce the next three year plan, designed by our employees. We will review the success of that strategy in 2020, by which time we hope to have a health and safety record equivalent to 20/20 vision.

FCC IMS Audit League Table

The famous FCC IMS Audit League Table scores sites' performance and positions them in the Premiership, Championship and League 3.

Reaching the top of the Premiership, of course, should be everyone's goal.

RIDDOR

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 require us to keep a record of the number of "Reportable Accidents" in the workplace, for example a broken bone or an accident resulting in more than seven days off work. From this, we can calculate our "Incidence Rate", which takes into account the size of our workforce and enables us to benchmark our performance against others.

72%

Accident rates have been cut by 72% since 2010

Continual improvement in health and safety

In order to maintain our positive progress in the health and safety of our workforce, in 2016 we will deliver:

- Regional & Divisional Health and Safety Roadshows
- A new 3 year Health and Safety Plan
- Leading Safety by Example Part 2
- IOSH Managing Safely (Enhanced) for Area Managers
- Safety – Let's Keep It Going campaign
- Additional Behavioural Safety Programmes
- Further improvements to Safeguard Incident Reporting System

Achievements

13%

At the end of Q4 2015 our Lost Time Accident Frequency Rate stood at 8.08, a 13% improvement on last year (exceeding our 10% year-on-year improvement target)

863

During 2015 we lost 863 calendar days to injury at work, against a target of no more than 1,174 days. This was 26% ahead of target and a 34% improvement on last year

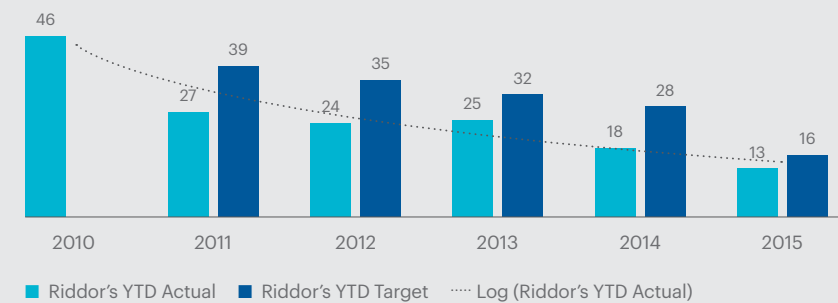
61%

Over the last 5 years, FCC Environment has achieved a 61% reduction in Lost Time Accidents, and a 63% reduction in our Lost Time Accident Frequency Rate

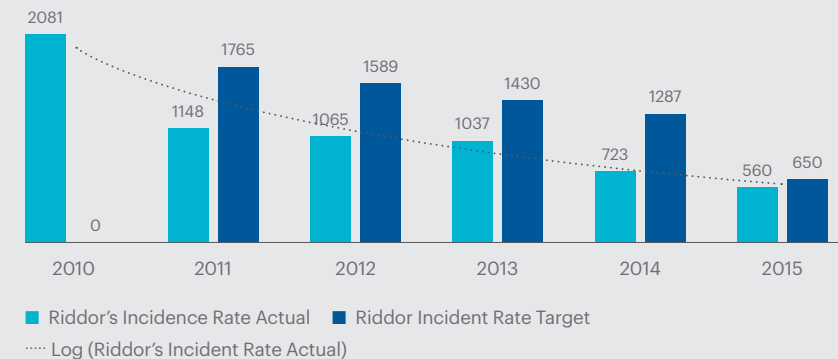
2015

We set ourselves the objective for 2015 of achieving zero overdue major non-conformance reports, which we achieved in the final two months of the year

FCC Environment UK
HSE (RIDDOR) Reportable Accidents 2010 – 2015



FCC Environment UK
HSE (RIDDOR) Incidence Rate 2010 – 2015



Equality and diversity

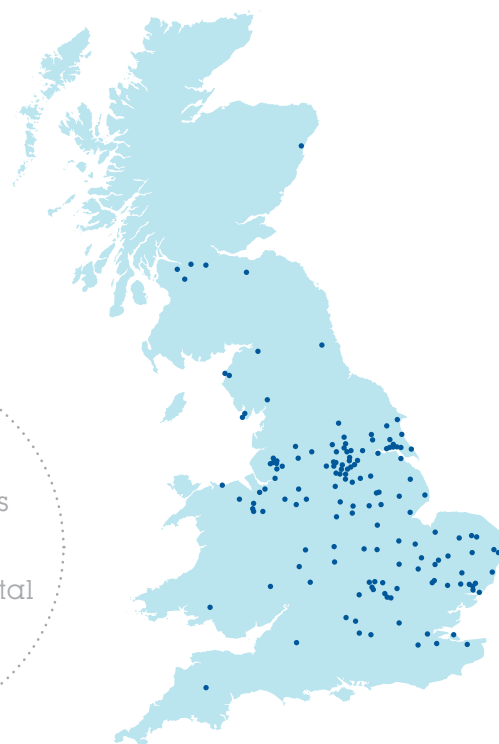
2015 workforce demographics

FCC Environment employs 2,449 people across England, Scotland and Wales at more than 200 different sites.

This large and diverse workforce is the foundation on which the success of the company is built. Our workforce encompasses a broad range of occupations from the manual roles in our recycling facilities to contract management and ecological protection.

We work hard to make sure the company is a great place to work. Our human resources team runs proactive absence management programmes, and at 1.95% our employee sickness and absence rate is less than the national average. During 2015 our staff turnover rate was 16.9% (17.6% including TUPE transfers).

Training and development remains a priority within our organisation, and in 2015 we delivered 931 training courses across the business and implemented a wide range of initiatives to attract and retain talent, enhance employee motivation and develop a sense of employee belonging.



Our 200 facilities
All our 200 facilities
across the UK are
operated to ISO
50001 environmental
standards.



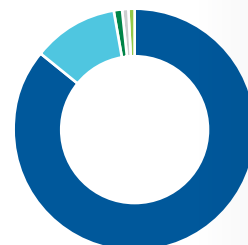
Gender

- 86.82% male
- 13.18% female



Disability

- 3.01% registered disabled



Ethnicity

- White European 86.05%
- Not specified 11.4%
- Asian 1.03%
- Black 0.79%
- Other 0.68%

Energy and Efficiency Industrial Partnership

FCC Environment is an active member of the Energy and Efficiency Industrial Partnership. Developed by employers and supported by the Government, the Partnership drives improvements to recruitment, skills and workforce development. It means that employers can set the skills agenda and develop new approaches to training, monitoring and compliance.

Greatmoor careers open day

In October 2015 we held an open day at our Greatmoor Energy from waste (EfW) facility for students and young professionals interested in job opportunities in the waste, energy and construction industries. The open day included a guided tour of the site, as well as an exhibition featuring a number of companies involved in its construction.

“People who came along to the open day had the chance to see first-hand how an Energy from Waste plant works and gained an insight into how to enter three industries that offer a wide range of career opportunities.

“The Greatmoor EfW uses some of the most advanced energy conversion technology in the world, playing its part in developing the UK’s Energy from Waste infrastructure and providing Buckinghamshire residents with jobs as well as power.”

Gillian Sinclair
Project Director

October
2015
—
Greatmoor
open day



Competence Management System

In January 2015, FCC Environment launched a new Competence Management System (CMS). The new CMS provides an additional approved route to demonstrate competence. Where the Certificate of Technical Competence (CoTC) recognises the competence of the individual, the CMS recognises the competence of the company as a whole.

Energy and Utility Skills prepared a private standard with which the CMS must comply. The specifications enable FCC Environment to demonstrate the technical competence required to satisfy regulatory requirements and comply with environmental permits.

The first stage of the CMS commenced in January 2015. Teams of line managers and specialists assessed Operational Managers at a number of our waste management facilities, producing Competence Records with which managers can now demonstrate their skills.

We ran a series of Internal Assessor courses through 2015, and will complete the Operational Managers' assessments in Q1 of 2016. Once complete, we will be externally audited by BSi, and use the experience gained and lessons learned to prepare for the introduction of Stage 2.

The second stage is scheduled to commence in Q3 2016, and will see the assessment of supervisors by their line managers and subject matter experts to determine their competence against set criteria as defined in their Competence Records.

The CMS has been received exceptionally well; the assessments carried out by line managers and subject matter experts has been robust and has highlighted skills gaps of managers which in turn have created learning opportunities. It has been a magnificent effort by all concerned.

Valuing our people (ABCD awards)

Following a review and consideration of employee feedback, we have redesigned our ABCD (Above and Beyond the Call of Duty) Awards, making the nomination process simpler and motivating employees to want to win. The awards are now presented every three months, with new categories that reflect our own brand values.

People focus

Valuing our people, recognising great work, motivating each other and enjoying what we do

Environmental commitment

Embracing change and preparing for the future

Doing the right thing

Securing our future by being customer-focused and delivering quality services

Forward thinking

Being environmentally and socially responsible

2015 winners



People focus

Paula Axtell, Calvert: High standard of support to colleagues, site inspectors and senior managers

Wayne Downham and Jodie Mugridge, Collections: Working well together and supporting other crews

Dan Pepper, Bury St Edmunds HWRC: Mentoring new recruits with learning difficulties



Environmental commitment

Craig Steel, Gordon Appleby and Mark Pailing, Greengairs: Making remarkable improvements in the SEPA performance rating

Stephen Tilley and Zsusz Kovacs, Welland Park, Harborough: Efforts and socially responsible work tending to the park

Anthony Porter and Andy Kirk, North Hykenham closed landfill: Proactively designing an engineering solution with long-term sustainability



Doing the right thing

Emma Perkins and Nigel Wellsbury, Thorney Mill Yard and West Drayton Plan: Solutions, action and management of the projects

Ruben Martin and Andy Driver, Harborough: Tackled a fire whilst waiting for the Emergency Services, ensuring it didn't reach the surrounding bushes and local homes

Robert Harris, Sutton Courtenay landfill: Team leadership, improving welfare, almost eliminating customer complaints, and scoring 99.6% with an IMS audit.



Forward thinking

Peter Sanderson, Alfreton MRF: Improving plant performance

Sarah Riley and colleagues, Wilmington Transfer Station: Refurbishment project

Garry Smith and the Operations Team, Wrexham PFI Phase II Mechanical Biological Treatment: Improving plant performance

2015 First Long Service Awards

In 2015 we announced the introduction of a Long Service Award scheme to the business, recognising and rewarding the contribution made by our loyal workforce. The awards are granted following landmark achievements at 25, 35 and 45 years of continuous service.

In 2015, the long service awards went to 18 people for 25 years' service, 5 people for 35 years' service and 3 of our longest-serving employees at 45 years' continuous service.

"I am delighted to be able to recognise the achievements and long term commitment made by these dedicated colleagues. In the modern workforce, it is rare to find such long service within a job. To have so many says a lot about the camaraderie within our teams."

Paul Taylor
Chief Executive Officer
FCC Environment



Environmental commitment

Our stewardship extends beyond collecting and processing materials, bringing additional benefits to the environment and local communities.



Regulatory compliance

We work closely with the Environment Agency and other regulatory bodies, ensuring we comply with all relevant environmental and waste management legislation.

Key Performance Indicators	2011	2012	2013	2014	2015
CCS Scores	2421	1849	2615	2164	1970
Average number of breaches per environmental permit	6	4	5	5	5
Leachate compliance	63.1%	65.2%	69%	69.2%	70.4%
Landfill gas compliance	92%	90%	90%	92%	95.5%
Complaints by stakeholders	-	991	497	683	383
Enforcement notices (EA/SEPA/NRW)	6	2	0	2	1
Prosecutions (EA/SEPA/NRW)	1	1	0	0	0
Fines for offences (EA/SEPA/NRW)	£20,000	£10,500	0	0	0
Sites in OPRA band D, E, F	-	-	34	32	30

How have we done this year?

- Achieved our corporate target to reduce permit breach notifications by 10%
- Further reduced OPRA band D, E and F sites (now 30) and improved performance for leachate compliance and reduction in legacy
- Increased landfill gas compliance to 95.5%
- Made significant reductions in the number of notifications at our Allington EfW facility in Kent
- Received no prosecutions or fines for offences for the third year running, although there was one enforcement notice at Fiskerton which was complied with
- Continued our National Environment Improvement Plan with the Environment Agency
- Developed and delivered training in monitoring and permit compliance across the business
- Prepared courses on energy management and environmental awareness to be rolled out in 2016
- Achieved ISO 50001 and ESOS compliant status

Environment objective 2016

5% reduction in permit breaches from the previous year's target



Reducing our energy use

The new Energy Savings Opportunity Scheme (ESOS) led us to revise our approach to carbon and energy management.

In order to comply with ESOS, we decided to move from the Carbon Trust Standard which focuses on carbon emissions, to the ISO 50001 energy management standard. The deadline for ESOS compliance was December 2015, so while we were busy implementing ISO 50001 we invited external advisors to carry out the ESOS audits for us, ensuring ESOS compliance by the deadline date.

We are now certified to ISO 50001 which will ensure long-term ESOS compliance.

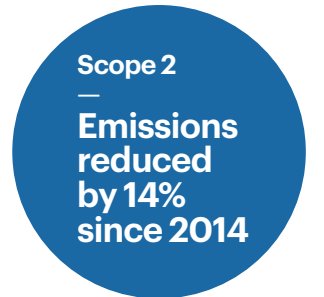
As part of our Energy Management System certification process to ISO 50001 we developed a policy for more efficient use of energy, with fixed targets and objectives to meet the policy. Our data collection means we can better understand and make decisions about our energy use, and make continual improvements in this important area.

Tonnes CO ₂ equivalent		
Scope 1	2014	2015
Landfill emissions	3,341,338	3,168,657
Energy from Waste	383,840	414,311
Fuel use	54,480	50,188
Scope 2	2014	2015
Electricity	15,191	13,103
Scope 3	2014	2015
Fuel	14,896	13,448
Gross Carbon Footprint	3,809,745	3,659,707
Biogenic Out of Scope Emissions	1,838,582	1,759,347
Net Carbon Footprint	1,971,163	1,900,360

Appendix 2 (see page 43) provides our emissions data according to the GHG protocol approach.

How have we done this year?

- We have reduced our Scope 1 landfill emissions by diverting waste away from landfill. Landfill capping and restoration projects continue to increase as landfills are closed
- We have reduced our Scope 2 emissions by 14% since 2014, due to significant efforts made across the business to drive down our energy use
- The reduction in Scope 2 emissions is particularly notable considering our move into a more energy intensive waste processing environment (materials recovery and recycling)
- A major factor in the reduction of our Scope 2 emissions has been due to the outstanding performance of our Allington facility in 2015
- Our target under the Carbon Trust Standard was a 2% reduction in carbon emissions from the previous year's target, which we exceeded in 2015
- We were proud to be one of the first organisations to be audited by the Environment Agency on ESOS compliance – passing with flying colours



Environment objective 2016

1% overall reduction in energy usage per tonne of waste processed within FCC.

This objective uses a new metric (kW/tonne waste processed) in order to normalise the data. This metric is affected by our move away from landfill towards energy intensive waste recycling and processing technologies, which may increase our energy demand. The challenge is to do this as energy efficiently as possible.



Land restoration

During 2015, FCC Environment restored over 48 hectares of land for a wide range of end uses:

- Woodland for nature conservation
- Commercial energy crop production
- Wildflower meadows
- Grazing or other agricultural land
- Parkland for public open space including tree planting, grassed areas and footpaths
- Wetland restoration, ponds, lagoons and streams

Restoration schemes are designed to provide a landscape in sympathy with surrounding areas, whether for nature conservation or public use, or to grow sustainable energy crops.

Most landfill restoration schemes are designed to reflect and attract local biodiversity while functioning as both sustainable landscapes and an environmental control on the landfill itself.

Our large team of professional ecologists are skilled in habitat creation, management and mitigation, landscape management and aftercare. As landfill restoration schemes closely integrate with their surroundings the impact on biodiversity can be very positive, with the occurrence of protected species or local Biodiversity Action Plan target species in restored areas. We also engage the support and expertise of local groups (Butterfly Conservation at Greatmoor, for example), statutory bodies (e.g. Natural Resources Wales), site managers and restoration managers.

Greengairs beauty spot

Opened in 1990, Greengairs Landfill is based in the central belt of Scotland in between Glasgow and Edinburgh. It enjoys views of Cumbernauld and the Campsie Fells which contrast with the twinkling lights of Glasgow city at night.

We have re-established a natural ecosystem on the once barren coal site, with natural peat moss populated with heather, wildflowers and rushes. The site supports an array of wildlife from wild hares, deer and foxes to peregrine falcons and red kites. Swans, Canada geese and mallard ducks also make seasonal visits. Greengairs' diverse insect population includes dragon flies and an array of butterflies which seem to like the ambient heat and salt from the leachate treatment facility on site.



Greengairs
—
A natural
ecosystem
restored

The majority of soils used for land restoration are waste products from the construction and quarrying industries. We also recycle inert wastes from the construction and demolition sector to produce soils and hardcore suitable for maintaining roads and building footpaths, further reducing the need for raw materials.

We use several thousand tonnes a year of green waste compost as soil conditioner. In 2015 we ran successful trials using soil conditioner derived from the separation and composting of municipal waste and we are now extending the programme across the group.

With the approval of the Environment Agency, we are also now using different recycled materials in our land restoration projects. These include sewage and clean water sludges for soil conditioning and cement kiln dust for neutralising acid soils. We will use these on our biomass crop land bank to create better soil structure and improve yields.

Planting and fencing

Replanting sites is an important part of the land restoration process, and our soil improvement strategies have successfully improved soil fertility without the use of fertilisers. This in turn reduces the amount of grass seed needed.

Where possible we use locally produced or harvested seed from adjacent or nearby land, allowing the matching of species and soil types while removing the need for commercially grown seed. The majority of grass seed, trees and shrubs we do purchase is from sustainable UK provenance stock, which ensures its quality and disease resistance.

Restoration projects

Skelbrooke Landfill

Recycling of 50,000t of soil to produce topsoil for the site restoration enabling its return to agriculture. The soils recycling project also generated 10,000t of re-usable aggregates to replaced quarried stone

Thurcroft Landfill

Import of 500t of recycled waste clays to create pond liners in the newly constructed mitigation ponds for translocated great crested newts. Water from an adjacent quarry lagoon was also imported to infill the ponds as it was required to be certified prior to use

Bootham Lane Landfill

Import of 30,000t of a mixture of recycled soils, waste water treatment sludges and compost in support of restoration of the site to biomass planting

Welbeck Landfill

Import of 80,000t of a mixture of recycled soils, water clarification sludges and green waste composts in support of returning the site to woodland and public open space

Greengairs Landfill

Import of 20,000t of peat and soils to assist in the restoration of the site to heathland and woodland

Oatslie Landfill

Import of over 100,000t of soils to complete restoration works and return the site to agriculture



Energy crops

Over the last few years, we have been planting energy crops (Willow coppice and Miscanthus grasses) on closed landfill sites. In addition to supporting leachate treatment, the sale of these crops helps offset the costs associated with the long-term upkeep of otherwise unproductive land.

We are now planting new sites with cuttings from coppiced Willow plants on our existing sites, and have established a number of temporary plantations to act as nurseries for Miscanthus, harvesting the seed for use in the planting of new areas.

An additional 50 hectares were planted during 2015, taking the total estate to 350 hectares spread across

eastern and southern England. We are now in discussions with buyers following the successful harvest of over 200 tonnes of biomass which is expected to steadily rise over the coming years to around 2,000 tonnes of saleable product.

Although government support for the planting of energy crops has been removed we are continuing with our long-term commitment to produce sustainable biomass on our sites, planting an additional 7 sites this year. We harvested 13 sites in 2015 and intend to increase this to 16 during 2016.

“In 2016 we will concentrate on consolidating our existing crops to maximise yields as well as reviewing the most viable end use of the biomass product whether it be fuel in the form of biomass pellets, straw, or the lucrative animal bedding market. There are opportunities for further planting and this will likely be rolled out once a market has been secured.”

Paul Brightwell

Restoration Manager North

200+

We are now in discussions with buyers following the successful harvest of over 200 tonnes of biomass

350

An additional 50 hectares were planted during 2015, taking the total estate to 350 hectares spread across eastern and southern England

Sustainable
biomass

13 sites
harvested
in 2015





Doing the right thing

FCC Environment is building a successful and secure future by being customer focused and delivering quality services. We also support improvement schemes in the communities in which we work through the Landfill Communities Fund.



Integrated Management System

Our Integrated Management System (IMS) is certified to ISO 14001, ISO 9001 and BS OHSAS 18001, and from 2015 also to the energy management standard ISO 50001. All of our certifications are externally audited by The British Standards Institution.

		Number of sites certified				
		2011	2012	2013	2014	2015
Environmental management systems standard	ISO 14001	170	170	139	176	136*
Quality management systems standard	ISO 9001	27	27	18	55	43*
Health and safety management systems standard	BS OHSAS 18001	26	26	19	45	37*
Energy management systems standard	ISO 50001					187

*These numbers have decreased due to site closures

How have we done this year?

- Gained accreditation to ISO 50001 Energy Management Standard, following internal audits and BSI external audits
- Added 11 sites to our ISO 14001 Environmental Management System
- Added 4 new sites to our BS OHSAS 18001 Health and Safety Management System
- Added 4 new sites to our ISO 9001 Quality Management System
- The percentage of operational activities certified to ISO 9001 during 2015 was 40%, and includes: Municipal collections, Quarries, Allington EfW and Group departments, Engineering, Procurement, Training and Commercial Management and Lillyhall Landfill
- During 2015 the Buckinghamshire HWRC contract, Staffordshire contract and Suffolk contract were added to the scope of registration for our Quality Management system
- During 2015 the system was further developed with simplified procedures and a further rationalisation of documents, and the internal audit scope was expanded to include legal compliance to the relevant legislation that affects FCC operations

100%

100% of sites certified to ISO 50001

73%

73% of operational activities certified to ISO 14001

95%

In 2015 we achieved our target of a minimum score of 95% for our Integrated Management System Internal Audit



Chapterhouse Certified Success

Our Materials Recycling Facility at Chapterhouse Close in Ellesmere Port was recommended for several certifications by the British Standards Institution in 2015: Quality Management System (ISO 9001), Environmental Management System (ISO 14001), Health and Safety Management System (OHSAS 18001) and was one of the sites audited for Energy Management System (ISO 50001).

Opened in October 2014, the team worked hard to implement relevant policies and procedures from the FCC Environment IMS and work to them. All four standards were audited with no non-compliances found, meaning the site was then recommended for certification.

Contributing to communities

In addition to the money raised for charity through our network of re-use shops, FCC Environment's involvement in the Landfill Communities Fund continued to deliver lasting benefits to communities and the environment throughout 2015.

In 2015 a total of 340 projects received funding of over £20m.

By voluntarily taking part in the Landfill Communities Fund, FCC Environment can divert a proportion of the tax collected on each tonne of waste deposited in landfills to WREN, an independent not-for-profit funding organisation which, in turn uses the money to fund important projects within 10 miles of a landfill site.

WREN continued to fund the development of the National Memorial Arboretum in Staffordshire with funding of £450,000 towards Heroes Square and improved visitor facilities across the site. The Arboretum is the UK's year round centre for remembrance of both military and civilian forces and receives over 300,000 visitors each year.

Further major awards were made to the National Army Museum towards building renovation and exhibition areas and to the Design Museum, to fund access and exhibition space as part of the works to transform the old Commonwealth Institute into their new home.

As part of WREN's ongoing support of UK biodiversity over £3.6m was awarded to 14 projects to help conservation charities purchase land to safeguard and restore some of the UK's most precious habitats.

Of this, £900,000 was used by the RSPB to complete the purchase of land at Hesketh Out Marsh East in Lancashire. The purchase of this land, along with the previous tranche also funded by WREN, allows the RSPB and the Environment Agency to complete their work in restoring vital saltmarsh habitat across 170ha of the Ribble Estuary which was drained for agricultural use during the 1980s.

The restoration of saltmarsh is important for wildlife, as well as sea defences, helping reduce the risk of flooding to over 100 neighbouring properties and farmland.

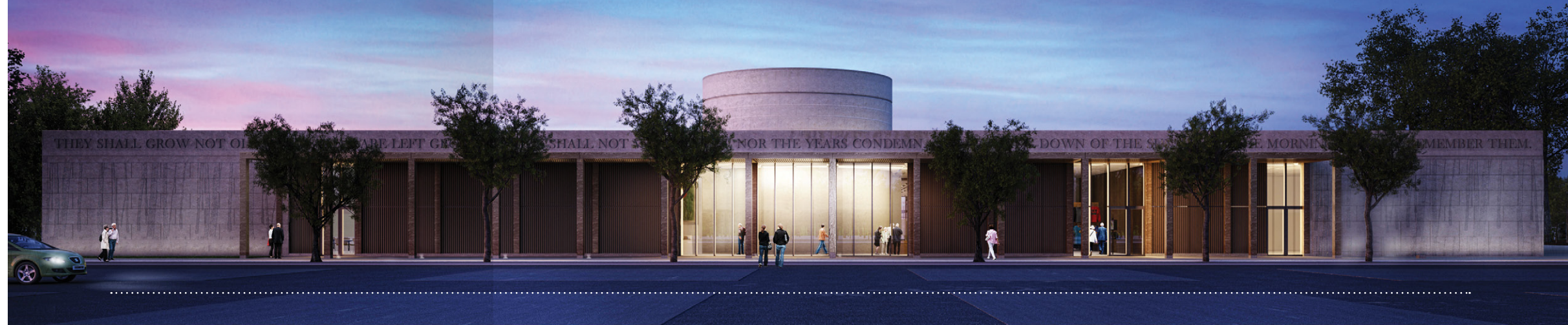
The FCC Biodiversity Action Fund, now in its 7th year, continued to fund projects which help restore and improve priority habitats across the UK. Habitats as diverse as upland bog, field margins, lowland meadows and sand dunes will all benefit along with the hundreds of species which make these habitats their home.

Funding of over £2.79m was shared by 16 projects working on 85 sites encompassing more than 2,500ha of land. Over 800,000 people visit these sites annually and more than 300 volunteers and training opportunities will be created to help deliver the projects.

New funding
—
£20m
donated
via WREN



National Memorial Arboretum
WREN continued to fund the development of the National Memorial Arboretum in Staffordshire with funding of £450,000 towards Heroes Square and improved visitor facilities across the site.





Contributing to communities

Listed building preservation, funded through the FCC Heritage Fund, benefitted from more than £1.35m awarded to projects which help restore buildings and structures at risk. Most notable was funding of £73k awarded to Coventry Cathedral ruins to restore and make watertight medieval crypts so they are safe for public access.

Providing funds for community projects remains at the heart of WREN. Through the FCC Community Action Fund and FCC Building Communities Programme over £10.6m was shared by nearly 300 projects all of which enhance and improve local facilities for the communities around FCC Environment landfill sites.

From small grants of £5,360 to help drain Crofton Community Centre

sports pitch in Wakefield to larger amounts, such as the grant of £75,000 towards the creation of a new BMX Skate Park in Chatteris, Cambridgeshire, all the projects WREN funded in 2015 make a real difference to local communities.

130 halls and community centres will be better equipped, easier to access or more efficient to run thanks to funding of more than £4.1m.

65 play areas, skate parks and games areas will benefit from funding of over £2.8m to help children and young people keep fitter.

£1.2m will help 39 parks, nature reserves and green open spaces be easier to access and more enjoyable to visit.

£1.35m

Listed building preservation, funded through the FCC Heritage Fund, benefitted from more than £1.35m awarded to projects which help restore buildings and structures at risk.

Coventry Cathedral
Most notable was funding of £73k awarded to Coventry Cathedral ruins to restore and make watertight medieval crypts so they are safe for public access

WREN funding by type 2015

- 1 **Community buildings**
£4,189,119
- 2 **Community outdoor spaces and parks**
£1,245,430
- 3 **FCC building communities**
£1,226,985
- 4 **Land purchase for UK biodiversity**
£3,664,680
- 5 **Major grants**
£1,528,000
- 6 **Priority habitats at risk**
£2,795,718
- 7 **Restoration of listed building and churches**
£1,352,965
- 8 **Sport and recreation**
£1,222,591
- 9 **Children and youth facilities**
£2,783,721



Important changes to FCC Biodiversity Action Fund and FCC Heritage Fund

The Government's announcement in November 2015 to reform the Landfill Communities Fund included measures to reduce the level of the fund itself by £20m.

The impact of this, along with the reduction in landfill tonnages, will see WREN's income reduce significantly in 2016/17. As a result of this reduction the WREN Board have had to make difficult decisions regarding WREN's funding programmes and has reluctantly concluded that WREN is unable to support separate programmes for Biodiversity and Heritage. The WREN Board still wish to support UK biodiversity and heritage however this will be done through a single LCF programme, which will encompass all WREN funding themes.





Forward thinking

It's been a fast moving and fascinating year for FCC Environment and the waste and resource management industry as a whole with debate about the future taking centre stage.



Introduction

FCC Environment remains one of the UK's leading recycling and waste management companies. We employ 2,449 people across a range of facilities including materials recycling facilities, energy from waste plants, landfill sites and household waste recycling centres.

Every day we minimise the amount of waste that ends up in landfill by transforming it into a worthwhile resource. Put simply, we collect waste from businesses, local authorities and households and process it to ensure we fully realise its potential.

Our mission is simple: we want to be known as the company that looks after the needs of its customers and the environment.

We do so in a dynamic and challenging environment with global commodity prices, domestic and continent wide policy and technical issues having a significant effect on our operations and future planning.

Uncertainty about the waste and resource landscape across a number of key areas presents significant challenges but ones that, thanks to the company's wealth of experience and technical expertise, we are well placed to overcome.

Among the issues affecting the landscape in which we operate was the publication of the European Circular Economy Package.

If passed, this piece of European legislation could set new, heightened recycling targets and other environmental policies, an issue that divides opinion and triggers concern and enthusiasm for change in equal measure.

That will only apply, of course, if Britain remains in the EU – another uncertain factor given the upcoming referendum.

There is also substantive discussion taking place about recycling and materials recovery, particularly given the collapse in prices across the globe.

Steel and plastics in particular have fallen in value significantly, creating a huge challenge for the secondary materials market to which there is no easy answer.

For FCC's part we continue to strive to tailor our operations and technology to extract maximum value, both fiscally and environmentally, from the waste we process.

In Britain specifically, we've seen positive signs, in particular from new DEFRA Minister, Rory Stewart MP, who has backed new legislative amendments designed to tackle waste crime; a significant problem for companies across the industry to the tune of an estimated £568m a year.

Those measures include speeding up the process of prosecuting

[Continued »](#)

2,449

We employ 2,449 people across a range of facilities including materials recycling facilities, energy from waste plants, landfill sites and household waste recycling centres



rogue waste site operators and the introduction of fixed penalty notices for small scale fly tipping.

A review of collection methodologies has also been ordered; a welcome step forward to end the huge variety of different collection policies across virtually every local authority area in the country.

Looking to the future the outcomes of this and the other issues listed could all, in their own way, have significant effects on the business and the markets in which we operate.

Our focus, however, remains unchanged. We will strive to continue to provide sustainable solutions that help our customers meet their legislative, corporate responsibility and commercial needs by keeping recycling and green energy at the heart of our business, along with a strong focus on waste management solutions for our commercial, industrial and municipal customers.

Every day we minimise the amount of waste that ends up in landfill by transforming it into a worthwhile resource.



Industry opinion

Jacob Hayler

While our European partners focus on the European Commission's Circular Economy Package and its potential to set the framework for our sector for the next 15 years and beyond, we here in the UK's waste and recycling industry are left wondering whether it will have any impact on us at all.

The referendum scheduled for 23rd June – during the height of the negotiations on the package – is throwing an extra layer of uncertainty over the future outlook for our sector. Whatever the outcome of the referendum, one thing is absolutely certain: the UK's resources industry needs a strategy.

The existing policy framework set by Brussels and the corresponding domestic instruments – primarily landfill tax coupled with support through the waste PFI Programme – have transformed our industry beyond all recognition. Almost £10 billion industry investment has delivered landfill diversion on a scale no-one thought possible 20 years ago. We met our 2020 targets for diversion six years early and have boosted household recycling rates six-fold.

But we are now at a crossroads. Landfill tax has successfully pushed material out of landfill. But we haven't given a huge amount of thought as to where that material should subsequently go. This has left us to a significant degree dependent on thriving export markets (for both

recyclates and for Refuse Derived Fuels) to meet our environmental objectives to date.

To move forward we now need to capture more value in the UK from a circular economy model. We should encourage the next wave of investment in domestic sorting and reprocessing capacity for recyclates and in energy production for that waste which cannot be recycled. We should use stronger policy levers, such as producer responsibility, to reconfigure supply chains and design a system which delivers more recycling in terms of both quantity and quality. And we should put in place measures to incentivise the use of secondary raw materials in production. In this way we could pull quality materials through the supply chain and close the loop domestically.

The Government has a great opportunity to put in place a long-term resource strategy that would deliver the jobs and growth of the future for our sector. This strategy would set the vision for more and better recycling with more value added for the UK. It would encourage more recovery of heat and power for that waste which cannot be recycled, thereby meeting our domestic energy objectives of security of supply, value for money and low carbon energy. And it would at least meet European goals and so would be deliverable regardless of the June referendum's outcome.

[Continued »](#)

£10bn

Almost £10 billion industry investment has delivered landfill diversion on a scale no-one thought possible 20 years ago

2020

We met our 2020 targets for diversion six years early and have boosted household recycling rates six-fold

Jacob Hayler
Executive Director
Environmental
Services Association





Industry opinion

Continued »

A new settlement for regulation would clamp down on waste crime while allowing legitimate operators to flourish. Higher standards of professionalism would become entrenched across the industry as all players would know that the rules would be enforced.

A great future exists for our industry. It has been five years now since the Government last reviewed a Waste Strategy for England (and nine years since we actually had a full Strategy introduced). It is time for politicians to take notice of the positive story we have to tell and put in place a domestic long-term framework that delivers both for the economy and for the environment.

Jacob Hayler
Executive Director
Environmental Services Association

Appendix 1

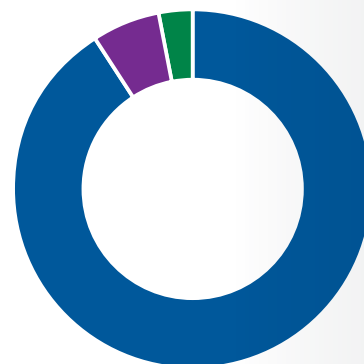
Waste management methods

Waste management methods 2009

Total landfilled
91%

Total energy recovery
6%

Total recycled
3%



Waste management methods 2015

Total landfilled
58%

Total energy recovery
10%

Total recycled
32%



Appendix 2

Carbon emissions

Tonnes CO₂ equivalent

Scope 1	2009	2010	2011	2012	2013	2014	2015
Landfill emissions	4,801,362	3,682,643	3,843,867	3,763,158	3,533,361	3,341,338	3,168,657
Energy from Waste	0	0	200,528	201,664	208,173	383,840	414,311
Fuel use (liquid & gas)	39,389	59,577	52,785	52,887	48,646	54,480	50,188
Scope 2	2009	2010	2011	2012	2013	2014	2015
Electricity	41,027	38,765	40,134	41,145	41,081	46,223	-
The way our Scope 2 emissions are calculated has been revised and redefined in accordance with the GHG Protocol, and does not now include our self-generated and supplied electricity						15,191	13,103
Scope 3	2009	2010	2011	2012	2013	2014	2015
Fuel	0	0	0	0	13,528	14,896	13,448

Gross Carbon Footprint	4,881,778	3,780,985	4,137,320	4,069,545	3,845,211	3,809,745	3,659,707
Biogenic Out of Scope Emissions	1,857,822	1,526,910	1,638,378	1,685,533	1,469,160	1,838,582	1,759,347
Net Carbon Footprint	3,023,956	2,254,075	2,498,942	2,384,012	2,376,051	1,971,163	1,900,360

Scope 1

Direct greenhouse gas emissions (carbon dioxide, methane, CFCs and HFCs) from landfill activities under full operational control, modelled using Gassim and the combustion of waste, liquid fuels and gaseous fuels.

Scope 2

Indirect greenhouse gas emissions from purchased grid electricity. In excess of 90% of this is based on accurate data.

Scope 3

Emissions from business travel using public transport, well-to-tank emissions from liquid & gaseous fuels, electricity generation, transmission and distribution and the transmission and distribution of purchased electricity.

Biogenic out of Scope

Our outside of scopes figures predominately account for our biogenic landfill and energy from

waste emissions (accounting for approximately 70% of total EfW inputs) in addition to an extremely small element within our diesel and petrol use.

All emissions factors and GWPs have been taken from the 2015 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (2015 update). This follows the GHG Protocol approach.



To find out more
call 0844 736 9992
fccenvironment.co.uk

Published by:
FCC Environment
Ground Floor West
900 Pavilion Drive
Northampton Business Park
Northampton NN4 7RG