Task Force on Climate-related Financial Disclosures Report ("TCFD")

In 2023, we continued to develop our TCFD reporting for the third year, further embedding the recommendations and latest guidance into our existing processes.

We aim to continuously improve our TCFD reporting over time as guidance evolves and our responsible business programme progresses.

We are committed to providing information about climate-related risks and opportunities that are relevant to our business. We are evolving our strategy and governance framework, to take account of these risks and opportunities. In 2023, Videndum complied with the requirements of the Listing Rule ("LR") 9.8.6R by including climate-related financial disclosures consistent with the TCFD recommendations and recommended disclosures (Table 1). We complied with the mandatory climate-related financial disclosure requirements under the Companies (Strategic Report) (Climate-related Financial Disclosure) Regulations 2022.

Table 1: TCFD recommendations and location in the standalone 2023 TCFD Report.

TCFD Area	TCFD recommendation	Climate-related Financial Disclosure	Compliance	Location in standalone 2023 TCFD Report
Governance	a) Describe the Board's oversight of climate-related risks and opportunities.	A description of the governance arrangements of the company in relation to assessing and managing climate-related risks and opportunities.	Compliant	Starting from page 8
	b) Describe management's role in assessing and managing climate-related risks and opportunities.			
Strategy	a) Describe the climate-related risks and opportunities identified over the short, medium and long term.	A description of (i) the principal climate-related risks and opportunities arising in connection with the operations of the Company and (ii) the time periods by reference to which those risks and opportunities are assessed.	Compliant	Starting from page 15
	b) Describe the impact of climate-related risks and opportunities on business, strategy and financial planning.	A description of the actual and potential impacts of the principal climate-related risks and opportunities on the business model and strategy of the Company.		
	c) Describe the resilience of the strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	An analysis of the resilience of the business model and strategy of the Company, taking into consideration different climate-related scenarios.	_	
Risk Management	a) Describe the processes for identifying and assessing climate-related risks.	A description of how the Company identifies, assesses, and manages climate-related risks and	Compliant	Starting from page 33
	b) Describe the processes for managing climate-related risks.	opportunities		
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into overall risk management.	A description of how processes for identifying, assessing, and managing climate-related risks are integrated into the overall risk management process in the Company.		
Metrics and Targets	a) Describe the targets used to manage climate-related risks and opportunities and performance against targets.	A description of the targets used by the Company to manage climate-related risks and to realise climate-related opportunities and performance against those targets.	Compliant	Starting from page 37
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and related risks.	The Key Performance Indicators ("KPIs") used to assess progress against targets used to manage climate-related risks and realise climate-related		
	c) Disclose the metrics used to assess climate-related risks and opportunities in line with the strategy and risk management process.	 opportunities and a description of the calculations on which those key performance indicators are based. 		

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As per the recommendations of the TCFD, we used a range of scenarios to assess the impact of climate change on our business, including warming pathways as adopted by the Intergovernmental Panel of Climate Change ("IPCC").

Table 2: Scenario warming pathways used in 2023.

Scenarios warming pathways

Below 2°C Scenario – In this scenario we assumed that organisations begin to align more closely with the Paris Agreement and SBTi (1.5°C) for an orderly and coordinated transition to a low-carbon economy. Between 2–3°C Scenario – The assumption is that we will reach this global warming scenario if businesses respond to patchwork policies with intermittent action, aligning with current forecasts. Above 3°C Scenario – In this scenario we assumed that businesses carry on with a "business as usual" approach without meaningful action to mitigate climate change and global emissions rise unchecked. In this scenario, the Bank of England models a recession given the substantial impact climate events will have on people, business and the environment.

We conducted the analysis using three timeframes that align with the UK's net zero target by 2050:

- Short term (up to 2025) aligns with the achievement of carbon neutrality by the end of 2025.
- **Medium term** (2025–2035) is consistent with the Group's net zero target by 2035.
- Long term (2035–2050) is consistent with the UK Government's net zero pledge by 2050.

We work closely with our independent, specialist ESG Consultant, Inspired ESG, to assess the potential climate-related risks across all sites and selected supply chain operations, analysing the impact of both physical risks (the physical impact of climate change) and transition risks (the risk associated with the transition to a decarbonised economy). Several Divisional climate risk management workshops were held in 2023 (June, July and September). In 2023, we further developed our climate analysis across our operations and supply chain. The Head of Group Risk Assurance finalised the financial impact based on information collected in the workshops, scoring risks as shown below:

- Low (Moderate): Risks with a potential financial impact lower than £1.0 million.
- Medium: Risks with a potential financial impact between £1.0 million and £5.0 million.
- **High:** Risks with a potential financial impact greater than £5.0 million.

Risks that may have a potential financial impact of >£1.0 million were deemed as material to the business. Therefore, these risks will be prioritised, and mitigation measures will be implemented. These risks are shown in Tables 4 and 5. In accordance with the 2018 UK Corporate Governance Code, the Directors have assessed the viability of the Group over a three-year period, taking account of the principal risks and uncertainties set out on pages 36 to 41 which include the climaterelated risk. The Directors believe that a three-year period is an appropriate period over which a reasonable expectation of the Group's longer-term viability can be evaluated and is aligned with the Group's business and strategic planning time horizon. The climate change risks do not materially impact our assessment of the Group's viability over the three-year time horizon.

We modelled our climate scenarios using several established models, such as the International Energy Agency's World Energy Models ("WEM") and the Shared Socioeconomic Pathways ("SSPs"). Climate scenarios make projections on hypothetical futures and as such come with a degree of uncertainty. For more details, please see our 2023 standalone TCFD report.

The climate models used for this analysis includes data from the Intergovernmental Panel on Climate Change's ("IPCC") Representative Concentration Pathways (RCP), the International Energy Agency's ("IEA") World Energy Model ("WEM"), the Network for Greening the Financial System ("NGFS") and other existing models. These models have been used as they are internationally recognised and help to provide a consistent risk measurement across our global portfolio and supply chain.

Climate scenario analysis: results

We identified four transitional risks and six physical climate-related risks that are material to the business, and four opportunities that will impact the Group. The transition risks were analysed at Group level, with the physical risks by location relevant to each of our three Divisions. The tables on pages 49 to 54 summarise the risks and opportunities to the Group, which together form the classification of our climate change principal risk and uncertainty. Please see our 2023 standalone TCFD Report for more details on each climate-related risk and opportunity.

Given the recent increase in reporting obligations, in 2023, transition risks were identified to be the most significant to the Group. We anticipate transition risks to increase over time as the global economy decarbonises, impacting all businesses. Transition risks are more prominent in the below 2°C scenario or 2-3°C scenario, as governments introduce more aggressive climate change reporting requirements and expand carbon pricing and similar mechanisms.

In the proactive scenario, carbon pricing is introduced earlier, therefore there is an initial cost associated with carbon emissions. However, while the carbon price increases in the medium term, the actual cost decreases for the Group due to carbon reduction initiatives and our net zero strategy. In the reactive scenario, the later introduction of carbon pricing creates a sharper cost rise in the medium and long term. In the inactive scenario, a smaller carbon cost is introduced, with limited variation across the short, medium and long term.

Table 3: Carbon pricing projections for the Group based on emissions.

Carbon cost assumptions (£ per tonne of CO ₂ tonne)	Short (up to 2025)	Medium (2025– 2035)	Long (2035- 2050)
Proactive Scenario 1	£49	£98	£238
Reactive Scenario 2	£13	£188	£441
Inactive Scenario 3	£13	£18	£23

The maximum annuity impact of climate change, based on the impact ranges below, was factored into the long-term financial modelling for the Group's cash-generating units ("CGUs"). There is no material impact on the available headroom. Any impact assessed in respect of 2024 is already incorporated in the budget, for example, in relation to additional compliance and consultancy costs. Cross-industry metrics form the basis for estimating the financial impact of climaterelated risks and opportunities on our business. These metrics include but are not limited to GHG emissions, transition, and physical risks, climate-related opportunities and carbon pricing. We have considered all the relevant cross-industry metrics as per TCFD guidance. Details of the metrics are located within the narratives from pages 60 to 61. We will look to continuously develop these metrics as our climate reporting progresses. While we have identified climate change as a principal risk, this process determined that climate change and its impact is moderate for the Group in the short/medium term, and the risk is therefore categorised as manageable in the short term. There is no material impact in relation to 2023. The results of our climaterelated risks and opportunities assessment, and quantification thereof, shows that the Group's long-term prospects are not adversely impacted in a material way by climate change.

Table 4: Transition Risks identified in 2023

Target	Timeline	Impact	Magnitude of impact	Risk response
Transition risks				
Carbon costs associated with carbon taxes and offsetting to hit our emissions goals in the 2–3°C scenario.	Medium (2025–2035)	Our projections have increased due to the EU Carbon Border tax	Medium	On our decarbonisation journey, we will be reducing our carbon emissions year-by-year and therefore mitigating
Explanation and mitigation: This risk would be of highest impact in the 2-3°C scenario, where carbon costs are projected to peak as governments bring in carbon taxation abruptly. A maximum additional cost of £0.5 million per annum is derived by reference to available carbon cost benchmarks, applied to Videndum's		which was recently announced and will apply to certain commodity imports into Italy from 2026 onwards. Based on projections of site-related CO ₂		the risk of carbon pricing. We aim to monitor the impact of carbon pricing on our business as we develop on this journey and update our pricing model with accurate Scope 1 and 2 carbon emissions. We conducted carbon pricing in 2023, however Videndum is not currently subject to carbon tax.
projections for Scope 1 and 2 emissions over the next 15 years. This includes projections for any offset cost from 2025 onwards.		emissions and applying benchmarks, we have estimated the future annual cost of carbon which is estimated to peak at £0.5 million per annum in 2026, but decrease thereafter.	Carbon emissions will likely decrease year-on-year as we work towards understanding and reducing our carbon footprint. By the end of 2025, the	
In addition, the EU's new EU Carbon Border Adjustment Mechanism ("CBAM") tax on imports of raw materials, could impact Videndum's imports in the			which means reducing emissions as much as possible before resorting to carbon offsets.	
medium term.				See targets on page 46.
Shifts in customer preferences in the <2°C and 2–3°C scenario. Explanation: Videndum's business is	Medium term (2025–2035)	Capital and Financing – Decreased access to capital.	Medium	Videndum monitors emerging trends and responds to changing consumer tastes. Competitors' propositions are closely monitored. Videndum has a significant
sensitive to customer spending conditions. A reduction in customer spending could have an adverse effect on Videndum's revenue and profitability.				competitive advantage as many of our competitors lack the digital talent, supply chain and global infrastructure, to seize the opportunities for sustainable products.
customers may change their shopping preferences in a way that is detrimental to revenue. Failing to communicate how we will reduce our environmental impact proactively could result in losing customers and impact our position in the market.	ers may change their shopping nces in a way that is detrimental nue. Failing to communicate how reduce our environmental impact vely could result in losing customers pact our position in the market.			We integrate the recommendations of the TCFD, to ensure our ESG strategy develops with guidance from best practice.
Customers may reduce their purchasing from retail companies which are seen to be harmful to the environment due to the use of raw materials, and instead opt for second-hand purchases.				

TCFD continued

Taraet	Timeline	Impact	Magnitude of impact	Rick response
	Timenne	impuet	orimpuer	Kisk response
Transition risks continued				
Substitute existing products for lower-emissions alternatives in the <2°C and 2–3°C scenario.	Short/ Medium term (up to	Reallocation of R&D expenditure effort to more sustainable products. The impact is	Medium	We aim to procure more sustainable/ recycled materials, which are likely to be more expensive, resulting in increased operating costs for the business.
technology is likely to come onto the market over the coming years. Adopting or deploying new practices or processes will come at a cost to the business. However, we expect such changes to gradually occur over time. As we aim to reduce our carbon emissions, we may need to invest more in lower emissions technology, resulting in increased costs for the Company. Costs to transition to lower-emissions technology in the <2°C and 2–3°C	2025-2035)	not quantifiable but likely to be a straight reallocation so no net impact.		The increased capital expenditure associated with this risk will be mitigated by our opportunity to increase revenue from an increased demand for sustainable products.
Costs to transition to lower-emissions technology in the <2°C and 2–3°C scenario. Explanation: To meet our net zero targets, we will have to invest in lower emissions technology across our operations as more innovative technology is developed. During 2023, approximately £1 million worth of capital expenditure was allocated to the implementation of energy efficiency initiatives.	Short/ Medium term (up to 2025-2035)	Capital expenditure expected to increase by £1 million to £2 million over the next couple of years due to further investment in solar panels, in addition to systems to phase out natural gas in heating and paint ovens. Depreciation will be offset by energy savings.	Low to medium	From the results we have seen to date, we believe this is a low risk to the business as the payback associated with the use of lower emissions energy use (energy efficiency technology and renewable power generation) outweighs the upfront cost of investment. We have already invested a significant amount of capex for energy efficiency technology across the Group, including LED lighting and other energy management systems. In 2023, solar panels were installed at our Feltre, Italy site. Significant capital expenditure has been allocated to the implementation of further energy efficiency initiatives. The payback associated with the use of lower emissions energy use (energy efficiency technology and renewable power generation) outweighs the upfront cost of investment. We expect the investment to decrease natural gas consumption will have a less attractive return than projects to reduce energy. Investment will require installation of air source pumps that have
				See pages 46, 54 and 58 of this report for more details.

Table 5: Climate-related physical risks that may impact the business.

Area	Target	Timeline	Impact	Magnitude of impact	Explanation and mitigation
	Climate-related physical risks				
Acute	Heatwaves 2-3°C and >3°C scenario.	Short/ Long term	Cost of property and business interruption	Medium	We have and continue to implement energy efficiency initiatives, such as renewable energy generation (solar
	Explanation: All our sites will be impacted by heatwaves. Increased temperatures will lead to a higher	(up to 2025– 2050)	increase. Other risks of supply chain disruption are		panels). This means we will need less power from the grid during periods of sunshine.
	As a result, energy costs will rise as sites require additional cooling to maintain optimum temperatures for staff and operations.		difficult to quantify at this point. We may need to increase safety stock, which can		During heatwaves, employees can take more frequent breaks to avoid health risks associated with higher temperatures.
	However, due to the increased energy demand, power outages may increase due to the increased pressure on the grid, leading to operational disruption.		affect our working capital.		
Acute	Flooding >3°C scenario.	Medium/	Cost of property and	Medium	Across the Group, high standard
Acute	Explanation: Videndum sites may be impacted by flooding, such as Tokyo, Japan and Cartago, Costa Rica.	Long term (2025– 2050)	business interruption insurance may increase. Other risks of supply chain		drainage systems are well maintained and serviced to reduce the risk of flooding. Climate scenario analysis is conducted annually to assess the
	The latest IPCC figures show that with 1°C of warming, rainstorms will intensify by 7%, resulting in an increase in flooding. Flooding could		disruption are difficult to quantify at this point. We may need to		impact of flooding on our sites. We will analyse the feasibility of conducting site specific flood risk assessments in 2024
	have an associated financial loss, for example, through direct damage to property, plant and equipment.		increase safety stock, which can affect our working		Our Production Solutions Division has incorporated specific soakaways to reduce the risk of flooding and improve
	Insurance costs could increase. Global property insurance premiums are forecast to rise as weather-related		capital.		ground stability at our Bury St. Edmunds, UK, site. We can use alternative storage sites in the event of a flood.
	catastrophes become both more intense and frequent.				Our Media Solutions Division relocated our Stroud, UK, site to Ashby-de-la-
	In the case of significant flooding, modelling shows that employee absence rates could increase by c.5.%.				Zouche, UK to derisk operations and improve efficiencies.

TCFD continued

Area	Target	Timeline	Impact	Magnitude of impact	Explanation and mitigation
	Climate-related physical risks continued	l			
Acute	Storms and Typhoons 2-3°C and >3°C scenario.Short/ Long term (up 	Medium	For critical suppliers located in Asia-Pacific countries, we are requesting information regarding their preparedness for typhoons. For example, a climate change questionnaire with AboCom Taiwan discusses typhoon risk and supplier mitigations. We seek to reduce overall reliance on		
	A typhoon lasts a few days and it can close ports and divert ships, leading to shipping delays of up to ten days.	ige. increase safety stock, which can affect our p to ten days. working capital. stronger and ns are expected cific and		China and APAC generally, for example, battery production has been partially moved to Costa Rica and in-sourcing to Italy for the JOBY Range.	
	During an El Niño year, stronger and more frequent typhoons are expected across the Eastern Pacific and Asian region.				Where possible, we aim to ensure we have multiple supplier sources, for example, FES supplies Videndum from one factory in Thailand and from one in China.
Acute	Wildfires >3°C scenario.	Long	Cost of property and	Medium	We will continue to conduct climate
	Explanation: Wildfires may increase over time due to more frequent heatwaves and extreme weather conditions.	Long term (2035– 2050)	business interruption insurance may increase. Other risks of supply chain disruption are difficult to quantify at this point. We may need to increase safety stock, which can		scenario analysis annually to identify key risk areas. Using this information we will devise preparation plans, for example, vent covers to prevent smoke damage to products, as well as installing appropriate ventilation
	be required to install appropriate ventilation, due to increased requirements for air filtration systems.				We will ensure our properties are covered by appropriate insurance policies.
	We will continue to monitor our insurance coverage, as we are aware that some insurance companies have begun to alter insurance coverage to exclude wildfire damage in California.		working capital.		

Area	Target	Timeline	Impact	Magnitude of impact	Explanation and mitigation
	Climate-related physical risks continued	1	•	•	
Chronic	Rising Mean Temperatures 2-3°C and >3°C scenario. Explanation: All our sites will be impacted by rising mean temperatures. Increased mean temperatures may cause a higher demand for cooling to maintain optimum temperatures for our staff and products, resulting in higher energy costs. Increased energy usage in summer months could obstruct our progress in reaching our targets to be net zero for Scope 1 and 2 by 2035. There may be an impact on productivity, for example, having to arrange more frequent break times, or health and safety concerns.	Medium/ Long term (2025– 2050)	Expenditures – Increased direct and indirect costs. Impact not significant in the short term, and longer-term impact difficult to measure.	Low in the short term but longer- term impact is difficult to measure.	We have and continue to implement energy efficiency initiatives, such as renewable energy generation (solar panels). This means we will need less power from the grid during periods of sunshine. During heatwaves, employees can take more frequent breaks to avoid health risks associated with higher temperatures.
Chronic	Sea level rise >3°C scenario. Explanation: Rising sea levels may result in damage to ports along key supply chain routes, resulting in delays and increased costs for the business. In the longer term, some sites may no longer be viable or so inhospitable that work force cannot be attracted. Sites such as Takyo, langa and	Long term (2035– 2050)	Expenditures – Increased direct and indirect costs. Impact not significant in the short term, and longer-term impact difficult to measure.	Medium	Where needed, we may have to engage with suppliers to see if they conduct site-specific flood risk assessments and monitor flood risk at sites for long-term impacts. We will continue to conduct annual climate scenario analysis to monitor this risk. We work with brokers to maintain alternative shipment methods.
	Shelton, US are at risk. Rising seas increase the risk of erosion, storm surges and saltwater intrusions into aquifers that supply sites with fresh water. Damage to sites could lead to closures and increased insurance premiums. Damage and disruption to major routes such as shipping ports could also impact Videndum's supply routes. Our scenario analysis conducted in 2023 identified that one of Creative Solutions key suppliers has a shipping site based in Hong Kong, which is predicted to be at risk from sea level rise in the long term.				Our Media Solutions Division's building leases are initially for five years, then renewed for a further three years, allowing for sites to be relocated if needed.

TCFD continued

Table 6: Opportunities identified as at the end of 2023

Target	Timeline	Impact
Opportunity		
Dispose of underutilised sites through improved management of property portfolio.	Short/	Reduced indirect (operating)
Explanation: One of our strategies for reducing emissions is to optimise the use of our sites and rationalise our site portfolio. For example, we plan to lease and relocate employees into smaller properties, where there is unutilised space. In 2023, the Stroud, UK site was relocated which resulted in savings of £0.75 million per annum. We have closed the New Jersey, US site, consolidating operations into Phoenix, US and have sold the Shelton, US site (and leased back a smaller footprint). We have also closed the Syrp, New Zealand office. This site rationalisation strategy results in significant year-on-year cost savings. Cumulating all site closures for the last few years would result in annual savings well in excess of £1 million per annum. Other site closures and consolidations are possible over the next few years owing to the size of our property portfolio and many smaller operations.	Medium/ Long term (up to 2025– 2050)	costs. Major benefit >£1 million per annum.
Use of lower emissions sources of energy.	Short/	Reduction in operating
Explanation: Use of lower emissions technology such as LED lighting, Building Energy Management Systems and solar panels improves energy efficiency and reduces energy usage. Therefore, this will reduce energy costs over time. The payback associated with the use of lower emissions energy (energy efficiency technology and renewable power generation) outweighs the upfront cost of investment. Projects are already generating a financial return. Please see table 10 for our 2023 and 2024 energy-saving initiatives.	Medium/ term (up to 2025– 2035)	expenses because of increased efficiency (for example, energy costs). Moderate benefit >£0.25 million per annum.
Use of more efficient production and distribution processes.	Short/	Reduced indirect
Explanation: Where possible, we diversify our supplier base and source away from countries with higher risk from a climate change perspective. For example, we have insourced some of the production relating to JOBY from China. This is beneficial from an ESG standpoint as it increases the utilisation of Videndum's sites that have sound environmental credentials (Feltre, Italy and Cartago, Costa Rica) and reduces emissions relating to transport. This is financially beneficial due to a greater proportion of margin remaining within the Group. The impact of this risk is not currently fully quantified. However, there are likely to be several insourcing opportunities that could offer a financial benefit (such as prompters, batteries, LED Lights, etc.).	Medium/ term (up to 2025– 2035)	(operating) costs.
Development of new products or services through R&D and innovation.	Short/	Increased revenues resulting
Explanation: As sustainability grows in importance, there will be an increased demand for sustainable products. We believe that Videndum is well-positioned to capitalise on this opportunity, given the development of our ESG Programme and the focus already underway to improve the sustainability of our products. As pressure grows for products to be more durable, there is an opportunity to increase this revenue stream. We are continually exploring new/sustainable product solutions such as the Salt-E Dog sodium battery.	Medium/ term (up to 2025– 2035)	from increased demand for products and services. Benefit not quantified at this point but likely to be major.
The development of sustainable packaging in our Media Solutions Division is predicted to result in significant cost savings of around ± 0.2 million per annum (monocolours, reducing and simplifying packaging).		
Similarly, JOBY has been evaluating sustainable packaging options. In 2023, JOBY Beamo Reel adopted single-colour carton paper packaging for online sales. In addition, we are working on packaging and paper reduction. For example, in 2023, JOBY HandyPod clips reduced the use of instruction manuals.		

We have a well-established framework for identifying and assessing our risks and assigning mitigation actions from years of development in a competitive business landscape, for which the Board has ultimate responsibility. Climate change is an aspect of this. We followed four interconnected steps:

Step 1 - Potential climate-related risks and opportunities facing Videndum were identified in 2021 during our first round of TCFD reporting, through research, stakeholder engagement and risk workshops. During 2023, we repeated this process on existing climate risks for the third time to determine whether they were still relevant to Videndum, or if there are any new risks or opportunities. To enhance our process, we worked to identify the risks and opportunities at new sites acquired during the current financial year and across our top 90 suppliers and routes. In total, 19 climate-related risks and four opportunities were identified in 2023. Starting in 2024 we will implement a new software solution to enable the capture and tracking of climate change risks.

Step 2 – We assessed each risk and opportunity using our climate scenario analysis, accounting for the full range of each potential impact. The financial impact of risks was assessed and considered where possible. In 2023, our risk assessment process considered the vulnerability of our 17 top suppliers to climate change. We also analysed how our key supply routes may be impacted. Analysing the potential impact of a number of physical risks, such as flooding, on our supplier locations and supply routes, allows us to forecast potential disruptions to our supply chain.

Step 3 – We continue to appraise our risk management options, ensuring that the response remains relevant and most effective. In 2023, we assessed the quality of existing risk mitigation options, including those that were implemented in 2023, such as new low-emission technologies and, where necessary, investigated potential options to manage the impact of risks and opportunities at new sites and within our supply chain. A risk management response was agreed, depending on how it helped build our resilience to the climate-related issue. The Climate Risk register has been integrated into the Group's overall Risk Register.

Step 4 – Finally, we addressed each risk and opportunity. Controls were implemented to prevent, reduce or mitigate downside risks, or increase the likelihood of opportunities. In 2023, mitigation actions remained in place from the previous financial year. The outcome of the climate scenario analysis was one of the factors behind the relocation of our Stroud, UK site, after it was identified to be in an area prone to flood risk. We recognise that residual risks will remain, and we will communicate this across the business as appropriate. Risks that were identified to have a medium or high impact on the business in 2023 will have mitigation measures prioritised.

At a minimum, our management teams review risk exposures against business risk level tolerances annually. Our management teams and the Head of Group Risk Assurance will annually review climate-risk exposure against business risk level tolerances.

Videndum's transition plan – a roadmap to net zero

See page 46

Our goal is to be Net-Zero by 2045. This is supported by several initiatives, for example, installing solar panels, entering renewable contracts for electricity, substituting petrol and diesel company cars to EVs, and rolling out LED lighting upgrades at our sites. We report on our carbon emissions to track our progress. In the next financial year we are planning a 38% reduction in our Scope 1 and 2 GHG emissions using the market-based approach. Please see the Metrics and Targets section of our standalone 2023 TCFD Report for how we will achieve this and details on progress made in 2023. We acknowledge that our Scope 3 emissions are harder to reduce, so we plan to monitor and reduce our employees' travel. For example, our Production Solutions Division implemented a car-pooling scheme in 2023 at the Cartago, Costa Rica site, with the aim to implement the scheme at the Division's Bury St. Edmunds, UK site in 2024.

Reducing our greenhouse gas emissions

In 2023, our Scope 1 and 2 emissions reduced by c.30% from 2019 (excluding the impact of newly acquired businesses). Our formal baseline for measuring Scope 1, 2 and 3 emissions is 2021, when the methodology was fully rolled out. We have reviewed progress against 2019 in order to analyse year-on-year trends, although 2019 is not technically the baseline year.

Reducing the Group's carbon footprint is a priority for Videndum (see table 10 for energy-saving initiatives). We calculated our entire Scope 3 emissions for the first time in 2021, following the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, using 2020 data. In 2022, we worked to align our Scope 3 reporting to our financial reporting period, calculating both our 2021 and 2022 carbon footprints.

Under the GHG Protocol, there are 15 reporting categories, of which 11 apply to the Group. The following are not applicable to the nature of the business's operations, given we have no upstream leased assets (Category 8), do not sell goods which require further processing (Category 10), have no franchises (Category 14) or any significant applicable investments (Category 15). In 2022, we introduced measures to improve the accuracy of our data collection. This financial year, we launched an ESG Supplier Questionnaire, engaging with our top 90 suppliers based on spend. The questionnaire requested details of our suppliers' Scope 1 and 2 carbon emissions, energy usage, reduction targets and wider ESG programmes. The surveys were tailored for each of the three Divisions to ensure supplier specific information was obtained. We will use the information from these surveys to improve the accuracy of our Category 1: Purchased Goods and Services and Category 2: Capital Goods data. We deem this approach to be effective and will widen the scope over time.

In 2023 we worked with Inspired ESG to improve the data quality of three Scope 3 Categories 1: Purchased Goods and Services and Categories 4: Upstream Transport and Distribution and 9: Downstream Transport and Distribution. 2023 is the first year that downstream transportation and distribution emissions were calculated. The aim is to further improve our data quality for both upstream and downstream transportation and distribution in 2024.

By improving our emissions data collection, we can improve our understanding of the high-emitting areas of our operations and value chain, which will support us with the implementation of our roadmap to achieve net zero by 2035 for Scopes 1 and 2, and net zero by 2045 for Scope 3.

TCFD continued

Our 2023 Scope 1 and 2 emissions represent 3.6% of our total Group emissions, with our 2023 Scope 3 emissions representing 96.4%.

Scope 1, 2 and 3 emissions

Table 7: Group emissions from 2019 to 2023 and reduction target

Emissions Scope	2023 Gross emissions (tCO2e)	2022 Gross emissions ² (tCO ₂ e) re-stated	2021 Gross emissions ¹ (tCO ₂ e) re-stated	2020 Gross emissions (tCO2e)	2019 Gross emissions (tCO2e)	Interim target	Net zero target year
Scope 1	1,155	1,336	1,193			50%	2035
Scope 2	2,556	2,903	2,533	3,535	4,580	reduction by 2030	2035
Scope 3	100,531	176,299	155,636	130,820	not fully captured	-	2045
Total	104,242	180,538	159,362	134,355	-	-	-

1 We have re-stated our 2021 Scope 1 and Scope 2 figures which were previously 1,456 and 2,524 tCO₂e, respectively. These restatements are due to recalibration of our natural gas and electricity emissions. This has resulted in a slight increase in our overall emissions for 2021. Our Scope 3 emissions were also restated as improved business travel data was collected. Previously, the total was 154,550 tCO2e.

2 We have re-stated our 2022 Scope 1 and Scope 2 figures which were previously 1,467 and 2,773 tCO₂e, respectively. These restatements were due to recalibration of our natural gas and electricity emissions. Scope 3 emissions were also restated as improved business travel data was collected. The previous total was 173,148 tCO₂e.

The marginal increase in Scope 1 and 2 emissions between 2021 and 2022 was due to new businesses being acquired late in 2021 (Savage and AUDIX). Removing these would show a decrease. A further decrease took place in 2023, due to the impact of several energy saving schemes, and consolidation of several sites. The above Scope 2 information is provided under the location basis; using the market-based approach, the reduction is much steeper which is due to the majority of large sites having entered into renewable energy contracts. Similar contracts will be entered into in 2024, which will be a key instrument to achieve carbon neutrality.

In terms of the Scope 3 emissions, the significant decline in 2023 is principally due to reduced activity caused by the macroeconomic headwinds facing the business.

Streamlined Energy and Carbon Reporting

This report summarises the energy usage, associated emissions, energy efficiency action and energy performance for the Group, under the government policy Streamlined Energy and Carbon Reporting ("SECR"), as implemented by the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018.

Table 8: Total consumption (kWh) figures for energy supplies reportable by the Group:

Utility and Scope	UK (kWh) 2023	UK (kWh) 2022	UK (kWh) 2021	Global (excluding UK) (kWh) 2023	Global (excluding UK) (kWh) 2022 re-stated	Global excluding UK) (kWh) 2021 re-stated	Total kWh 2023	Total kWh 2022 ¹	Total kWh 2021 ¹
Scope 1 – gaseous and other fuels (voluntary)	783,283	872,109	945,124	4,624,549	5,112,471	4,053,757	5,407,832	5,984,580	4,998,881
Scope 1 – transport (Company fleet)	195,019	275,041	236,608	506,567	669,388	1,093,729	701,585	944,428	1,330,337
Scope 2 – electricity	1,208,408	1,322,599	1,716,613	7,506,194	8,940,700	8,709,990	8,714,602	10,263,299	10,426,603
Scope 2 – transport (Company fleet)	19,857	5,448	6,473	-	1,727	_	19,857	7,175	6,473
Scope 2 – purchased heat, steam and cooling	2,475	2,675	9,148	-	-	-	2,475	2,675	9,148
Scope 3 – grey fleet ²	124,765	35,880	51,642	63,154	69,097	49,342	187,919	104,977	100,984
Total energy use – all Scopes	2,333,807	2,513,752	2,965,608	12,700,464	14,793,383	13,906,818	15,034,270	17,307,134	16,872,426

1 We have restated our UK and Global kWh figures across 2021 and 2022 as improved data quality has become available. These changes align with the restated emissions in Table 7.

2 Grey fleet are the use of employees' personal vehicles for business purposes, as opposed to belonging to the Company.

Streamlined Energy and Carbon Reporting continued

Table 9: The Total Carbon Emissions (tCO_2e) figures for Group

Location-based

Utility and Scope	UK (tCO₂e) 2023	UK (tCO₂e) 2022	UK (tCO₂e) 2021	Global (excluding UK) (tCO₂e) 2023	Global (excluding UK) (tCO2e) 2022 re-stated	Global (excluding UK) (tCO ₂ e) 2021 re-stated	Total (tCO₂e) 2023	Total (tCO₂e) 2022	Total (tCO₂e) 2021
Scope 1 total	189	224	228	966	1,112	1,002	1,155	1,336	1,231
Scope 1 – gaseous and other fuels	143	159	173	847	938	745	990	1,097	919
Scope 1 – transport (Company fleet)	46	65	55	119	159	257	165	224	312
Scope 1 – refrigerants	-	-	-	-	15	-	-	15	-
Scope 2 total	255	258	367	2,301	2,645	2,167	2,556	2,903	2,535
Scope 2 – electricity	250	256	364	2,301	2,645	2,167	2,551	2,901	2,532
Scope 2 – transport (Company fleet)	4	1	1	-	0.33	_	4	1	1
Scope 2 – purchased heat, steam and cooling	1	1	2	-			1	1	2
Scope 3 total (grey fleet)	29	8	12	15	16	12	43	25	24
Total emissions – all Scopes	473	490	607	3,282	3,773	3,181	3,754	4,264 ¹	3,790 ¹

1 We have restated our 2021 and 2022 emissions totals to incorporate improved data quality. Previous totals equalled 4,265 and 4,005 tCO₂e for 2022 and 2021, respectively.

The following table shows the intensity metric of tCO_2e per £million turnover applied for the annual total consumption.

				Global (excluding	Global (excluding	Global (excluding	Total Global	Total Global	Total Global
	UK Intensity Metric	UK Intensity Metric	UK Intensity Metric	UK) Intensity Metric	UK) Intensity Metric	UK) Intensity Metric	Intensity Metric	Intensity Metric	Intensity Metric
Intensity Metric	2023	2022	2021 ¹	2023	2022	2021 ¹	2023	2022	2021
tCO₂e/£m T/O	4.55	3.71	4.79	16.17	11.82	11.89	12.23	9.45	9.61

1 We have re-stated our 2021 intensity metrics as a result of now applying a UK only specific £m revenue value to UK only emissions. This methodology has also been applied to global (excluding UK) intensity metric calculations. i.e., applying a global (excluding UK) only £m revenue value to global (excluding UK) emissions.

TCFD continued

Energy efficiency improvements

The Group is committed to year-on-year improvements in our operational energy efficiency. A register of energy efficiency measures has been compiled and will be implemented within five years.

Table 10: Energy efficiency improvements that will reduce Group emissions in 2023 and planned for 2024 onwards.

	Measures undertaken in 2023	Measures planned for 2024 and onwards
Solar	 Solar panels installation to the roof of Media Solutions' facility in Feltre, Italy. 30% expansion of solar panels at Production 	 Solar panels installation to the roof at Media Solutions' Ashby-de-la-Zouche, UK site is under evaluation with suppliers, and planned for installation in the next two years.
Fleet	Solutions' site in Cartago, Costa Rica. - 33.3% of Production Solutions' vehicles were hybrid or electric at the end of 2023 compared to 27.3% at	 Continue conversion of motor vehicles to electric once they have reached end of life
	 Media Solutions has converted 80% of Company vehicles to electric (2022: 54%). Creative Solutions does not have a car fleet. 	 Media Solutions has a target to convert 100% of the Company fleet to hybrid or electric vehicles by 2025. Production Solutions aim to have 63.6% of vehicles converted to electric/hybrid by the end of 2024. This is due to a number of leases expiring by the end of 2024 and all new leases are hybrid or electric as per Group policy.
LED Lighting	 The Bad Kreuznach, Germany, Tokyo, Japan and China offices now use 100% LED lighting. Media Solutions' Ashby-de-la-Zouche, UK site converted an additional 20% of lighting to LED saving an estimated 0.7t CO₂. 	 The complete transition to LED lighting in Feltre, Italy and Ashby-de-la-Zouche, UK aims to have 100% of lighting converted to LED in 2024. LED lighting conversion at Media Solutions' Arizona, US office is budgeted for in 2024.
	 Up to 90% of all lights are now LED in both our Production Solutions Bury St Edmunds, UK and Cartago, Costa Rica sites. LED lights were installed at Creative Solutions' Los Angeles, US site towards the end of 2023. 	 Other smaller sites being gradually converted, e.g. Richmond, UK.
Metering	 25% completion of energy metering and circuit level monitoring was implemented in Feltre, Italy which is an estimated saving of 10 tCO₂e. 	 Continue to analyse areas where we can conduct similar initiatives at other sites.
Green energy contract	 A total of seven sites have renewable energy contracts, as at the end of 2023. The sites are: Richmond, Twickenham, Byfleet and Bury St. Edmunds, UK; Irvine, US; Cassola and Feltre, Italy. Cartago, Costa Rica is not technically on a renewable contract, however, the energy is from a clean, hydroelectric source. 	 We aim to transfer the following sites to a Renewable Energy Contract in 2024, which aims to further reduce emissions. Phoenix, US Raleigh, US Shelton, US Creative Solutions will move three facilities to a renewable energy contract in 2024.
New product	 Anton/Bauer, a brand within Production Solutions, has launched a sodium-based 9kWh mobile power source called Salt-E Dog, which delivers consistent and reliable energy and addresses the pressing issue of carbon emissions associated with traditional fossil fuel or lithium generators. 	 Continue to conduct R&D to implement similar innovative products.
Site rationalisation	 We have confirmed plans to lease one-third of the area at our Shelton, US site, reducing the size of the site leased by the Group. We have also switched all the lighting to LED and checked all HVACs to ensure compliance with the latest energy efficiency standards. 	- Site rationalisation continues to be a key priority.
Air conditioning energy saving	 70% completion of compressed air leak detection and repairs in Feltre, Italy. 30% implementation of heating and air conditioning controls in Feltre, Italy. 	 Continue to analyse areas where we can conduct similar initiatives at other sites. In 2024, we are looking to upgrade the air-conditioning system in Raleigh, US.

Methodology

Scope 1 and 2 consumption and CO₂e emission data for UK sites have been calculated according to the 2019 UK Government environmental reporting guidance and the GHG Protocol. The current kWh gross calorific value (CV) and kg CO₂e emissions factors relevant to reporting year 1 January – 31 December 2023 were applied. Scope 3 emissions have been calculated based on the guidance in the GHG Protocol Corporate Value Chain (Scope 3) Standard.

Scope 1 emissions

Direct emissions from our own operations e.g. fuel combustion. Scope 1 fuel consumption – natural gas, transport fuel and other fuels – are converted to CO_2e figures using conversion factors outlined below.

- To convert Scope 1 (Company fleet and natural gas) and Scope 3 (grey fleet) usage in the UK, the UK DESNZ 2023 emissions factors database was used. For the US, the United States Environmental Protection Agency GHG Emissions Factors Hub 2023 was used. For Australia, the Australia National GHG Account Factors 2022 database was used. For remaining countries, we default to the UK DESNZ 2023 emissions factors database.

Scope 2 emissions

Indirect emissions generated from purchased electricity. Scope 2 emissions are calculated based on both the "location" and "market" methods outlined in the GHG Protocol. Scope 2 country-specific electricity emissions factors were used on the sources in the table on page 56 to 57.

Location-based methodology

Methodology to calculate Scope 2 emissions using the average electricity grid emission conversion factor of a region. For all UK facilities we use the DESNZ 2023 conversion factors. For all non-USA facilities, we use national carbon conversion factors for grid purchased electricity from a variety of published sources; including national grid suppliers and government agencies (see table on next page). For USA sources we use the latest regional intensity factors available from the Environmental Protection Agency's Emissions and Generation Resource Integrated Database (eGrid). Emissions associated with the use of purchased electricity (Scope 2 emissions) were calculated using country-specific electricity emissions factors as per the sources in the table on the next page.

Market-based methodology

Methodology to calculate Scope 2 emissions using electricity conversion factors specific to the contractual instruments in place for procured electricity. Where contract specific data was not available, location specific residual factors were used. Where neither is present, the location-based factor was used.

Scope 3 emissions

All the indirect emissions (excluded in Scopes 1 and 2) that occur in our value chain. For all Videndum sites, applicable Scope 3 categories were identified based on an operational control boundary. Scope 3 emissions for applicable categories were calculated following methodologies outlined in the GHG Protocol "Technical Guidance for Calculating Scope 3 Emissions", with further guidance taken from the GHG Protocol's detailed methodology chapters for each applicable Scope 3 category.

For UK sites, most conversion factors were sourced from UK Government GHG Conversion Factors for Company Reporting, v1.1 2023. Where a spend-based approach was used, as per the GHG Protocol guidance, conversion factors were taken from the University of Leeds and Department for Environment, Food and Rural Affairs' "UK Footprint Results (1990 – 2018)" study or the Department for Environment, Food and Rural Affairs' "IK Footprint Results (1990 – 2018)" study or the Department for Environment, Food and Rural Affairs' "IK Footprint Results (1990 – 2018)" study or the Department for Environment, Food and Rural Affairs' "IK Footprint Results (1990 – 2018)" study or the Department for Environment, Food and Rural Affairs' "IK Footprint Results (1990 – 2018)" study or the Department for Environment, Food and Rural Affairs' "IK Footprint Results (1990 – 2018)" study or the Department for Environment, Food and Rural Affairs' "IK Footprint Results (1990 – 2018)" study or the Department for Environment, Food and Rural Affairs' "IK Footprint Results (1990 – 2018)" study or the Department for Environment, Food and Rural Affairs' "IN Footprint Results (1990 – 2018)" study or the Department for Environment, Food and Rural Affairs' "Indirect emissions for the supply chain" database. Scope 3 emissions include Well to Tank and T&D losses.

For international sites, country-specific emissions factor databases were used where available. For example, for US sites, 2023 specific emissions factors were taken from the EPA GHG Emission Factors Hub and spend-based emission factors were sourced from a Quantis database.

Country-specific 2023 electricity emissions factors were used to estimate emissions associated with Categories 11: Use of Sold Products and 13: Downstream Leased Assets. These factors were taken from the sources outlined in the table below.

A third party uses the Company's data to calculate emissions but no formal assurance is provided.

Country	Source used
Australia	Australia National GHG Accounts 2022
China	Climate Transparency Report 2022
Costa Rica	Costa Rica IMN 2022 Factor
Germany	AIB Factors 2023
Hong Kong	Hong Kong Electric Company 2023
India	Climate Transparency Report 2023
Israel	Carbon Footprint Ltd's 2023 Factors
Italy	AIB Factors 2023
Japan	Climate Transparency Report 2022
New Zealand	Ministry of Environment 2022
Singapore	Singapore Energy Market Authority 2022
UK	DESNZ 2023
USA	EPA 2023