

TCFD Disclosure

The Task Force on Climate-Related Financial Disclosures

The Group has complied with the requirements of LR 9.8.6 R by including climate-related financial disclosures consistent with the TCFD recommendations and recommended disclosures.

Governance

Board's oversight of climate-related risks and opportunities

Until May 2022, the Board's oversight of the environment was through its Safety & Environment Committee. Since May 2022, it has been through its dedicated Sustainability Committee, with a remit to cover the governance of environmental and sustainability matters. The Sustainability Committee met twice during 2022, with the Safety & Environment Committee also meeting once during the year prior to it being repurposed. In future, the Sustainability Committee will meet three times a year. The terms of reference can be found on the Company's website at www.nationalexpressgroup.com/search/?q=sustainability+committee

Key activities

With the Safety & Environment Committee having previously approved the Group's environmental strategy, which is centred on the transition of the Group's fleet to ZEVs, this year the key activities of the newly formed Sustainability Committee focused on monitoring the progress of implementing the strategy, including:

- Assessing the Group's performance against its sustainability targets and reviewing the plans for achieving its sustainability ambitions, the Group's Sustainability road map and the Group's ZEV transition road map;
- Reviewing and approval of the Group's first Group-wide Sustainability Report published in July 2022;
- Monitoring of the Group's plans to align with the Paris Agreement target of limiting global warming to 1.5 degrees above pre-industrial levels; and
- Reviewing and approval of the sustainability disclosures reported in this Annual Report.

Reporting

The Committee reports to the Board of Directors, with the Committee Chair providing updates to the Board after each Committee meeting on the matters discussed. The Board is specifically updated on information received by the Committee in respect of the physical and transitional risks associated with climate change and any strategic recommendations made by the Committee. The Committee also produces a formal written report each year to the Company's Shareholders, which is approved by the Board. This year's report is set out on pages 136 to 139 of this Annual Report, which includes a list of Committee members and other attendees.

Review of climate-related issues

The Evolve strategy, launched in 2021 was reviewed by the Board prior to launch. One of the key outcomes of the strategy is for the Group to be an environmental leader, by delivering the transition to zero emission vehicles.

To monitor progress against this strategy and the financial impact, the Board reviews on an annual basis both the long-term strategic plan, of which the latest runs until 2027, and the annual budget, the most recent of which was for FY23. Both of these exercises consider the financial and operational impacts of both the transition to a low carbon economy and the potential impact of physical risks from climate change, which are discussed in detail in the Strategy section of this disclosure.

Please refer to the risk management section for how the Board exercises oversight vis-à-vis the incorporation of climate-related issues into the risk management processes.

Training and Development

To assist them in discharging their oversight responsibilities on the Group's environmental strategy and having the ability to give direction and raise challenges, the Committee received a Benchmarking and Landscape review presentation from international sustainability consultants BRODIE during the year. Committee members also have access to climate related resources, including Chapter Zero.



TCFD Disclosure continued

Management's role in assessing and managing climate-related risks and opportunities

The Company's Executive Directors are responsible for the delivery of the Group's environmental strategy and are the sponsors of its overall 2040 net zero ambitions. The Group Sustainability Director, who joined the Group in December 2021, has supported this delivery and continued to develop the Group's environmental and wider sustainability strategy during the year. As the Group's environmental strategy is centred on the transition of the Group's fleet to ZEVs, the Group has steering Groups to oversee and lead the ZEV transition. This includes a new Global Sustainability Steering Group (GSSG), which was incorporated during the year and has the Group CFO and the Group Human Resources and Communications Director as the Executive sponsors. The following diagram explains the role both Board committees and different senior leaders play in having oversight of assessing and managing climate-related risks and opportunities:

Board of Directors

Responsible for reviewing the Group's strategy and its management of risk and ensuring that there is a robust system of internal control in place, including for climate risks.

Sustainability Committee

Newly formed in the year with a remit to cover the governance of environmental and sustainability matters. Key activities in the year are set out on page 136.

Nominations Committee

Considered and recommended the proposed size and composition of the newly formed Sustainability Committee, taking into account the Non-Executive Directors' experience, expertise and other Board and Committee responsibilities

Remuneration Committee

Reviewed and approved the inclusion of ESG targets within the Executive Directors, and senior management's remuneration to ensure alignment with strategy and performance

Audit Committee

Reviewed the annual report including TCFD disclosures

Company Executive Management (Group CEO & CFO)

- Delivery of the Group's overall strategy, including its ZEV fleet transition strategy and management of other climate-related risks and opportunities
- Ensure effectiveness of the Group's risk management system, including for climate-related risks
- Management of the functional managers and divisional executive managers, and being members of the Company ZEV Steering Group

Group

Group Sustainability Director

- Supports Company executive management in developing and delivering a sustainability strategy, consistent with the Evolve strategy

Group Head of Compliance & Risk

- Supports Company executive management in ensuring there is an effective risk management system

Functional Managers

Managers and their climate-related responsibilities:

- Group General Counsel: assists with the identification of climate-related risks e.g. by advising on regulatory changes driving transitional risks
- Group Insurance Manager: assists with managing climate-related risks e.g. by securing insurance coverage for physical risks
- Group Safety Director: assists with managing climate-related risks e.g. by devising new safety policies and procedures to mitigate physical risks
- Group Procurement Director: identifies, negotiates and builds partnerships with vehicle manufacturers for the supply of ZEVs on the best obtainable terms
- Group Head of Internal Audit: provides independent assessment of the effectiveness of climate-related risk management activities and of other functions' climate-related activities
- Group Financial Controller: assists with the quantification of climate-related risks and scenario modelling

Company ZEV Steering Group

Membership: Group CEO, Group CFO, Divisional CEOs, Divisional ZEV Leads, Group Procurement Director, Group Commercial Director

Climate-related activities:

- Lead and oversee progress of delivery of ZEV transition plans
- Receive reports from Divisional ZEV Steering Groups on all matters reviewed by them

Global Sustainability Steering Group (GSSG)

The GSSG was newly established in the year. Attendees also include the Group Head of Sustainability, Group Financial Controller, Group Procurement Director, and representatives from each division who are primarily responsible for environmental and sustainability matters. The Steering Group is tasked with:

1. Ensuring consistent reporting of ESG and sustainability targets
2. Setting the global strategic framework for our sustainability strategy
3. Establishing how to communicate our ESG strategy, vision and purpose externally
4. Sharing best practice and collective learning
5. Communicating our successes to our stakeholders – particularly shareholders

Divisional

Divisional Executive Management (Divisional CEOs & CFOs)

- Build climate-related risks and opportunities into divisional business plans, allocate resources for their delivery, and manage and track their delivery
- Build the financial implications of climate-related risks and opportunities into divisional budgets and track these through forecasts

Divisional Commercial & Operations/Service Delivery Managers

- Manage the operational impact of climate-related risks e.g. develop and implement contingency plans to mitigate physical risks
- Deliver commercial arrangements to capitalise on climate-related opportunities e.g. arrange road services to cover disruption caused by physical risks to rail infrastructure and apply for ZEV grant funding
- Assist in identifying new climate-related risks and opportunities

Divisional ZEV Steering Groups (x3)

Membership: Divisional CEOs, Divisional ZEV Leads, Divisional Procurement Directors, Divisional Commercial Directors

Climate-related activities:

- Develop and track progress against divisional ZEV transition plans
- Track financial impact of ZEV initiatives
- Review customer (passenger and contract counterparty) demand for ZEVs
- Review ZEV supply chain relationships
- Review ZEV funding options
- Track ZEV technological advancements

TCFD Disclosure continued

Risk Assessment

Processes for identifying, assessing and managing climate-related risks, and integration into overall risk management

Identifying and Assessing

We apply a two-pronged approach to identifying and assessing climate-related risks. Firstly, they are considered as part of the Group's risk management system to identify, assess and report on all business risks (see pages 56 to 61 for more detail), which is presented to the Board annually. Secondly, in 2021, a specific climate-related risk self-assessment was introduced for the first time, which was updated by all the Group's divisions during 2022 and will be refreshed annually in the future. This process enabled the Group to assess the potential size and scope of climate-related risks identified across the Group.

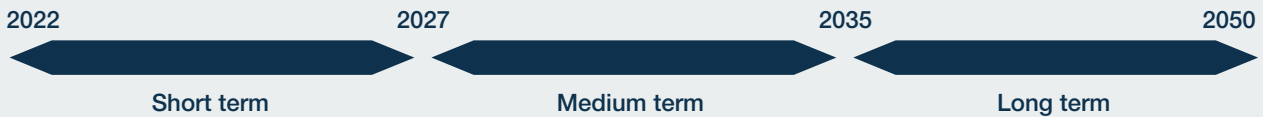
The key features of the specific climate-related risk assessment are as follows:

- The risk assessment has two components: physical risks (such as extreme weather events); and risks related to the transition to a lower carbon society (such as the cost and operational challenges with transitioning rapidly to a ZEV fleet). This transition risk includes the need to comply with new regulations or laws related to climate change (e.g. a ban on use of diesel vehicles).
- Divisional teams assigned a probability of occurrence and a financial impact score against each of the risks identified, enabling the Group to prioritise consideration of the higher climate-related risks we face.

- For each risk, divisional teams assessed the expected frequency of occurrence, the activities and controls in place to mitigate the risk, and the effectiveness of those controls.
- Each division has also assessed potential opportunities related to climate change.
- The risk assessments were reviewed by the Group Financial Controller, Group Head of Compliance and Group Sustainability Director.
- A summary is presented to the Board, who duly reviewed and challenged the conclusions, enabling an assessment of the relative significance of the risks posed by climate change compared to other risks.

Time horizons

In order to assess the impact of climate-related risks over time, the Group has set short, medium and long-term time horizons as set out in the diagram below. The short-term time horizon to 2027 aligns with the five-year forecast period used for the Group's strategic financial planning process. The medium-term end date of 2035 aligns with the assumed ban on use of diesel vehicles that we have applied in the 'extreme transition' scenario (as described below), and is also a key milestone date for the Group's zero emission targets. The long-term assessment considers a longer period to 2050. Please refer to page 72 for our net zero goals, timeline and plan.



Materiality

In assessing these risks, we have set materiality thresholds in line with TCFD guidance. For short to medium-term risks, we have applied a level of materiality consistent with the approach of how the Group has determined materiality for our Financial Statement audit (the higher of (i) 5% of the Group's Underlying Operating Profit in the respective year of the most recent long term strategic plan; or (ii) £10

million). For longer-term risks, we apply a higher materiality of 10% of a long-term estimate of the Group's Underlying Operating Profit, as the risks are less certain and the Group has longer to develop mitigation plans. We applied this assessment to the climate change scenario modelling analysis to determine material risks and opportunities arising from climate change.

Managing climate-related risks

Climate-related risks, like any principal risks, are included in the divisional and Group risk registers. They are assigned Risk Owners, who are responsible for capturing and reporting any developments regarding the risk in the regular risk management updates that take place throughout the year. Any necessary actions required to respond to climate-related risks (for example increased investment or expenditure to mitigate the risks) are discussed and approved as per the Group's delegated authority framework.

Furthermore, the more detailed breakdown of specific climate-related risks identified in the climate-related risks self-assessment process are reviewed by the Global Sustainability Steering Group, who instruct the relevant teams in each division to draw up mitigation plans where relevant.

Integration into overall risk management

The climate-related risk self-assessments feed into the wider divisional and Group risk registers. Any significant climate-related risks are captured for review and discussion at the various levels of Management and the Board. There is a clear interrelationship between addressing climate-related risks and Group strategy primarily through the transition to ZEVs. As a further control over the completeness and accuracy of the divisional and Group risk registers, a cross check is performed from the detailed climate-related risks self-assessment exercise to ensure it is consistent with the higher-level risk register process.

Strategy

Climate-related risks and opportunities (short, medium and long term)

Impact of climate-related risks and opportunities on the strategy and financial planning

Resilience of the organisation's strategy, considering different climate-related scenarios, including a 2°C or lower scenario

Our climate scenarios:

1. an **extreme physical climate change scenario** assuming a lack of coordinated governmental action and intervention to reduce emissions, ultimately resulting in more extreme weather events. This scenario assumes the current warming rate continues unabated; rising to circa +4°C by the end of the century, as forecast by the Intergovernmental Panel on Climate Change (IPCC) in its worst case 'RCP 8.5' scenario; and
2. an **extreme transition scenario** including an assumed ban on internal combustion engines to limit the global temperature increase to 1.5°C above pre-industrial levels, as projected by the IPCC's 'RCP 2.6' scenario.

These two scenarios were selected to model the potential impacts at the opposite end of the spectrum of likely outcomes: the extreme transition scenario (consistent with significant, co-ordinated intervention) increases transition risk, but minimises physical risks associated with climate change, whereas the opposite can be said for scenario 1. We confirmed this by analysing a third scenario (based on the IPCC's 'RCP 4.5' scenario).

A summary of the two scenarios is set out in the table below.

Scenario	Extreme Physical Climate Change	Extreme Transition Scenario
RCP scenario	8.5°C	2.6°C
Description	Assuming a lack of action to reduce emissions, resulting in more extreme weather events	Including an assumed ban on internal combustion engines
Mean temperature rise by 2100	4°C	1.5°C

TCFD Disclosure continued

1. Extreme physical climate change scenario

For this scenario, we assumed a range of extreme weather events occurring with increasing frequency through the time horizons under consideration, which included damage to depots from flooding or fires and business disruption from extreme heat or cold. We considered the impact of these before mitigations; in reality, we anticipate that mitigating actions will significantly reduce risk, for example, by relocating assets away from localised flood or wildfire risks.

We concluded that the financial impact of those risks would not be material. We arrived at this conclusion because of the geographical spread of the Group; operating from hundreds of depots across 50 cities in 11 countries. Any extreme weather event, whilst potentially very disruptive on a localised basis, is unlikely to affect more than a small number of Group locations, nor occur with sufficient annual frequency to cause a material financial impact, post mitigations. In any case, the Group's insurance policies cover many of the risks of physical damage, as well as the cost of business interruption.

During 2022, the Group performed an initial physical climate risk assessment with an external provider in order to inform and supplement our own risk assessment. This exercise calculated a risk rating for approximately 200 of the Group's major locations, to identify those most at risk from the impact of climate change across a number of different extreme weather or climate events. The analysis identified that sites in central USA, largely from draught and high temperatures, and southern ALSA, from extreme rainfall, are the sites at the highest risk of impact from climate change; and these would be a priority to address in the medium and long-term time horizon.

This analysis also enables the development of location-specific mitigation plans.

The illustrations on the next page show physical risk on a colour scale from green (least at risk from climate change) to red (most at risk from climate change) forecasted for the midpoint of our medium-term horizon, 2030, under the RCP 8.5 scenario.

Across the Group, we already operate vehicles in both the coldest large city in the USA (Fairbanks, Alaska, with a mean January temperature of -22oC), and Bahrain, which has an average high temperature of 38oC in the summer. This shows we are already used to operating in extreme weather conditions, and have the infrastructure to manage it. Nonetheless, weather events have historically had some impact on our operations; in 2022, the financial impact from extreme weather events was £5m, mostly being disruption from snow fall in North America, and this was broadly consistent with that

experienced in prior years. This amount also included a number of extreme storm events during the year, including hurricane Fiona in Florida in September 2022. However, some events such as Storm Eunace and Storm Franklin in the UK had a minimal impact, demonstrating that there is variation in the extent to which each event has a financial or operational impact. The Group also has many mitigations in place. For example, Germany has adjustments built into its contracts, meaning we have access to reimbursement of infrastructure costs and penalty reductions, to reduce the financial impact of extreme weather events. We will continue to closely monitor the impact weather has on our operations as part of our future financial planning.

Under this very extreme scenario, our climate modelling showed that the financial impact caused by an increased magnitude and severity of extreme climate events could be in the order of c.£50m annual profit impact from 2027. Critically, however, this is before any offset from mitigating actions and modal shift opportunities that would very likely arise under this extreme scenario. Whilst based on our calculated materiality this amount would represent a material impact on Group profit, it is not significant in the context of our going concern, viability statement and headroom on lender covenant tests. In reality, mitigating actions, such as relocating frequently affected depots in order to continue operating the services, can be implemented to reduce the impact.

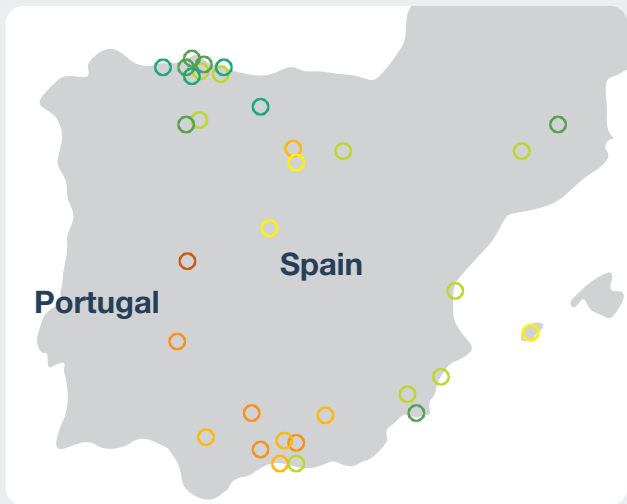
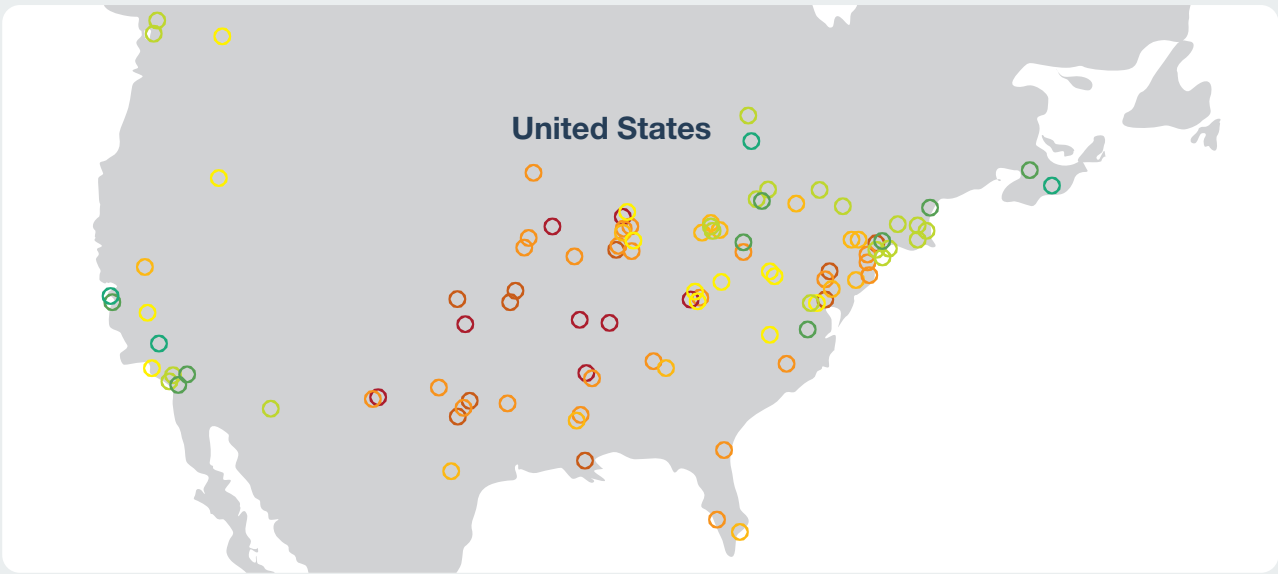
2. Extreme transition scenario, incorporating the Group's transition plans

We considered the risk of regulatory change and/or customer demand requiring society to transition to zero emission cars and public transport in a relatively short period of time. Specifically, we have assumed that this involves a global ban on the use of any internal combustion engine vehicles from 1 January 2035. We have also considered the Group's plans to transition to a low carbon economy to address the Group's existing net zero targets.

A ban being introduced in 2035, as assumed under this scenario, would have the greatest impact on the Group in the medium-term time horizon.

The Group's current ZEV transition plan assumes over 95% of the fleet would be transitioned during the short and medium time horizon, with only a small remainder being required in the long-term time horizon, and therefore the key risks listed below are most pertinent in the short and medium-term time horizon.

Physical risk rating to the Group's locations under the 'RCP 8.5' scenario by 2030



The colour coding denotes the scale of expected physical impacts from climate change at that location, from green (least at risk from climate change) through to red (most at risk from climate change), under the 'RCP 8.5' scenario by 2030.

TCFD Disclosure continued

Our analysis of this scenario identified the following key risks, which apply to both the Group's transition plan, and to a greater extent under the extreme transition scenario:

- i. impact on our existing fleet;
- ii. the ability to manage the fleet transition, including:
 - a. supply chain challenges to production of ZEVs in sufficient volumes;
 - b. infrastructure availability (particularly with respect to power/fuel);
- iii. maintaining the operation of the assets (particularly with regard to having sufficient skilled employees);
- iv. rising costs of ZEVs (particularly in a supply constrained scenario); and
- v. changing consumer behaviour (as attitudes towards flying and cruise travel impact on our associated services, e.g. airport transfers).

We concluded that the most significant priority risks are risks (i) and (ii), which are discussed in more detail below.

Impact on existing fleet

The Group has considered the impact on the value and useful economic lives of its assets, primarily on public service vehicles, under both the extreme transition scenario and as a result of the Group's own transition plan.

The Group has set out its ZEV fleet target dates by division on page 72.

With the exception of UK Bus, all existing diesel vehicles will have been fully depreciated by each divisional net zero target date. In UK Bus, the net book value of diesel vehicles at their net zero target date of 2030 is estimated to be £35m, assuming no disposals in the intervening period. The Group is not accelerating depreciation on these vehicles because it is anticipated that they will be sold at, or above, their net book value between now and the ZEV transition date. Some ZEV suppliers are actively buying back diesel vehicles in order to accelerate the introduction of electric vehicles.

Under the extreme transition scenario, where we have assumed a ban on the use of diesel vehicles from 2035, the net book value of diesel vehicles at that date would be £14m, and so the impact of accelerated depreciation on annual profit from 2023 would be circa £1m in the event of such a ban being implemented.

Please refer to the table below for a timeline of net book values and Note 15 in the Notes to the Consolidated Accounts for further information.

NBV of Diesel Vehicles	2030 (£m)	2035 (£m)	2040 (£m)
UK	36	6	0
ALSA	42	3	0
Germany	n/a- already operate electric fleet		
North America	86	5	0

Managing the fleet transition

The Group's ability to both transition the fleet to ZEVs to meet our own net zero targets, plans to move towards a low-carbon economy, and to mitigate risk in the extreme transition scenario is dependent on the ability to transition to and operate ZEVs across all divisions, with the exception of Germany, which already operates a fully electric fleet of trains. Vehicle emissions currently represent around 95% of Scope 1 emissions and therefore transitioning the fleet to ZEVs is the key driver of achieving our net zero target. We therefore do not currently anticipate that carbon offsetting will represent a significant part of the strategy to reach net zero. A transition plan is in place for each division, setting out both the known procurement pipeline in the near term and the assumed purchases in later years in order to achieve full transition of the fleet by the relevant target date.

We are transitioning our fleet regardless of any introduction of legislation to ban diesel vehicles, because of both the positive impact on the environment and, as we've proven in the UK, it is also economically better. The transition to ZEVs presents opportunities from reduced exposure to increases in fossil fuel prices.

The capital investment impact of the fleet transition will be achieved through a blend of traditional leasing agreements, outright purchasing, and 'availability' type arrangements. We do not expect that the financial commitments required each year under a mix of these financing arrangements to be any more capital intensive than the continuation of replenishing and replacing the existing diesel fleet would be. The pipeline of new ZEVs over the next five years has been reflected in the financial forecasts within the Group's latest strategic plan.

The impact of this on impairment assessments is set out in note 14 to the Consolidated Accounts.

A summary of the progress towards achieving our transition plan in each key division or market, and the future outlook is set out below.

Urban Bus – UK

The Group is most progressed in the UK Bus division, with 99 ZEVs in operation as of 31 December 2022, and a further 84 to be delivered and operational by the end of Q1 2023. An order for 170 was placed at the end of 2022, and a further 130 planned in early 2023. Our early orders have enabled us to monitor actual data on the operating cost of electric vehicles versus diesel vehicles, in order to inform and refine our total cost of ownership (TCO) modelling. Our modelling shows that electric buses have a TCO better than that of diesel vehicles, without grant funding being required; largely driven by lower maintenance and running costs. It is assumed in the extreme transition scenario that this continues to hold true in the future. Early signs in the UK also point to increased passenger numbers when ZEVs are used, with all other factors controlled for. There are several operational benefits from using electric vehicles, including the ability to optimise maintenance (both planned and reactive). We are able to mitigate technology transition risk by negotiating with supply chain partners, for example, by obtaining extended warranties on battery performance or through availability contracts.

We do not expect our vehicle purchasing requirements to comprise a significant portion of the market capacity for the manufacture of these vehicles. In relation to the charging infrastructure, the Office for Zero Emission Vehicles is accelerating the ease of installing charging points for businesses.

Urban Bus – Spain and Morocco

In Spain and Morocco we expect our Urban Bus operations to transition on a slightly longer timescale than in the UK as a result of two key factors: (i) operating conditions, including route length, and ambient temperatures being more challenging than in the UK; and (ii) the contracted nature of the services means that the transition timetable needs to be agreed with the contract counterparty. Whilst there is more uncertainty than in the UK, we still anticipate that the availability of suitable vehicles in the market will be sufficient to meet our transition plan and that the TCO is at least at parity compared to diesel vehicles.

School Bus – North America

School bus operations are well suited to ZEVs given relatively short operating distances and ample time for mid-day recharging. However, the longer time frame for transition in North America reflects two key factors: (i) ZEVs for the school bus market are currently expensive, reflecting low production volumes; and (ii) contracted procurement practices at school board level will need to adapt to accommodate ZEV introduction (for example, to recoup the cost of infrastructure investment). However, we are seeing increased demand for ZEVs (particularly as parents embrace the clean

air agenda), and funding is becoming increasingly available, such as the US government launching a \$5bn Clean School Bus programme. The Group has already submitted applications, and to date has received \$31m in grants. Additionally, our own assessment shows that the market capacity for ZEVs that we expect to consume is not notably larger than our proportionate market share.

Transit and Shuttle – North America

Our Transit and Shuttle operations are well progressed in transition, with approximately 100 electric vehicles currently in operation across the business. Our customers are driving the transition by replacing the vehicles they own, (which we operate), to ZEVs, and providing the on-site infrastructure to enable this. There is ample capacity in the vehicle market to enable transition. We have also set up a Zero Emission Leadership Coalition (ZELC) which brings together a number of our key customers, industry experts and vehicle providers to share knowledge and experience and help to drive the transition agenda forwards.

Long-Haul Coach – UK and ALSA

The transition of our long haul coach operations is more uncertain, as whilst hydrogen power produces a longer range than battery EV, the technology for hydrogen power is less developed, and fuel costs are currently too high to compete economically with diesel. More practical concerns such as the need to maintain sufficient passenger luggage space also need to be considered in the design and specification of ZEVs. However whilst battery EV may be impractical for long distance journeys, it is still suited to shorter distances and we are already using electric vehicles on a private hire contract in the UK.

In the UK, we are already engaging with the industry to develop a hydrogen coach demonstrator vehicle meeting our specification and multiple potential suppliers have been engaged.

In terms of hydrogen power, we have experience of setting up the required infrastructure through introducing 20 hydrogen vehicles into service in UK Bus in the West Midlands. Although the hydrogen requirements for these vehicles utilises approximately two thirds of our suppliers' current capacity, the market capacity is still developing. Given we have a number of depot locations located across the UK, the Group Procurement team are considering a range of alternate options to having hydrogen delivered to depots, with one solution being explored to have an on-site hydrolyser where the gas is created inside depots.

TCFD Disclosure continued

Ultimately, although the current outlook is more uncertain, we anticipate that we will be able to procure ZEVs suited to short and long distance journeys to enable us to achieve full transition by the target date, given our progress in engaging with suppliers and the wider industry thus far. Whilst TCO parity is not currently achieved for hydrogen solutions without grant funding, we would expect that, particularly under the extreme transition scenario, a combination of government support and private investment would ensure the requisite infrastructure was in place to enable the wider use of hydrogen vehicles. We will also be closely following emerging solutions for the considerably larger haulage industry, which will likely accelerate the emergence of technology and infrastructure solutions into the market for long haul transport.

Modal shift opportunities

In both scenarios, there are potentially very material upside opportunities from modal shift, which is discussed in more detail on page 13.

In the extreme physical climate change scenario, whilst it is assumed that central governments take no action to reduce emissions, it is likely that local government authorities or transport authorities would unilaterally impose measures to address congestion and pollution in cities (to help the drive for a cleaner air environment) and simultaneously meet their countries' own carbon reduction targets. These measures are likely to include increasing clean air zones or congestion zones that levy fees for cars, or ban them from city centres completely. This would force modal shift out of private car and into public transport.

In the extreme transition scenario, it is likely that as well as the above, central governments would bring about measures to either ban combustion engine cars or make them prohibitively expensive, as well as otherwise incentivising the transition to ZEVs. The UK's Climate Change Committee predicts that 9-12% of car journeys could be switched to bus by 2030, with 17-24% being switched by 2050. According to our analysis of the Department for Transport's 'Passenger transport by mode' 2019 statistics, a modal shift of 1% from car to bus would result in an increase of 23% bus passenger kilometres.

Resilience of the Group's strategy

A cornerstone of our Evolve strategy is to be an environmental leader, by leading the transition to zero emission vehicles, setting zero emission fleet targets for all areas of our business and fulfilling our purpose of leading the modal shift from cars to mass transit. Collectively, across Governments, employers and the public, there will be a desire and a need to reduce emissions to tackle the risks posed by climate change.

We believe this will accelerate both modal shift into public transport and the need to transition away from diesel vehicles; and that this would happen more quickly under the extreme physical climate change scenario. Therefore, we believe our strategy is resilient to these likely changes, as whilst as we have set out above, physical risks from climate change will undoubtedly provide more challenges to the business, we see greater opportunities from the vehicle transition and modal shift which are both key to our strategy.

Please refer to the risk management section on pages 56 to 61 for further considerations on the possible impact and mitigations of anticipated climate-related risks.

Impact on the strategy and financial planning

The Group considers both the financial and operational impact from transitioning the fleet to ZEVs, and possible physical risks from climate change, in its financial planning. These considerations are incorporated into both the five-year strategic plan, and the annual budget process. The following climate-related matters are reflected in both of these exercises on an annual basis:

- The blend of financing options for new ZEVs.
- Impact on the net book value or useful lives of the existing fleet – this is discussed in detail in the 'extreme transition' section.
- Whilst the targets for transitioning to fully ZEV fleets are ambitious and industry-leading, they can largely be accomplished through normal replacement cycles and therefore do not create a significant capital investment burden on the Group.
- Consideration of the output of the divisional climate-related risk assessments.

Additionally, in relation to the climate change scenario modelling, we assessed the impact of these on the Group's profit, cash flow and net debt, as well as the impact on the covenant tests that apply to certain borrowings.

Conclusion on risks, opportunities and impacts

In modelling the impact of a ban on diesel vehicles from 1 January 2035, whilst the Group does not underestimate the operational challenges (and has set up the appropriate governance to plan for it), there would be no material adverse financial impact on the Group. This is because it would not need to significantly accelerate the Group's existing transition plan. Even under the most extreme climate scenarios, we believe that the modal shift opportunities more than offset the transitional and physical risks.

Our conclusion does rely on various assumptions as set out in detail above, with varying levels of confidence, which will continue to monitor and re-assess closely.

Metrics and Targets

Metrics to assess climate-related risks and opportunities in line with strategy and risk management process

Targets used to manage climate-related risks and opportunities and performance against targets

In 2019, the Group was an early adopter of a set of intensity-based metrics which are measured year-on-year and are used as the basis for three absolute targets on GHG emissions, using the Sectoral Decarbonisation Approach (SDA) methodology. These targets were chosen to meet the then-prevailing IPCC goal of controlling the increase in global warming to below 2 degrees. Therefore, the existing targets are not yet aligned to the ambition of the Paris agreement. We intend to set new targets aligned to this approach during 2023, using 2022 as the new baseline year.

In the meantime, we continue to report against the existing targets, which are based on intensity metrics widely used in the transport industry, and were aimed to be achieved over an initial seven-year performance period, 2019 to 2025, with 2018 being the baseline year.

The Group has reviewed the list of metrics in tables A1.1, A1.2 and A2.1 in the TCFD guidance and considers the following to be the relevant metrics which the Group will use to track climate-related risks and opportunities:

- Absolute Scope 1, 2 and 3 emissions (see below for commentary on 2022 performance)
- Number of zero emission vehicles in service or on order by division and % of total fleet that is ZEV
- Revenue and profit impact from extreme weather events
- Net book value of existing vehicles in the context of both the Group's own transition plans and any ban on use/sale of diesel vehicles implemented in the future

- Levels of debt financing linked to ESG-related metrics (see below)
- Proportion of LTIP remuneration targets based on ESG metrics

We consider the remaining metrics to not be not relevant nor meaningful to the Group at the current time. The Group will continue to monitor which metrics are most appropriate, as we expect that the need to track further metrics will emerge over time. For example, tracking changes in passenger numbers and behaviours as a result of modal shift and higher utilisation of ZEVs across the business.

In relation to the use of internal carbon pricing, the Group already has incentives in place across all divisions to lower our carbon footprint in our operations, for example being embedded within bonus targets and employee objectives. Please see page 149 for information on how our GHG reduction metrics and increase in zero emission vehicles are used as a remuneration metric in relation to the Executive Directors' and senior managers' LTIP scheme. In addition to this, capital investment requests and bid models are already scrutinised for their environmental impact. Given that the ZEV transition targets, which drive the majority of carbon reduction plans, already meet the aim of using a carbon price, we are not currently utilising one in our internal reporting at this stage; however this will be kept under review.

During the year, the Group entered into a new £32m unsecured Revolving Credit Facility, which is the first debt facility that has a margin linked to ESG metrics, being the additional number of ZEVs procured, and reduction in emissions.

The table below shows the overall Group targets through to 2025 and our progress to date from our baseline year of 2018.

Reduction target description (metric)	Base year (2018)	2025 target	2021	2022	% change from base year	% change YOY (2021-2022)	Required % reduction to meet target
Traction Energy: (vehicle fuel and electricity) MWh/mpkm	66.92	58.72	86.19	83.82	25.3%	(2.7%)	(29.9%)
Traction Carbon Emissions (Scope 1 & 2) tCO₂e/mpkm	17.67	15.45	24.15	23.38	32.3%	(3.2%)	(33.9%)
Total Scope 1 & 2 Emissions tCO₂e/mpkm	19.26	16.45	25.26	24.17	29.6%	(4.3%)	(31.9%)
Site Scope 1 & 2 Emissions (building use only) tCO₂e	41,656	38,199	31,683	29,839	(28.4%)	(5.8%)	Met
Landfill Waste Disposal tonnes	7,711	5,783	4,491	4,215	(45.3%)	(6.1%)	Met
Water consumption m³	478,956	439,209	424,347	429,170	(10.4%)	1.1%	Met

TCFD Disclosure continued

The performance against KPI intensity targets in 2022 was still impacted by Covid-19, with disruption caused by the Omicron variant in the early part of the year affecting discretionary travel. This had the effect of reducing the environmental efficiency relative to normalised operation. The year began, therefore, with Covid-19 continuing to have a significant impact on our intensity metrics.

Over the full year, the 2022 traction metrics have all improved on the 2021 result as patronage improved over the year. Whilst we remain behind our 2025 targets on all three traction metrics, we are seeing the start of a positive impact of ZEV transition, mostly in the UK, and expect this to continue as we roll out the ZEV transition in future years and therefore there remains potential for material improvement in intensity metrics as this progresses.

More detail on these targets and on performance against them is set out in the detailed environmental data disclosures on pages 285 to 288.

Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions, and the related risks

We continue to measure our absolute Scope 1 and 2 emissions and have this year completed a Group-wide assessment of our Scope 3 emissions across all relevant categories, enabling fuller disclosure of our Scope 3 emissions compared to previous years.

By reducing our absolute emissions, we believe we are reducing our exposure to risks of regulatory change, public policy and changing customer demands. Please see pages 58 to 61 for more information on our principal risks and uncertainties.

Reporting boundaries

The Group applies an Operational Control approach to reporting emissions for collecting this data, thereby covering 100% of our business activities. A regular review is undertaken to ensure any changes to the Group structure are reflected in capturing emissions data.

tCO ₂ e emissions by scope	2016	2017	2018	2019	2020	2021	2022	% change YOY (2021-2022)
1	815,788	801,061	808,650	823,582	514,106	657,239	830,287	26.3%
2	95,107	60,682	48,583	49,938	67,879	73,649	83,577	13.5%
3	9,620	6,127	7,627	8,221	8,641	5,762	600,400¹	n/a ¹
Total	920,516	867,870	864,859	881,741	590,626	736,650	1,514,264	n/a ¹

¹ Scope 3 absolute emissions has increased significantly year-on-year due to the Group completing a full baseline assessment of Group-wide Scope 3 emissions during the year and including all relevant categories in the 2022 numbers. Prior year Scope 3 included only business travel, waste, water and certain other upstream emissions, hence no year-on-year % change has been disclosed as they are not comparable. Please refer to the below for the detailed methodology and breakdown of Scope 3 emissions by category.

Scope 1 and 2

Scope 1 emissions (from combustion of fuels, and use of natural gas and refrigerant gases) represent the largest category for emissions, with vehicle emissions representing around 95% of Scope 1 emissions. Scope 2 emissions (from electricity usage) represent energy usage both in our buildings, in our German rail operations and electric vehicles in operation in other divisions.

We report our greenhouse gas emissions in line with the GHG Protocol methodology.

Scope 1 absolute emissions increased by 26.3% on 2021 predominantly due to the strong patronage growth in the year and the inclusion of the WeDriveU business in North America for the first time following a full assessment of their emissions. Excluding WeDriveU, Scope 1 absolute emissions on a like-for-like basis increased by 20.3% on 2021.

Scope 2 absolute emissions increased 13.5% year on year, primarily due to an increase in electricity use in Germany because of the emergency contract awards in the year.



Scope 3

Prior to calculating our Scope 3 footprint, all categories were screened for relevance using the GHG Protocol criteria. Those listed as 'n/a' in the table on the following page were considered to make a negligible or no contribution to the Group's Scope 3 emissions. The same operational control approach was used as for Scope 1 and 2 emissions, with all divisions in the Group being included.

Scope 3 emissions have been calculated based on the guidance in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Standard. The screening exercise and determination of relevant categories was also reviewed externally prior to the commencement of the detailed calculations.

Note that for categories 1 and 2 (purchased goods and services and capital goods), the calculation methodology for 2022 was based on actual spend data, which was then applied to emissions factors by spend category, as supplier-specific data is not yet available. The same methodology was used within category 8 for emissions from the manufacture of leased vehicles, which includes the optional disclosure of life cycle emissions associated with manufacturing leased assets.

We aim to transition to a supplier-specific approach over time, starting with the most material suppliers, for example the companies who manufacture and produce our vehicles, some of which have committed to Scope 1 and 2 Science-Based Targets already. We are already working with some of our major vehicle manufacturers to obtain supplier-specific emissions data. We will continue to improve the data quality and methodology for calculating emissions in these categories, and therefore, these three categories may see more significant year-on-year movements in the future.

For employee commuting (category 7), assumptions have been made around commuting patterns applied to the actual number of employees at each location.

For investments (category 15), the 'average data' method is used, based on the sector the investee company operates in, which drives the sector specific emission factor used, applied to revenue data, and our proportional share of equity held.

For all other Scope 3 categories (3, 4, 5, 6 and 13), actual usage data has been obtained.

TCFD Disclosure continued

A breakdown of Scope 3 emissions by category is shown in the following table:

Category	Absolute emissions (tCO₂e)	% of total Scope 3
1. Purchased goods and services	221,783	36.9%
2. Capital goods	92,680	15.4%
3. Upstream fuel and energy production and distribution	214,893	35.8%
4. Upstream transportation & distribution	n/a	n/a
5. Waste and water	1,967	0.3%
6. Business travel	2,349	0.4%
7. Employee commuting	41,819	7.0%
8. Upstream leased assets	10,543	1.8%
9. Downstream transportation and distribution	n/a	n/a
10. Processing of sold products	n/a	n/a
11. Use of sold products	n/a	n/a
12. End-of-life treatment of sold products	n/a	n/a
13. Downstream leased assets	1,118	0.2%
14. Franchises	n/a	n/a
15. Investments	13,248	2.2%
TOTAL	600,400	100.0%

Data assurance

We recognise the importance of emissions data, and the quality of data underpinning it. Accordingly, we have continued to enhance our approach and processes in line with external expectations by continuing to utilise external support in the calculation and compilation of the Group's emissions.

During the year external assurance from Carbon Responsible Limited was obtained over the Group's 2021 environmental data underpinning absolute Scope 1 & 2 emissions, to a limited level of assurance to the ISO14064-3 standard.

Future developments

From 2023 onwards, the Group intends to obtain external assurance on a wider scope of ESG data. A project was initiated during 2022 to prepare for this.

The Group has also noted the newly announced Transition Plan Taskforce ('TPT') disclosures, which will be applicable from 2023; the requirements have been noted and the Group will work towards compliance during the year.