# Carbon Footprint KPIs

## Sustainability and Environment Policy

| Year | KPI Description | Status |
|---|---|---|
| 2021/22 | Up to date Environmental Policy in line with ISO 14001 | Successfully maintained |
| 2021/22 | UKAS ISO 14001 Accreditation | Successfully maintained |
| 2022 / 23 | UKAS ISO 14001 Accreditation | Successfully maintained |
| 2023 / 24 | UKAS ISO 14001 Accreditation | Successfully maintained |

## Waste Management and Reducing Hazardous Pest Control Waste to Landfill

**Waste reduction figures:**

| | Number of techs | Rodenticides (KG) | EFK bulbs | Aerosols | Ave rodenticides per tech (KG) |
|---|---|---|---|---|---|
| 2017 | 30 | 78.1 | 495 | 0 | 2.60 |
| 2018 | 30 | 73.75 | 520 | 6 | 2.46 |
| 2019 | 34 | 145.7 | 416 | 0 | 4.28 |
| 2020 | 36 | 70.05 | 296 | 0 | 1.94 (Covid) |
| 2021 | 39 | 90 | | 0 | 2.3 |
| 2022 | 42 | 100 | | 0 | 2.3 |
| 2023 /24 | 46 | 103 | 483 | 0 | 2.2 |

## Reducing Carbon Emissions (Energy and Transport)

We use Lightfoot Fleet management to assure careful driving and reduce idling.

We have a car-sharing scheme set up for admin staff. We still have a % of staff working from home.

We also have a cycle to work scheme in place with 1 employee using it currently.

We employ drivers close to their contracted areas to reduce mileage, plus foot technicians where possible.

$CO_2$ production – year on year change. Fleet management.

| Dates | Number of vehicles | Fuel used - ltrs | CO2 produced kg | CO2 produced imperial tons | % difference | CO2 – Imperial tons Per Vehicle |
|---|---|---|---|---|---|---|
| 8/4/19 – 7/4/20 | 44 | 54157 | 141891 | 139.65 | | 3.17 |
| 8/4/20 – 7/4/21 | 44 | 48633 | 127417 | 125.40 | -10.20% (Covid) | 2.85 |
| 8/4/21 – 7/4/22 | 47 | 57200 | 149864 | 147.8 | +17.8% | 3.14 |
| 8/4/22– 7/4/23 | 49 | TBC | | | | |
| 23 /24 Revolut | 56 | 69408 | 181848 | 181.8 | 23% | 3.23 |

*We continue to save 552.30 Kg a year (per vehicle) due to the change from car to EV – 4 at present.
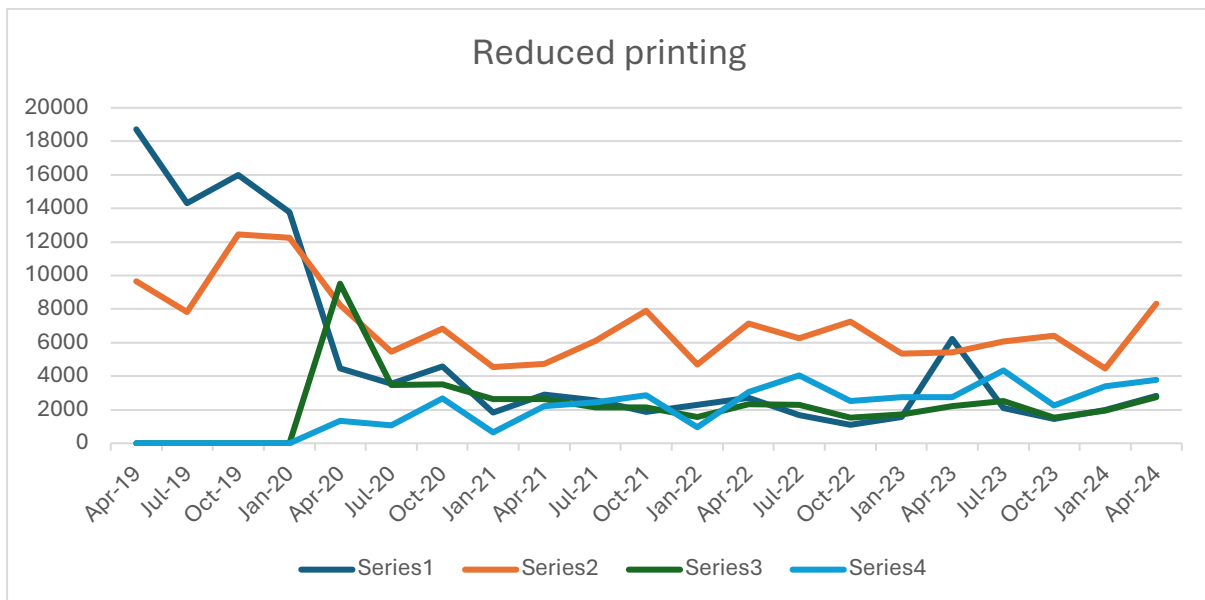There is an upward anomaly 23/24 that needs to be investigated

EV: The infrastructure, 2023 is not yet conducive to us rolling this out quicker

**Foot Tech Service**

| Year | Technicians | Vehicles avoided | Tonnes CO2 Saved |
|------|-------------|------------------|------------------|
| 2019 | 5 | 5 | 23.2 |
| 2020 | 6 | 6 | 27.8 |
| 2021 | 7 | 7 | 32.2 |
| 2022 | 7 | 7 | 32.2 |
| 2023 / 24 | 8 | 8 | 36.6 |

## Office reduction of footprint via reduced printing and other pre-printing:

(Once the customer portal is introduced, 2024, there will be no need for physical folders)



From 2020 to 2024 we have reduced the printing and paper carbon output from 4.5 Tonnes per year to 1 Tonne per year, despite a 30% increase in size of Beaver.

NB Series 4 – Printer replaced – 2019 – 2020 data was lost. (It was roughly 10,000)

## Employing Locally

99% of staff are employed with a 50% radius of our local office. 100% of staff work within a 15 mile radius of their work patch.



## Scope 3 (Subset) Calculations

Employee Commuting

We have begun our scope 3 monitoring with employee commuting calculations for scope 3 emissions. Calculations were carried out in 23/24 to create a base calculation in this area for the employee community.

| Travel | 2023/4 CO2e KG | | |
|---|---|---|---|
| Train | 2151.28 | | |
| Motorbike | 168.59 | | |
| Car (Petrol) | 3141.26 | | |
| Bus | 594.87 | | |
| Walk | 0 | | |

Actions to reduce:

Due to remote working since Covid-19, we have already seen a reduction in emissions due to travel. We have introduced a a bike to work scheme and an electric car financial assistance scheme to support employees switching to more green travel options.

## Sourcing Responsibly

Beaver is compliant with ISO 14001 and has a range of policies to help achieve sustainable sourcing.

We plant 100 trees in the National Forest each year.

We do not purchase any timber from a supplier unless the product is FSC backed by the Forestry Commission.  Our policies include:

- Subcontractor Selection Policy

- Sustainability Policy
- Carbon Reduction Policy

## Minimising Waste by Reducing Recycling and Reusing Materials

Since 2017, despite the company growing by around 50%, we have reduced the percentage use of rodenticide on the ground per technician by over 10% using smarter and more innovative solutions (2017 – 78.1 kg, 2020 – 70.05 kg). We have also moved from disposing of bait to recycling 100% of the used bait. We are now more focussed upon root cause, which is essentially finding ingress points and proofing them, this results in the reduction of bait stations and pesticide use.

Remote monitoring / Motion cameras have also helped reduce the need for excessive use of monitoring points and pesticides.

Beaver Pest Control are continually looking at reducing our Carbon Footprint

FSB.ORG – 2023 - 2024

The average carbon footprint per individual in the UK is 10 tonnes $CO_2$ per year

A tree can absorb 1 tonne $CO_2$ over it's lifetime (21 Kg per year) 15,000

Computer user – 600 KW per year

Office 15,000 KWh Per year - average business plus 40% extra working from home = 21,000 KW per year

Home worker cost = around £1.20 per day – but overall with other costs up to £2.50 per day extra

I estimate an extra 40% carbon usage for fuel usage at home = 6000 Kw  – this will be offset some-what by reduced travel to work – public transport not included.

2800 gms $CO_2$ per week private car commuting x 40 weeks = around 1000KW x 7 office staff using own cars = 7000KW per year

**Therefore office uses 14,000KW per year** (21,000 kw but 7000KW is offset by reduced personal commuter travel **– 14 tonnes**

**Reduced printing saves a further 4 tonnes per year 2024 -= 10 Tonnes total**

**Vehicles –**

Before lockdown

4$^{th}$ Oct 2019  - 4$^{th}$ April 2020 = 6 months = 28575 liters ( £34K + Vat) x 2 = 57,000 liters per year ( £68K per year) – 4750 liters per month

After lockdown

4$^{th}$ April 2021 (Covid) – 4$^{th}$ October  = 6 months = 23587 liters (£30K + Vat) x2 = 47000 liters per year ( £60K per year) – 3916 liters per month

2023 /24 – 5784 litres per month x 12 = 69408

**2023 Direct use Beaver Vehicles Carbon Footprint per year =around 181,848 KgCo2e (181 tonnes)**

**181,848 KgCo2 + 10,000 KgCo2 =**

**Beaver - Total Footprint = 2023 / 24 = 191,848 Kgco2e 191 tones per year**

Scope 1 Direct = 181,488 (eg vehicles / direct energy) / Scope 2 indirect = 10,000 (eg heating but ours includes homework and commuting)

Scope 3 are stakeholders / suppliers.

KEY TAKEAWAY –

2019 Total Carbon footprint 2085 Kg per person / PA (70 staff members)

2024 Total Carbon footprint 1795 Kg per person / PA (91 Staff members)

UK Pest Management Sustainability Awards winner 2024

Worked out another way – Average = 10 Tonnes per year per person – 80 Staff = 800 Tones – Time at work = one third – so = around **266 Tonnes per year.**

40 trees offset 1 tonne of carbon per year, so we would need to plant or sponsor 7800 trees, to be Carbon Neutral we need to plant 487 per year up until 2030. We already plant about 120 PA which off sets our carbon footprint by a quarter. We need to offset a further 146 tonnes per year.

**However we do continue to save our output in many areas.**

In reality there are a number of other Carbon additions created in the production of materials we use and their transfer footprint. If we assume that other companies offset this then we can quote to and work to the above calculations. Refer to Industry best practice reports and data currently being produced 2024.

**END**

**PLANNING AHEAD FOR THE FUTURE - OPTIONS BEING CONSIDERED**

| | |
|---|---|
| Measuring and Managing Sustainability and performance | |
| | |
| Sustainability School | |
| Energy And Carbon | |
| Environmental Management | |
| Performance Measurement | |
| Sustainability Strategy | |
| Sustainable Procurement | |
| Waste and Resource Efficiency | |
| | |
| Pathways | |
| Pre Requisites - Introduction to Climate Change and Carbon | Carbon negative by 2030 by reducing emissions (Scope 1, 2 and 3) and removing emitted carbon - Beaver total footprint 2020 Scope 1 and 2 only = 150 Metric Tonnes CO2e |

| | |
|---|---|
| H E Simm - Introduction to Sustainability | |
| Carbon reporting 2021 | Carbon Footprint Document produced |
| Climate Change and Carbon footprinting | |
| Carbon in Procurement | |
| Net Zero and Carbon offsetting | Targeting Net Zero 2045 |
| EKFB - Sustainability Tool Reporting / Training | |
| H E Simm - Carbon - a better future | |
| | |
| Mental Health and Wellbeing | Work Benefit App being looked at |
| Sustainability Goals 2021 - 22 | Actions |
| | |
| Complete Sustainability School Action Plans and training | |