

# MAKING MORE FROM WASTE

Corporate Responsibility Report 2014

## The **FULL** data set

This is our full corporate responsibility (CR) data document. Our publicly available annual CR Reports include highlights of our sustainability and CR performance. This document supports our CR Reports by giving fuller, more in-depth information. To see our 2014 CR Report and other information on our corporate responsibility see the 'want to know more' section at the end of this document.



## Shanks CR Report 2014 – the **FULL** data set contents and introduction

### Shanks Group is a leading international sustainable waste management business

**We meet the growing need to manage waste without damaging the environment. Our solutions reduce greenhouse gas emissions, recycle natural resources and limit fossil fuel dependency.**

We use a range of sustainable and cost-effective technologies to make valuable products from what is thrown away. We produce green energy, recovered fuel, recycled commodities and organic fertiliser, while generating returns for our shareholders. We operate in four divisions that reflect our markets: Benelux Solid Waste, Hazardous Waste, Organics and the UK. We have operations in the Netherlands, Belgium, UK and Canada, and employ nearly 4,000 people. In our target markets, we are at the forefront in providing sustainable waste management solutions for both the public and private sectors.

This is our full corporate responsibility (CR) data document. Our publicly available annual CR Reports include highlights of our sustainability and CR performance. This document supports our CR Reports by giving fuller, more in-depth information. For ease of reading this document is split as shown right.

### Contents

1. Key facts and figures about our activities
2. Sustainability and the environment – carbon footprints for our Group and divisions and Group GHG intensity ratios
3. Sustainability and the environment – wider environmental indicators, our emissions, spills and bio-diversity
4. Sustainability and the environment – wider environmental indicators, our resource use
5. Sustainability and the environment – waste types handled by our sites
6. Sustainability and the environment – our recycling and recovery performance
7. Health and safety – our accident performance
8. People – our employee absence performance
9. People – our employee retention, diversity and training performance
10. People – our age profile
11. Community – our neighbourliness performance
12. Management – our international and national accreditations
13. Management – our compliance performance
14. Want to know more? Other documents you may be interested in

### Basis for data

Each of the above sections is presented below with a brief description of what the data is and what it shows. Where given, CR data is split by our operating divisions. For further information on what each item of data means and how it has been calculated please see our 'CR Indicators document', which is available in the Our Responsibilities section on our Group web site ([www.shanksplc.com](http://www.shanksplc.com)). This CR indicators document also explains how we treat data issues such as joint ventures, our reporting cycle and other background information on our CR data.

## 1. Key facts and figures

Our operations are diverse and widespread. The data to the right illustrates this and provides readers with an overview of our operations split between each of our operating divisions and as Group totals

### Key facts and figures

Measure	Benelux Solid Waste	Hazardous Waste	Organics	UK Municipal	Group
Average number of employees <sup>3</sup>	2,209	810	72	821	3912
Active operating centres <sup>1</sup>	46	13	6	20	85
Operating centres with recycling/recovery	34	2	6	20	62
Operational landfill sites	3	0	0	2	5
Collection and transport lorries	688	125	0	45	858
Tonnes waste handled (million tonnes)	4.05	2.11	0.69	1.23	8.08
Tonnes materials recovered (million tonnes) <sup>2</sup>	3.09	2.02	0.66	0.87	6.64
Overall recycling and recovery rate	76%	96%	96%	71%	82%
Total energy generated (000' megawatt hours)	58.0	0	38.9	9.5	106.4

1. Active operating centres does not include small stand-alone civic amenity and similar sites
2. For some technologies includes water loss, such as during the production of waste derived fuels
3. May not align with data in financial report as the result of differing reporting rules

## Sustainability and the environment



## 2. Sustainability and the environment – carbon footprints

### Group carbon footprint

This is our Group carbon footprint. Unlike many other companies Shanks activities provide a carbon avoidance benefit produced from our recycling and recovery operations. The footprint right is split to reflect this: Listed first are our emissions, both direct and indirect, followed by the carbon avoidance benefit produced by our activities. For details of how we calculate this data see our CR Indicators document. The following pages contain individual footprints for our operating divisions, which when totalled result in our Group footprint

### Emissions from our activities: Shanks Group totals

Source	CO <sub>2</sub> equivalent (‘000 tonnes) <sup>1</sup> 2013	CO <sub>2</sub> equivalent (‘000 tonnes) <sup>1</sup> 2014
<b>Process based emissions</b>		
Emissions from anaerobic digestion	14	19
Emissions from composting	41	45
Emissions from hazardous waste treatment	258	255
Emissions from landfill	105	115
Emissions from mechanical biological treatment (MBT)	18	22
<b>Transport based emissions</b>		
Fuel used by waste transport vehicles	70	61
Business travel (cars, trains, flights etc)	4	4
<b>Energy use emissions</b>		
Electricity used on sites and in offices	46	64
Gas used on sites and in offices	9	9
Fuel used on sites for plant and equipment / heating <sup>2</sup>	24	20
<b>Total emissions from significant sources</b>	<b>589</b>	<b>614</b>
<b>Renewable energy generated</b>	<b>44</b>	<b>36</b>
<b>Waste derived fuels produced and sold<sup>3s</sup></b>	<b>652</b>	<b>750</b>
<b>Materials separated for re-use/recycling (some re-used directly, others undergo re-processing by 3<sup>rd</sup> parties)<sup>3</sup></b>	<b>518</b>	<b>474</b>
<b>Total potential avoided emissions</b>	<b>1214</b>	<b>1260</b>

1. Figures rounded to nearest 1,000 tonnes – totals may reflect rounding

2. Includes heat use on site for Shanks Hazardous Waste

3. Change in balance between waste derived fuels and recycling data is mainly the result of restructuring in the UK



## 2. Sustainability and the environment – carbon footprints

### Shanks Benelux Solid Waste carbon footprint

This is the carbon footprint for our Benelux Dry Waste Division operations. As for our Group carbon footprint the information is split into the emissions from our activities, followed by the carbon avoidance benefit we produce from our sustainable waste management operations

#### Emissions from our activities: Shanks Benelux Solid Waste

Source	CO <sub>2</sub> equivalent ('000 tonnes) <sup>1</sup> 2013	CO <sub>2</sub> equivalent ('000 tonnes) <sup>1</sup> 2014
<b>Process based emissions</b>		
Emissions from composting	20	23
Emissions from landfill	57	58
<b>Transport based emissions</b>		
Fuel used by waste transport vehicles	55	46
Business travel (cars, trains, flights etc)	2	2
<b>Energy use emissions</b>		
Electricity used on sites and in offices	6	14 <sup>2</sup>
Gas used on sites and in offices	7	8
Fuel used on sites for plant and equipment / heating	15	12
<b>Total emissions from significant sources</b>	<b>162</b>	<b>163</b>
<b>Renewable energy generated</b>	<b>13</b>	<b>13</b>
<b>Waste derived fuels produced and sold</b>	<b>542</b>	<b>514</b>
<b>Materials separated for re-use/recycling (some re-used directly, others undergo re-processing by 3<sup>rd</sup> parties)<sup>3</sup></b>	<b>321</b>	<b>341</b>
<b>Total potential avoided emissions</b>	<b>876</b>	<b>868</b>

1. Figures rounded to nearest 1,000 tonnes – totals may reflect rounding

2. In 2013 Shanks Benelux Solid Waste ceased buying green energy. This resulted in a change in the carbon conversion factor for electricity consumption from 22.9 g/kWh to 455 g/kWh resulting in the large change seen in emissions

## 2. Sustainability and the environment – carbon footprints

### Shanks Hazardous Waste carbon footprint

This is the carbon footprint for our Hazardous Waste Division operations. As for our Group carbon footprint the information is split into the emissions from our activities, followed by the carbon avoidance benefit we produce from our sustainable waste management operations

#### Emissions from our activities: Shanks Hazardous Waste

Source	CO <sub>2</sub> equivalent (‘000 tonnes) <sup>1</sup> 2013	CO <sub>2</sub> equivalent (‘000 tonnes) <sup>1</sup> 2014
<b>Process based emissions</b>		
Emissions from hazardous waste treatment	258	255
<b>Transport based emissions</b>		
Fuel used by waste transport vehicles	8	9
Business travel (cars, trains, flights etc)	1	1
<b>Energy use emissions</b>		
Electricity used on sites and in offices	24	25
Gas used on sites and in offices	2	1
Fuel used on sites for plant and equipment / heating	2	2
<b>Total emissions from significant sources</b>	<b>295</b>	<b>293</b>
<b>Energy from waste used on site as a fuel<sup>2</sup></b>	<b>220</b>	<b>257</b>
<b>Total potential avoided emissions</b>	<b>220</b>	<b>257</b>

- Figures rounded to nearest 1,000 tonnes – totals may reflect rounding
- Waste used on site as a fuel is unique to Shanks Hazardous Waste and is not quoted for other business units. Please note that avoided emissions from waste used on site as a fuel is not included in Shanks group's footprint as this was not included for data from the Group's base year for Shanks carbon avoidance objective. This omission to ensure the tracking of this objective is consistent from year-to-year

## 2. Sustainability and the environment – carbon footprints

### Shanks Organics carbon footprint

This is the carbon footprint for our Organics Division operations. As for our Group carbon footprint the information is split into the emissions from our activities, followed by the carbon avoidance benefit we produce from our sustainable waste management operations

#### Emissions from our activities: Shanks Organics

Source	CO <sub>2</sub> equivalent (‘000 tonnes) <sup>1</sup> 2013	CO <sub>2</sub> equivalent (‘000 tonnes) <sup>1</sup> 2014
<b>Process based emissions</b>		
Emissions from anaerobic digestion	10	11
Emissions from composting	17	18
<b>Transport based emissions</b>		
Fuel used by waste transport vehicles <sup>2</sup>	0	-
Business travel (cars, trains, flights etc)	0.3	0.3
<b>Energy use emissions</b>		
Electricity used on sites and in offices	4	8 <sup>3</sup>
Gas used on sites and in offices	0	0
Fuel used on sites for plant and equipment / heating <sup>3</sup>	3	2
<b>Total emissions from significant sources</b>	<b>34</b>	<b>39</b>
<b>Renewable energy generated</b>	<b>16</b>	<b>18</b>
<b>Energy from waste directly used on site</b>	<b>1</b>	<b>1</b>
<b>Materials separated for re-use/recycling (some re-used directly, others undergo re-processing by 3<sup>rd</sup> parties)<sup>3</sup></b>	<b>39</b>	<b>39</b>
<b>Total potential avoided emissions</b>	<b>56</b>	<b>58</b>

1. Figures rounded to nearest 1,000 tonnes – totals may reflect rounding

2. No waste collection activities and hence zero figure

3. In 2013 Shanks Organics ceased buying green energy. This resulted in a change in the carbon conversion factor for electricity consumption from 22.9 g/kWh to 455 g/kWh resulting in the large change seen in emissions



## 2. Sustainability and the environment – carbon footprints

### Shanks UK Municipal footprint

This is the carbon footprint for our UK Division operations. As for our Group carbon footprint the information is split into the emissions from our activities, followed by the carbon avoidance benefit we produce from our sustainable waste management operations

#### Emissions from our activities: Shanks UK Municipal

Source	CO <sub>2</sub> equivalent (‘000 tonnes) <sup>1</sup> 2013	CO <sub>2</sub> equivalent (‘000 tonnes) <sup>1</sup> 2014
<b>Process based emissions<sup>2</sup></b>		
Emissions from anaerobic digestion	4	8
Emissions from composting	4	4
Emissions from landfill	48	57
Emissions from mechanical biological treatment (MBT)	18	22
<b>Transport based emissions</b>		
Fuel used by waste transport vehicles	7	6
Business travel (cars, trains, flights etc)	1	1
<b>Energy use emissions</b>		
Electricity used on sites and in offices	12	17
Gas used on sites and in offices <sup>4</sup>	0	0
Fuel used on sites for plant and equipment / heating <sup>2</sup>	4	4
<b>Total emissions from significant sources</b>	<b>98</b>	<b>119</b>
<b>Renewable energy generated<sup>3</sup></b>	<b>14</b>	<b>5</b>
Waste derived fuels produced and sold	110	236 <sup>5</sup>
Materials separated for re-use/recycling (some re-used directly, others undergo re-processing by 3 <sup>rd</sup> parties) <sup>3</sup>	158	94 <sup>6</sup>
<b>Total potential avoided emissions</b>	<b>282</b>	<b>335</b>

1. Figures rounded to nearest 1,000 tonnes – totals may reflect rounding
2. Emissions include biogenic carbon
3. Decrease the result of the sale of Peckfield Landfill (which had power generation) in April 2013
4. Gas is used at only a few sites leading to zero figure with rounding
5. Additional MBT capacity brought on line during the year and increased sales of waste derived fuels
6. Affected by sale of UK commercial solid waste sites in 2013 which has changed the balance with UK operations

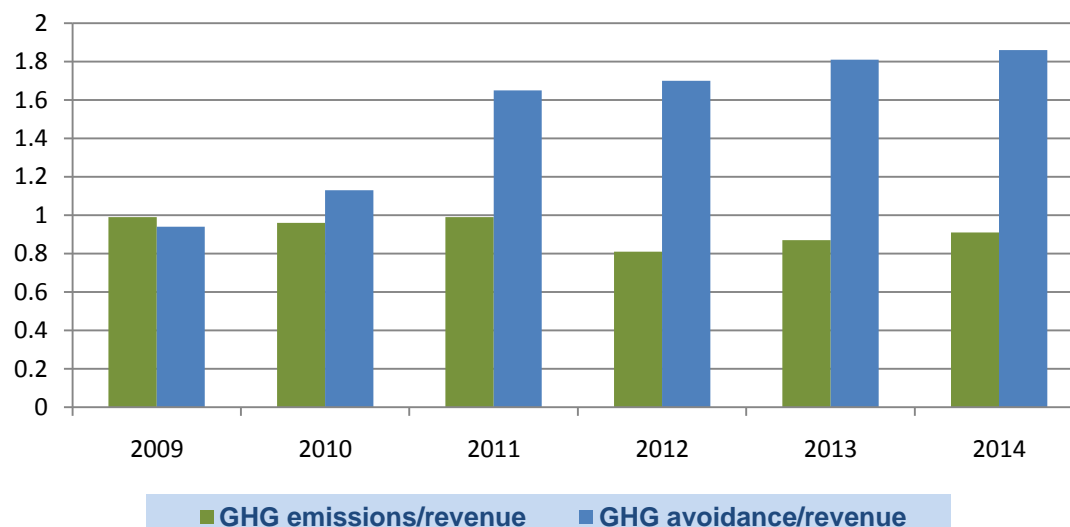
## 2. Sustainability and the environment – carbon footprints

### Group GHG intensity ratios

Shanks operations have GHG (greenhouse gas) emissions. They also facilitate carbon avoidance through their recycling, recovery and green energy production. This data is presented above. However, this data when seen in isolation may not show trends or performance over time. In order to achieve this we also present our total emissions and avoidance (as CO<sub>2</sub> equivalents) as a ratio of our turn-over. The below shows this and is expressed as '000 tonnes CO<sub>2</sub> equivalent per £ million of revenue. In broad terms, emissions intensity ratio is static or declining and avoidance intensity ratio is rising over time. This reflects Shanks strategic move towards more sustainable waste management

### GHG intensity ratios

Indicator	2009	2010	2011	2012	2013	2014
Amount greenhouse gases emitted (CO <sub>2</sub> equivalent '000 tonnes) per revenue-over (£ million)	0.99	0.96	0.99	0.81	0.87	0.91
Greenhouse gases avoided by our activities (CO <sub>2</sub> equivalent '000 tonnes) per unit revenue (£ million)	0.94	1.13	1.65	1.70	1.81	1.86



### 3. Sustainability and the environment – emissions, spills and bio-diversity

#### GHG emissions, spills and bio-diversity near to our sites

This is a synopsis of our significant greenhouse gas (GHG) emissions, spillages and biological diversity

#### GHG emissions, spills and biological diversity

Indicator	Benelux Solid Waste	Hazardous Waste	Organics	UK Municipal	Group
Amount greenhouse gases emitted key operations (CO <sub>2</sub> equivalent '000 tonnes) <sup>1</sup>	163	293	39	119	<b>614</b>
Significant spills at sites – number of reported spills required by permits	0	24 <sup>2</sup>	0	1 <sup>4</sup>	<b>25</b>
Sites with land in or next to protected or high biodiversity value areas	3 <sup>3</sup>	0	4 <sup>5</sup>	0	<b>7</b>

1. Data rounded to nearest 1,000 tonnes
2. All reportable spills at Shanks ATM site are a function of strict site permit reporting requirements
3. Area of high biodiversity as part of Shanks Monceau site which is managed in accordance with legal obligation (5,000 square metres extent). Foronex Bree is located nearby natura 2000 areas and protected bird region. Foronex Manhay is located nearby natura 2000 areas. Area of protected land near to Shanks ATM site (115,000 metres<sup>2</sup> in extent)
4. Westcott Park AD Plant. Spill of pasteurised digester feed (food waste) into site containment bund as a result of a pump failure (no release to environment). Reporting required under site permit
5. Four sites in the Netherlands near to natura areas of land

## 3. Sustainability and the environment – emissions, spills and bio-diversity

### Significant emissions

We use a wide variety of technologies. These technologies use different processes and their potential significant environmental emissions are often very different: For example, methane emissions are significant for a landfill, but not for a recycling plant. As a result reporting in a meaningful way on potentially significant emissions is complex for us, and requires common indicators and a common set of parameters to report against.

All of our sites operate under environmental permits. With the exception of Shanks Canadian operations, these permits fall under common European (EU) law. Part of this regulation is that larger facilities are required to report on specified emissions using the European Pollution Release and Transfer (EPRT) protocols. This gives us a common set of emissions and measures of significance.

However, EPRT does not cover all of our operations, only larger facilities where the regulator deems there may be significant emissions. In practice this means that Shanks EPRT emissions reporting covers some 70% of the wastes our sites handle, leaving some 30% not covered. This does not mean we do not report emissions from our non-EPRT sites - we do but as part of our greenhouse gas/carbon reporting. The table right lists our operational types in broad categories, whether they are covered by EPRT, brief descriptions of potential significant emissions and where Shanks reports on these.

For example, a small or medium sized recycling plant will typically have two significant emissions: Indirect greenhouse gas (GHG) emissions associated with electricity used on site to power recycling equipment and direct GHG emissions from diesel use in heavy mobile plant. There will be other emissions, such as discharges to sewer from employee welfare facilities, but these are very unlikely to be significant

### Significant emission types by operation type

EPRT	Operation types	Description of potential significant emissions	Where reported
EPRT sites Some 70% waste handled	Landfills	Treated leachate to environment/sewer Methane to environment from landfill gas Direct CO <sub>2</sub> and other GHG to environment from landfill gas Direct CO <sub>2</sub> and other GHG to from green energy generation Direct CO <sub>2</sub> and other GHG emissions from fuel use (mobile plant)	CO <sub>2</sub> and other GHG emissions included in Shanks carbon footprints. Other emissions in EPRT data as below
	Mechanical Biological treatment	Effluent discharge to environment/sewer Direct CO <sub>2</sub> and other GHG to environment Indirect GHG emissions from power use (eg, electricity) Direct CO <sub>2</sub> and other GHG emissions from fuel use (mobile plant)	
	Hazardous waste treatment	Effluent discharge to environment/sewer Direct CO <sub>2</sub> and other GHG to environment Indirect GHG emissions from power use	
	Larger recycling plants	Indirect CO <sub>2</sub> / other GHG emissions from power use (eg, electricity) Direct CO <sub>2</sub> and other GHG emissions from fuel use (mobile plant)	
	Larger composting plants	Direct CO <sub>2</sub> and other GHG to environment from compost process Indirect GHG emissions from power use (eg, electricity) Direct CO <sub>2</sub> and other GHG emissions from fuel use (mobile plant)	
	Larger AD plants	Direct CO <sub>2</sub> and other GHG to from green energy generation Indirect GHG emissions from power use (eg, electricity) Direct CO <sub>2</sub> and other GHG emissions from fuel use (mobile plant)	
Non-EPRT sites Some 30% waste handled	Smaller recycling plants	Indirect CO <sub>2</sub> and other GHG emissions from power use (eg, electricity) Direct CO <sub>2</sub> and other GHG emissions from fuel use (mobile plant)	CO <sub>2</sub> and other GHG emissions included in Shanks carbon footprints
	Smaller recovery plants	Indirect CO <sub>2</sub> and other GHG emissions from power use (eg, electricity) Direct CO <sub>2</sub> and other GHG emissions from fuel use (mobile plant)	
	Smaller AD plants	Direct CO <sub>2</sub> and other GHG to from green energy generation Indirect GHG emissions from power use (eg, electricity) Direct CO <sub>2</sub> and other GHG emissions from fuel use (mobile plant)	
	Transfer stations	Direct CO <sub>2</sub> and other GHG emissions from fuel use (mobile plant)	
	Amenity sites	Direct CO <sub>2</sub> and other GHG emissions from fuel use (mobile plant)	
NA	Offices	Indirect CO <sub>2</sub> and other GHG emissions from power use (eg, electricity)	CO <sub>2</sub> and other GHG emissions included in Shanks carbon footprints
	Vehicles sites	Direct CO <sub>2</sub> and other GHG emissions from fuel use (road lorries)	

### 3. Sustainability and the environment – emissions, spills and bio-diversity

#### EPRTR emissions

The table right shows emissions from our sites under EPRTR reporting. These are cumulative – the total emissions for all of our EPRTR sites across the Group. Which emissions any site is required to report on is decided by the regulator and reporting requirements vary. Notes are given (see ref No next to each emission data-set and comments below). However, reflecting the complexity of the data, the following also need to be accounted for:

- ✓ Thresholds under EPRTR (columns headed 'EPRTR thresholds') are for single sites and not for a company's total emissions. We have chosen to report on all EPRTR emissions and notes are given on whether any single site reported emissions above threshold
- ✓ EPRTR covers both the 'release' and 'transfer' of emissions. For releases these are emissions direct to the environment. For transfers these are emissions to secondary treatment. For example, a discharge to a sewer where further treatment will be applied before release into the environment. Where threshold has been exceeded, but only by transfer this is noted (those emissions marked in final column as reference 4)
- ✓ Much of the below data is based on monitoring of emissions. However, some is based on modelling. In particular where emissions may be from a diffuse source, such as fugitive emissions of methane through a landfill cap where direct measurement is not practical. As with most modelled data its value may be more in an ability to benchmark rather than as an exact measurement of emissions
- ✓ For data derived from models some of the assumptions in the model used may result in over-estimation. For example, emissions of CFCs and HCFCs from landfill sites may be lower than shown as a result of assumptions in the models used to derive this data

EPRTR emission	EPRTR threshold kg/year			Group total emissions kg/year			Ref
	Air	Water	Soil	Air	Water	Soil	
Methane (CH <sub>4</sub> )	100000	-	-	2244216	-	-	1
Carbon monoxide (CO)	500000	-	-	53145	-	-	2
Carbon dioxide (CO <sub>2</sub> )	10000000	-	-	70513058	-	-	2
Ammonia (NH <sub>3</sub> )	10000	-	-	8460	3732	-	2
Nitrogen oxides (NO <sub>x</sub> /NO <sub>2</sub> )	100000	-	-	326153	-	-	3
Sulphur oxides (SO <sub>x</sub> /SO <sub>2</sub> )	150000	-	-	45587	-	-	2
Total nitrogen	-	50000	50000	-	242027	211560	4/7
Total phosphorus	-	5000	5000	-	3741	167700	2/7
Chlorofluorocarbons (CFCs) (6) 1	1	-	-	39	-	-	1
Arsenic and compounds (as As)	20	5	5	-	13	43	4/7
Cadmium and compounds (as Cd)	10	5	5	-	0.1	1	2
Chromium and compounds (as Cr)	100	50	50	-	12	211	2/7
Copper and compounds (as Cu)	100	50	50	-	10	274	2/7
Mercury and compounds (as Hg)	10	1	1	-	0.1	0.3	2
Nickel and compounds (as Ni)	50	20	20	-	312	835	4/7
Lead and compounds (as Pb)	200	20	20	-	4	43	2/7
Zinc and compounds (as Zn)	200	100	100	-	368	1929	4/7
2 1,2-dichloroethane (EDC)	1000	10	10	-	47	-	2
2 Dichloromethane (DCM)	1000	10	10	-	38	-	4

### 3. Sustainability and the environment – emissions, spills and bio-diversity

#### EPRTR emissions continued

Key to notes (see reference number in right hand column)

1. Threshold only exceeded at landfill sites
2. Threshold not exceeded cumulatively or at any site
3. Threshold exceeded at one site only (hazardous waste destruction to prevent environmental damage)
4. Threshold only exceeded as a transfer to secondary treatment not as release to the environment
5. Threshold only exceeded at landfill sites - data is based on models and likely an over-estimate
6. Threshold not exceeded at any one site
7. Green composts placed to land

**General notes:** Data is for 2012 as reported by Shanks sites under EPRTR. Some of the data (such as methane and carbon dioxide) is already reported on as carbon equivalents in Shanks carbon footprints. Exceeding an EPRT threshold, even at an individual site, does not imply any breach of an environmental permit or an unacceptable level of emission, simply that the emission is significant

EPRTR emission	EPRTR threshold kg/year			Group total emissions kg/year			Ref
	Air	Water	Soil	Air	Water	Soil	
Halogenated organic compounds	-	1000	1000	-	99.8	-	2
Simazine	-	1	1	0.98	-	-	2
Tetrachloroethylene (PER)	2000	20	-	-	2	-	2
Tetrachloromethane (TCM)	100	1	-	-	2	-	4
Benzene	1000	200	200	9385	1	-	1
Ethyl benzene	-	200	200	-	1.4	-	2
Naphthalene	100	10	10	-	1.1	-	2
Organotin compounds(as total Sn)	-	50	50	15	0	-	2
Phenols (as total C)	-	20	20	-	95	-	4
Polycyclic aromatic hydrocarbons	50	5	5	-	8	-	2
Toluene	-	200	200	0.06	1.4	-	2
Total organic carbon (TOC)	-	50000	-	-	394293	-	4
Xylenes	-	200	200	-	2	-	2
Chlorides (as total Cl)	-	2000000	2000000	-	4746052	-	4
Cyanides (as total CN)	-	50	50	-	84	-	4
Fluorides (as total F)	-	2000	2000	-	80	-	2
Particulate matter (PM10)	50000	-	-	2408	11430	-	2
Fluoranthene	-	1	-	-	0.2	-	2



## 4. Sustainability and the environment – resources and consumption

### Our resource use

This data is a synopsis of our resource use across our activities. As for other data the basis for calculation is included in our CR indicators document available on our Group web site ([www.shanksplc.com](http://www.shanksplc.com)) in the Our Responsibilities section

### Resource use

Indicator	Benelux Solid Waste		Hazardous Waste		Organics		UK Municipal		Group	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Electricity consumption (000' Kilowatt hours)	41154	39477	52887	54958	20669	21419	24139	30604	138849	146458
Gas used at sites and offices (cubic metres)	3759	4503	926	868	12	21	46632	25180	51329	30572
Fuel use at sites and offices (000' litres) <sup>1</sup>	5053	3869	410	548	874	802	1365	1241	7702	6460
Fuel used waste collection vehicles (000' litres) <sup>1</sup>	18697	15362	3078	2743	-	0	2738	2244	24513	20349
Electricity generated (Mega watt hours)	58660	57951	-	-	35665	38972	21543	9455 <sup>3</sup>	115868	106378
Water used at sites - potable water ('000 m <sup>3</sup> ) <sup>2</sup>	80	79	139	117	8	32	47	39	274	267
Water used at sites – surface water ('000 m <sup>3</sup> ) <sup>2</sup>	18	29	3842	3149	-	-	-	-	3860	3178
Water used at sites – groundwater ('000 m <sup>3</sup> ) <sup>2</sup>	48	47	-	-	9	12	-	-	57	59
Water used at sites – rain water ('000 m <sup>3</sup> ) <sup>2</sup>	36	36	20	21	24	-	0.5	0.5	80.5	57.5
Water used at sites – grey water ('000 m <sup>3</sup> ) <sup>2</sup>	83	84	613	690	81	65	-	-	777	839

1. Diesel fuel used (for site use mainly in heavy mobile or static plant)
2. Data rounded to nearest 1,000 m<sup>3</sup>
3. Sale of Peckfield landfill in April 2013 has resulted in lower electricity production

## 5. Sustainability and the environment – waste types handled by Shanks sites

### Our waste types

As a waste management company, the wastes we accept are our raw materials. Right is a synopsis of the waste types we accept and the tonnages of each accepted in the year. As for other data this is split between our divisions plus a Group total

### Wastes accepted by our sites

Waste type <sup>1,2</sup>	Benelux Solid Waste	Hazardous Waste	Organics	UK Municipal	Group
Bulky waste	59	-	-	-	59
Construction and demolition	442	-	-	20	462
Commercial waste	589	-	13	160	762
Compost	1	-	-	-	1
Domestic waste	97	-	-	700	797
Food waste	53	-	149	1	203
Glass and ceramics	147	-	-	1	148
Green waste	315	-	342	1	658
Landfill	158	-	-	-	158
Liquid waste	115	693	138	-	946
Metals	12	-	-	-	12
Paper based	137	-	0.7	3	141
Plastics	29	-	-	2	31
Rockwool	55	-	-	-	55
Rubber	10	-	-	-	10
Rubble	1019	-	-	-	1019
Soil / sand / sludge	383	1.141	41	1	1566
Special waste	70	32	12	-	114
SRF / RDF (waste derived fuels)	1	-	-	10	11
Wood	262	-	-	10	272
General waste	0.2	-	-	-	0
Other	91	66	-	330	487
<b>Totals</b>	<b>4046</b>	<b>1932</b>	<b>696</b>	<b>1239</b>	<b>7912</b>

- Figures are '000 tonnes, may reflect rounding and may not total. As a result of rounding and small scale wastes not included data may be different to waste data elsewhere in this document
- Data is for wastes received at Shanks sites (handled) and does not include wastes collected and transported to third party site

## 6. Sustainability and the environment – recycling and recovery performance

### Our recycling and recovery rates

As a sustainable waste management company one of Shanks key performance measures is its recycling and recovery rate. Our recycling and recovery activities have a positive resource benefit and underpin our carbon avoidance benefit. The below data shows how much of the wastes we handle were recycled or recovered in the year compared to the previous year

#### Resource use

Indicator	Benelux Solid Waste		Hazardous Waste		Organics		UK Municipal		Group	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Total waste handled at Shanks sites (million tonnes)	3.93	4.05	1.71	2.11	0.68	0.69	1.51	1.23	7.83	8.08
Amount of materials recovered from waste at Shanks sites (million tonnes) <sup>1</sup>	3.00	2.67	1.62	2.02	0.66	0.66	0.81	0.87	6.09	6.64
Proportion of total waste handled at sites recovered from the waste stream (%) <sup>1</sup>	76%	76%	96%	97%	98%	96%	54%	71% <sup>3</sup>	78%	82%
Tonnes of waste handled at Shanks sites sent for landfill disposal (million tonnes) <sup>2</sup>	0.35	0.86	0	0	0	0.03	0.64	0.27	0.99	1.16
Tonnes of waste handled at sites sent for incineration disposal (million tonnes) <sup>2</sup>	0.58	0.10	0.06	0.05	0.01	0.002	0.06	0.08	0.71	0.23

1. Includes water recovery and moisture loss during treatment for some technologies employed

2. Summing wastes sent to landfill and incineration will not always result in total as the result of rounding

3. Large increase in recycling and recovery rate mainly the result of: Sale of last commercial landfill site in April 2013, sale of commercial waste operations in December 2013 and increased sales of waste derived fuels

## Health and safety



## 7. Health and safety – our accident performance

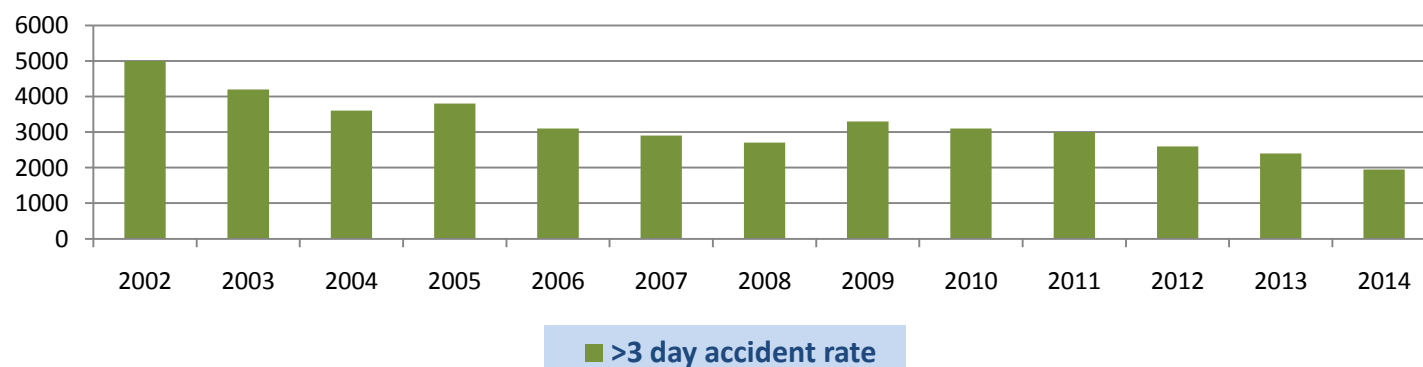
### Our accident performance

The health, safety and wellbeing of all of our employees are key issues for Shanks. We accept that we operate in a known high-risk sector. The most basic measure of accident rate is shown right, along with severity and lost time accident frequency rates on the following pages. Together this data provides the top-line indicators of our success in this area

#### Employee accidents 2013 and 2014 years

Indicator	Benelux Solid Waste		Hazardous Waste		Organics		UK Municipal		Group	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Total Number LTAs (lost time accidents)	85	58	5	4	3	4	29	45	122	111
LTA rate	3700	2950	650	500	4300	5550	3200	5550	3000	3100
Number >3 day accidents	76	55	5	4	0	1	17	12	98	72
>3 day accident rate	3300	2700	650	5000	0	1400	1850	1450	2400	1950
Number fatal accidents	0	0	0	0	0	0	0	0	0	0

#### Employee >3 day accident rates 2002 to 2014 – long term trend



## 7. Health and safety – our accident performance

### Key to terms used in health and safety tables and graphs

In all of the health and safety tables and graphs the accident categories used are:

**>3 day accident** – any injury suffered by an employee which results in more than three days off work. Note – in some Shanks documents this type of accident is referred to as 'reportable'. In Shanks documents, the terms 'reportable' and '>3 day' are interchangeable and mean the same. The term 'reportable' is internal only and does not imply any regulatory definition. Shanks has decided to use >3 day as a definition to allow comparison both between Shanks divisions and over time.

**LTA (lost time accident) injury** – any injury suffered by an employee which results in at least one day off work.

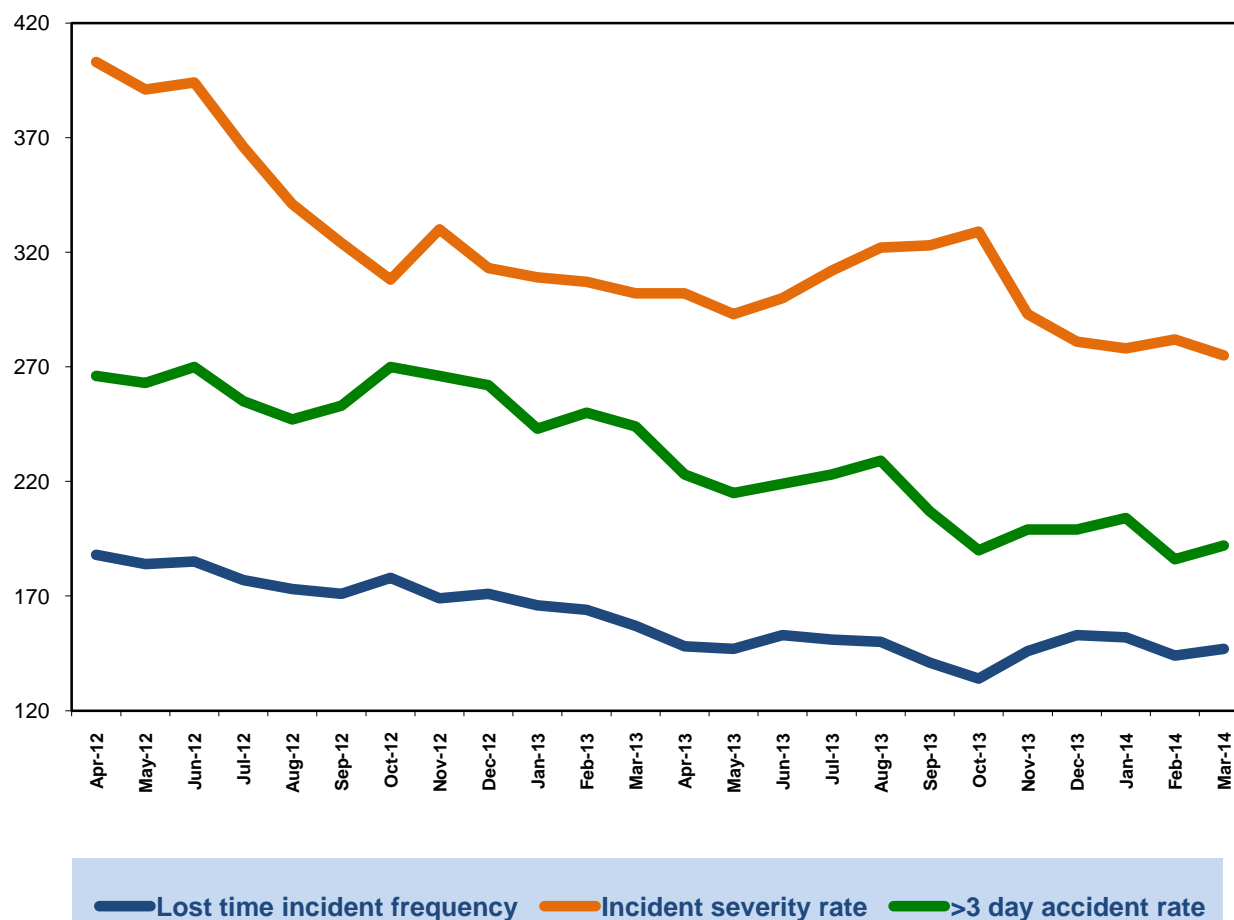
**Fatal accidents** – fatal employee workplace accidents.

**>3 day and LTA accident rates** – total accident figures do not allow adequate comparisons to be made over time as employee numbers can, and do, change. The accident rates quoted are per 100,000 employees. These rate figures are a truer measure of accident performance.

**LTA frequency** – number of lost time employee accidents per 100,000 days worked. Note – data is presented on a rolling 12 month basis to smooth any month-to-month changes and allow the data to represent trends

**Incident severity rate** – average number of days lost per lost time employee accident. Note – data is presented on a rolling 12 month basis to smooth any month-to-month changes and allow the data to represent trends

Shanks Group lost time accident frequency and severity 2013 and 2014





## Our people



## 8. Our people – sickness absence performance

### Our people – sickness absence

Absence from work may be for work reasons, such as a workplace accident, or for non-work related reasons. Right is a synopsis of our employee absence data. As for other data this is presented split into our operating divisions and as Group totals

#### Sickness absence

Indicator	Benelux Solid Waste		Hazardous Waste		Organics		UK Municipal		Group	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Total employee absenteeism from work (% of available days)	4.7	5.6	4.3	4.0	3.8	2.2	5.0	4.4	4.7	5.1
Work related accident absenteeism (% of available days)	0.6	0.3	0.3	0.16	0.01	0.0002	0.16	0.29	0.6	0.3
Non-work related absenteeism from work (% of available days)	4.1	5.3	4.0	3.80	3.8	2.2	4.8	4.1	4.1	4.8
Average duration of employee absence (days)	19	21	14	25	7	8	10	10	19	19
Average frequency of absence (number of absence periods)	1.1	3.1	0.7	0.7	1.2	0.7	1.3	1.1	1.1	2.1
Employees with more than 2 absence periods (% of workforce)	13	16	14	12	10	14	18	14	13	16
Employees with zero absence days (% of workforce)	44	44	55	59	56	55	39	47	44	48

1. Data as percentages may not sum to totals as a result of rounding

## 9. Our people – employee retention, training and general performance

### Our people

Right is synopsis data on our people performance

1. Employee numbers are by divisional reporting line and may vary from those contained in Shanks annual financial report
2. Statutory directors only as listed in company data
3. Other senior executives/directors such as divisional MD direct reports. Note – not including statutory directors noted in the lines above to avoid double-counting
4. Male/female splits are as at year-end for reporting rules reasons, whereas total employee figures are averages – male/female splits may not total to averages
5. Director and senior executive data only given as Group totals
6. Includes Group central services
7. Data not collected on a consistent basis for 2013
8. Figure affected by the sale of UK commercial waste sites in December 2013

### People performance indicators

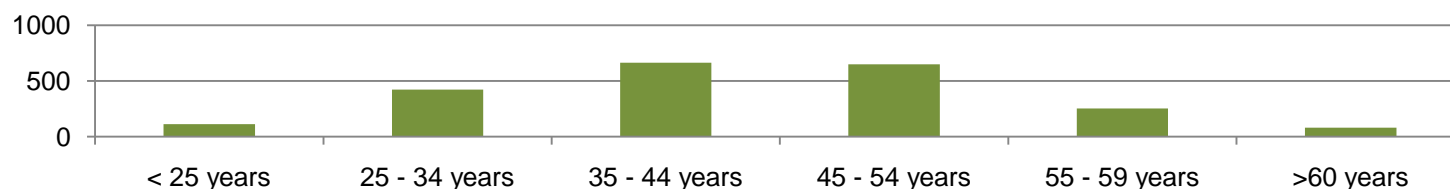
Indicator	Benelux Solid Waste		Hazardous Waste		Organics		UK Municipal		Group	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
<b>Total number permanent employees<sup>1</sup></b>	2285	2209	749	810	77	72	900	821	<b>4011</b>	<b>3912</b>
<b>No. operational site employees</b>	1789	1662	490	519	47	45	556	497	<b>2882</b>	<b>2723</b>
<b>No. support, etc. employees</b>	496	547	259	291	30	27	344	324	<b>1129</b>	<b>1189</b>
<b>No. male permanent employees<sup>4</sup></b>	1939	1930	644	697	63	59	738	457	<b>3384</b>	<b>3143</b>
<b>No female permanent employees<sup>4</sup></b>	346	246	105	115	14	13	162	123	<b>627</b>	<b>497</b>
<b>No. male statutory directors<sup>2,4,5</sup></b>	-	-	-	-	-	-	-	-	<b>-<sup>7</sup></b>	<b>34</b>
<b>Number female statutory directors<sup>2,4,5</sup></b>	-	-	-	-	-	-	-	-	<b>-<sup>7</sup></b>	<b>2</b>
<b>No. male senior executives/directors<sup>3,4,5</sup></b>	-	-	-	-	-	-	-	-	<b>-<sup>7</sup></b>	<b>7</b>
<b>No. female senior executives/directors<sup>3,4,5</sup></b>	-	-	-	-	-	-	-	-	<b>-<sup>7</sup></b>	<b>3</b>
<b>No. of full-time permanent employees</b>	2132	2044	661	718	66	62	880	794	<b>3739</b>	<b>3618</b>
<b>No. part-time permanent employees</b>	153	165	88	92	11	10	20	27	<b>272</b>	<b>294</b>
<b>Permanent employee turnover (%)</b>	8	9	6	6	18	16	23	64 <sup>8</sup>	<b>11</b>	<b>20<sup>8</sup></b>
<b>Average years service for employees</b>	10	10	10	10	3	4	6	6	<b>9</b>	<b>9</b>
<b>No. training days per employee</b>	1.4	1.2	8.0	9.3	2.9	3.0	3.0	3.1	<b>3.5</b>	<b>3.3</b>
<b>No. non-permanent employees</b>	211	177	82	128	14	10	130	111	<b>437</b>	<b>426</b>
<b>No. cases of discrimination</b>	-	-	-	-	-	0	-	-	<b>-</b>	<b>-</b>
<b>% employees covered by formal safety consultation committees</b>	84	84	100	100	100	100	85	100	<b>88</b>	<b>91</b>

## 10. Our people – age profiles

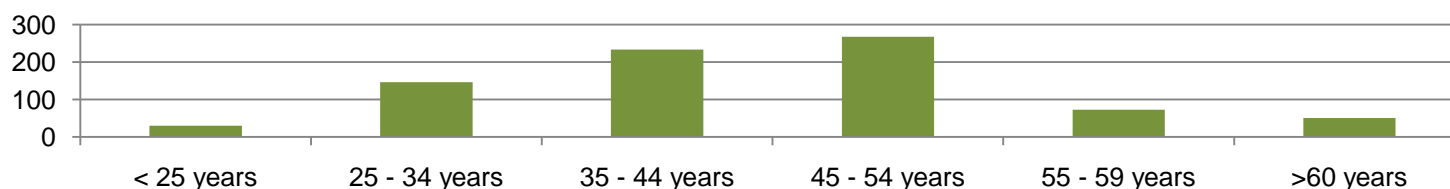
### Our people – age profile of our people

Right are graphs showing the age spread of our employees. These are presented as four graphs: One for each of our operating divisions

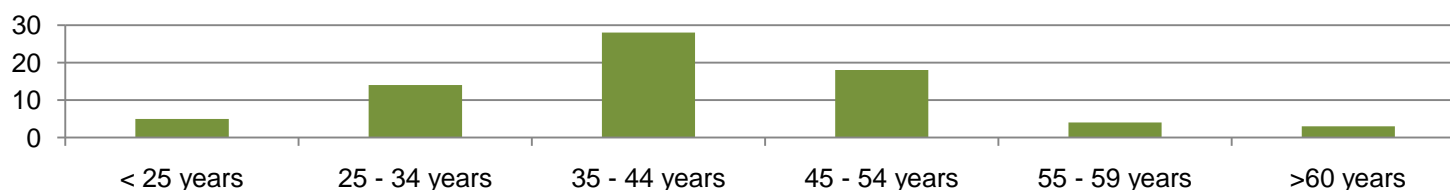
Age profile by number of employees – Shanks Benelux Solid Waste



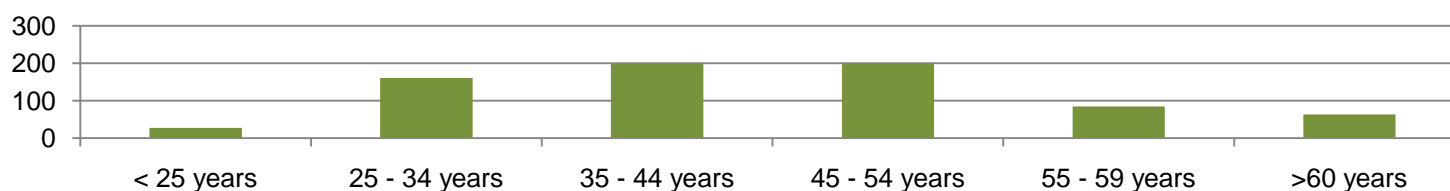
Age profile by number of employees – Shanks Hazardous Waste



Age profile by number of employees – Shanks Organics



Age profile by number of employees – Shanks UK



## Community relations





## 11. Community – our neighbourliness performance

### Community – complaints performance

The local communities around our sites are a critical stakeholder group for Shanks. If we do not engage with local communities we may find it difficult to gain new environmental permits or develop existing permissions. One of the most obvious performance indicators of our neighbourliness is the number of environmental complaints received by our sites

#### Numbers of complaints

Indicator	Benelux Solid Waste		Hazardous Waste		Organics		UK Municipal		Group	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Number environmental complaints received by our sites/operations <sup>1</sup>	112	41	174	125	153	64	59	106	498	336
Average number of complaints per site (out of total number of sites)	2.6	0,89	13	10	26	10,7	1.5	5.3	4.8	4.0
Types of complaint										
Odour	68	33	174	124	152	62	55	32	-	-
Litter	-	-	-	-	-	-	3	3	-	-
Vermin	1	-	-	-	-	-	-	64 <sup>2</sup>	-	-
Traffic	-	1	-	-	-	-	-	3	-	-
Mud / Dust	15	2	-	-	-	2	1	4	-	-
Noise	19	3	-	-	-	-	-	-	-	-
Other	9	2	-	1	1	-	-	-	-	-
<b>Total</b>	<b>112</b>	<b>41</b>	<b>174</b>	<b>125</b>	<b>153</b>	<b>64</b>	<b>59</b>	<b>106</b>	<b>-</b>	<b>-</b>

1. Includes all complaints, both those substantiated and those not substantiated

2. Mainly fly complaints relating to one site. Complaint levels at this site have now reduced significantly as a result of actions taken by Shanks



## Sustainable management systems



## 12. Sustainable management – our accreditations

### Management systems – our accreditations

We seek to continuously improve the way we manage our operations to gain further sustainability benefits and to ensure we are compliant with the law and good practice. This is also a critical customer issue for us. Below is a synopsis of the main international and national accreditations we hold. As for other data in the document the information is split by our operating divisions and also shown as Group totals

#### Our formal accreditations

Accreditation	Benelux Solid Waste		Hazardous Waste		Organics		UK Municipal <sup>1,2</sup>		Group totals	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
ISO14001 / EMAS	31	29	16	17	-	-	39	20	86	66
ISO 9001	34	34	14	15	5	4	39	20	92	73
OSHAS 18001	6	6	15	16	-	-	39	20	60	42
SCC / VCA	21	19	14	15	-	-	-	-	35	34
Other	13	11	10	12	3	3	-	-	26	23

- Figures for UK include certification for Shanks Dumfries and Galloway, for the project management of the Dumfries and Galloway Council waste management contract, which involves 11 sites and certification for Shanks Derbyshire and Cumbria, which involves a series of sub-contracted operations (all three only counted as one certification each)
- Reduction the result of the sale of UK commercial waste sites in December 2013

ISO14001 / EMAS – international environmental management standards  
 ISO9001 – international quality standard  
 OHSAS18001 – international health and safety standard  
 SCC / VCA – national health and safety standards

In addition to our formal accreditations, we also take part in high-profile corporate responsibility and sustainability assessments. For example, we are listed in the FTSE4Good index and take part in the Carbon Disclosure Project

## 13. Sustainable management – our compliance performance

### Management systems – our compliance

We aim to achieve high standards. When we do not meet these standards, we are open and transparent about this. We see such failings as opportunities to improve. Right is a synopsis of our compliance record for the year

#### Our compliance performance

Indicator	Benelux Solid Waste		Hazardous Waste		Organics		UK Municipal <sup>1,2</sup>		Group totals	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Number of environmental convictions and fines <sup>1</sup>	1	3	0	0	0	0	0	1	1	4
Number of health and safety convictions and fines	0	0	1	0	0	0	0	0	0	0
Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	0	0	0	0	0	0	0	0	0	0
% of operations which have undergone risk assessment for bribery and other similar risks	100	100	100	100	100	100	100	100	100	100

1. Data is for convictions (cases where the company goes to court) and administrative fines (such as those in Belgium and the Netherlands)

#### Our compliance performance – details of cases

<b>Operation:</b>	Shanks Waste Management Ltd (UK)
<b>Date:</b>	April 2013
<b>Penalty:</b>	Spot fine of 1200 Euro
<b>Details:</b>	Administration error on transfrontier shipment paperwork for waste derived fuel consigned to the Netherlands
<b>Operation:</b>	Foronex International NV (Belgium)
<b>Date:</b>	June 2013
<b>Penalty:</b>	24.000 euro effective immediately and 6.000 euro postponed
<b>Details:</b>	Repeated dust nuisance
<b>Operation:</b>	Van Vliet Recycling (Netherlands)
<b>Date:</b>	March 2014
<b>Penalty:</b>	2400 euro
<b>Details:</b>	Transport of compost without correct paperwork and reporting issues
<b>Operation:</b>	ToI Milieu Burgerbrug (Netherlands)
<b>Date:</b>	March 2014
<b>Penalty:</b>	2000 euro
<b>Details:</b>	Transport of electronics waste (WEEE) without correct documentation,

## 14. Want to know more about Shanks?

### Want to know more?

This CR the full data document is not the only document we produce on our approach to sustainability. The details given right will take you to other sources of information

#### Want to see our formal annual CR Reports?

Our annual CR Reports are publicly available and provide explanations, discussion and further information on our approach to sustainability, including case studies. Our CR Reports are available in the Our Responsibilities section of our Group web site ([www.shanksplc.com](http://www.shanksplc.com))

#### Want to know how we calculate our CR data?

Our CR indicators document defines each of the items of data we release and how they are calculated. It also gives the general rules we use for our reporting. To see our CR indicators document go to the Our Responsibilities section of our Group web site ([www.shanksplc.com](http://www.shanksplc.com))

#### Want to see how our reporting is in line with GRI guidance?

The data and disclosures in our CR Report, and our other publicly available documents, are based on the requirements of the Global Reporting Initiative (GRI). To see how our reporting complies with GRI go to the Our Responsibilities section of our Group web site ([www.shanksplc.com](http://www.shanksplc.com))

#### Want to know more about our strategy and financial performance?

Our annual financial report is publicly available. Our annual reports give more information on Shanks, its activities, our strategy, financial performance and governance. To see our annual report, go to the Investment Centre section of our Group web site ([www.shanksplc.com](http://www.shanksplc.com))

#### Do you have a comment or question on our CR report or activities?

Contact us at [CRinfo@shanks.co.uk](mailto:CRinfo@shanks.co.uk). Or, if you do not have access to e-mail please use the contact details given in the contacts section on the rear inside cover of our CR Reports (see above)