ESG Appendix

Packaging categories

- Packaging refers to packaging and other products within the foodservice, grocery and retail sectors which are facing legislation or consumer pressure.
- Packaging sales only includes those sales of products that will be ultimately bought or used by consumers. Sales of packaging related products bought by business customers for non retail purposes are captured as non packaging revenue.
- In future years packaging and products may move between categories and/or may be added or removed (for example, as legislation changes, recyclability improves or if a new line of products is launched).
- We have exercised our judgement to allocate sales to the packaging and non-packaging categories as explained below. There are certain limitations with respect to the accuracy and completeness of the packaging categories as it is not always possible to evidence the exact composition of our products across the vast range that we sell. Judgements with respect to allocating products to categories are taken at a point in time, and both evolving legislation and changes in product composition mean that it is likely we will recognise adjustments, both current and retrospective, akin to those we have disclosed below this year as we continue to enhance the quality of our data. We will continue to disclose such adjustments where they are of significance to year on year trends in our packaging-related data.

We review the categorisation of our products and packaging on a quarterly basis as part of our internal controls process and have made two changes this year.

- Food containers made from Expanded Polystyrene 'EPS' have been moved from category 3 to category 2. Several of the countries where we operate have announced legislation restricting the use of this material in the takeaway foodservice sector and we are actively transitioning customers to alternative materials with no reductions in volume. As these restrictions have not been applied consistently across our Group (for example, c.94% of our sales in this product category are in United States of America where EPS is not widely restricted) and they do not impact the fresh produce sector in some of our markets, we have positioned these sales in 'Consumable plastics likely to transition'.
- Baking paper and parchment products have moved from category 4 to category 3. Despite c.99% of the material in the product being renewable and recyclable, the presence of a silicone coating means these products cannot be widely recycled. As papers of this nature serve a functional purpose and alternatives are not commercially available, we have positioned these sales in 'Packaging and products with an important purpose'.

Category detail and name applied by Bunzl	#	Description	Example products in category
Category detail: Single-use plastic products facing restriction	1	The single-use plastic products most commonly facing restriction – i.e. outright bans or complete restriction on placing into the market within the majority of the countries in which we operate	Including but not limited to: Plastic cutlery Plastic plates, bowls, platters,
Bunzl name: Consumable plastics facing		 this is the category where we expect to see some volume reduction and transition may not happen on a like-for-like basis. 	and lids
regulation		We have expanded these specific regulations to all business areas where such products are sold. This is to provide consistency, as it can be reasonably expected that legislation will follow in those areas where it does not currently apply.	
Category detail: Single-use plastic products facing regulation (not outright restriction)	2	Single-use plastic products that have existing measures in place (either legislative in countries we operate or voluntarily by some brands/businesses we sell to) to control their usage.	Including but not limited to: Single-use plastic cups Paper cups and soup containers
Bunzl name: Consumable plastics likely to transition		As the use of these products across our Group is not completely restricted (i.e. there are no consistent bans as with category 1) and the products themselves serve a functional purpose, customers typically transition away from these products to alternatives on a like-for-like basis (including reusable options).	with plastic lining Lightweight plastic carrier bags EPS food containers
		We have expanded these specific regulations to all business areas where such products are sold to provide consistency.	

Category detail and name applied by Bunzl	#	Description	Example products in category
Category detail: Single-use plastic products where plastic is an appropriate material for the job, where alternatives are not commercially available or where substitution could cause unintended environmental consequences	3	Single-use plastic products where plastic is an appropriate material for the job from a functional perspective, where alternatives do not currently exist at scale or where unmitigated, careless substitution of plastic could lead to significant negative, unintended consequences such as higher carbon emissions, water use and food waste.	Including but not limited to: Plastic food containers Plastic pouches, packets, and wrappers Baking paper and parchment
Bunzl name: Packaging and products with an important purpose			
Category detail: Recyclable, reusable, compostable products, and those made from renewable resources	4	These are products that are recyclable or compostable, made from a renewable resource, for example palm leaf or sugar cane, plastic products containing a proportion of recycled content (where these products are also recyclable) and reusable products	Including but not limited to: PET and rPET food containers Cardboard or paperboard containers
Bunzl name: Packaging and products made from		such as 'bags for life' or refillable coffee cups that are products specifically designed to be used more than once.	Compostable plastic cups Reusable cups
alternative materials		These represent the alternative solutions our customers typically transition their single-use packaging and products to.	Alternative materials cutlery Alternative materials plates,
		National guidance (where it exists) has been used to determine the recyclability of a product.	bowls, platters, and lids Paper bags Decorative retail boxes (paper
		Due to the huge variation in recycling provisions globally, to provide consistency we have expanded these criteria to all business areas where such products are sold.	and corrugate) Reusable carrier bags

Climate change scenarios

The climate change scenarios align with the environmental and economic conditions represented in the Network for Greening the Financial System 'NGFS' scenario framework. This framework was used as the basis for the Bank of England's 2021 Biennial Exploratory Scenario on climate risks and is based on the following assumptions:

Scenario 1 - 'Orderly'

This reflects Net Zero 2050 commitments from COP26 which limit global warming to 1.5°C through stringent climate policies and innovation and assumes those jurisdictions which have committed to Net Zero (including US, EU, UK, Canada, Australia and Japan) will achieve those goals. This scenario assumes climate policies are introduced early and become gradually more stringent and that physical and transition risks increase gradually. Carbon prices increase steadily in key Bunzl countries and the use of internal combustion engine 'ICE' vehicles will be limited by regulations and market pressures. Physical and transition risks are both relatively low, however carbon prices are initially higher than the Disorderly scenario in order to encourage an earlier curbing of emissions. Customers may also increasingly express their preferences relating to the type of transportation used by Bunzl to deliver their products.

Scenario 2 – 'Disorderly'

This scenario assumes a lack of coordinated response to climate change and therefore emissions reductions are limited until 2030. Climate policies are delayed or divergent across countries and since actions are taken relatively late and are limited by available technologies, emissions reductions need to be greater than in the Orderly scenario to limit warming to below 2°C. The result is higher transition risks and higher carbon prices.

Scenario 3 - 'Hothouse world'

The final scenario assumes that Governments fail to introduce the policies needed to address climate change beyond those that are already in place. Climate policies are implemented in some jurisdictions, but global efforts are insufficient to halt significant global warming. Global average carbon prices remain low and emissions grow until 2080 leading to +3°C of warming with severe physical risks and irreversible global impacts.

Evaluating potential impacts of climate change on our business

The Group has considered three possible outcomes (best, medium, worst) across our key potential climate-related business impacts, under the three climate scenarios. We have assessed the impacts on a short term (to 2025) mid term (to 2030) and long term (to 2050) basis.

Shifting customer expectations

The timing of the emissions reductions required varies significantly between the Orderly, Disorderly and Hothouse scenarios. Many customers have committed to dramatically reduce carbon emissions by 2050 (with some committing to net zero) and they expect suppliers such as Bunzl to contribute to achieving these targets. Bunzl has already established a science-based reduction target in line with an Orderly scenario and will assess on an ongoing basis whether this emissions trajectory continues to meet customers' ambitions.

Environmental impacts of technology

Whilst the transition to electric and plug-in hybrid vehicles has begun, the pace and breadth of change will depend upon the climate scenarios above. Bunzl is aware of relevant current trends including the deployment of electric 'EV' and plug-in hybrid electric vehicles 'PHEV', the energy density and range limitations of batteries for long haul trucks, and the likely future cost of biofuels, which represent an important transition fuel. We considered whether a rapid increase in carbon pricing after 2030 in the Disorderly scenario could leave Bunzl with stranded assets, if trucks were to become uneconomical to run. Consideration of the environment in which we may operate under each of the climate scenarios above has led us to conclude that Bunzl will implement a fleet strategy that ensures a timely transition to alternative fuels at a cost that is comparable to the current cost, or that any increase in costs is marketwide and can be incorporated into sales prices. We also conclude that the risk of stranded assets is minimal, as the average life remaining on our truck and car leases is limited (estimated to 3 to 4 years).

Adaptation to extreme weather

The business impact of extreme weather is already included in our climate model, as it could be a driver of lower GDP growth. Bunzl monitors the current impact of extreme weather on our operations to ensure we remain well prepared for worsening conditions in the future. In recent years we have seen disruptions due to extreme weather in North America (hurricanes and wildfires) and Australasia (wildfires and flooding). These events were predominantly regional and in most cases we were able to serve customers from a different location. If this was not possible, then it is expected revenue would recover in a short time after conditions normalise. We have concluded that extreme weather conditions currently do not represent a material financial risk to Bunzl in excess of the impacts already modelled by considering the impact climate change will have on GDP.

Changing market dynamics

We have modelled the business impact of changing market conditions, by considering the potential for climate change to lead to lower GDP growth and higher carbon taxes:

Global GDP: Bunzl's revenue is to some extent correlated with the health and progress of the global economy. Economic damage from climate change could be caused by a number of outcomes, including shocks from extreme weather events, losses in agricultural productivity, temperature effects on labour productivity and human health, energy demands, and flows of tourism. All impacts are considered within our scenarios.

Carbon pricing is a cost levied by governments to encourage polluters to reduce the amount of greenhouse gases they emit. The Orderly scenario assumes increased carbon pricing in key Bunzl countries as a result of Government intervention and sustained consumer pressure. The Disorderly scenario reflects moderate pressure from consumers for climate action, resulting in a much lower carbon price than the Orderly scenario until 2030, when the substantial financial impacts of extreme weather events leads to a rapid policy response from Governments. A high carbon price is required from this point to drive large emissions reductions to limit global warming. Within the Hot House scenario, increases in carbon pricing remain negligible up to and beyond 2050.

Greenhouse gas emissions data (Group)

Data for the period 1 October to 30 September	2019	2020	2021	2022
Scope 1				
Total emissions (tonnes of CO ₂ e)	99,193	90,568	87,125	93,405◊
Emission intensity (tonnes of CO ₂ e/£m revenue)	10.7	9.5	8.5	8.1°
Natural gas usage (m ³)	8,912,413	8,082,813	8,272,123	9,650,228
Fuel usage (ltr)	31,523,097	29,306,537	28,060,702	29,099,858
Fuel intensity (ltr/£m revenue)	3.4	3.1	2.7	2.5*
Scope 2				
Emissions location-based (tonnes of CO2e)	29,594	27,421	25,043	27,895°
Emission intensity location-based (tonnes of CO ₂ e/£m revenue)	3.2	2.9	2.4	2.4
Emissions market-based (tonnes of CO ₂ e)	29,835	26,183	25,025	27,337
Emission intensity market-based (tonnes of CO2e/£m revenue)	3.2	2.7	2.4	2.4
Electricity usage (MWh)	83,062	80,276	79,057	93,224
% renewable electricity	NA	15	14	17
Total Scope 1 and 2 emissions				
Emissions location-based (tonnes of CO ₂ e)	128,787	117,989	112,168	121,300
Emission intensity location-based (tonnes of CO₂e/£m revenue)	13.9	12.4	10.9	10.5*
Emissions market-based (tonnes of CO ₂ e)	129,028	116,751	112,150	120,742
Emission intensity market-based (tonnes of CO ₂ e/£m revenue)	13.7	12.2	10.9	10.5*
Total energy (MWh)	516,775	480,711	470,941	510,524

Included in the external auditors limited assurance scope. See Data Assurance statement, which is available on our website, www.bunzl.com. The location-based emissions and intensity data for previous years was also assured as detailed in the respective Annual Reports.

Our absolute carbon emissions increased by 8% during the year primarily caused by acquisitions. Carbon emissions in the remaining business were stable as our growth was offset by reductions from an increased uptake of electric vehicles, energy efficiency improvements and increased procurement of renewable energy. Fuel used for transportation remains our highest source of operational emissions, contributing c.79% of our scope 1 emissions. Of those emissions relating to transportation, c.82% are generated by our fleet of commercial vehicles.

Performance against carbon reduction targets

			2022 %	
Data for the period 1 October to 30 September	2019	2022	reduction (vs 2019)	2030 target (vs 2019)
Data for the period i October to 50 September	2019	2022	(VS 2019)	(V3 2019)
Total scope 1 and scope 2 Emissions market-based (tonnes of CO_2e)	141,320 ¹	120,742°	15	27.5%
Emission intensity market-based (tonnes of CO ₂ e/£m revenue)	13.8 ¹	10.5*	24	50%

1 Emissions in our baseline year have been recalculated to reflect the impact of acquisitions. Emissions intensity has been recalculated using revenue at constant currency. This process has

been agreed with the SBTi.
 Included in the external auditors' limited assurance scope. See the data assurance statement on the Company's website, www.bunzl.com.

Greenhouse gas emissions data (UK)*

Data for the period 1 October to 30 September	2019	2020	2021	2022
Scope 1 emissions (tonnes of CO ₂ e)	17,211	15,261	14,845	15,479
Scope 2 Emissions (tonnes of CO ₂ e) (location-based)	2,660	2,847	2,511	2,215
Total scope 1 and 2 Emissions (tonnes of CO ₂ e)	19,871	18,108	17,356	17,694
Emission intensity (tonnes of CO ₂ e/£m revenue)	17.0	14.9	14.6	13.4
Natural gas usage (m3)	469,573	486,661	419,138	425,053
Fuel usage (ltr)	6,271,182	5,606,760	5,572,556	5,716,256
Electricity usage (MWh)	10,405	11,140	9,823	11,292
Total energy consumption (MWh)	82,084	75,812	73,815	76,744

* Energy usage and carbon emissions disclosed separately to adopt to the requirements of the UK Streamlined Energy and Carbon Reporting ('SECR') policy.

Our reported environmental data includes all businesses that are subsidiaries of the Group for financial reporting purposes, except for recent acquisitions where there has been insufficient opportunity for the businesses to adopt our reporting guidelines. The revenue from these businesses is not included when calculating the indexed emissions. The reported data covers 99.3% of the Group by revenue.

Bunzl has a Group-wide approach to recording, measuring and reporting energy and climate change data. Business Areas are responsible for data input and monitoring progress against targets and providing commentary on significant variances and on the implementation of projects aimed at improving EHS performance. All data is reported in the Group's central EHS reporting and consolidation system. More details can be found in the Group reporting guidelines on our website https://www.bunzl.com/sustainability/sustainability/reporting.

Scope 3:

During 2022 we performed a full assessment of our scope 3 carbon emissions, covering both 2019 (as our baseline year) and 2021. This work has been covered in more detail on page 60. The carbon emissions are summarised in the table below.

Greenhouse gas emissions scope 3 data (Group)

Scope 3 category	2019 (kt CO ₂ e)	2021 (kt CO₂e)
Purchased goods and services	5,212	6,200
Capital goods	18	18
Fuel and energy-related activities not included in scope 1 or scope 2	29	30
Upstream transportation and distribution	247	282
Waste generation in operations	5	5
Business travel	20	11
Employee commuting	21	20
Downstream transportation and distribution	53	47
Use of sold products	20	13
End-of-life treatment of sold products	468	483
Total scope 3 emissions	6,093	7,109

Waste

The amount of waste generated in our facilities in 2022 is 22,200 tonnes which is a decrease of 1% compared to last year, mainly due to increased completeness and accuracy of reporting. The recycling rates strongly depend on the locally available waste recycling options. In 2022, the recycling rate remained stable at approximately 50% of the generated waste. This excludes any post-disposal waste treatment and recycling carried out by waste handlers. The reported waste data covers more than 99% of the Group by revenue although accurate waste measurement remains challenging in geographies with less advanced waste management infrastructures. We continue to work on improvement of the completeness and accuracy of waste reporting across the Group.

Water

Direct water usage is not a significant environmental impact for our business as it is principally confined to staff hygiene and workplace cleaning, with the exception of a very small number of sites where we process gel or ice packs which contain water. Water discharges, apart from internal sanitation, are limited to rainwater run-off from the yards of our locations. Our estimated water usage is 230,000 m3 of water per year. The usage is significantly higher than last year (175,000 m3) due to an increased number of FTEs in the group, increased completeness of reporting and increased water consumption due to a higher sales of ice packs, which are produced at a very small number of sites.

Environmental management system certification

We have developed an internal EHS management system standard that is based on ISO 14001 and ISO 45001. Some parts of the business, mainly in UK & Ireland, Asia Pacific and Continental Europe, have elected to become formally certified. These businesses cover approximately 25% of the Group's operations (measured by revenue).

Health & safety

Health & safety indicators	2018	2019	2020	2021	2022
Average number of incidents per month per 100,000 employees	95	96	85	86	80 °
Average number of days lost per month per 100,000 employees	2,370	3,110	3,040	2,615	2,441 °
Fatalities	1	0	0	0	0

Included in the external auditors' limited assurance scope. See the data assurance statement on the Company's website, www.bunzl.com. The data for previous years was also assured as detailed in the respective Annual Reports.

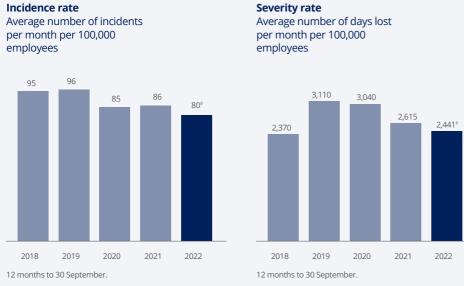
Targets for 2022:

Reduce the Group accident incidence rate by 5% from 2021. Reduce the Group accident severity rate by 5% from 2021.

The 2022 group accident incidence rate of 80 represents a 7% improvement versus 2021. The 2022 group accident severity rate of 2,441 represents a 7% improvement versus 2021. The continued improvement of our safety performance has been the result of our ongoing focus on minimising health and safety risks and creating a safe work environment for our employees. We have continued to refine our programmes to reduce injuries relating to the operation of our warehouses and vehicles, such as manual handling, falling, slipping and tripping and impact with equipment which remain the highest causes of accidents. We have also made further improvement in our programmes to report on leading indicators such as near misses, safety meetings and inspections. A key project in 2022 which will continue into 2023, has been the replacement of our current EHS reporting system by on global integrated EHS data management system.

Targets for 2023:

Reduce the Group accident incidence rate by 3% from 2022 Reduce the Group accident severity rate by 3% from 2022



Included in the external auditors' assurance scope

See Data Assurance statement which is available on our website, www.bunzl.com The data for previous years was also assured as detailed at https://www.bunzl.com/sustainability/sustainability-reporting/external-assurance-opinion-statement

External assurance

We engaged PricewaterhouseCoopers LLP 'PwC' to undertake a limited assurance engagement, reporting to Bunzl plc only, using International Standard on Assurance Engagements 'ISAE' 3000 (Revised): 'Assurance Engagements Other Than Audits or Reviews of Historical Financial Information' and ISAE 3410: 'Assurance Engagements on Greenhouse Gas Statements' over the two non-financial KPIs highlighted on page 47 and the selected data on page 56 of the Sustainability Report and in the ESG Appendix. In each case that has been highlighted with the symbol '\o'.

PwC has provided an unqualified opinion in relation to the relevant KPIs and data and their full assurance opinion is available in the Sustainability section of our Group website, www.bunzl.com. Non-financial performance information, including greenhouse gas quantification in particular, is subject to more inherent limitations than financial information. It is important to read the selected information contained in this Annual Report in the context of PwC's full limited assurance opinion and the Company's EHS Reporting Guidelines which are also available in the Sustainability section of our website.

Supply chain risk assessment

To guide our responsible sourcing work effectively, we partnered with the Non-Governmental Organisation (NGO) Stop the Traffik which has applied its methodology to rank the inherent modern slavery and human rights risks in our supply chain. This work was based on a combination of the sourcing country and market sector applicable to the products and services being procured.

In our supplier risk assessment work we place primary focus on the inherent modern slavery risks in the countries that we source our products from (see Category A below for examples). However, we are aware that lower risk countries can contain industry sectors with an increased risk of modern slavery issues (see Category B below for examples and our approach to mitigation). The table below provides an overview of how we categorise the modern slavery risks associated with our suppliers and the risk mitigations we apply.

Category	Description	Countries and product sectors	Risk mitigation
Category A (low overall spend)	Suppliers operating in very high or high risk countries regardless of product risk sector. Our responsible sourcing target to 2025 covers this category.	Most Asian countries. Key countries outside of Asia are Brazil, Turkey, Mexico, Poland and Israel.	 Standard or enhanced Bunzl audit process in Asia. Risk-based assessment and audit process outside Asia (self-assessment will be used to determine the most appropriate approach). Type of audit (standard or enhanced) to be determined by product risk sector and other leverage factors such as spend and number of employees at supplier location.
Category B (low overall spend)	 Suppliers operating in lower risk countries but operating in a very high or high product risk sector. Very high and high risk product sectors: Manufacturing of wearing apparel Manufacturing of textiles Manufacture of leather products 	In various countries such as USA, UK and France.	• Similar assessment and auditing techniques to Category A but targeting specific sectors in these countries. These will be conducted at a lower frequency or by using proactive spot checks.
Category C (high overall spend)	 Suppliers operating in lower risk countries and operating in lower risk product sectors. Lower risk product sectors: Manufacture of rubber and plastic products Manufacture of paper and paper products Manufacture of chemicals and chemical products 	In various countries such as USA, UK, France and the Netherlands.	These suppliers are provided with Bunzl's Supplier Code of Conduct.

Code of conduct

The Group's business code of conduct is a guide for every employee explaining how they are expected to conduct themselves both from a corporate and individual perspective.

	2020	2021	2022	Comment
Material breaches of code of conduct	0	0	0	No material breaches of our code of conduct were recorded in 2022.
Speak up	43	33	83	In 2022 we received 83 reports through our confidential whistle blowing process, 'Speak Up', none of which related to any issues of material concern. Over half of the cases were from the LATAM region. A number of the reports raised were from the same site or related to the same issue and were treated as separate reports.

Employees

Engaging with our employees with clear communications and the provision of learning and development opportunities

	2020	2021	2022	What we said we would do in 2022	What we did	What we plan to do in 2023
Employee turnover: Voluntary	12.2%	17.3%	17.1%	Build on the strong engagement results and focus on the employee experience. Ensure employees continue to feel safe at work. Establish models of hybrid working.	Focus on understanding key drivers for teams with higher turnover of employees including use of employee survey data.	Ensure that we have a competitive employment proposition which reflects the local labour market. Continue our strategy of listening to understand employee engagement in more detail.
Gender diversity: Women at senior management level	16%	19%	21%	Encourage more women into leadership roles though focused and targeted activities and a continuation of leadership development initiatives.	Continued to monitor engagement survey results by gender. Provided high- potential women with access to mentors.	Promote female role models through a focused programme of communications and extended networking events such as female leadership conferences in North America and Latin America.
Employee engagement index score	88%	86%	85%*	Ensure employees are involved in conversations to develop plans based on their local survey results. Run tailored local surveys to focus on specific areas to be improved or understood in more depth.	Identified a common improvement area of communications. Ran a communications pulse survey for all employees to gain a greater understanding of communication needs and improvement opportunities.	Extend the pilot of GPTW in our Continental Europe region. Undertake pulse surveys with specific teams to monitor progress on action plan and impact on results.

* The measure of engagement has changed to sustainable engagement and this is a 5% improvement from the survey completed in 2021

Senior manage	ement (%) and	d employees	Total workfor	ce (%) and e	mployees	Average number of empl	oyees (%)	Total workforce age	profile (%)
Males	79%	374	Males	63%	13,577	North America	39%	Under 30	16%
						Continental Europe	25%	30–39	23%
Females	21%*	97	Females	37%	7,969	UK & Ireland	19%	40-54	38%
						Rest of the World	17%	Over 55	23%

 HR from September 2022 (those employees eligible source:
 Source:
 Source:
 Source:

 to receive grants of executive share options)
 HR from BRMS
 Note 26 on page 210
 HR from BRMS

Charitable contributions

Bunzl's operations are international but our strength lies in the local nature of our businesses. We support the communities where our employees live and work and encourage fundraising activities championed by our businesses and their employees locally.

In 2019, we realigned our corporate charity programme to focus on environmental projects related to recycling, litter prevention, clean-up and waste management infrastructure.

During 2022 we continued to support activities in these three areas:

- · charitable projects that encourage packaging reuse and recycling, and work to educate consumers;
- litter clean-up and prevention initiatives operating in our markets, giving our employees the opportunity to get involved; and
 projects that build new waste management infrastructure and develop recycling skills in some of the world's poorest places,
- often in areas where plastic leakage to the natural environment is highest.

Example initiatives

Charity name	Project(s)
Hubbub	Reusable packaging systems research and guide for businesses
Sea Changers	Coastal fountain fund (provision of water bottle refill fountains at some of the UK's busiest beaches)
Marine Conservation Society 'MCS'	Sponsorship of MCS Ocean Schools programme
Plastics for Change	Supported informal waste collectors in India with the resources and skills to work with dignity and the launch a new scholarship and education programme for local children
WasteAid	Informal waste collectors in Johannesburg provided with training and capex funding to help them grow their waste collection businesses.

Group wide, Bunzl donated a total of c.£2.3 million to charitable causes during 2022. This does not include amounts donated by Bunzl in matching funds raised by employees for local charities.

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