



CORPORATE RESPONSIBILITY REPORT 2018

FULL DATA DOCUMENT

Waste no more

This is our Corporate Social Responsibility (CSR) Full Data Document. Our publicly available annual CSR Reports include highlights of our sustainability and CSR performance. This document supports our CSR Report by giving additional and more in-depth information, such as divisional splits of data and detailed emissions figures. Please visit our dedicated CSR website www.renewiplc.com/ourresponsibilities for more information



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Renewi CSR Report 2018 – Full data document

Renewi was formed in February 2017 by the merger of Van Gansewinkel Group (VGG) and Shanks. Each of our legacy businesses differed in how they defined and reported on CSR performance. As a result, Renewi's 2017 CSR Report was a transitional report in which the data was represented as a sum of the totals from the two legacy businesses. For this year's reporting, we have calculated our CSR statistics on a fully merged basis, which also gives us the opportunity to report on divisional performance in this full data document. Our divisional structure is as follows:

- Belgium Commercial Waste
- Netherlands Commercial Waste
- Hazardous Waste
- Municipal UK
- Monostreams

We are a leading waste-to-product business ideally positioned to be part of the solution to some of the main environmental problems facing society today.

In a world where resources are limited, the status of waste is changing. By giving new life to used materials, we play an important role in the circular economy – an economy that keeps resources in use for as long as possible through recycling and recovery. This is our purpose. In order to fulfil our purpose, our vision is to be the leading waste-to-product company.

We use a range of sustainable and cost-effective technologies to make valuable products from waste that is thrown away. We see waste as an opportunity to give new life to used materials. We transform waste into useful products, such as recycled paper, metal, plastic, glass, woodchips, compost, energy and fuel, while generating returns for our shareholders.

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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, CSR 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 'CSR Indicators document', which is available in the Our Responsibilities section on our Group web site (www.renewiplc.com/ourresponsibilities). This CSR indicators document also explains how we treat data issues such as joint ventures, reporting cycle and other information on our CR data.

1. Renewi at a glance

Overview	Indicator	Belgium Commercial Waste	Netherlands Commercial Waste	Hazardous Waste	Municipal	Mono-streams	Renewi total
<p>Our operations are diverse and widespread. The data to the right illustrates this and provides readers with an overview of our operations. Remarks:</p> <ol style="list-style-type: none"> The total figure includes 254 FTE who work at Group Central Services Number operating centres does not include small stand-alone civic amenity, offices and other non-operational sites Total waste handled at sites is calculated based on total accepted waste minus waste diverted from landfill and disposal incineration 	Number of employees (FTE)	1,708	3,034	943	700	461	7,100
	Number operating sites	41	77	17	38	25	198
	Operating sites with recycling/recovery	19	32	2	38	25	114
	Operational landfill sites	1	1	0	2	3	7
	Number waste collection and transport trucks	733	1,423	304	25	0	2,485
	Total waste handled at sites (million tonnes)	2.59	5.02	1.88	1.63	2.91	14.02
	Recycling and recovery as % of total waste handled ⁴	90.5%	93.8%	97%	78.5%	80.4%	89.1%
	Green electricity generated (Megawatt hours)	46,098	3,280	1,097	35,912	57,075	143,462



PLANET

We give new life to used materials. This helps to protect the world's limited resources and preserve the planet for future generations. Our work puts us at the heart of the circular economy



2. Planet – Recycling and recovery performance

Our vision is to be the leading waste-to-product company	Indicator ¹	Belgium Commercial Waste		Netherlands Commercial Waste		Hazardous Waste		Municipal		Monostreams		Renewi total	
		2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18
Our recycling and recovery performance is key to this. The table at the right shows how much waste we received at our sites, and how much of this was recycled and recovered rather than being disposed of in the year compared to the previous year	Total waste handled at sites (million tonnes)	2.70	2.59	5.35	5.02	2.03	1.88	1.74	1.63	2.86	2.91	14.68	14.02
	Materials recycled (million tonnes) ²	1.33	1.54	3.58	3.12	1.93	1.78	0.71	0.58	2.23	2.29	9.78	9.30
	Materials recovered (million tonnes) ²	0.90	0.80	1.47	1.59	0.05	0.05	0.63	0.70	0.04	0.05	3.09	3.19
	Total materials recycled and recovered (million tonnes) ^{2,3}	2.23	2.34	5.05	4.71	1.98	1.82	1.34	1.28	2.28	2.34	12.87	12.49
	Recycling as % of total waste handled	49.4%	59.6%	66.9%	62.1%	94.9%	94.5%	40.8%	35.6%	78.0%	78.6%	66.6%	66.3%
	Recycling and recovery as % of total waste handled	82.6%	90.5%	94.4%	93.8%	97.3%	97.0%	77.0%	78.5%	79.5%	80.4%	87.7%	89.1%

1. For our 2018 reporting we have calculated our waste statistics on a fully merged basis. This includes the removal of internal waste transfers between our sites which may have formerly been operated by Shanks or Van Gansewinkel. This avoids double counting. We have recalculated our 2017 data to allow valid year-on-year comparison, and restated our 2017 waste statistics accordingly.

2. Recycling is materials given a 'second life' for reprocessing into new goods/materials. Recovery is waste used for energy production such as production of waste derived fuels, bio-mass and similar

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

3. Planet – Waste to raw materials

Our waste types	Indicator	Belgium Commercial Waste	Netherlands Commercial Waste	Hazardous Waste	Municipal	Mono-streams	Renewi total
	<p>As a waste management company, our purpose is to turn the wastes we accept into raw materials. Right is a synopsis of the waste types we accepted, split into main categories (in '000 tonnes). As for other data this is split between our divisions plus a Renewi total.</p> <p>For an insight in which waste categories fall under these main-categories, see the CSR indicators document available on our Group web site in the 'Our Responsibilities' section.</p>	Residual (household) waste, biomass, SRF / RDF (incineration)	801	1,592	47	700	66
Landfill + incineration disposal		246	309	56	350	554	1,516
Minerals		392	1,557	1,058	61	455	3,523
Glass		21	127	-	39	1,169	1,357
Wood		384	299	-	32	-	716
Plastics		32	45	-	16	-	94
Metals		33	104	-	26	-	163
Paper		204	379	-	29	-	612
Hazardous		179	55	717	-	-	950
Organic waste		116	265	-	324	522	1,226
Electrical/electronic waste (WEEE)		-	-	-	-	139	140
Other (mixed) waste streams		181	284	-	53	-	518
Totals		2,590	5,017	1,878	1,630	2,906	14,022



4. Planet – carbon footprints

Renewi total carbon footprint

This is our Renewi total carbon footprint. Unlike many other companies Renewi activities provide a potential carbon avoidance benefit produced from our recycling and recovery operations. The footprint right is split to reflect this.

Figures are rounded to nearest 1,000 tonnes – totals may reflect rounding. The data is based on carbon 'factors' which are included in our **CSR indicators document** available on our Group web site in the 'Our Responsibilities' section. These vary from country to country and are periodically updated, such as by Government agencies

The following pages contain individual footprints for our operating divisions, which when totalled result in our Renewi total footprint.

Carbon emissions from our activities (CO ₂ -equivalent '000 tonnes)	2016/17	2017/18
Process based emissions		
Emissions from green composting	41	42
Emissions from landfill	94	94
Emissions from hazardous waste treatment	304	254
Emissions from mechanical biological treatment (MBT)	71	67
Transport based emissions		
Fuel used by waste transport vehicles	111	110
Business travel (cars, trains, flights etc)	7	7
Energy use emissions		
Electricity used on sites and in offices	116	116
Gas used on sites and in offices	20	20
Fuel used on sites for plant and equipment / heating	32	32
Total emissions from significant sources	797	741
Carbon avoidance as a result of our activities (CO₂-equivalent '000 tonnes)	2016/17	2017/18
Materials separated for re-use/recycling ¹	1,823	1,699
Renewable energy generated	63	56
Waste derived fuels produced and sold	983	946
Energy from waste used on site as a fuel	349	305
Total potential avoided emissions	3,218	3,006
Carbon emissions and avoidance intensity ratios²	2016/17	2017/18
Million tonnes greenhouse gases emitted (CO ₂ equivalent) per million tonnes waste handled	0.054	0.053
Million tonnes greenhouse gases avoided by our activities (CO ₂ equivalent) per million tonnes waste handled	0.219	0.214

1. See footnote to recycling and recovery performance table. Restatement of waste data also affects carbon avoidance from recycling and recovery. As a result, some of the data above relating to carbon avoidance from recycling and recovery is also restated

2. In previous years Renewi used unit of revenue as the denominator to calculate intensity ratios. However, this use was affected by variables such as currency exchange rates. For 2018 we have moved to using tonnes of waste handled as a more appropriate denominator, less affected by variables such as exchange rates. 2017 data above has been recalculated to allow year-on-year comparison



Commercial Waste Belgium carbon footprint

This is our Commercial Waste Belgium carbon footprint. Unlike many other companies Renewi activities provide a potential carbon avoidance benefit produced from our recycling and recovery operations. The footprint right is split to reflect this. For details of how we calculate this data see our CSR Indicators document.

Figures are rounded to nearest 1,000 tonnes – totals may reflect rounding. The data is based on carbon 'factors' which are included in our **CSR indicators document** available on our Group web site in the 'Our Responsibilities' section. These vary from country to country and are periodically updated, such as by Government agencies

Carbon emissions from our activities (CO₂-equivalent '000 tonnes)	2016/17	2017/18
Process based emissions		
Emissions from green composting	1	1
Emissions from landfill	33	29
Emissions from hazardous waste treatment	-	-
Emissions from mechanical biological treatment (MBT)	-	-
Transport based emissions		
Fuel used by waste transport vehicles	29	29
Business travel (cars, trains, flights etc)	1	1
Energy use emissions		
Electricity used on sites and in offices	6	6
Gas used on sites and in offices	3	2
Fuel used on sites for plant and equipment / heating	9	9
Total emissions from significant sources	82	78
Carbon avoidance as a result of our activities (CO₂-equivalent '000 tonnes)	2016/17	2017/18
Materials separated for re-use/recycling ¹	477	453
Renewable energy generated	14	12
Waste derived fuels produced and sold	264	259
Energy from waste used on site as a fuel	-	-
Total potential avoided emissions	754	725
Carbon emissions and avoidance intensity ratios²	2016/17	2017/18
Million tonnes greenhouse gases emitted (CO ₂ equivalent) per million tonnes waste handled	0.031	0.030
Million tonnes greenhouse gases avoided by our activities (CO ₂ equivalent) per million tonnes waste handled	0.279	0.280

1. See footnote to recycling and recovery performance table. Restatement of waste data also affects carbon avoidance from recycling and recovery. As a result, some of the data above relating to carbon avoidance from recycling and recovery is also restated

2. In previous years Renewi used unit of revenue as the denominator to calculate intensity ratios. However, this use was affected by variables such as currency exchange rates. For 2018 we have moved to using tonnes of waste handled as a more appropriate denominator, less affected by variables such as exchange rates. 2017 data above has been recalculated to allow year-on-year comparison



Commercial Waste Netherlands carbon footprint

This is our Commercial Waste Netherlands carbon footprint. Unlike many other companies Renewi activities provide a potential carbon avoidance benefit produced from our recycling and recovery operations. The footprint right is split to reflect this. For details of how we calculate this data see our CSR Indicators document.

Figures are rounded to nearest 1,000 tonnes – totals may reflect rounding. The data is based on carbon 'factors' which are included in our **CSR indicators document** available on our Group web site in the 'Our Responsibilities' section. These vary from country to country and are periodically updated, such as by Government agencies

Carbon emissions from our activities (CO₂-equivalent '000 tonnes)	2016/17	2017/18
Process based emissions		
Emissions from green composting	11	11
Emissions from landfill	18	24
Emissions from hazardous waste treatment	-	-
Emissions from mechanical biological treatment (MBT)	-	-
Transport based emissions		
Fuel used by waste transport vehicles	72	71
Business travel (cars, trains, flights etc)	4	3
Energy use emissions		
Electricity used on sites and in offices	25	25
Gas used on sites and in offices	11	10
Fuel used on sites for plant and equipment / heating	12	13
Total emissions from significant sources	152	157
Carbon avoidance as a result of our activities (CO₂-equivalent '000 tonnes)		
Materials separated for re-use/recycling ¹	830	772
Renewable energy generated	1	1
Waste derived fuels produced and sold	162	178
Energy from waste used on site as a fuel	-	-
Total potential avoided emissions	993	950
Carbon emissions and avoidance intensity ratios²		
Million tonnes greenhouse gases emitted (CO ₂ equivalent) per million tonnes waste handled	0.028	0.031
Million tonnes greenhouse gases avoided by our activities (CO ₂ equivalent) per million tonnes waste handled	0.186	0.189

1. See footnote to recycling and recovery performance table. Restatement of waste data also affects carbon avoidance from recycling and recovery. As a result, some of the data above relating to carbon avoidance from recycling and recovery is also restated

2. In previous years Renewi used unit of revenue as the denominator to calculate intensity ratios. However, this use was affected by variables such as currency exchange rates. For 2018 we have moved to using tonnes of waste handled as a more appropriate denominator, less affected by variables such as exchange rates. 2017 data above has been recalculated to allow year-on-year comparison



Hazardous Waste carbon footprint

This is our Hazardous Waste carbon footprint. Unlike many other companies Renewi activities provide a potential carbon avoidance benefit produced from our recycling and recovery operations. The footprint right is split to reflect this. For details of how we calculate this data see our CSR Indicators document.

Figures are rounded to nearest 1,000 tonnes – totals may reflect rounding. The data is based on carbon 'factors' which are included in our **CSR indicators document** available on our Group web site in the 'Our Responsibilities' section. These vary from country to country and are periodically updated, such as by Government agencies

Carbon emissions from our activities (CO₂-equivalent '000 tonnes)	2016/17	2017/18
Process based emissions		
Emissions from green composting	-	-
Emissions from landfill	-	-
Emissions from hazardous waste treatment	304	254
Emissions from mechanical biological treatment (MBT)	-	-
Transport based emissions		
Fuel used by waste transport vehicles	9	8
Business travel (cars, trains, flights etc)	1	1
Energy use emissions		
Electricity used on sites and in offices	43	42
Gas used on sites and in offices	2	2
Fuel used on sites for plant and equipment / heating	2	2
Total emissions from significant sources	360	308
Carbon avoidance as a result of our activities (CO₂-equivalent '000 tonnes)	2016/17	2017/18
Materials separated for re-use/recycling ¹	-	-
Renewable energy generated	-	-
Waste derived fuels produced and sold	-	-
Energy from waste used on site as a fuel	349	305
Total potential avoided emissions	349	305
Carbon emissions and avoidance intensity ratios²	2016/17	2017/18
Million tonnes greenhouse gases emitted (CO ₂ equivalent) per million tonnes waste handled	0.177	0.164
Million tonnes greenhouse gases avoided by our activities (CO ₂ equivalent) per million tonnes waste handled	0.172	0.163

1. See footnote to recycling and recovery performance table. Restatement of waste data also affects carbon avoidance from recycling and recovery. As a result, some of the data above relating to carbon avoidance from recycling and recovery is also restated

2. In previous years Renewi used unit of revenue as the denominator to calculate intensity ratios. However, this use was affected by variables such as currency exchange rates. For 2018 we have moved to using tonnes of waste handled as a more appropriate denominator, less affected by variables such as exchange rates. 2017 data above has been recalculated to allow year-on-year comparison



Municipal UK carbon footprint

This is our Municipal UK carbon footprint. Unlike many other companies Renewi activities provide a potential carbon avoidance benefit produced from our recycling and recovery operations. The footprint right is split to reflect this. For details of how we calculate this data see our CSR Indicators document.

Figures are rounded to nearest 1,000 tonnes – totals may reflect rounding. The data is based on carbon 'factors' which are included in our **CSR indicators document** available on our Group web site in the 'Our Responsibilities' section. These vary from country to country and are periodically updated, such as by Government agencies

Carbon emissions from our activities (CO₂-equivalent '000 tonnes)	2016/17	2017/18
Process based emissions		
Emissions from green composting	30	30
Emissions from landfill	17	16
Emissions from hazardous waste treatment	-	-
Emissions from mechanical biological treatment (MBT)	58	55
Transport based emissions		
Fuel used by waste transport vehicles	1	1
Business travel (cars, trains, flights etc)	1	1
Energy use emissions		
Electricity used on sites and in offices	20	23
Gas used on sites and in offices	1	2
Fuel used on sites for plant and equipment / heating	4	4
Total emissions from significant sources	132	132
Carbon avoidance as a result of our activities (CO₂-equivalent '000 tonnes)		
Materials separated for re-use/recycling ¹	209	124
Renewable energy generated	19	16
Waste derived fuels produced and sold	557	509
Energy from waste used on site as a fuel	-	-
Total potential avoided emissions	785	649
Carbon emissions and avoidance intensity ratios²		
Million tonnes greenhouse gases emitted (CO ₂ equivalent) per million tonnes waste handled	0.076	0.081
Million tonnes greenhouse gases avoided by our activities (CO ₂ equivalent) per million tonnes waste handled	0.451	0.398

1. See footnote to recycling and recovery performance table. Restatement of waste data also affects carbon avoidance from recycling and recovery. As a result, some of the data above relating to carbon avoidance from recycling and recovery is also restated

2. In previous years Renewi used unit of revenue as the denominator to calculate intensity ratios. However, this use was affected by variables such as currency exchange rates. For 2018 we have moved to using tonnes of waste handled as a more appropriate denominator, less affected by variables such as exchange rates. 2017 data above has been recalculated to allow year-on-year comparison



Monostreams carbon footprint

This is our Monostreams carbon footprint. Unlike many other companies Renewi activities provide a potential carbon avoidance benefit produced from our recycling and recovery operations. The footprint right is split to reflect this. For details of how we calculate this data see our CSR Indicators document.

Figures are rounded to nearest 1,000 tonnes – totals may reflect rounding. The data is based on carbon 'factors' which are included in our **CSR indicators document** available on our Group web site in the 'Our Responsibilities' section. These vary from country to country and are periodically updated, such as by Government agencies

Carbon emissions from our activities (CO₂-equivalent '000 tonnes)	2016/17	2017/18
Process based emissions		
Emissions from green composting	-	-
Emissions from landfill	26	25
Emissions from hazardous waste treatment	-	-
Emissions from mechanical biological treatment (MBT)	13	12
Transport based emissions		
Fuel used by waste transport vehicles	-	-
Business travel (cars, trains, flights etc)	-	-
Energy use emissions		
Electricity used on sites and in offices	23	20
Gas used on sites and in offices	4	4
Fuel used on sites for plant and equipment / heating	5	5
Total emissions from significant sources	70	66
Carbon avoidance as a result of our activities (CO₂-equivalent '000 tonnes)	2016/17	2017/18
Materials separated for re-use/recycling ¹	307	351
Renewable energy generated	30	26
Waste derived fuels produced and sold	-	-
Energy from waste used on site as a fuel	-	-
Total potential avoided emissions	337	377
Carbon emissions and avoidance intensity ratios²	2016/17	2017/18
Million tonnes greenhouse gases emitted (CO ₂ equivalent) per million tonnes waste handled	0.025	0.023
Million tonnes greenhouse gases avoided by our activities (CO ₂ equivalent) per million tonnes waste handled	0.118	0.130

1. See footnote to recycling and recovery performance table. Restatement of waste data also affects carbon avoidance from recycling and recovery. As a result, some of the data above relating to carbon avoidance from recycling and recovery is also restated

2. In previous years Renewi used unit of revenue as the denominator to calculate intensity ratios. However, this use was affected by variables such as currency exchange rates. For 2018 we have moved to using tonnes of waste handled as a more appropriate denominator, less affected by variables such as exchange rates. 2017 data above has been recalculated to allow year-on-year comparison

5. Planet – resources and spills

Our resource use	Indicator	Belgium Commercial Waste		Netherlands Commercial Waste		Hazardous Waste		Municipal		Monostreams		Renewi total	
		2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18
<p>This data is a synopsis of our resource use across our activities. As for other data the basis for calculation is included in our CSR indicators document available on our Group web site in the 'Our Responsibilities' section</p>	Electricity consumption (MWh)	22,818	24,043	37,902	38,073	66,242	64,712	39,962	46,947	33,579	30,172	200,503	203,947
	Gas used at sites and offices (MWh)	13,777	12,546	46,233	44,980	7,991	7,988	7,670	12,068	17,977	20,128	93,648	97,710
	Fuel use at sites and offices (MWh)	37,495	36,899	39,514	42,202	5,254	5,076	17,349	14,537	23,823	23,927	123,435	122,641
	Total energy use at sites (MWh)	74,090	73,488	123,648	125,255	79,487	77,777	64,981	73,552	64,981	73,552	417,585	424,298
	Fuel use waste collection vehicle (000' litres)	12,226	12,275	22,367	22,021	2,700	2,436	510	466	-	-	37,803	37,199
	Green electricity generated (MWh)	71,257	46,098	3,856	3,280	-	1,097	40,527	35,912	58,734	57,075	174,373	143,462
	Significant spills at sites – reports of spills required by permits	4	2	8	1	8	39	9	1	2	7	31	50



6. Planet – E-PRTR emissions

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. Except for Renewi Canadian operations, these permits all come 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 (E-PRTR) protocols. This gives us a common set of emissions and measures of significance.

However, E-PRTR does not cover all of our operations. Only larger facilities where the regulator deems there may be significant emissions. This does not mean we do not report emissions from our non-E-PRTR 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 E-PRTR, brief descriptions of potential significant emissions and where Renewi reports on these. For example, a small or medium sized recycling plant will typically have two significant emissions: Indirect green-house 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

Operation types		Description of potential significant emissions	Where reported
EPTR sites	Landfills	Treated leachate to environment/sewer Methane to environment from landfill gas Direct CO2 and other GHG to environment from landfill gas Direct CO2 and other GHG to from green energy generation Direct CO2 and other GHG emissions from fuel use (mobile plant)	CO ₂ and other GHG emissions included in Renewi carbon footprints. Other emissions in EPRT data as below
	Mechanical Biological treatment	Effluent discharge to environment/sewer Direct CO2 and other GHG to environment Indirect GHG emissions from power use (eg, electricity) Direct CO2 and other GHG emissions from fuel use (mobile plant)	
	Hazardous waste treatment	Effluent discharge to environment/sewer Direct CO2 and other GHG to environment Indirect GHG emissions from power use	
	Larger recycling plants	Indirect CO2 / other GHG emissions from power use (eg, electricity) Direct CO2 and other GHG emissions from fuel use (mobile plant)	
	Larger composting plants	Direct CO2 and other GHG to environment from compost process Indirect GHG emissions from power use (eg, electricity) Direct CO2 and other GHG emissions from fuel use (mobile plant)	
	Larger AD plants	Direct CO2 and other GHG to from green energy generation Indirect GHG emissions from power use (eg, electricity) Direct CO2 and other GHG emissions from fuel use (mobile plant)	
Non-EPTR sites	Smaller recycling plants	Indirect CO2 and other GHG emissions from power use (eg, electricity) Direct CO2 and other GHG emissions from fuel use (mobile plant)	CO ₂ and other GHG emissions included in Renewi carbon footprints
	Smaller recovery plants	Indirect CO2 and other GHG emissions from power use (eg, electricity) Direct CO2 and other GHG emissions from fuel use (mobile plant)	
	Smaller AD plants	Direct CO2 and other GHG to from green energy generation Indirect GHG emissions from power use (eg, electricity) Direct CO2 and other GHG emissions from fuel use (mobile plant)	
	Transfer stations	Direct CO2 and other GHG emissions from fuel use (mobile plant)	
	Amenity sites	Direct CO2 and other GHG emissions from fuel use (mobile plant)	
Offices	Indirect CO2 and other GHG emissions from power use (eg, electricity)		
Vehicles sites	Direct CO2 and other GHG emissions from fuel use (road lorries)		



EPRTR emissions

The table right shows emissions from our sites under E-PRTR reporting. These are cumulative – the total emissions for all of our E-PRTR 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 E-PRTR (columns headed 'EPRT thresholds') are for single sites and not for a company's total emissions. We have chosen to report on all E-PRTR emissions
- ✓ E-PRTR 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
- ✓ 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 emissions	EPRTR threshold kg/year			Group total emissions kg/year		
	Air	Water	Soil	Air	Water	Soil
Methane (CH4)	100,000			2,077,631		
Carbon monoxide (CO)	500,000			73,056		
Carbon dioxide (CO2)	100,000,000			281,289,385		
Nitrous oxide (N2O)	10,000			-		
Ammonia (NH3)	10,000			95,216		
Non-methane VOCs	100,000			71,781		
Nitrogen oxides (NOx/NO2)	100,000			328,640		
Sulphur oxides (SOx/SO2)	150,000			8,769		
Total nitrogen		50,000	50,000		275,074	
Total phosphorus		5,000	5,000		1,943	
Hydrochlorofluorocarbons (HCFCs)	1			-		
Chlorofluorocarbons (CFCs)	1			8		
Arsenic and compounds (As)	20	5	5		1,381	
Cadmium and compounds (Cd)	10	5	5		-	
Chromium and compounds (Cr)	100	50	50		1,220	
Copper and compounds (Cu)	100	50	50		104	
Mercury and compounds (as Hg)	10	1	1		2	
Nickel and compounds (as Ni)	50	20	20		825	
Lead and compounds (as Pb)	200	20	20		38	
Zinc and compounds (as Zn)	200	100	100		1,276	



EPRTR emissions continued

Further notes

- ✓ For carbon and other GHG emissions threshold only exceeded generally at landfill sites
- ✓ For some other emissions in excess of threshold the threshold is only exceeded at one site only (hazardous waste destruction to prevent environmental damage)
- ✓ For other emissions threshold only exceeded as a transfer to secondary treatment not as release to the environment

General notes: Data is for 2017 as reported by Renewi sites under E-PRTR. Some of the data (such as methane and carbon dioxide) is already reported on as carbon equivalents in Renewi carbon footprints. Exceeding an E-PRTR 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 emissions	EPRTR threshold kg/year			Group total emissions kg/year		
	Air	Water	Soil	Air	Water	Soil
2 1,2-dichloroethane (EDC)	1,000	10	10		46	
2 Dichloromethane (DCM)	1,000	10	10		17	
Trichloromethane	500	10			18	
Halogenated organic compounds (as AOX)		1,000	1,000		50	
Ethyl benzene		200	200		1	
Phenols (as total C)		20	20		26	
Toluene		200	200		5	
Total organic carbon (as total C or COD/3)		50,000			287,555	
Xylenes		200	200		-	
Chlorides (as total Cl)		2,000,000	2,000,000		5,428,422	
Asbestos	1	1	1		-	
Cyanides (as total CN)		50	50		303	
Particulate matter (PM10)	50,000				-	



PEOPLE

Ensuring the health, safety, wellbeing and engagement of our people is crucial to Renewi's success. We take that responsibility very seriously



7. People - Health and safety data

Our accident performance	Indicator	Belgium Commercial Waste		Netherlands Commercial Waste		Hazardous Waste		Municipal		Monostreams		Renewi total	
		2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18
<p>The health, safety and wellbeing of all of our employees are key issues for Renewi. We accept that we operate in a known high-risk sector. The most basic measures of accident rate are shown right, along with severity and near miss close out. Together this data provides the top-line indicators of our success in this area</p> <p>See the key on next page for definitions and explanations</p>	Total Number LTIs	59	71	64	81	2	4	15	6	18	10	158	172
	LTI rate	17.3	23.6	9.6	12.1	1.0	2.3	9.3	3.7	22.9	12.6	10.9	12.5
	Number >3 day accidents	53	45	52	46	2	4	7	5	14	8	128	108
	>3 day accident rate	2660	2315	1605	1500	215	440	1015	695	3035	1540	1,750	1,505
	Number fatal accidents	0	0	0	0	0	1	0	0	0	0	0	1
	Severity Rate	48.9	20.3	25.2	15.8	75.2	23.5	10.1	13.2	9.8	10.4	31.6	17.4
	Number near-miss reports raised	4,667	2,639	1,825	1,664	764	761	5,121	4,935	994	935	13,473	10,934
	Number near-miss reports closed	3,308	2,013	1,543	1,942	697	533	4,359	3,859	712	750	10,750	9,097
	Near-miss close-out rate	71%	76%	85%	100%	91%	70%	85%	78%	72%	80%	80%	83%



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

>3 day accident – any injury suffered by an employee which results in more than three days off work. Note – in some Renewi documents this type of accident is referred to as ‘reportable’. In Renewi documents, the terms ‘reportable’ and ‘>3 day’ are interchangeable and mean the same. Renewi has decided to use >3 day as a definition to allow comparison both between Renewi divisions and over time.

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

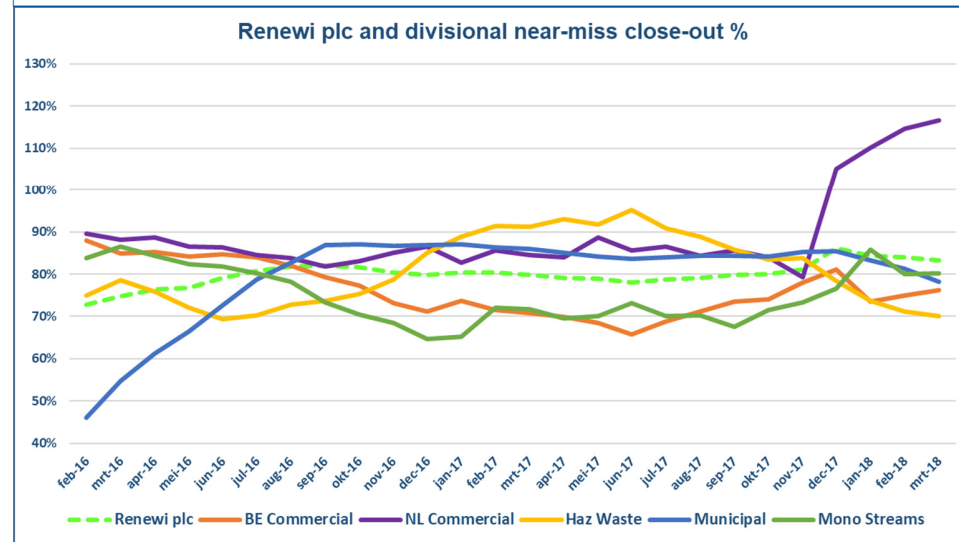
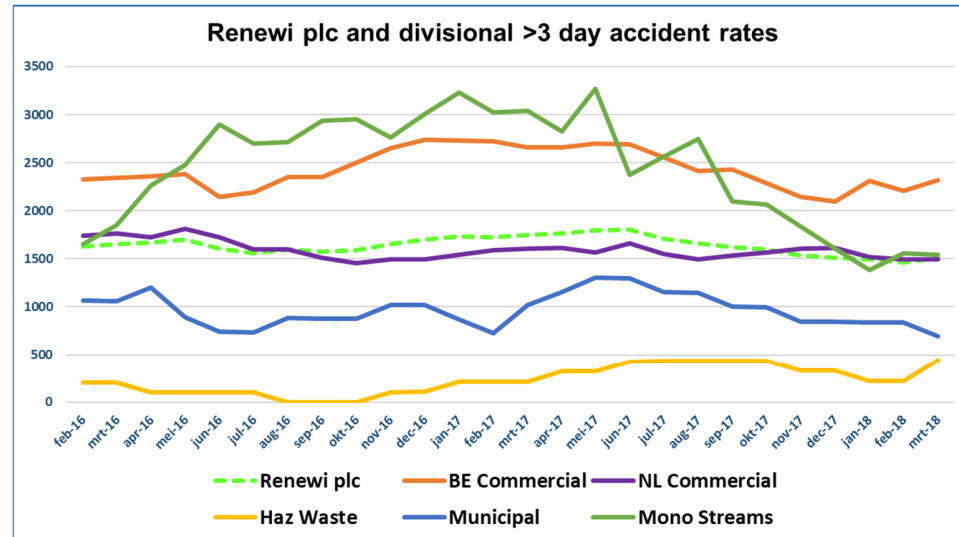
Fatal accidents – fatal employee workplace accidents.

>3 day accident and LTI 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. Note – scale used in graph right is different to that in tables above. This is simply to allow all data to fit onto the graph right.

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 month-to-month changes and allow the data to represent trends

Graphs - Renewi >3 day accident rate and near-miss close out rate



8. People – Our employees, turnover and absenteeism

Our people	Indicator	Belgium Commercial Waste	Netherlands Commercial Waste	Hazardous Waste	Municipal	Mono-streams	Group support	Renewi total
	On the right you will find synopsis data on our people performance	Total number employees	1,935	3,042	962	694	273	273
	Number of female employees	315	412	120	105	114	137	1,203
	Number of male employees	1,620	2,643	842	589	387	136	6,204
1. Employee numbers are by divisional reporting line and are reported in headcount	Number of full-time employees	1,562	2,612	867	656	441	184	6,322
2. Statutory directors only as listed in company data	Number of part-time employees	373	430	95	38	60	89	1,085
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	Number of operational employees	1,428	2,150	628	447	387	0	5,040
	Number of admin/support employees	507	892	334	247	114	273	2,367
	Number female senior managers	11	22	4	7	9	55	79
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	Number male senior managers	29	78	41	48	50	26	301
	No. female Board statutory directors	NA	NA	NA	NA	NA	NA	2
5. Director and senior executive data only given as Group totals	No. male Board statutory directors	NA	NA	NA	NA	NA	NA	6
	Number of employees who left the company during the year	104	179	61	-	20	-	364
	Employee turnover %	5.4	5.9	6.3	-	4.0	-	4.9
	Number of non-permanent employees (FTE)	322	569	45	-	180	28	1,143
	Total employee absenteeism from work (% of available days)	2.0%	6.1%	5.8%	2.5%	4.6%	-	4.6%



PARTNERSHIP

Through our partnerships, we aim to help society towards a more sustainable future. Taking the views of our host communities into account, minimising the impact we have on them and giving something back – through what we do – is important to us



9. Partnership – Community performance

Community complaints performance	Indicator	Belgium Commercial Waste	Netherlands Commercial Waste	Hazardous Waste	Municipal	Mono-streams	Renewi total
<p>The local communities around our sites are a critical stakeholder group for Renewi. 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. This includes all complaints, both those substantiated and those not substantiated.</p>	Odour	9	21	14	216 ¹	4	264
	Litter	5	2	0	3	1	11
	Vermin/flies	1	2	1	2	0	6
	Traffic	0	0	0	2	0	2
	Mud/Dust	4	6	0	0	1	11
	Noise	1	2	0	3	1	7
	Other	2	1	0	0	2	5
	TOTAL number of complaints	22	34	15	226	9	306
	Average number of complaints per site	0.5	0.4	0.9	5.9	0.4	1.5
<p>1. The high number of complaints for Municipal is largely the result of issues with two new plants and ongoing odour complaints at Renewi London IVC Plant in Canada</p>							

10. Partnership – 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. Data is presented as number of operating centres covered by accreditations	Indicator	Belgium Commercial Waste	Netherlands Commercial Waste	Hazardous Waste	Municipal	Mono-streams	Renewi total
	ISO 14001 / EMAS (environment)	34	77	16	5	18	150
	ISO 9001 (quality)	33	77	14	5	21	150
	OHSAS 18001 (health and safety)	20	62	161	4	12	114
	SCC/VCA (national health & safety)	12	0	13	-	-	25
	% operations with ISO 14001 / EMAS	83%	100%	94%	13%	72%	76%

11. Partnership – Compliance

Our compliance performance Right is a synopsis of our compliance record. Data is for convictions (cases where the company goes to court) and administrative fines (such as those in Belgium and the Netherlands)	Indicator	Belgium Commercial Waste	Netherlands Commercial Waste	Hazardous Waste	Municipal	Mono-streams	Renewi total
	Number of environmental convictions and fines	0	2	2	0	1	5
	Number of health and safety convictions and fines	1	0	2	0	0	3
	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	0	0	0	0	0	0