

# **Rail Delivery Group**

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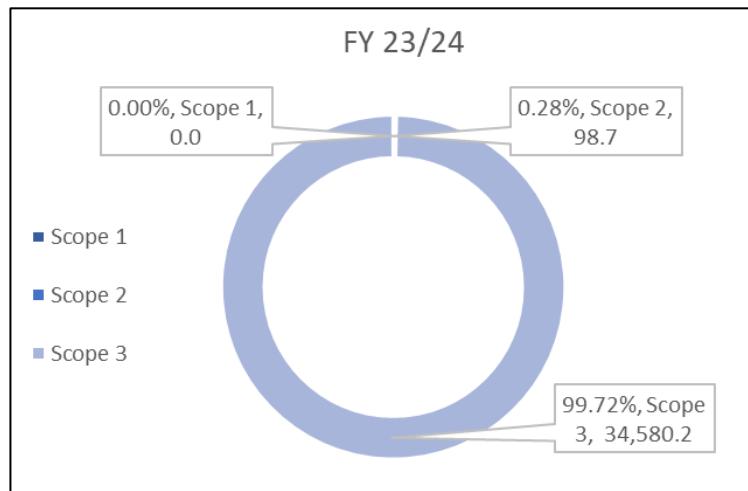
## Rail Delivery Group Carbon Footprint Report 2023 – 2024

# RDG's emissions on a page

## Total emissions

In the financial year 2023 to 2024, RDG's total emissions were [34,678.2 tCO<sub>2</sub>e](#).

This is a [decrease of 13%](#) from the previous year from a decrease in Scope 3 emissions in the Purchased Goods and Services category (S3-1).



Scope 3 emissions are all indirect emissions that occur in RDG's value chain, including both upstream and downstream emissions.

RDG's biggest contributor to Scope 3 is [Purchased Goods and Services](#), accounting for [39,836.4 tCO<sub>2</sub>e](#)

## Comparison to FY 2022-2023

	FY22/23	tCO <sub>2</sub> e	FY23/24
Scope 1			
Stationary combustion	-	-	-
Mobile combustion	-	-	-
Refrigerants	-	-	-
Scope 2			
Purchased heat	36.6	6.1	
Purchased electricity	45.1	92.6	
Scope 3			
Purchased goods and services	38,956.4	33,631.9	
Capital goods	0.5	12.9	
Fuel- and energy- related activities not included in S1 or S2	23.4	29.8	
Upstream transportation and distribution	0.0	0.0	
Waste generated in operations	0.5814	0.3	
Business Travel	62.9	52.4	
Employee commuting (& remote working)	232.0	236.0	
Upstream leased assets	-	-	
Downstream transportation and distribution	-	-	
Processing of sold products	-	-	
Use of sold products	-	-	
End of life treatment of sold products	420.4	454.5	
Downstream leased assets	-	-	
Franchises	-	-	
Investments	140.2	162.4	

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# 1. Introduction

This report summarises the Rail Delivery Group's (RDG) carbon footprint for the financial year 2023-2024 (the 12-month period from 1<sup>st</sup> April 2023 – 31<sup>st</sup> March 2024).

The methodology, key limitations and recommendations for improvement in subsequent years are also outlined, alongside comparison to the previous financial year 2022-2023.

## The Climate Pledge

As part of RDG's efforts to reduce the impacts of its own operations, RDG joined the Climate Pledge on 21<sup>st</sup> April 2021. The Climate Pledge calls on companies to be net zero across their businesses by 2040, committing signatories to three principal areas of action:

1. **Regular reporting** - measure and report greenhouse gas emissions (GHG) on a regular basis across Scopes 1, 2 and 3. The Climate Pledge asks companies to refer to best practices within their industry, e.g. the Greenhouse Gas (GHG) Protocol, which is one of the Climate Pledge's recommended methods.
2. **Carbon elimination** - implement decarbonisation strategies in line with the Paris Agreement through real business changes and innovations, including efficiency improvements, renewable energy, materials reductions, and other carbon emission elimination strategies.
3. **Credible offsets** - neutralise any remaining emissions with additional, quantifiable, real, permanent, and socially-beneficial offsets to achieve net zero annual carbon emissions by 2040<sup>1</sup>.

As part of the Climate Pledge, RDG commit to comprehensively reviewing and reporting of the organisation's greenhouse gas emissions, accounting for all emissions associated with RDG's operations, including those the organisation can control, Scopes 1 and 2, as well as emissions the organisation can influence, Scope 3.

This process was first completed in 20/21.

## 2. Methodology

The methodology used to calculate RDG's greenhouse gas emissions follows the World Resources Institute GHG Protocol - A Corporate Accounting and Reporting Standard, Revised Edition<sup>2</sup> ("the Protocol") and is guided by the Protocol's key principles of relevance, completeness, consistency, transparency and accuracy.

An operational control approach has been taken, meaning that the inventory covers emissions from all operations that are under the group's operational control. Emissions are reported in line with the company's financial year. UK Government emissions factors have been applied where available; electricity emission factors are location based.

To ensure full transparency, calculation methodologies, assumptions and any alternative emission factors have been disclosed within a detailed methodology document, 'RDG

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<sup>1</sup> The Climate Pledge. *The Pledge*. Available: <https://www.theclimatepledge.com/us/en/the-pledge>.

<sup>2</sup> WRI GHG Protocol Corporate Standard. Available: <https://ghgprotocol.org/corporate-standard>.

Extended Report\_Carbon Footprint Methodology FY23\_24<sup>3</sup>, as well as the 'RDG Carbon Inventory FY23\_24'<sup>4</sup> spreadsheet.

This approach is in line with the UK's Competition and Markets Authority (CMA) Green Claims Code<sup>5</sup>, which ensures green claims are truthful, accurate, clear and unambiguous, do not hide or omit important information, consider the full life cycle of a product or service and are substantiated.

### 3. RDG's Carbon footprint

#### Greenhouse gas emissions summary

A summary of RDG's GHG emissions for the 12-month period from 1<sup>st</sup> April 2023 - 31<sup>st</sup> March 2024 is shown in Table 1. Absolute emissions (total emissions) are summarised, as well as two intensity ratios. Intensity ratios provide a measure of greenhouse gas emissions in proportion to a measure of activity and are useful for annual comparison.

Summary table	
Absolute GHG emissions breakdown (tCO <sub>2</sub> e) per financial year	
Scope	FY23/24
Scope 1	0.0
Scope 2	98.7
Scope 3	34,580.2
<b>Total (Scope 1 and 2)</b>	<b>98.7</b>
<b>Total (Scopes 1, 2, and 3)</b>	<b>34,678.9</b>
% change (year-on-year)	-13%
GHG emission intensity (tCO <sub>2</sub> e) per financial year	
Budget (£)	£73,113,000
Carbon intensity (tCO <sub>2</sub> e per £ million budget)	474.3
% change	-22%
Average FTEs	328.5
Carbon intensity (tCO <sub>2</sub> e per FTE)	105.6
% change (year-on-year)	-18%

Table 1: RDG GHG emissions summary (FY23/24).

<sup>3</sup> Available on request

<sup>4</sup> Available on request

<sup>5</sup> HM Government, 2021. *Green Claims Code*. Available: <https://greenclaims.campaign.gov.uk/>.

## RDG's impact

As illustrated in Figure 1, near 100% of RDG's GHG emissions fall within Scope 3. The remaining 0.28% of emissions are Scope 2 emissions from electricity and heat supplied through RDG's landlord.

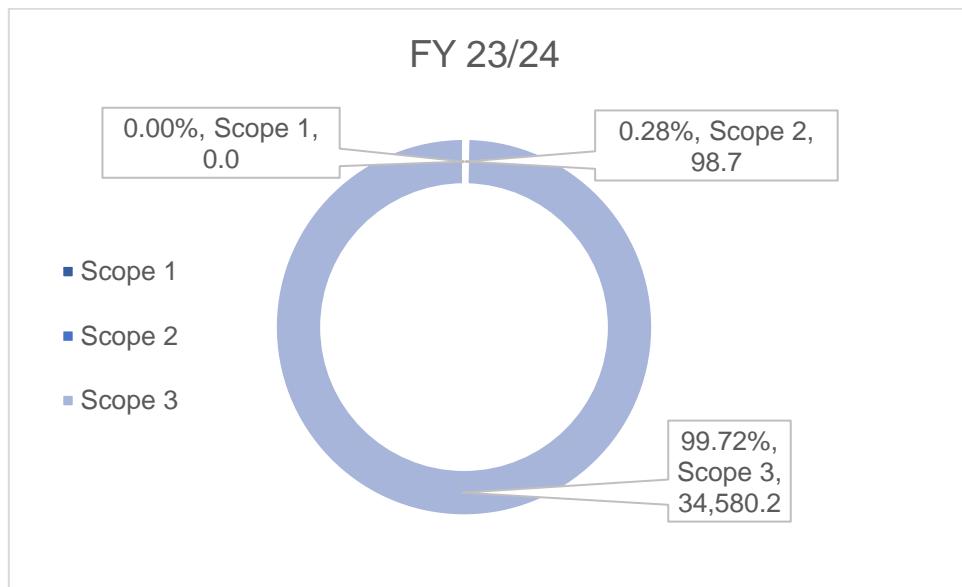


Figure 1: RDG's GHG emissions by scope (FY23/24).

### Scope 1

Scope 1 emissions involve the direct GHG emissions that are released as a result of operations that are controlled or owned by an organisation. There are three major subcategories within Scope 1: stationary combustion (the combustion of fuel within machinery or equipment such as boilers), mobile combustion (the combustion of fuels due to the operation of vehicles owned or leased), and fugitive emissions (emissions from refrigeration systems)<sup>6</sup>. There are no Scope 1 emissions associated with RDG's operations as RDG did not operate or maintain any heating or cooling plant and had no company-owned vehicles. Fugitive emissions from refrigerants used in cooling plant have been accounted for in Scope 3 due to RDG's indirect control.

### Scope 2

Scope 2 emissions are caused by the indirect release of GHG emissions that are derived from the purchase of heat, electricity, steam, and cooling. RDG's Scope 2 emissions make up 0.27% of overall GHG emissions: 92.6 tCO<sub>2</sub>e are from purchased electricity and 6.1 tCO<sub>2</sub>e are from purchased heat. Data for the first two months of the FY for these categories came from RDG's landlord at our then premises, 200 Aldersgate Street, London. For the remaining ten months when RDG moved into its new premises occupying one floor at 1 Puddle Dock, London, the heating was electric and information about RDG's electricity consumption was supplied by RDG's landlord at Puddle Dock.

<sup>6</sup> US EPA Scope 1 and Scope 2 Inventory Guidance. Available: <https://www.epa.gov/climateleadership/scope-1-and-scope-2-inventory-guidance>.

## Scope 3

Scope 3 emissions are all indirect emissions (not included in Scope 2) that occur in RDG's value chain, including both upstream and downstream emissions<sup>7</sup>. Whilst RDG's operations are predominantly office-based, the reach of the organisation's operations, and therefore the Scope 3 emissions, is large. A breakdown of RDG's Scope 3 emissions, as per the GHG Protocol's fifteen Scope 3 categories is shown in Figure 2. All applicable categories were included in the baseline carbon inventory (FY 2020/21) for completeness and to assess the materiality of emission sources for future GHG emission calculations.

Within Scope 3, the purchase of goods and services (S3-1) accounts for 33,631.9 tCO<sub>2</sub>e of RDG's overall footprint and is therefore by far the largest emission source. Figure 3 shows a further breakdown of emissions within Scope 3-1 Purchased goods and services. IT services account for 8257.5 tCO<sub>2</sub>e of emissions within this category and marketing is a further 7467.5 tCO<sub>2</sub>e.

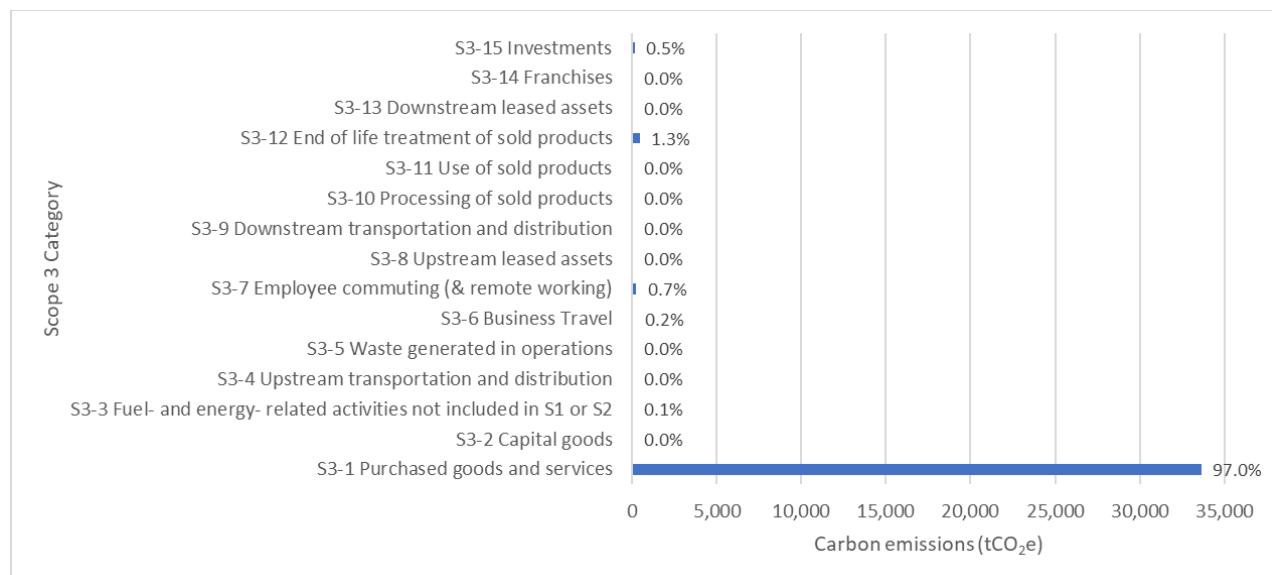


Figure 2: RDG's GHG Scope 3 emissions.

<sup>7</sup> WRI GHG Protocol. FAQ. Available: [https://ghgprotocol.org/sites/default/files/standards\\_supporting/FAQ.pdf](https://ghgprotocol.org/sites/default/files/standards_supporting/FAQ.pdf).

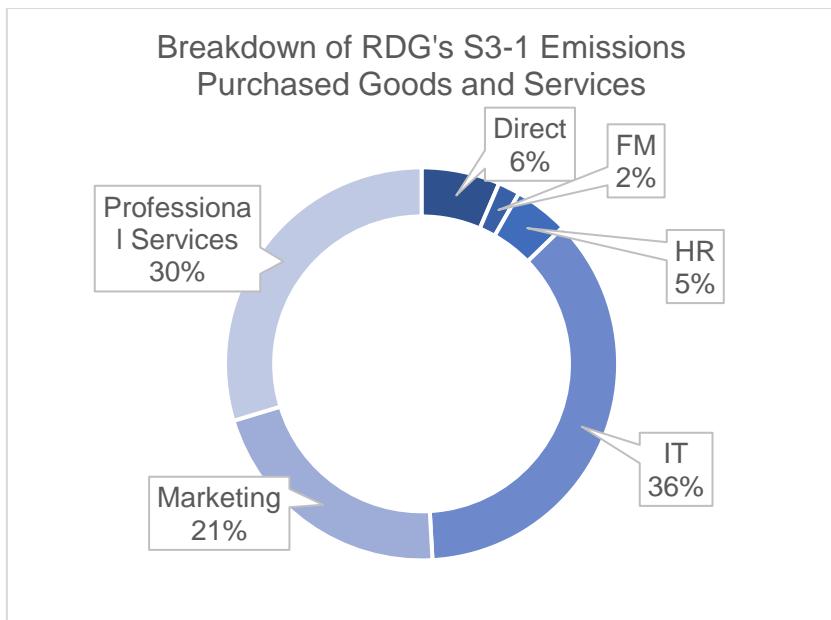


Figure 3: Breakdown of RDG's GHG emissions (tCO<sub>2</sub>e) within S3-1 Purchased goods and services.

The GHG emissions associated with End of life treatment of sold products (S3-12), which for RDG is rail tickets, is the second largest category within Scope 3, accounting for 454.5 tCO<sub>2</sub>e., Employee commuting and remote working (S3-7) and RDG's investments (S3-15), i.e. pension payments, are also significant emission sources accounting for 236.0 tCO<sub>2</sub>e and 164.2 tCO<sub>2</sub>e respectively.

### Emissions Intensity Ratio

In order to compare RDG's GHG emissions annually, two intensity ratios have been calculated, as shown in Table 2. The carbon emissions per British Pound of budget and per full-time equivalent (FTE) have been calculated.

Total carbon footprint and intensity ratio		
Carbon intensity (intensity ratio)	Carbon emissions per £ million budget	474.3 tCO <sub>2</sub> e
	Carbon emissions per FTE	105.6 tCO <sub>2</sub> e

Table 2: RDG Carbon intensity ratio.

## 4. Comparison to Previous FY

### Greenhouse gas emissions comparison

A summary of RDG's GHG emissions for financial years 2022/23 and 2023/24 is shown below (table 2). Absolute emissions (total emissions) are summarised, as well as two intensity ratios.

There was a decrease in emissions of 5,239.1 tCO<sub>2</sub>e from FY22/23 to FY23/24.

Summary table		
Absolute GHG emissions breakdown (tCO <sub>2</sub> e) per financial year		
Scope	FY22/23	FY23/24
Scope 1	0.0	0.0
Scope 2	81.6	98.7
Scope 3	39,836.4	34,580.2
<b>Total (Scope 1 and 2)</b>	<b>81.6</b>	<b>98.7</b>
<b>Total (Scopes 1, 2, and 3)</b>	<b>39,918.0</b>	<b>34,678.9</b>
<b>% change (year-on-year)</b>	<b>32%</b>	<b>-13%</b>
GHG emission intensity (tCO <sub>2</sub> e) per financial year		
Budget (£)	£65,662,000	£73,113,000
<b>Carbon intensity (tCO<sub>2</sub>e per £ million budget)</b>	<b>607.9</b>	<b>474.3</b>
<b>% change</b>	<b>39%</b>	<b>-22%</b>
Average FTEs	309.0	328.5
<b>Carbon intensity (tCO<sub>2</sub>e per FTE)</b>	<b>129.2</b>	<b>105.6</b>
<b>% change (year-on-year)</b>	<b>55%</b>	<b>-18%</b>

Table 2: RDG GHG emissions summary (FY 22/23 and FY23/24).

### Commentary

#### Reason for emissions decrease

The GHG emissions decreased by 13.1% while the FTE intensity, the carbon intensity per £million fell even further, by 22% and 18% respectively. The greater fall in the intensity metric values is due to the emissions being spread over greater activity as reflected by a larger budget (the budget increased by 11.3% over the period) and more staff (FTEs increased by 6.3%).

#### RDG's Impact

##### SCOPE 1

Scope 1 is out of scope.

## SCOPE 2

Scope 2 emissions of purchased electricity and heat has increased by 17.1 tCO<sub>2</sub>e. However, RDG's Scope 2 energy use is now based on meter readings for RDG's office space (compared to using a percentage of the building's emissions at the previous office premises which RDG occupied until June 2023). The new offices also use electricity for heating which has a higher emission factor in the reporting year but potential for greater reductions as the grid decarbonises and more renewable energy comes online.

## SCOPE 3

Purchased goods and services was the largest category in both years.

The overall fall in emissions from this scope comes from the fall in emissions from purchases of goods in the 'Direct' category (hardware, print, railcards, ticketing etc.), the emissions factors for these categories have fallen; where there has been a reduction in (the need for) Marketing campaigns compared to the previous year where the rail industry was working encourage people back to the railway following the COVID-19 pandemic.

The only increase is in IT emission factor as the number of passengers/journeys has increased and staff numbers rose in the same period as RDG built back up its capability post -pandemic.

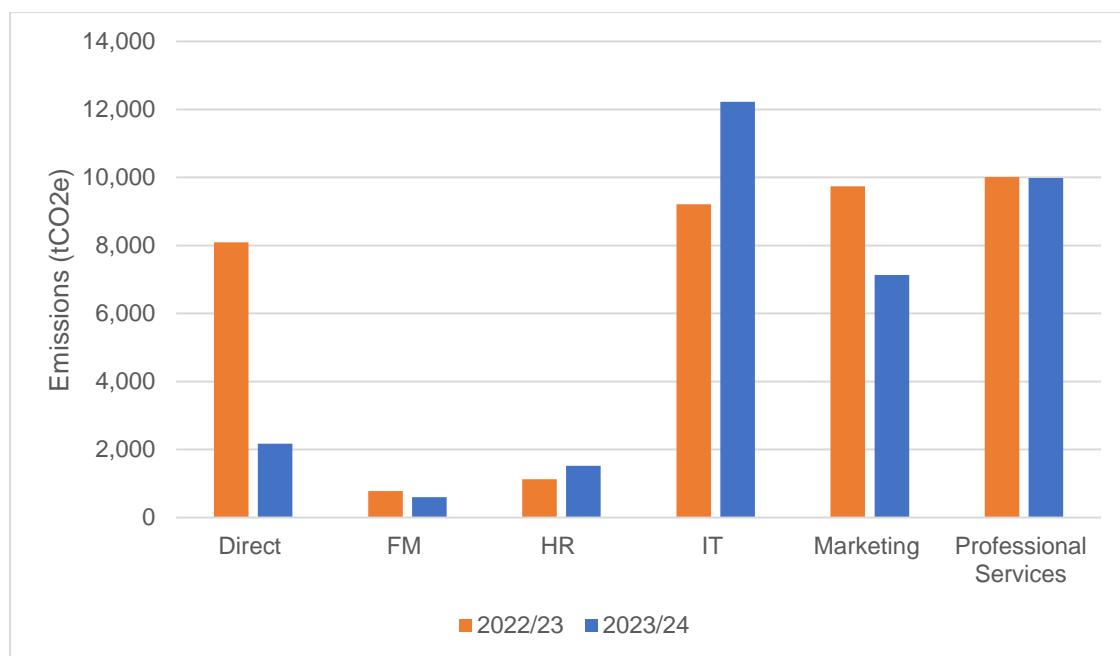


Figure 4: Breakdown of RDG's GHG emissions (tCO<sub>2</sub>e) within S3-1 Purchased goods and services for financial years 2022/23 and 2023/24.

End of life treatment of sold products, the second largest category in FY 23/24 covers rail tickets, which RDG supplies on behalf of the industry. The 8% increase in emissions in this category, from 232.0 tCO<sub>2</sub>e to 236.0 tCO<sub>2</sub>e, correlates with a much greater increase of 16% in the number of physical tickets from the last FY.

Employee commuting and remote working the third largest category in FY 23/24 reflects a 1% increase in emissions but given an increase in headcount of 20 FTEs this is a real-terms decrease.

From our analysis of commuting patterns rail accounts for most kilometres travelled, with 82% of employees taking mainline rail for some proportion of their trip. Almost all employees walk

some of the journey. However, 32% of staff drove for at least a portion on their journey, with the average distance driven rising from previous years from 4 miles to 7.5 miles.

## 5. Next Steps - Emissions Reduction

Having quantified Scope 1, 2 and 3 emissions, RDG's next step will be to identify opportunities to make emissions reductions.

With Scope 3 emissions from purchased goods and services forming the majority of its emissions, RDG will focus on this area through engaging with individuals and teams who make the high-spend purchases and the supply chain, firstly to better understand and quantify these emissions, then to seek to make reductions where possible through supplier engagement and considering carbon emissions as part of its future procurement strategy and purchasing decisions. RDG have begun reaching out to our biggest suppliers to better monitor emissions and are identifying some of the challenges.

RDG is already working on a project to reduce the emissions from end-of-life treatment of sold products. The responsible directorate is focused on increasing options for alternative ticket-types, such as PAYG smartcards, barcode and paper tickets (rather than the current magnetic, non-recyclable tickets).

A staff engagement programme will also be rolled out to look at further areas of reduction, initially focussing on reducing waste and changing commuting habits.

RDG will investigate behaviour changes campaigns that could be introduced to help reduce the electricity consumed which forms much of our Scope 2 emissions.

## 6. Limitations of Methodology and Recommendations

As with all GHG emissions inventories, there are limitations to the methodology applied and certain assumptions had to be made in the absence of suitable quantified data. A summary of key limitations and recommendations for improvement in subsequent years is shown below (a full review of these for each scope category can be found in the 'RDG Extended Report\_Carbon Footprint Methodology FY23\_24<sup>8</sup>):

### Spend based emission calculations

- **Limitation:** Emissions were based on the best data available at the time of calculation. Primary data was provided for emission categories where available. In some instances, primary data was based on spend in place of weight/volumes, which reduces the accuracy of emission calculations.
- **Recommendation:** It is recommended that emissions from purchased goods and services are based on quantity of goods/services in place of spend, however, this approach is considered appropriate to assess the scale.

### Assumptions/benchmarks used in place of some primary data source

- **Limitation:** Neither primary or spend data was available for some 'in-scope' categories. In these instances, calculations are based on benchmarked data or

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<sup>8</sup> Available on request

assumptions. These assumptions have been noted within the extended methodology report and within the GHG Inventory.

- **Recommendation:** Obtain primary data for scope categories where assumptions or benchmarks have been used.

**Emissions are based on the best available emission factors.**

- **Limitation:** There is a lack of specific up to date emission factors for some Scope 3 categories, particularly Scope 3-1 Purchased goods and services.
- **Recommendation:** Continue to work with suppliers to obtain supplier specific emission factors to improve the accuracy of emission calculations within this category.

It is acknowledged that the calculation methodology and data sources will evolve in the future as improved data becomes available.

The above limitations will not have a material impact on the overall inventory. Where assumptions have been made, a 'worst case scenario' has been chosen, to ensure emissions are not underestimated.