Cabinet Office

Carbon reduction plan Guidance

Notes for Completion

Where an In-Scope Organisation has determined that the measure applies to the procurement, suppliers wishing to bid for that contract are required at the selection stage to submit a Carbon Reduction Plan which details their organisational carbon footprint and confirms their commitment to achieving Net Zero by 2050.

Carbon Reduction Plans are to be completed by the bidding supplier[1] and must meet the reporting requirements set out in supporting guidance, and include the supplier's current carbon footprint and its commitment to reducing emissions to achieve Net Zero emissions by 2050.

The CRP should be specific to the bidding entity, or, provided certain criteria are met, may cover the bidding entity and its parent organisation. In order to ensure the CRP remains relevant, a Carbon Reduction Plan covering the bidding entity and its parent organisation is only permissible where the detailed requirements of the CRP are met in full, as set out in the Technical Standard[2] and Guidance, and all of the following criteria are met:

- the bidding entity is wholly owned by the parent
- the commitment to achieving net zero by 2050 for UK operations is set out in the CRP for the parent and is supported and adopted by the bidding entity, demonstrated by the inclusion in the CRP of a statement that this will apply to the bidding entity
- the environmental measures set out are stated to be able to be applied by the bidding entity when performing the relevant contract
- the CRP is published on the bidding entity's website

Bidding entities must take steps to ensure they have their own CRP as soon as reasonably practicable and should note that the ability to rely on a parent organisation's Carbon Reduction Plan may only be a temporary measure to satisfy this particular condition of participation.

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1 Bidding supplier or 'bidding entity' means the organisation with whom the contracting authority will enter into a contract if it is successful.

2 Technical Standard can be found at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/991625/PPN_0621_Technical_standard_for_the_Completion_of_Carbon_Reduction_Plans__2_.pdf

The Carbon Reduction Plan should be updated regularly (at least annually) and published and clearly signposted on the supplier's UK website. It should be approved by a director (or equivalent senior leadership) within the supplier's organisation to demonstrate a clear commitment to emissions reduction at the highest level. Suppliers may wish to adopt the key objectives of the Carbon Reduction Plan within their strategic plans.

A template for the Carbon Reduction Plan is set out below. Please complete and publish your Carbon Reduction Plan in accordance with the reporting standard published alongside this PPN.

Carbon Reduction Plan Template

Supplier name: Redflex Traffic Systems Limited, now trading as Verra Mobility

Publication date: 27 May 2025

Commitment to achieving Net Zero

Redflex Traffic Systems Limited, now trading as Verra Mobility is committed to achieving Net Zero emissions by 2050.

Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Redflex Traffic Systems trading as Verra Mobility Systems Ltd ('Redflex') has set a goal to achieve net-zero Scope 1 and 2 emissions by 2050. Following a review of baseline emissions, the Scope 1 and 2 near-term targets have been established as:

- Scope 1: Transition to a 30% electric fleet by 2030
- Scope 1: Phase out use of mains gas and replace with electric heating
- Scope 2: Use 100% renewable electricity by 2030

Baseline Year: 2022

Additional Details relating to the Baseline Emissions calculations.

Redflex's baseline emissions were assessed for 2022.

The GHG assessment considered scopes 1, 2, and 3 according to the GHG protocol. Market-based emissions are reported throughout this plan.

The total company emissions were 274 tCO_2e (13.7 tCO_2e/FTE, 0.6 tCO_2e/m), and Scope 3 was the largest emission source.

Scope 3 emissions accounted for 83% of Redflex's footprint. Scope 1 and 2 emissions comprised 13% and 4% of the footprint, respectively.

Of the Scope 3 sources, business travel (24%) and commuting (23%) made up the majority of the footprint.

Other notable Scope 3 sources included emissions from upstream fuels (13%) and upstream transportation and distribution (11% of Scope 3 emissions).

Significant business travel emissions are from long-haul business class flights (88%). Short-haul flights made up 7% of business travel emissions. For comparison, there were 12 long-haul flights during the reporting period and 38 short-haul flights.

Emissions from commuting were largely apportioned to car use. 77% of commuting emissions were from diesel car use, and 22% were from petrol car use.

Baseline year emissions:

EMISSIONS	**TOTAL (tCO_2e)**
Scope 1	35
Scope 2	11
Scope 3 (Included Sources)	233
Total Emissions	279

Current Emissions Reporting

Reporting Year: 2024	
EMISSIONS	**TOTAL (tCO_2e)**
Scope 1	27
Scope 2	4
Scope 3 (Included Sources)	582
Total Emissions	612

As can be seen, the total emissions have gone up most recently due to an increase in Scope 3:

- Purchased goods and services and capital goods (1,325% increase): The Scope is not the same as 2022, and therefore % change is disproportionate (less than 200,000 GBP accounted for in 2022, whereas the spend was in the millions for 2023 and 2024). This is due to an increase in the number of contracts, project and operations.
- Downstream leased assets (465% increase): Given the increase in work, there were more cameras installed in 2023 and 2024, explaining increase in emissions.
- Business travel incl WTT (53% increase): This Scope increased given the increase in workforce and need to travel to deliver the expanded programmes.

Still, and regardless of the increase in business operations, the company managed to keep its Carbon reduction initiatives, which translated into an increase in emissions in both Scope 1 and 2:

- Mains gas incl. WTT (100% reduction): Our facility's gas boiler was removed and therefore not applicable from 2023 onwards.
- Electricity incl. T&D and WTT (51% reduction): New supplier-specific emission factors have been used in 2023 and 2024, which explains the reduction in emissions.

Emissions reduction targets

Redflex has set a target to achieve net zero carbon emissions by 2050 for Scope 1 and 2 emissions, in line with the target set out by the UK Government.

Redflex has also committed to supporting the United Nations Sustainable Development Goals, and in particular, has committed to supporting the following:

The following section details the specific actions that can be taken by Redflex to meet its overarching goal of net zero.

Emissions Category	2022 emissions (tCO_2e)	Required coverage to meet targets	Reduction required	Action	Description	tCO_2e saved	Cost	Ease
All				1. Enhance activity data quality.	Review missing data points and put actions in place to record this data for future assessments	Variable, indirect.	Low. Additional admin or management time.	Moderate.
Scope 1 – COVs	34	100%	30% of fleet vehicles powered by alternative fuels by 2030. 100% by 2050.	2. Transition to an electric/hybrid fleet.	Review feasibility of acquiring plug-in hybrid vans for fleet vehicles at the end of their lease, provided operational suitability.	~2 tCO2e saving for every 10,000 km travelled in hybrid van (excl. WTT and T&D).	Medium. However, if vehicles are nearing the end of their lease, potentially less significant. Benefit-in-kind tax savings also available for specific vehicles.	Moderate.
Scope 1 – Main Gas	1	100%	100% switch away from mains gas use.	3. Replace gas heating system.	Look into feasibility of decommissioning existing gas boiler.	~1 tCO2e saving (excl WTT).	Low to medium. Majority of actions to transition away from gas have already been taken.	Easy – steps have already been taken to transition to fully electric premises.
Scope 2	11	100%	100% renewable electricity by 2030.	4. Switch office electricity to 100% renewable tariff.	Engage in conversation with landlord to determine feasibility of transitioning to a 100% renewable electricity tariff.	~11 tCO_2e (market based).	Low. Green energy tariffs are similar in price to standard energy tariffs.	Easy but dependent on landlord.
Scope 3-1	17	Increase coverage over time.	Move towards green procurement of purchased goods and services.	5. Engage in discussions with suppliers to understand carbon emissions associated with equipment and potential opportunities.	It is recommended that an initial Pareto analysis is carried out of service and suppliers to evaluate most suitable suppliers to approach first. This could be those that represent largest proportion of spend, those that are more carbon intensive and those that are most interested in discussions	Variable.	Moderate.	Moderate.

					around sustainability.			
Scope 3-6	65	Increase coverage over time.	100% of UK-Arizona flights undertaken in premium economy class in place of business class by 2030. Implement optimised route planning policy by 2030.	6. Reduce business travel emissions.	Implement travel booking policy for flight class and route optimisation.	~13 tCO2e saving (change of flight class UK-Arizona only, excl. WTT). Impact of optimised route planning variable, but likely significant.	Low, potentially cheaper than existing.	Dependent on staff engagement and incentives/policy put in place by Redflex.
Scope 3-7	60	Increase coverage over time.	25% of commuter car trips undertaken in EV's by 2030.	7. Reduce staff commuting emissions.	Look into feasibility of adopting staff EV scheme and installing EV charger at office to support transition.	~10 tCO2e saving by 2030 (assumes all EV's, excl. WTT and T&D). Assumes EV's not charged on-site.	Moderate.	Dependent on staff engagement and incentives put in place by Redflex.
Scope 3-11	5	Increase coverage over time.	100% renewable electricity to power cameras – national grid of many countries is decarbonising over time.	8. Engage with camera users to investigate whether they use or intend to use renewable energy.	Use of renewable energy to operate cameras will lead to a reduction/change of reporting of emissions within this category.	~5 tCO_2e dependent on whether renewable energy is used or whether users intend to switch to use of renewable energy.	Low to no cost.	Moderate.

Carbon Reduction Projects

Redflex has also implemented the following carbon reduction and general sustainability measures thus far:

- Maintenance and awareness programmes to ensure vehicles are running efficiently, no idling, etc.
- Flexible working arrangements to facilitate home working to avoid travel to the office.
- Use of video conferencing, internally, with supply chain and with clients to avoid travel between sites, with clients etc.
- Use of biodegradable hand soap and dissolvable toilet tissue
- Installation of water-saving devices.
- Employee ‘swag’ to include free reusable water bottles.
- Re-issue of PPE and uniform (where safe to do so).
- Use of recycled papers and handmade notebooks.
- Limits on printer use, which encourages double-sided printing.
- PIR lighting to automatically turn off.
- Use of less harmful cleaning products (subject to COVID safety).
- Localised heating.
- Remote system testing.

Future carbon reduction initiatives

In the future, we hope to implement further measures such as:

- **Improving data quality***:* Data quality is an essential part of the calculation process. Data that has been provided as secondary data (e.g., expenditure) tends to result in an overestimate of the true emissions value. Therefore, obtaining more primary data will likely lower Redflex's overall emissions and provide more reliable results so reduction actions can be targeted most effectively. Approximately 86% of Redflex's footprint was based on primary data.
    - Specific next actions: Enhance the quality of emissions data collected by:
        - Business travel and upstream shipments – collect primary data for all categories
        - Water – collect consumption and treatment data in m^3 or litres (likely obtained from invoices)
        - Waste – record weight of waste disposed, by waste stream, or carry out periodic waste surveys prior to collection to establish typical fullness of skips e.g. 50%, 75%, 100%.
        - Purchased goods and services, and capital goods – engage with suppliers to investigate whether there are supplier specific emissions factors. Collect the number and type of units purchased in place of spend (where applicable) and aim to provide further categorisation of sources, where applicable.
    - Timescale: Immediate
    - Potential tCO_2e saving: unknown, significant.
- **Company-owned vehicles:** Emissions from company-owned vehicles account for 74% of Redflex's Scope 1 and 2 emissions (34 tCO_2e) and thus constitute a significant proportion of Redflex's directly controllable emissions.

  Redflex's fleet is made up of diesel-powered vans. It is important to note that some vehicles are nearing the end of their lease agreement, presenting a notable opportunity to begin Redflex's transition to a hybrid/electric fleet.
    - Specific next actions:
        - Investigate the feasibility of replacing fleet vehicles near the end of their lease with plug-in hybrid equivalents. It is specifically recommended that Redflex look to obtain plug-in hybrid vans that produce less than 50 g CO_2/km. This will allow Redflex to receive greater benefit-in-kind tax benefits for their company-owned vehicles and

ensure reasonable emission savings*. The operational suitability of these vans would also need to be considered, given the need for on and off-site charging. It is also worth noting that the EV emissions are likely to reduce over time as the UK grid decarbonises.
        - A procurement policy for new fleet vehicles could be developed, which outlines a range of Redflex-approved fleet vehicles, depending on employee requirements.
    - Timescale to implement: Upon lease renewal (1 - 5 years for 30% transition)
    - Potential tCO_2e saving: 2 tCO_2e for every 10,000 miles travelled
- **Switch office to renewable tariff:** Electricity consumption contributes to ~5% of Redflex's emissions for 2022 (including WTT and T&D). It is recommended that Redflex switch to a renewable energy tariff, where possible, upon renewal of the current electricity tariff. However, care should be taken to ensure that any change of tariff is to a service that leads to genuine additionality of renewable energy: this is not the case for all (or even most) nominally 'green' tariffs, which are effectively just contractual arrangements with no real-world carbon reduction impact (the UK government is currently carrying out a consultation on tightening rules around such claims). Any such switch should not be taken as a pretext for foregoing genuine energy reduction efforts.
    - Specific next actions:
        - Initiate conversation with landlord to discuss feasibility/interest in switching electricity tariff.
        - If mutually agreed, switch energy procurement to a renewable tariff at the Southampton site.
        - Switch away from natural gas consumption to renewable electricity – see the list below.
    - Existing initiatives: It should be noted that Redflex has already made significant efforts to reduce their on- site energy usage. This includes the following:
        - Installing LEDs.
        - Installing air-conditioning units that can be controlled by individual rooms.
        - A general move away from mains gas usage. There is potential to decommission the gas boiler to switch to fully electric.
    - Timescale: 1 - 2 years.
    - Potential tCO_2e saving: 11 tCO_2e

- **Reduce business travel – long-haul flights:** Emissions relating to business travel account for 24% of Redflex's emissions for 2022. Emissions were namely attributed to long haul business class flights (88% of business travel emissions).
  Redflex's 2022 GHG emissions (tCO2e) from long-haul flights have been categorised in three different flight class scenarios: business class (this represents Redflex's actual long-haul flight emissions for 2022), premium economy class, and economy class. By opting for premium economy or economy class flights in place of business, an emissions reduction of 45% and 66% would be achieved, respectively. However, it is understood that there is a need to balance staff well-being and comfort with emission reduction goals.
    - Specific next actions:
      - It is recommended that Redflex implement a travel booking policy that encourages optimised route planning. The aim would be to consolidate trips over longer periods, thus avoiding more frequent, shorter trips. For example, when considering travel logistics, it is worth noting that a one-way business class flight from London Heathrow to Melbourne equates to ~7 tCO_2e. A 14-night stay in a hotel in Australia equates to ~0.49 tCO_2e.
      - It is also recommended that Redflex encourage premium economy class in place of business class for long-haul flights. As discussed above, the change in class type could lead to a 45% reduction in emissions when considering all long-haul flights. Premium economy class may also provide a reasonable compromise between staff comfort and carbon reduction goals, especially for UK-Arizona journeys.
    - Timescale to implement: Ongoing.
    - Potential tCO_2e saving: 13 tCO_2e (UK-Arizona flights: premium economy)
- **Staff commuting:** Employee commuting accounts for 23% of Redflex's footprint. The majority of commuting emissions are attributed to car use. Emissions from diesel car use account for 77%, whilst petrol accounts for 22% of commuting emissions. It should be noted that due to the remote location of Redflex's premises, opportunities for active travel are limited. However, some lift sharing does take place and there is a reasonable level of homeworking across employees.
    - Specific next actions:

- Investigate the feasibility of adopting an electric vehicle scheme to provide staff tax incentives and greater affordability for purchasing electric vehicles. For example – tuskercars.com
- The potential for installing an electric vehicle charge point on-site was discussed as a way of encouraging electric vehicle uptake amongst staff. It is recommended that the feasibility of this is explored.
- Continue to encourage homeworking where practical and feasible.

- Timescale: 1 - 5 years.
- Potential tCO_2e saving: 10 tCO_2e by 2030

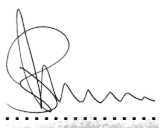
Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 006 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard[3] and uses the appropriate Government emission conversion factors for greenhouse gas company reporting[4].

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard[5].

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of the Supplier: 

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Date: 26th May 2025 ……

[3] https://ghgprotocol.org/corporate-standard
[4] https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting
[5] https://ghgprotocol.org/standards/scope-3-standard