



# AUDIT OF CARBON EMISSIONS AND CARBON REDUCTION PLAN TO ACHIEVE NET-ZERO

SEPTEMBER 2022



Harrison Clark Rickerbys (HCR) is a Top 70 UK law firm which provides the full range of legal services to organisations, business leaders and individuals. Our passion for people is at the heart of everything we do.



Go Green Experts supports organisations in the measurement, and reduction of their carbon footprint. We have a wealth of experience supporting companies and non-profits in their drive to reach a lower environmental impact. We ensure that our work is in line with the latest science and standards.

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# Foreword: A passion for people

Our passion for people is at the heart of everything we do. It's the engine that keeps us ticking and inspires us to do our best. This philosophy has long been a part of who we are. We've supported the communities we work and live in, via charitable giving and social responsibility initiatives, for many years. As a fast growing and entrepreneurial firm, we recognise that our social responsibility extends to doing all we can to reduce our impact on the climate and protect the environment.

We commissioned this report to identify the scope of our greenhouse gas emissions and believe it provides a fair assessment of our carbon footprint. Since commissioning the report we have taken significant steps to improve our position but acknowledge there is much still to do. This report outlines our starting point and our commitment to reducing our emissions over the coming years. We recognise that we need to play our part and, therefore work collaboratively with suppliers, employees, clients, and stakeholders if we're going to make a real difference.

We thank Go Green Experts for their support and guidance throughout the auditing process. We immediately started working through some of the initial action points and have consulted our workforce on their ideas for changing working practices. Continuous assessment and improvement will be at the heart of our firm, and carbon reduction measures are now a significant factor in determining and managing our supply chain.

As is reflective of the drive and ambition that the firm is known for, we wish to be fully transparent, so we have clearly set out our targets within this plan. We will publish yearly updates on how we are doing. We expect that in some years our outcomes will be better than in others, but here we state our aim to remove carbon from our operations and wider business activities consistently, to enable us to reach a net-zero position by 2040.

Rod Thomas

Managing Partner

## 1. Executive Summary

Harrison Clark Rickerbys (HCR) is a leading UK law firm with offices throughout England and Wales.

An award-winning Top 70 UK law firm, HCR provide the full range of services that you would expect to organisations, business leaders and individuals. Our sector experts provide specialist advice nationally and are leaders in their field, recognised with industry award nominations and for their contributions to national conferences.

HCR is committed to removing carbon from its operations and wider business activities consistently each year until we reach a net-zero position by 2040. This target has been set using the Science-Based Targets Initiative (SBTi) guidance.

An interim target of a 72% reduction in CO<sub>2</sub>e emissions by 2032 from the baseline position has also been set. This is equivalent to a 1,306 tonnes reduction in CO<sub>2</sub>e by 2032.

These are ambitious targets and HCR are committed to working with our partners and supply chain to initiate short-term "quick wins" activity in addition to more strategic longer-term initiatives to ensure that these targets are met.

The first step for HCR in creating our decarbonisation plan and strategy has been to measure our carbon footprint. Go Green Experts have measured the carbon footprint of HCR's full carbon emissions including direct and selected indirect emissions, i.e., scope 1, scope 2 and selected scope 3 emissions.

This was undertaken for the period 1st April 2019 to 31st March 2020.

### HCR Total CO<sub>2</sub>e Emissions

| Aspect             | Tonnes CO <sub>2</sub> e | Scope       |
|--------------------|--------------------------|-------------|
| Electricity        | 334.20                   | Scope 2 & 3 |
| Gas                | 74.50                    | Scope 1 & 3 |
| Business Travel    | 333.88                   | Scope 3     |
| Water and Sewerage | 1.04                     | Scope 3     |
| Waste              | 106.55                   | Scope 3     |
| Commuting          | 893.83                   | Scope 3     |
| Homeworking        | 0.00                     | Scope 3     |
| Purchases          | 70.00                    | Scope 3     |
| Total              | 1,814.00                 |             |

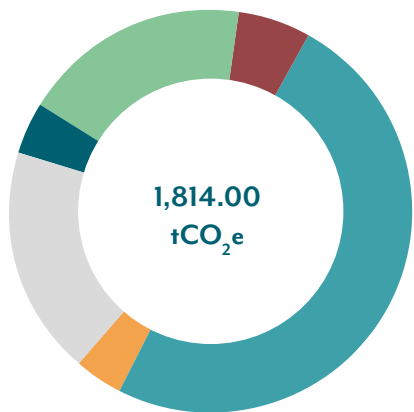


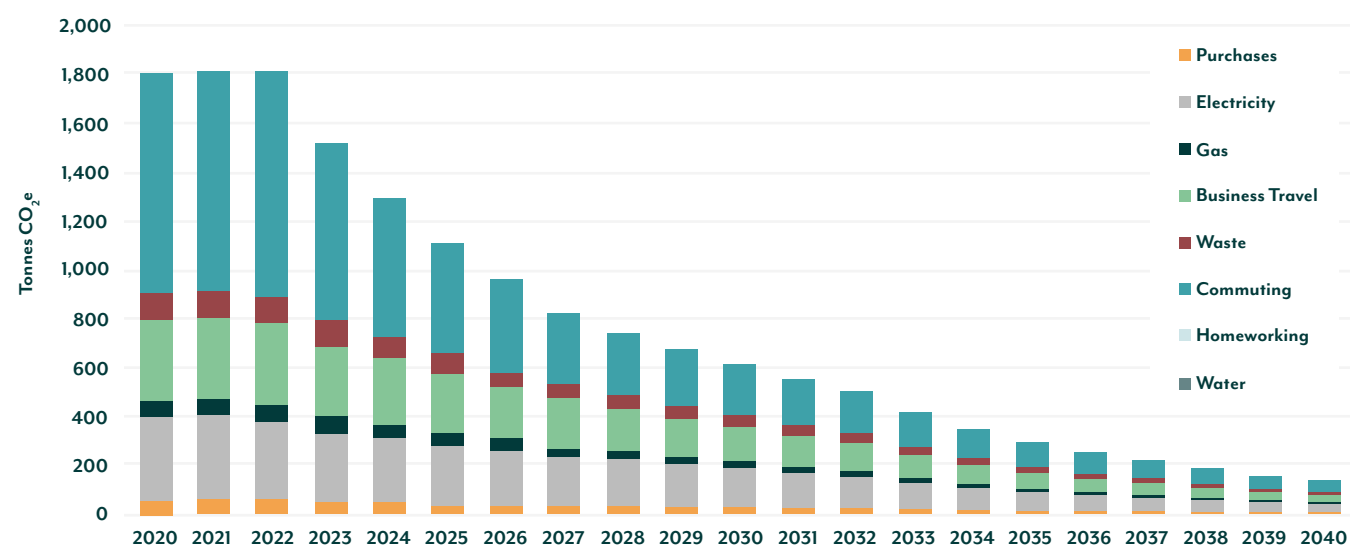
Figure 1.1: HCR's CO<sub>2</sub>e carbon footprint for the period 1st April 2019 to 31st March 2020



Based on an analysis of the existing carbon footprint, economy-wide forecast trends and HCR's carbon reduction strategy, HCR has set a target to be Net-Zero in relation to carbon emissions (CO<sub>2</sub>e) by 2040. This includes reducing emissions to 8% of the baseline 2019/20 period, which equates to 167 tonnes of CO<sub>2</sub>e residual emissions by 2040. The equivalent amount of emissions will be removed from the atmosphere using direct carbon capture technology, in line with the Science-Based Target Initiative (SBTi) guidance, enabling HCR to be a Net-Zero organisation.

To achieve this HCR has set out a number of activities to undertake in its carbon reduction plan, split into short-term, medium-term and long-term activities:

### HCR Carbon Reduction Plan



#### Short Term Initiatives:

- Supplier engagement to enable scope 3 reduction
- Facilities carbon management project workstream
- Employee engagement to enable culture shift

#### Medium Term Initiatives:

- Engage with office managers and landlords to improve buildings energy efficiency
- Reduce emissions from Cloud software usage

#### Long Term Initiatives:

- Project to reduce Commuting and Business Travel emissions
- Investigate moving to low emission office space

Figure 1.2: HCR's carbon reduction plan summary: 2021 to 2040

To enable a clear understanding of the carbon footprint that HCR has control over, versus the element where we have influence, but not control, the carbon reduction plan has also been categorised into scope 1, scope 2, and scope 3 elements as shown in figure 4.3.

## 2. Context

HCR's Decarbonisation Strategy 2021 - 2040 and accompanying carbon footprint have been calculated by Go Green Experts, to identify the scale and prioritisation of measures to reduce the overall environmental impact moving forward. This strategy sets out ambitious, yet achievable, decarbonisation targets to 2040 and beyond. It outlines what decarbonisation opportunities and interventions are suitable, how they could be implemented and what their impact would be over time.

Go Green Experts Ltd have reviewed the following data sets submitted by HCR, which include:

- Energy consumption at 14 individual offices
- Water and sewerage
- Business travel data
- Waste data
- Significant purchases
- An employee survey which collected commuting and homeworking insight.

The data was used to calculate the carbon footprint of HCR including scope 1, scope 2, and significant scope 3 emissions, as referred to in the WBCSD-WRI Greenhouse Gas Protocol emissions in carbon dioxide equivalent.

Scopes 1 and 2 are calculated using the conversion factors listed in the 2020 BEIS Greenhouse Gas Conversion Factors.





### 3. Carbon Footprint Calculations: Summary

As the first step to setting the carbon reduction strategy, it is critical to set a baseline carbon footprint to enable an understanding of the below:

- What are the current carbon emission sources?
- How much carbon is currently emitted?
- Who is responsible for each source’s carbon reduction plan?

Go Green Experts were appointed by HCR to calculate the carbon emissions for each category of consumption, using the methodology defined in the Greenhouse Gas Protocol and the Carbon Conversion Factors published annually by DEFRA on behalf of the UK government. This calculation forms the baseline for HCR’s future carbon strategy.

#### 3.1 Footprint Baseline and Scope

The Greenhouse Gas Protocol defines direct and indirect emissions as follows:

Direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity.

Indirect GHG emissions are emissions that are a consequence of the activities of the reporting entity but occur at sources owned or controlled by another entity.

The Greenhouse Gas Protocol further categorises these direct and indirect emissions into three scopes:

- **Scope 1:** Direct emissions from combustion of gas and other fuels
- **Scope 2:** Indirect emissions resulting from the consumption of purchased electricity, heat or steam
- **Scope 3:** Other indirect emissions, including those associated with leased assets, waste disposal, employee commuting, business travel, the extraction, production, transport and distribution of purchased materials, fuels and electricity.

**Table 3.1** below details the emission sources included within HCR’s 2019/20 carbon footprint used to calculate the baseline figure.

| Sources |  |
|---------|--|
| Scope 1 | • HCR offices’ gas consumption   |
| Scope 2 | • HCR offices’ electricity consumption   |
| Scope 3 | • Purchases<br>• Business travel in private cars (Grey Fleet)<br>• Commuting<br>• Homeworking<br>• Waste |

Table 3.1: HCR’s CO<sub>2</sub>e carbon footprint drivers for the period 1st April 2019 to 31st March 2020

The carbon emissions for each category of consumption have been calculated using the methodology defined in the Greenhouse Gas Protocol and the Carbon Conversion Factors published annually by DEFRA on behalf of the UK government.

Based on Scope 1, 2 + significant scope 3 purchases, the carbon footprint for HCR for the period 1st April 2019 to 31st March 2020 was calculated to be 1,814 Tonnes CO<sub>2</sub>e per figure 3.2 below:

| Total Carbon Footprint | 1,814 | Tonnes CO <sub>2</sub> e |
|------------------------|-------|--------------------------|
| Electricity            | 334   | Tonnes CO <sub>2</sub> e |
| Gas                    | 75    | Tonnes CO <sub>2</sub> e |
| Business Travel        | 334   | Tonnes CO <sub>2</sub> e |
| Water                  | 1     | Tonnes CO <sub>2</sub> e |
| Waste                  | 107   | Tonnes CO <sub>2</sub> e |
| Commuting              | 893   | Tonnes CO <sub>2</sub> e |
| Homeworking            | 0     | Tonnes CO <sub>2</sub> e |
| Purchases              | 70    | Tonnes CO <sub>2</sub> e |
| Split by scope:        | 1,814 | Tonnes CO <sub>2</sub> e |
| Scope 1                | 64    | Tonnes CO <sub>2</sub> e |
| Scope 2                | 270   | Tonnes CO <sub>2</sub> e |
| Scope 3                | 1,480 | Tonnes CO <sub>2</sub> e |

Table 3.2: HCR’s carbon footprint summary: 1st April 2019 to 31st March 2020

This carbon footprint represents the “Baseline” position for HCR from which carbon reductions from 2021 to 2040 will be measured against.

Comments

1. Two leased office sites, out of a total of 11 sites, were unable to obtain kWh level energy data usage, which means that energy consumption for those offices has been estimated using industry average data.
2. The employee survey was used to estimate the percentage of days worked in the office, the commuting distance and the mode of transport. This data was used to calculate the commuting and homeworking emissions.
3. Recycling rates of waste material was not available, and so to avoid underestimating the carbon footprint it is assumed that all waste is sent to landfill.

Exclusions

| Aspect   | Reason for Exclusion  |
|--|---|
| Professional service contracts (legal, accounting) | Details of this expenditure were not available at the time of the audit. It is estimated that emissions will be relatively small, and it is intended that these will be measured during the next audit. |
| Office Leasing Costs                               | Details of this expenditure were not available at the time of the audit. It is intended that these will be measured during the next audit.  |

Table 3.3: HCR’s CO<sub>2</sub>e carbon footprint for the period 1st April 2019 to 31st March 2020

### 3.2 CO<sub>2</sub>e Emissions - Total Carbon Footprint

#### HCR Total Emissions

| Aspect             | Tonnes CO <sub>2</sub> e | Scope       |
|--------------------|--------------------------|-------------|
| Electricity        | 334.20                   | Scope 2 & 3 |
| Gas                | 74.50                    | Scope 1 & 3 |
| Business Travel    | 333.88                   | Scope 3     |
| Water and Sewerage | 1.04                     | Scope 3     |
| Waste              | 106.55                   | Scope 3     |
| Commuting          | 893.83                   | Scope 3     |
| Homeworking        | 0.00                     | Scope 3     |
| Purchases          | 70.00                    | Scope 3     |
| Total              | 1,814.00                 |             |

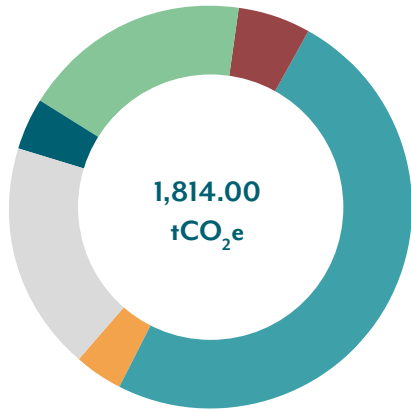


Figure 3.4: HCR's Total Carbon Footprint

#### Commentary

The total Carbon Footprint for HCR has been calculated using World Resources Institute (WRI) Greenhouse Gas (GHG) Protocol conversion factors.

This chart shows the total emissions for the period from 1st April 2019 to 31st March 2020.

The chart includes all scope emissions (scope 1, scope 2 and significant scope 3).

Electricity, commuting, homeworking and business travel are the highest contributors of emissions. These have been estimated using the employee survey and high level mileage data. The carbon reduction plan should feature approaches to refining the data with more granularity.

**Categorisation:** Gas and electricity are reported in scopes 1 & 3, where the scope 3 element covers upstream distribution losses.

### 3.3 Carbon Intensity

HCR's carbon intensity metrics selected for the base year are turnover and staff. The intensity for this is shown in figure 3.5.

Carbon Intensity is a metric to allow a company to compare its emissions year on year as the size and activity of the business increases or decreases. This is calculated by measuring emissions per £ Revenue or staff or product.

The metrics also allow comparison to industry averages and similar organisations that are also publishing their carbon intensity metrics.

Finally, the metric will also allow HCR's customers to estimate their own carbon footprint from doing business with HCR by using the revenue intensity metric of HCR multiplied by the customer expenditure with HCR.

| Carbon Intensity         |  |
|--------------------------|--|
| Employees (FTE)          | 517  |
| Turnover                 | £61,017,050                                      |
| Tonnes CO <sub>2</sub> e | 1,814  |
| Per £million Turnover    | 29.73 Kg CO <sub>2</sub> e per £million Turnover |
| Per Employee (FTE)       | 3.51 tCO <sub>2</sub> e per Employee (FTE)       |

Figure 3.5: HCR's Carbon Intensity Metrics

### 3.4 CO<sub>2</sub>e Emissions – Commuting Breakdown

#### HCR Emissions from Commuting

| Mode        | Tonnes CO <sub>2</sub> e |
|-------------|--------------------------|
| Electric    | 4.3                      |
| Hybrid      | 15.1                     |
| Small       | 238.1                    |
| Medium      | 377.1                    |
| Large       | 189.4                    |
| Motorbike   | 1.1                      |
| Bus         | 34.9                     |
| Train       | 30.7                     |
| Underground | 3.0                      |
| Total       | 893.83                   |

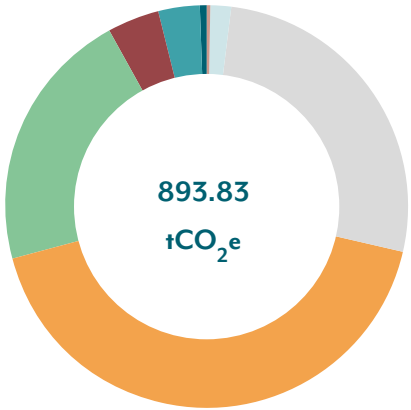


Figure 3.6: HCR Emissions from Commuting

#### Commentary

This chart shows a breakdown of Commuting carbon emissions by travel type.

The figures per vehicle and mode of transport were calculated using percentages based on the employee survey carried out by HCR.

Employee commuting by petrol/diesel car contributes a large proportion to the overall HCR footprint and is therefore a key element to control and reduce over time during the carbon reduction plan.



### 3.5 CO<sub>2</sub>e Emissions – Breakdown of Business Travel

#### HCR Business Travel Emissions

| Mode       | Tonnes CO <sub>2</sub> e |
|------------|--------------------------|
| Air        | 11.2                     |
| Taxi       | 3.1                      |
| Grey Fleet | 315.3                    |
| Train      | 4.3                      |
| Total      | 333.88                   |

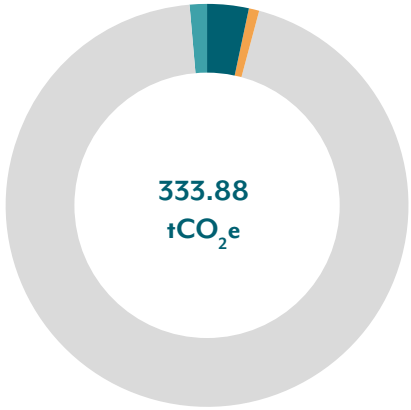


Figure 3.7: HCR's Carbon footprint emissions from Business Travel

#### Commentary

This chart shows a breakdown of business travel.

Grey fleet is defined as the use of private vehicles for business use. These carbon emissions were calculated from the data on miles claimed as business expenses.

### 3.6 CO<sub>2</sub>e Emissions – Breakdown of Purchases

#### HCR Purchases Emissions

| Aspect                | Tonnes CO <sub>2</sub> e |
|-----------------------|--------------------------|
| Archive Storage       | 17.3                     |
| Car Parking           | 6.9                      |
| Cleaning Services     | 1.6                      |
| Insurance             | 0.8                      |
| Postage & DX          | 30.0                     |
| Printing & Stationary | 13.4                     |
| Total                 | 70.0                     |

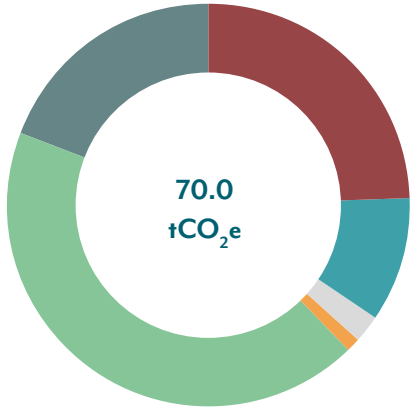


Figure 3.8: HCR's Carbon footprint emissions from purchases

#### Commentary

This chart breaks down the total emissions from purchases made by HCR for the period.

Postage makes up the majority of carbon emissions and represents the opportunity for a quick win in terms of carbon reductions for HCR as we continue our journey towards a paperless office.

### 3.7 CO<sub>2</sub>e Emissions – Breakdown from Energy use by HCR By Office

#### HCR Emissions from Electricity Split by Office

| Site          | Tonnes CO <sub>2</sub> e (Electricity) |
|---------------|--|
| Birmingham    | 15.43                                  |
| Cambridge     | 57.15                                  |
| Cardiff       | 10.64                                  |
| Cheltenham    | 54.21                                  |
| Hereford      | 9.57                                   |
| London        | 15.96                                  |
| Milton Keynes | 7.72                                   |
| Northampton   | 54.78                                  |
| Thames Valley | 13.30                                  |
| Worcester     | 77.60                                  |
| Wye Valley    | 17.85                                  |
| Total         | 334.20                                 |

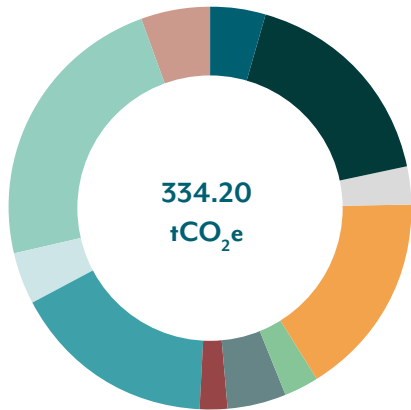


Figure 3.9: HCR's Carbon footprint CO<sub>2</sub>e Emissions – Electricity use by Office

#### HCR Emissions from Gas Split by Office

| Site          | Tonnes CO <sub>2</sub> e (Gas) |
|---------------|--------------------------------|
| Birmingham    | 0.00                           |
| Cambridge     | 27.49                          |
| Cardiff       | 0.00                           |
| Cheltenham    | 0.00                           |
| Hereford      | 0.00                           |
| London        | 0.00                           |
| Milton Keynes | 0.00                           |
| Northampton   | 17.23                          |
| Thames Valley | 0.00                           |
| Worcester     | 27.36                          |
| Wye Valley    | 2.42                           |
| Total         | 74.50                          |

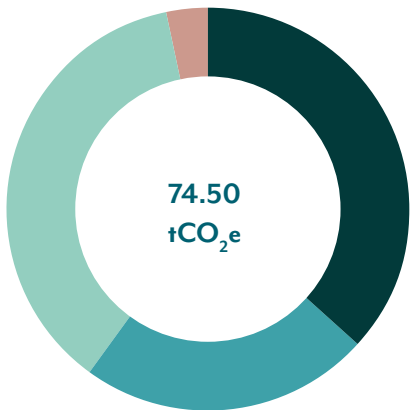


Figure 3.10: HCR's Carbon footprint CO<sub>2</sub>e Emissions – Gas use by Office

#### Commentary

Where energy use is known for a particular office, the emissions have been calculated directly use Green House Gas Protocol conversions factors. In cases where energy bills are included in the lease rates for an office then an estimate of consumption has been made using UK industry average data based on number of employees. To more accurately measure emissions, HCR is committed to working closely with landlords and facility management to collect energy data, which can then better be controlled and reduced over time.

### 3.8 CO<sub>2</sub>e Emissions – Waste

#### HCR Emissions by Waste Category

| Waste type        | Tonnes CO <sub>2</sub> e |
|-------------------|--------------------------|
| Paper             | 102.69                   |
| Cardboard         | 2.49                     |
| Wood Pallets      | 1.36                     |
| Plastic Bottles   | 0.01                     |
| Metal Cabinets    | 0.00                     |
| Glass             | 0.00                     |
| Office Chairs     | 0.00                     |
| WEEE              | 0.00                     |
| Drinks Cans       | 0.00                     |
| Fluorescent Tubes | 0.00                     |
| Total             | 106.55                   |

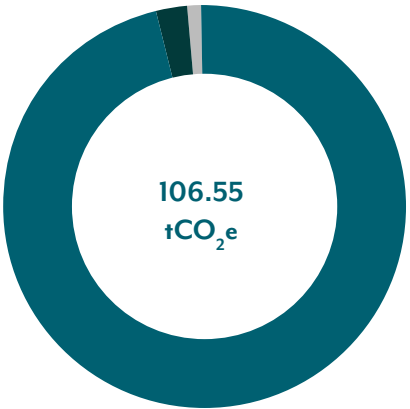


Figure 3.11: HCR's Carbon footprint CO<sub>2</sub>e Emissions – Waste

#### Commentary

The fate of the waste material is not clear from the data available. It is known that confidential paper is shredded. However, the final fate - landfill or recycled - is not yet confirmed.

Due to this uncertainty, it has been assumed that all waste is sent to landfill. This is in accordance with GHG Protocol rules where worst case should be assumed to avoid underestimating the carbon footprint.

For the next Carbon Footprint reporting period confirmation will be sought with the waste contractors as to whether the paper is recycled.

If they are recycled, then these carbon emissions will significantly reduce as paper is the largest element of the Waste footprint.



### 3.9 CO<sub>2</sub>e Emissions – Breakdown of HCR Energy use by Scopes 1, 2 and 3

Emission scopes are defined by the internationally accepted Greenhouse Gas Protocol. The protocol has been developed through many years' cooperation with The World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

They are based on an assessment of which emissions from operations the organisation can directly control versus those which the organisation can merely influence.

The below diagram summarises the categories of emissions that are classified into each scope:

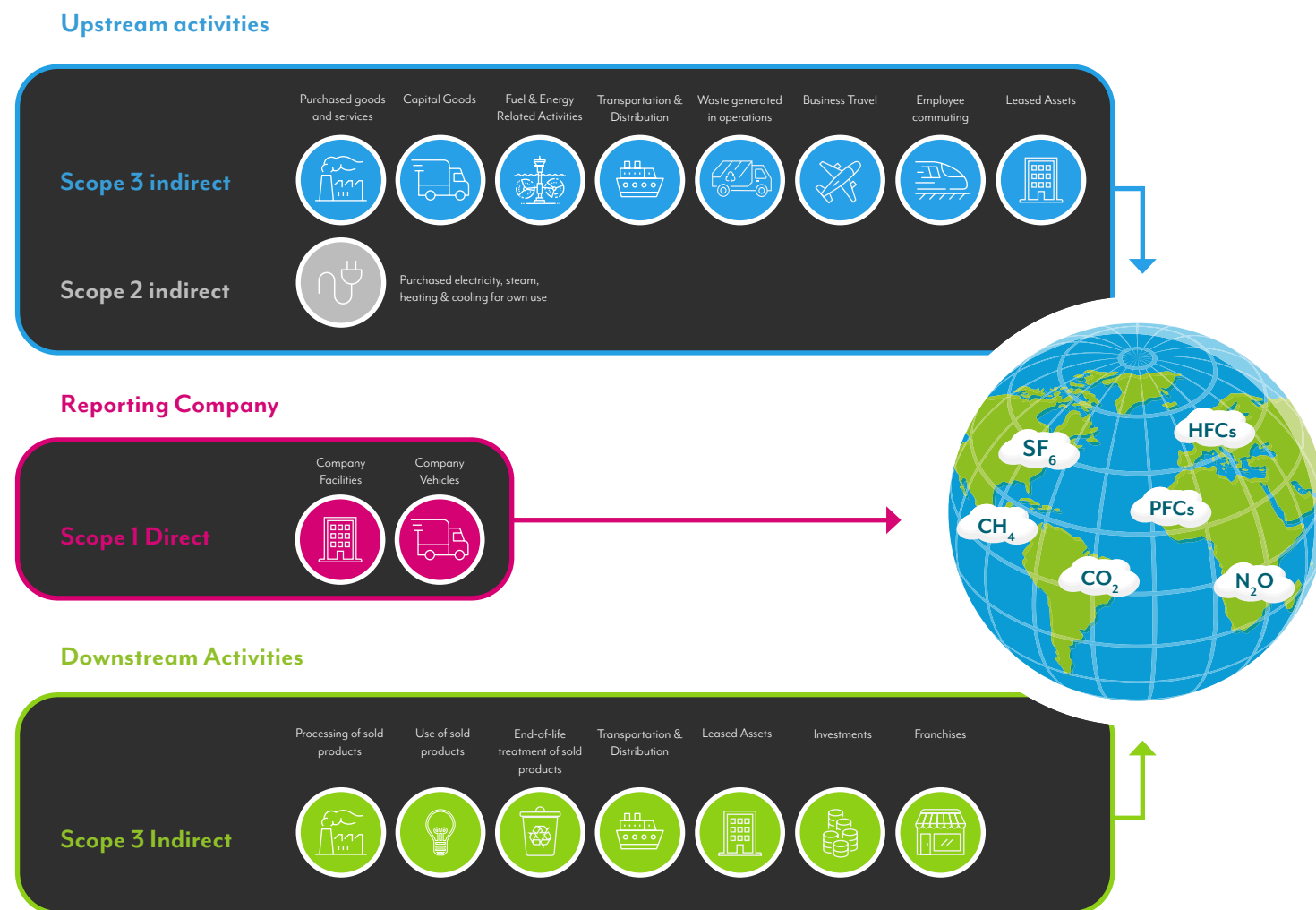


Figure 3.12: Depiction of Scope 1, Scope 2 and Scope 3 emission categories

### HCR Data Types Included and Excluded By Scope

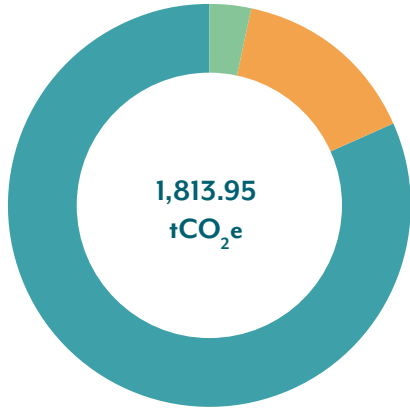
| Scope   | Category | Category name   | Applicable? | In Scope |                                    |
|---|----------|---|-------------|----------|------------------------------------|
| <b>Scope 1</b> Direct emissions from owned/controlled operations                                    |          |   |             |          |                                    |
| Scope 1   |          | Company Facilities  | Yes         | Yes      | Office Data. Including gas         |
| Scope 1   |          | Company Vehicles  | No          | No       | No company vehicles listed         |
| Scope 1   |          | Fugitive Emissions  | Yes         | Yes      | No data on air con gas replacement |
| <b>Scope 2</b> Indirect emissions from the use of purchased electricity, steam, heating and cooling |          |   |             |          |                                    |
| Scope 2   |          | Purchased Electricity   | Yes         | Yes      |                                    |
| Scope 2   |          | Steam   | No          | No       |                                    |
| Scope 2   |          | Heating   | No          | No       |                                    |
| Scope 2   |          | Cooling   | Yes         | No       | No                                 |
| <b>Scope 3</b> UPSTREAM SCOPE 3 EMISSIONS (Supply Chain)  |          |   |             |          |                                    |
| Scope 3   | 1        | Purchased goods and services  | Yes         | Yes      |                                    |
| Scope 3   | 2        | Capital goods   | No          | No       | No capital purchases listed        |
| Scope 3   | 3        | Fuel - and energy-related activities (not included in scope 1 or scope 2) | Yes         | Yes      | Distribution losses                |
| Scope 3   | 4        | Upstream transportations and distribution                                 | No          | No       | Not relevant                       |
| Scope 3   | 5        | Waste generated in operations   | Yes         | Yes      |                                    |
| Scope 3   | 6        | Business travel   | Yes         | Yes      |                                    |
| Scope 3   | 7        | Employee commuting  | Yes         | Yes      | Data from HCR survey               |
| Scope 3   | 8        | Upstream leased assets  | Yes         | No       | No data on office leases           |
| <b>Scope 3</b> DOWNSTREAM SCOPE 3 EMISSIONS   |          |   |             |          |                                    |
| Scope 3   | 9        | Downstream transportation and distribution                                | No          | No       | Not relevant                       |
| Scope 3   | 10       | Processing of sold products   | No          | No       | Not relevant                       |
| Scope 3   | 11       | Use of sold products  | No          | No       | Not relevant                       |
| Scope 3   | 12       | End-of-life treatment of sold products                                    | No          | No       | Not relevant                       |
| Scope 3   | 13       | Downstream leased assets  | No          | No       | Not relevant                       |
| Scope 3   | 14       | Franchises  | No          | No       | Not relevant                       |
| Scope 3   | 15       | Investments   | No          | No       | Not relevant                       |

Figure 3.13: HCR Data Types Included and Excluded By Scope

HCR Emissions Split by Scope

| Scope   | Tonnes CO <sub>2</sub> e |
|---------|--------------------------|
| Scope 1 | 63.60                    |
| Scope 2 | 270.38                   |
| Scope 3 | 1,479.97                 |
| Total   | 1,813.95                 |

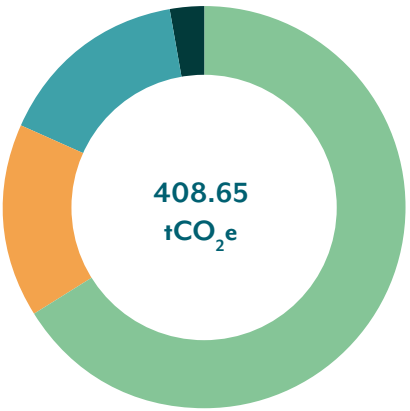
Figure 3.14: HCR's Carbon footprint Scope 1



HCR Emissions from Energy Split by Scope

| Aspect      | Tonnes CO <sub>2</sub> e | Scope   |
|-------------|--------------------------|---------|
| Electricity | 270.38                   | Scope 2 |
| Electricity | 63.77                    | Scope 3 |
| Gas         | 63.60                    | Scope 1 |
| Gas         | 10.90                    | Scope 3 |
| Total       | 408.65                   |         |

Figure 3.15: HCR's Energy Emissions by Scope

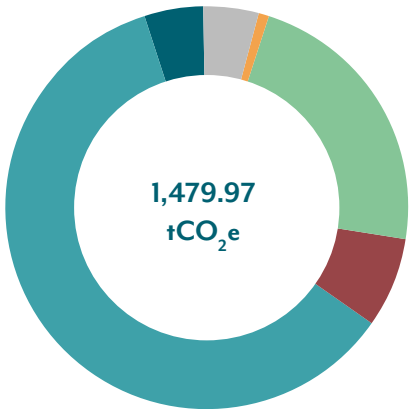


3.10 CO<sub>2</sub>e Emissions – Scope 3 Breakdown

HCR Scope 3 Emissions

| Aspect          | Tonnes CO <sub>2</sub> e |
|-----------------|--------------------------|
| Electricity     | 63.77                    |
| Gas             | 10.90                    |
| Business Travel | 333.88                   |
| Water           | 1.04                     |
| Waste           | 106.55                   |
| Commuting       | 893.83                   |
| Homeworking     | 0.00                     |
| Purchases       | 70.00                    |
| Total           | 1,479.97                 |

Figure 3.16: HCR's Carbon footprint Scope 3



Commentary

This chart shows the scope 3 emissions for HCR. These consist of business travel, purchased goods and services, including subcontracted work as well as water, sewerage, and waste.

Scope 3 emissions also include an element of distribution losses for electricity and gas.

Scope 3 emissions account for 83% of HCRs total carbon footprint for the baseline period.

Business Travel & Commuting account for 68% of HCR's total carbon footprint.



## 4 HCR Carbon Reduction Target

Following the measurement of HCR’s carbon footprint, a detailed analysis has been undertaken to ascertain where our carbon reductions could be made in the short term, medium term and long term.

This has then formed the basis of HCR’s ambitious net-zero 2040 target. A summary of the annual carbon reduction forecast by category to achieve this target is shown in figure 4.1 below.

This includes reducing emissions to 8% of the baseline 2019/2020 period, which equates to 139 tonnes of CO<sub>2</sub>e residual emissions by 2040. The equivalent amount of emissions will be removed from the atmosphere using direct carbon capture technology, in line with the Science-Based Target Initiative (SBTi) guidance, to enable HCR to be a Net-Zero organisation.

SBTi requires that an interim target is set for 10 years after the year of submission. For HCR to achieve Net-Zero by 2040 this means achieving a target of 508 tonnes of CO<sub>2</sub>e by 2032, which equates to a reduction of 72% (or 1,306 tonnes CO<sub>2</sub>e reduction).

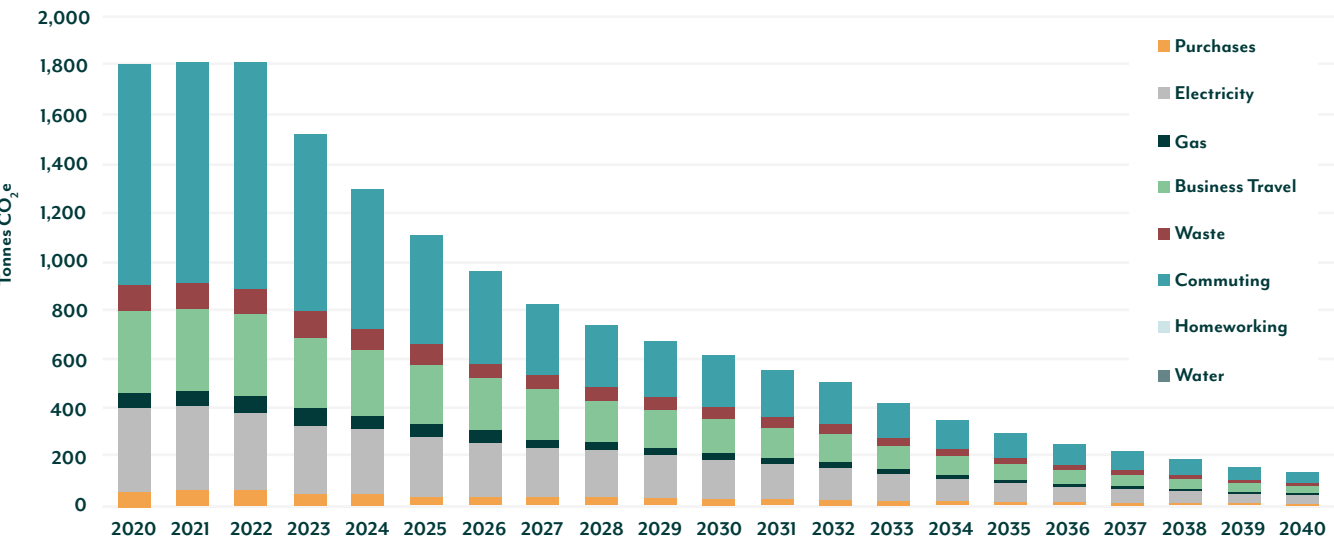
As part of the glide path to net-zero informed assumptions on the wider UK economy decarbonisation milestones. For example, it is assumed that electricity will become increasingly renewable resulting in a lower greenhouse gas conversion factor. Further, over time, the usage of electric vehicles will increase dramatically, as will the usage of alternative, lower carbon forms of transport – including cycling, trains, zero-emissions buses, and EV car share - facilitated by improvements in the UK low carbon transportation infrastructure and active travel commitment.

The supply chain, both nationally and internationally will also become less carbon-intensive over time, with more options for very low carbon products and services, thus supporting a reduction in HCR’s scope 3 emissions.

| Aspect          | Scope | 2020  | 2021  | 2022  | 2023  | 2024  | 2025  | 2026 | 2027 |
|-----------------|-------|-------|-------|-------|-------|-------|-------|------|------|
| Electricity     | 2     | 334   | 334   | 309   | 286   | 265   | 245   | 226  | 209  |
| Gas             | 1     | 75    | 75    | 75    | 67    | 60    | 54    | 49   | 44   |
| Business Travel | 2     | 334   | 334   | 334   | 300   | 270   | 243   | 219  | 197  |
| Water           | 2     | 1     | 1     | 1     | 1     | 1     | 1     | 1    | 1    |
| Waste           | 3     | 107   | 107   | 107   | 96    | 86    | 78    | 70   | 63   |
| Commuting       | 3     | 894   | 894   | 894   | 715   | 572   | 458   | 366  | 293  |
| Homeworking     | 3     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    |
| Purchases       | 3     | 70    | 70    | 70    | 56    | 45    | 36    | 29   | 23   |
| Target          |       | 1,814 | 1,814 | 1,789 | 1,521 | 1,299 | 1,114 | 960  | 830  |
| Actual          |       | 1,814 |       |       |       |       |       |      |      |
| % of Base Year  |       | 100%  | 100%  | 99%   | 84%   | 72%   | 61%   | 53%  | 46%  |

Figure 4.1: HCR's carbon reduction plan summary: 2021 to 2040

### HCR Carbon Reduction Plan



| 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 194  | 179  | 166  | 153  | 142  | 131  | 121  | 112  | 104  | 96   | 89   | 82   | 76   |
| 40   | 36   | 32   | 29   | 26   | 21   | 16   | 13   | 10   | 8    | 6    | 5    | 4    |
| 177  | 160  | 144  | 129  | 116  | 92   | 73   | 57   | 45   | 36   | 28   | 22   | 18   |
| 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 57   | 51   | 46   | 41   | 37   | 32   | 27   | 24   | 20   | 17   | 15   | 13   | 11   |
| 264  | 237  | 214  | 192  | 173  | 137  | 108  | 85   | 67   | 53   | 42   | 33   | 26   |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 21   | 19   | 17   | 15   | 14   | 12   | 10   | 9    | 7    | 6    | 5    | 5    | 4    |
| 752  | 682  | 618  | 560  | 508  | 424  | 356  | 300  | 255  | 217  | 186  | 160  | 139  |
|      |      |      |      |      |      |      |      |      |      |      |      |      |
| 41%  | 38%  | 34%  | 31%  | 28%  | 23%  | 20%  | 17%  | 14%  | 12%  | 10%  | 9%   | 8%   |

HCR Key Action Areas and Assumptions to deliver 72% emissions reduction by 2032

| CO <sub>2</sub> e Aspect   | Opportunities  | Baseline Emissions  | Potential Carbon Savings in Year 1 (Tonnes CO <sub>2</sub> e) | Potential Carbon Savings by 2032 (Tonnes CO <sub>2</sub> e)  | % of Total Footprint | Comment  |
|--|--|---|---|--|----------------------|--|
| Background UK Government Decarbonisation Initiatives - Relevant Activity |  |   |   |  |                      |  |
| Electric Vehicles & associated EV infrastructure                         | The UK Government has committed to new car sales to all be zero emission by 2035, and the associated required electric vehicle infrastructure will be in place by that date. | Background policy infrastructure required to unlock the HCR Business Travel and Commuting carbon savings below. |   | UK Government policy:<br>-End the sale of the new petrol and diesel vehicles by 2030<br>-All new cars and vans to be fully zero emission at the tailpipe by 2035<br><br>The UK Government also needs to deliver on it's commitment to the roll out of electric vehicle charging infrastructure in the UK ahead of the above phase out dates. |                      |  |
| Electricity Grid   | Estimated decarbonisation of UK electricity grid - supports office and travel carbon savings.  | 334.20  | 75  | 214  | 12%                  | Estimate based on historic annual reduction in UK grid emissions from recent years. Dependent on continuation at the current rate which is in line with Government objectives. |
| Potential HCR Key Actions To Meet 2032 Interim Target                    |  |   |   |  |                      |  |
| Gas  | Eliminate gas from office heating. Move to offices not using gas.  | 74.50   | 45  | 71   | 4%                   | Assumes 95% reduction in gas usage.  |
| Electricity  | Reduce electricity use in office through increased efficiency.   | 334.20  | 48  | 194  | 11%                  | Based on office efficiency improvements.   |
| Business Travel  | Reduce grey fleet vehicles with 100% Electric vehicles.  | 333.88  | 0   | 240  | 13%                  | Dependent on UK EV charging infrastructure.  |
| Commuting  | Encourage commuting behaviour change. Increase electric vehicle usage.   | 893.83  | 179   | 708  | 39%                  | Dependent on UK EV charging infrastructure.  |
| Paper  | Improve recycling of paper.  | 102.69  | 70  | 88   | 5%                   | Aim for 98% recycling  |
| Total  |  |   | 342   | 1,301  | 72%                  |  |

Table 4.2: Key Action Areas & Assumptions to deliver 72% emissions reduction by 2032

4.1 HCR Carbon Reduction Target – By Scope

The Carbon reduction target has been split by Scope (1, 2 and 3) to provide a sense of how much of the reduction HCR has control over versus influence over.

The below diagram demonstrates that most of the reduction required is in scope 3 emissions – the implication of this is that HCR will engage heavily with our suppliers and employees, in the short-term, medium-term and long-term to enable the carbon reductions necessary to be net-zero by 2040.

HCR Carbon Reduction Plan by Scope

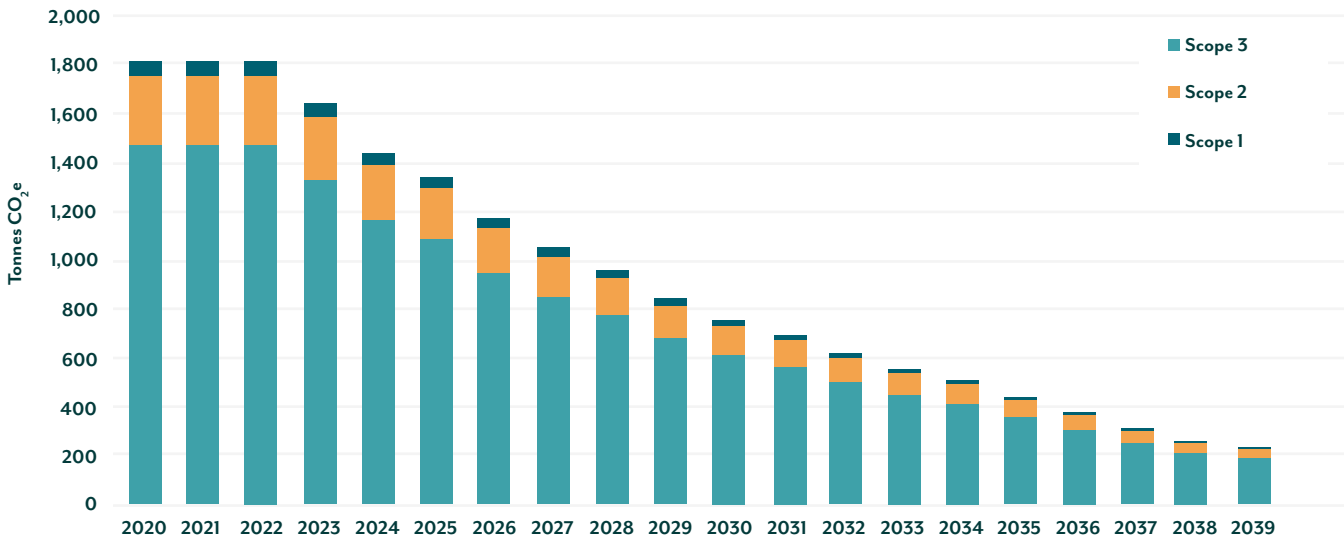


Figure 4.3: HCR's carbon reduction plan by scope

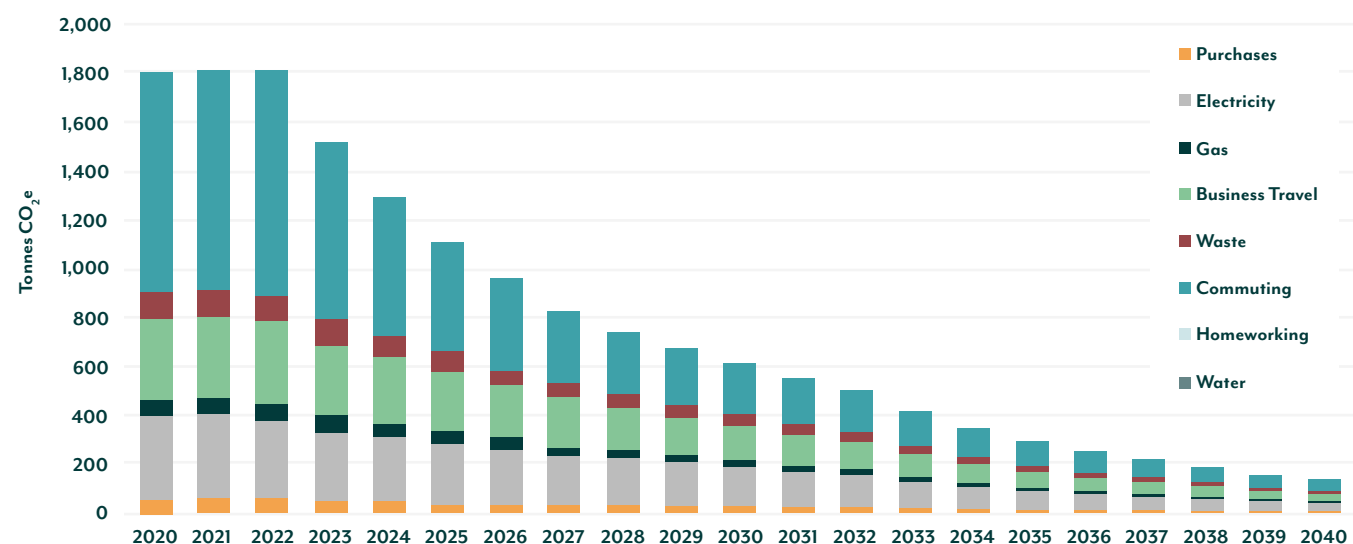


## 5. HCR Carbon Reduction Plan

HCR have committed to being Net-Zero Carbon by 2040. In order to achieve this ambition, a mixture of measures is available to gradually reduce HCR's carbon emissions over time. In section 4 of this report, the necessary annual carbon reductions were highlighted by category and scope. This section 5, aims to illustrate all targeted opportunities in the short, medium, and long-term. The options are presented using a hierarchy of consumption avoidance and usage optimisation followed by decarbonising energy consumption by moving away from fossil fuels.

As the timing of the plan is starting from the baselined carbon footprint period, then particular focus has been on the short-term initiatives which represent the 'low hanging fruit' for HCR.

### HCR Carbon Reduction Plan



#### Short Term Initiatives:

- Supplier engagement to enable scope 3 reduction
- Facilities carbon management project workstream
- Employee engagement to enable culture shift

#### Medium Term Initiatives:

- Engage with office managers and landlords to improve buildings energy efficiency
- Reduce emissions from Cloud software usage

#### Long Term Initiatives:

- Project to reduce Commuting and Business Travel emissions
- Investigate moving to low emission office space

Figure 1.2: HCR's carbon reduction plan summary: 2021 to 2040

## 5.1 Decarbonisation Opportunities

There is a variety of opportunities available which lead to a reduction of carbon emissions. To target HCR's activities and maximise impact, it is important to differentiate between areas where HCR are the owner, i.e. some of the offices, and where HCR has limited operational control i.e., Supply Chain partners activities.

### 5.2 Office Sites

**Decarbonising the heat source in offices.** As natural gas is a fossil fuel, no significant decarbonisation of the national gas grid is expected. There are some scenarios which predict an uptake of blending biogas and/or hydrogen into the grid but this is yet to come to fruition in an impactful way. Both scenarios are only possible to a certain extent which ultimately limits the achievable reduction of natural gas-related carbon emissions without changing the given infrastructure (such as gas pipework, boilers, and appliances to hydrogen combustion).

**Moving away from natural gas** can only be achieved by working with landlords and or selecting office locations with no gas supply. Possible change over from natural gas to heat pumps in the future should be looked at but is considered a longer-term action.

**Introduction of renewable electricity using solar panels with possible battery storage.** To assess the viability of on-site renewables, such as solar panels (PV) systems.

### 5.3 Private Vehicles

Business travel is considered in the current carbon footprint (scope 3 staff-owned vehicle mileage emissions) accounting for mileage from the employee's place of residence and the office along with claimed mileage for business travel where staff are using their own vehicles. A travel hierarchy could be introduced to reduce and ideally avoid the usage of staff-owned vehicles and promote alternatives such as pool or hire cars if travel is unavoidable.

This may take the following form. Can you:

- Work from home
- Walk or cycle to work (active Travel)
- Utilise Public Transport
- Utilise electric pool car fleet.

## 6. HCR Carbon Reduction Plan – Detailed Plan

HCR's detailed carbon reduction plan provides clear initiatives to undertake over time, with short-term initiatives being tackled first. In the longer term as new technology is developed and Government policy changes then the plan can flex to accommodate these changes.

### 6.1 Environmental and Carbon Footprint

| Environmental Aspect  | Short/Medium/Long Term | Observation/Action   |
|---|------------------------|--|
| Carbon footprint and EMS ongoing management, review and target setting. | Short term             | <b>Control</b><br><br>1.1 Implement environmental policy and action plan.<br><br>1.2 Raise awareness and consult with staff and other interested parties regarding CO <sub>2</sub> emissions energy consumption, and other environmental aspects.<br><br>1.3 Embed aggressive CO <sub>2</sub> reduction target setting into all processes within the business in order to continually improve performance.<br><br>1.4 Appoint green champions/ambassadors to assist with energy and resource management on a day - to - day basis.<br><br>1.5 Discuss ideas with senior staff to secure manager and other key staff engagement. Development and implement CO <sub>2</sub> - related training for all staff and suppliers.<br><br>1.6 Develop a structured training and CO <sub>2</sub> awareness plan for staff.<br><br>1.7 Ensure staff are aware of sustainability objectives, train procurement staff, and raise awareness with suppliers.<br><br>1.8 Complete a waste audit. |
|   | Short term             |  |
|   | Long term              |  |
|   | Short term             |  |
|   | Short term             |  |
|   | Short term             |  |
|   | Short term             |  |
|   | Short term             |  |
|   | Short term             |  |
|   | Medium term            | <b>Influence</b><br><br>1.9 Review supplier competence and their ability to implement and install new technologies.<br><br>1.10 Include review of all suppliers and contractor's carbon intensity.<br><br><b>Ongoing</b><br><br>1.11 Continually review the action plan and include carbon footprint considerations.<br><br>1.12 Continually identify relevant training and implement a training plan throughout the organisation.   |
|   | Long term              |  |
|   | Long term              |  |

### 6.2 Financial and Commercial

| Environmental Aspect     | Short/Medium/Long Term | Observation/Action  |
|--------------------------|------------------------|---|
| Financial and commercial | Short term             | <b>Control</b><br><br>2.1 Review commercial service supply chain, banks, insurance, accountancy, website, cloud hosting, training providers, software subscriptions, legal services and other relevant suppliers.<br><br><b>Influence</b><br><br>2.2 Raise awareness with procurement staff when reviewing or renewing contracts.<br><br><b>Ongoing</b><br><br>2.3 Continually review of the supply chain and consider suppliers offering the lowest CO <sub>2</sub> options. |
|                          | Short term             |   |
|                          | Long term              |   |



## 6.3 Facilities and Office

| Environmental Aspect       | Short/Medium/Long Term | Observation/Actions   |
|----------------------------|------------------------|---|
| Facilities Office and site |                        | Office equipment:<br><b>Control</b>   |
|                            | Short term             | 3.1 Ensure computers, copiers and display screens are set to optimum efficiency. Review the energy consumption of the servers.  |
|                            | Short term             | 3.2 Review the office and other equipment energy consumption.   |
|                            | Short term             | 3.3 Review the copier's energy consumption/ consider what printing is required to reduce paper consumption.   |
|                            | Medium term            | 3.4 Review energy consumption and embodied CO <sub>2</sub> as a criterion for future purchases.   |
|                            | Medium term            | 3.5 Review the final destination of office equipment when it is disposed of. Consider recycling and re-use options (ensure any data is wiped).  |
|                            |                        | <b>Influence</b>  |
|                            |                        | 3.6 Liaise with the landlords at each office to obtain accurate energy consumption data.  |
|                            |                        | <b>Ongoing</b>  |
|                            | Long term              | 3.7 Consider IT lifecycle for future projects, equipment be repaired and re-used?   |
|                            |                        | 3.8 Consider building energy efficiency when acquiring new premises.  |
|                            |                        | Energy suppliers:<br><b>Control</b>   |
|                            | Short term             | 3.9 Green energy tariffs could be reviewed at all sites, consider a package for all sites. Review utility suppliers if practical and consider renewable supplies. By purchasing electricity from reputable renewable suppliers, the company will be contributing to the reduction of fossil fuel supplied to the grid. Under the current arrangements for Green House Reporting, renewable energy purchased from the grid cannot be counted against CO <sub>2</sub> reductions. This is currently being reviewed and the progress of any changes should be monitored. |
|                            |                        | <b>Influence</b>  |
|                            | Short term             | 3.10 Review energy suppliers.   |
|                            | Short term             | 3.11 Review supply chain energy supply contracts. Share learning with staff and other interested parties.   |
|                            |                        | <b>Ongoing</b>  |
|                            | Medium term            | 3.12 Continually review energy procurement.   |
|                            | Medium term            | 3.13 Continually review the market to ensure that renewable energy claims are valid.  |
|                            | Long term              | 3.14 Consider moving to premises without gas supply and sustainable technologies.   |

## 6.4 Procurement

| Environmental Aspect | Short/Medium/Long Term | Observation/Actions  |
|----------------------|------------------------|--|
| Procurement          |                        | <b>Control</b>   |
|                      | Short term             | 4.1 Review the accounting and other software to obtain information about the biggest supplier spend. |
|                      | Medium term            | 4.2 Ensure new contracts require suppliers to state carbon footprint and have action plan.           |
|                      |                        | <b>Influence</b>   |
|                      | Medium term            | 4.3 Complete a supply chains survey to determine the current status of their carbon awareness.       |
|                      | Medium term            | 4.4 Support supply chain in order to help them manage footprint.                                     |
|                      |                        | <b>Ongoing</b>   |
|                      | Long term              | 4.5 Measure and implement a plan in line with science-based targets.                                 |
|                      | Long term              | 4.6 Develop a consistent approach to data gathering throughout the supply chain.                     |
|                      | Medium term            | 4.7 Review the options to raise client awareness.  |
|                      | Long term              | 4.8 Continually review best practice.  |

## 6.5 Travel and Homeworking

| Environmental Aspect | Short/Medium/Long Term | Observation/Actions  |
|----------------------|------------------------|--|
| Travel & Homeworking |                        | <b>Control</b>   |
|                      | Short term             | 5.1 Gather specific data on grey fleet. Vehicle type, size and fuel. Consider driver awareness training. |
|                      |                        | <b>Influence</b>   |
|                      | Medium term            | 5.2 Encourage use of train travel if possible.   |
|                      |                        | 5.3 Consider electric vehicles.  |
|                      | Medium term            | 5.4 Engage with staff to reduce home emissions.  |
|                      |                        | <b>Ongoing</b>   |
|                      |                        | 5.4 Continually review new vehicle technologies.   |



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|                                      |                                      |                                      |                                      |                                      |                                      |
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