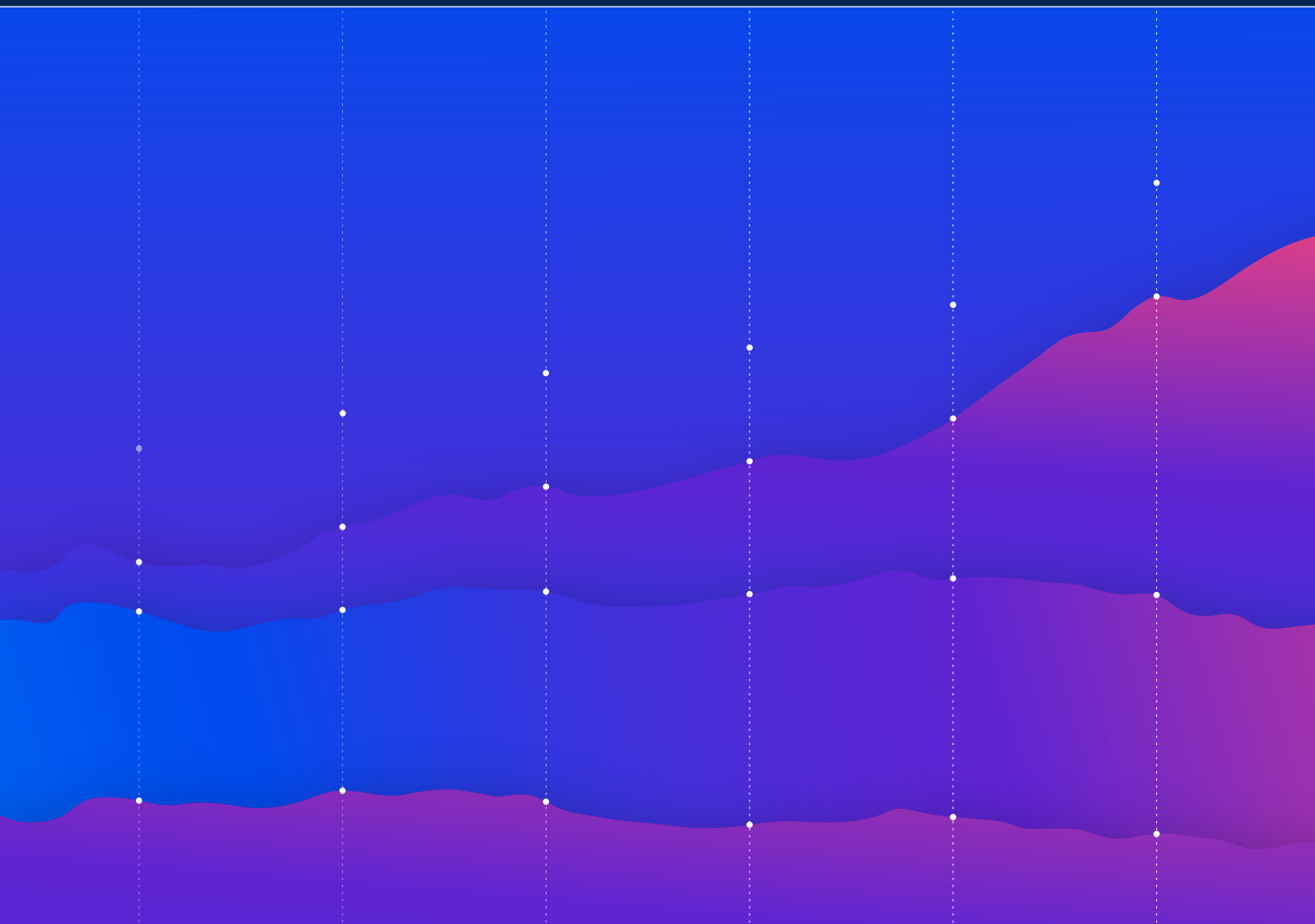
GOCARDLESS

# Climate Impact Report 2019 – 2021



# Contents


| | |
|---|---|
| **Executive Summary** | |
| Overview | 1 |
| Baseline | 3 |
| Summary for Customers | 3 |
| **Report** | |
| Objective and Scope | 4 |
| Measuring Our Impact | 6 |
| Scope 1 | 6 |
| Scope 2 | 7 |
| Scope 3 | 8 |
| Summary | 17 |
| Projections | 19 |
| Targets and Improvements | 20 |
| Summary of Supporting Documents | 20 |

# Executive summary

At GoCardless we are committed to reducing our impact on the natural environment and seeking opportunities to create positive change, leaving a more sustainable world for future generations. In 2021 we began our journey towards Net-Zero, becoming co-founders of the Tech Zero coalition. We built upon this commitment by becoming signatories of Business Ambition For 1.5°, aligning our climate action with the Science Based Target initiative Net-Zero Standard. We are committed to achieving this in line with climate Science and the Paris Agreement; reducing our emissions in a manner consistent with limiting global temperature rise to 1.5°C, and neutralising any residual emissions that we cannot reduce.

→ Our Science Based Targets:
Short-term = 2027;
Long-term (Net-Zero) = 2035

→ Read more in our Environmental Sustainability Strategy and Net-Zero Action Plan

A key part of this journey towards Net-Zero is measuring our impact each year, and this report sets out our emissions across Scope 1, 2 and 3 in line with the Greenhouse Gas Protocol.

Building upon our first Climate Impact Report (2020), we have improved the accuracy of measurements and addressed missing data gaps. Additionally, we have also measured our 2019 emissions, important for establishing our baseline for our Science Based Targets.

Our emissions for the calendar years 2019 – 2021 were:

| **Total (Scope 1, 2 and 3)** | **2019** | **2020** | **2021** |
|---|---|---|---|
| Location Based tCo2e | 6272.90 | 5902.86 | 8293.66 |
| Market Based tCo2e | 6085.77 | 5459.84 | 7923.24 |

| **Market Based Metrics** | **2019** | **2020** | **2021** |
|---|---|---|---|
| Intensity per employee (tCo2e/FTE) | 17.81 | 13.62 | 13.23 |
| Intensity per payment (gCo2e/Payment) | 63.76 | 41.79 | 47.84 |
| Energy Used (Offices, homeworking, customers) | 270 MWH | 279 MWH | 501 MWH |

Figure 1. 2019 – 2021 GHG Impact Emissions Summary

| **Top 5 Areas of impact** | **2019** | **2020** | **2021** |
|---|---|---|---|
| 1 | Financial Services | Financial Services | Financial Services |
| 2 | Business travel | SaaS and related services | Advertising services |
| 3 | SaaS and related services | Homeworking | SaaS and related services |
| 4 | Food services | Advertising services | Homeworking |
| 5 | Real estate services | Real Estate services | Insurance and pension services |

Figure 2. 2019 – 2021 GHG Impact Areas

## Baseline Average

In order for us to measure our emissions reduction, it is necessary to set a baseline year. However, the last few years have seen a major shift in ways of working due to the Covid-19 pandemic.

Our most accurate "business as usual" year prior to the pandemic is 2019. However this does not represent the shift to homeworking that we saw in 2020 and beyond, which became a major source of emissions.

In line with recommendations by the Science Based Targets, we have therefore used an average baseline. This combines our 2019 emissions with the homeworking emissions per employee from 2020, giving an average of what 2019 would have looked like taking into account the increase in home-working.

| Total (Scope 1, 2 and 3) | 2019 | 2019 – 20 baseline | 2020 | 2021 |
|---|---|---|---|---|
| Total Market based emissions (tCo2e) | 6085.77 | 6521.24 | 5459.84 | 7923.24 |
| Total emissions per employee (tCo2e) | 17.81 | 19.08 | 13.62 | 13.23 |

Figure 3. Baseline Emissions

## Summary for our customers

In order for our customers to calculate the emissions related to using GoCardless, a summary of our emissions per £ of spend is shown.

We have shown this for scope 1 and 2 for supply chain calculations in line with the GHG Protocol (the direct emissions produced from the provision of our service). We have also shown this as Scope 1, 2 and 3 for companies wishing to report additionally on full-scope supply chain emissions.

| 2021 | Scope 1 + 2 | Scope 3 | Combined |
|---|---|---|---|
| Total Market based emissions (tCo2e) | 3.04 | 7920.20 | 7923.24 |
| Market based emissions kg Co2e Per £ Spend | 0.000054 | 0.140983 | 0.140929 |
| Total Market based emissions (tCo2e) Per US $ Spend | 0.000041 | 0.106764 | 0.106805 |
| Total Market based emissions (tCo2e) Per EUR Spend | 0.000045 | 0.118428 | 0.118473 |
| Total Market based emissions (tCo2e) Per AU$ Spend | 0.000030 | 0.079174 | 0.079204 |

Figure 4. Customer Metrics

# Climate Impact Report 2021

## Objective and Scope

- → **Identify** and measure GHG emissions across our business (Scope 1, 2 and 3)
- → **Identify areas** in which we can strengthen our calculation over coming years
- → Externally **verify** our calculations in line with the Green House Gas Protocol
  - Verified By: Carbon Footprint LTD
  - Verification Standard: ISO 14064-3: 2019
- → Where use-data is not available, we will use **worse-case** estimations
- → Where market-based data is not available, we will use location-based data
- → We will consolidate emissions via **operational control approach**
- → Inventory Periods:
  - 1st January 2019 to 31st December 2019
  - 1st January 2020 to 31st December 2020
  - 1st January 2021 to 31st December 2021

## Definitions

| | |
|---|---|
| **Scope 1:** | All Direct GHG Emissions from the activities of our organisation or under our control, such as fuel combustion and air-conditioning |
| **Scope 2:** | Indirect Emissions from electricity purchased |
| **Scope 3:** | All Other Indirect Emissions from activities of the organisation |
| **Greenhouse Gases:** | Water vapor (H2O), Carbon dioxide (CO2), Methane (CH4), Nitrous oxide (N2O), Ozone (O3), Chlorofluorocarbons (CFCs), Hydrofluorocarbons (includes HCFCs and HFCs) |
| **Global Warming Potentials:** | GHGs have a Global Warming Potential (GWP) — the ability to trap extra heat in the atmosphere over time relative to carbon dioxide (CO2). This is defined by the IPCC in the Fifth Assessment Report (AR5). |
| **CO2e:** | Carbon Dioxide Equivalent, encompassing all GHGs. |
| **Tonne (t):** | Metric tonne (1000kg) |
| **Market Based vs Location Based:** | Where calculating emissions from energy consumption, we will show both market-based (using supplier specific data) and location based (data based on the geographical location of the site) |

## Measurements

Data for our operations in 2021 was gathered across the business, including energy consumption, travel, and purchased goods and services. These measurements are summarised below across scopes 1, 2 and 3. Our measurements for calendar years 2019 and 2020 are also shown alongside. Full calculations are available upon request.

## Scope 1

#### 1.1 LONDON HVAC – REFRIGERANT GAS LOSS

Our London office heating, ventilation, and air-conditioning (HVAC) system uses R410A refrigerant gas. Should this leak into the atmosphere, this has a Global Warming Potential of 2088, whereby 1 kg of R410A = 2088 kg Co2e. No leaks have been recorded to date. The maximum potential loss is also recorded below.

| London HVAC | 2019 | 2020 | 2021 |
|---|---|---|---|
| Potential Emissions tCo2e | 160.36 | 160.36 | 160.36 |
| Actual Emissions tCo2e | 0 | 0 | 0 |

#### 1.2 LONDON OFFICE CO2 TAP

Our London offices uses Co2 gas canisters for sparkling drinking water. Each canister holds 3.15kg of Co2.

| London Office Tap | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 0.24 | 0.19 | 0.19 |
| Market Based tCo2e | 0.24 | 0.19 | 0.19 |

| Scope 1 Total | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 0.24 | 0.19 | 0.19 |
| Market Based tCo2e | 0.24 | 0.19 | 0.19 |

# Scope 2

### 2.1 LONDON OFFICE – PURCHASED ELECTRICITY

Our UK office is located within a multi-tenanted building which houses our general office. The building uses electricity for which we receive use-data from the energy provider. During 2021, 100% of our electricity came from renewables, leading to market-based zero emissions.

| London Office | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 67.38 | 43.97 | 42.12 |
| Market Based tCo2e | 31.41 | 17.81 | 0 |

### 2.2 GLOBAL OFFICES — PURCHASED ELECTRICITY

Our global offices are located in serviced offices where no individual use-data is available. The energy use is calculated using the London energy-use prorated by location headcount. The location-based emission factor is used for each region, and where supplier data is not available, the residual mix is used for market-based emissions. Where no supplier or residual mix is available, the location-based factor is also used as market-based.

| Munich Office | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 0.02 | 0.78 | 0.57 |
| Market Based tCo2e | 0.03 | 1.07 | 0.82 |

| Paris Office | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | N/A | N/A | 0.16 |
| Market Based tCo2e | N/A | N/A | 0 |

| Melbourne Office | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | N/A | N/A | 3.95 |
| Market Based tCo2e | N/A | N/A | 1.19 |

| US Offices | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | N/A | N/A | 0.84 |
| Market Based tCo2e | N/A | N/A | 0.84 |

| Scope 2 Total | 2019 | 2020 | 2021 |
|---|---|---|---|
| Market Based tCo2e | 31.44 | 18.88 | 2.85 |
| Location Based tCo2e | 67.40 | 44.75 | 47.64 |

## Scope 3

### 3.1 DATA CENTRES: GOOGLE CLOUD SERVICES

We use Google Cloud Services for our data storage and processing. In 2019 and 2020 location-based emissions data was not available, and so a spend-based calculation has been used. For 2021, Google launched their emissions tracking platform, providing actual location-based data.

For all years, the service is provided at the market-based zero emissions.

| Google Cloud | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 150.57 | 259.95 | 110.85 |
| Market Based tCo2e | 0 | 0 | 0 |

### 3.2 SOFTWARE AS A SERVICE (SAAS)

A large proportion of our supply chain is Software as a Service (SaaS) and related services. We have used the spend-based method to calculate the impact of all SaaS suppliers. In 2020 and 2021 we were able to map out our providers and whether they have zero-emission operations. For example, Looker, Salesforce, Google and Atlassian already provide a market-based zero emissions service.

| SaaS | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 645.68 | 838.32 | 1284.79 |
| Market Based tCo2e | 645.68 | 691.30 | 1077.94 |

### 3.3 FINANCIAL SERVICES

The impact of financial services was measured using the spend-based method. The use of financial services, insurance and pensions has a larger wider impact, depending on how and where the money is used and invested (Financed Emissions), and will be something we will look to report on in future reports.

| Financial Services | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 1360.19 | 1299.59 | 1802.39 |
| Market Based tCo2e | 1360.19 | 1299.59 | 1802.39 |

## Why do our purchased goods and services create GHG emissions?

The emissions here might not seem as obvious as energy consumption or travel. However, when we buy a service or product from a supplier, the way in which this is provided generates emissions.

To increase the accuracy of the spend-based emissions factors used, a combined average of several spend-based factors — from DEFRA and Quantis through to the US-EEIO database — was used.

In future calculations, we will look to improve the accuracy by using supplier specific data sets, rather than a sectoral approach.

### 3.4 OTHER PURCHASED GOODS AND SERVICES:

The below goods and services were measured using the spend-based method.

| Other Purchased Goods & Services (Spend based tCo2e) | 2019 | 2020 | 2021 |
|---|---|---|---|
| Insurance & Pension | 288.83 | 349.61 | 536.59 |
| Food | 499.29 | 92.69 | 418.85 |
| Real Estate Services | 456.51 | 384.74 | 339.88 |
| Legal Services | 141.96 | 94.11 | 96.89 |
| Accounting Services | 81.63 | 77.17 | 134.67 |
| Advertising Services | 388.07 | 528.46 | 1164.24 |
| Other Professional Services | 285.25 | 214.48 | 358.30 |
| Employment Services | 139.34 | 105.95 | 284.00 |
| Travel Services | 19.82 | 5.85 | 3.65 |
| Security Services | 14.78 | 9.64 | 8.40 |
| Education Services | 65.26 | 58.87 | 128.64 |
| Creative Services | 49.87 | 26.48 | 93.94 |
| Membership Services | 2.88 | 3.93 | 17.16 |
| Repair of Goods | 3.95 | 3.66 | 5.89 |
| Telecoms Services | 13.08 | 12.30 | 13.40 |
| Furniture | — | 81.17 | 82.85 |
| Other Manufactured Goods | 31.28 | 25.19 | 64.73 |
| Media Services | 20.97 | 28.53 | 50.66 |

### 3.5 PURCHASED IT EQUIPMENT

The impact of purchased IT Equipment was calculated by using data sheets for products and new-joiner numbers, assuming that all new joiners received the same IT equipment.

| Purchased IT Equipment | 2019 | 2020 | 2021 |
|---|---|---|---|
| Spend-Based tCo2e | 35.96 | 27.27 | 73.88 |

## Did you know?

In February 2022, we reset 50 of our unused laptops and partnered with Framework — a charity and one of our customers — to help improve digital inclusion and skills for homeless people.

### 3.6 LONDON OFFICE – PURCHASED ELECTRICITY – TRANSPORTATION & DISTRIBUTION

The emissions from the Transportation and Distribution of electricity use in the London office is calculated by energy use and DEFRA Emission factors.

| London T&D | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 4.98 | 3.78 | 3.75 |
| Market Based tCo2e | 4.98 | 3.78 | 3.75 |

### 3.7 GLOBAL OFFICES – PURCHASED ELECTRICITY – TRANSPORTATION & DISTRIBUTION

Transportation and Distribution emissions for electricity use in our global offices is based on a prorated basis vs headcount of London. IEA Emission factors were used to calculate the emissions.

| Global T&D | 2019 | 2020 | 2021 |
|---|---|---|---|
| Munich | 0 | 0.03 | 0.02 |
| Paris | N/A | N/A | 0.01 |
| Melbourne | N/A | N/A | 0.04 |
| USA | N/A | N/A | 0.04 |

### 3.8 LOGISTICS

We use various logistics providers to ship equipment globally and calculate the emissions using the spend-based method.

| Logistics | 2019 | 2020 | 2021 |
|---|---|---|---|
| Spend-Based tCo2e | 4.77 | 7.14 | 10.82 |

### 3.9 WASTE

In our *2020 Climate Impact Report*, we had no data available for waste. Since then, we have been able to collect data for our London office, and now use this as a basis to calculate averages for our other sites.

| Waste (tCo2e) | 2019 | 2020 | 2021 |
|---|---|---|---|
| London | 2.01 | 2.26 | 3.32 |
| Paris | N/A | N/A | 0.09 |
| Munich | 0.02 | 0.02 | 0.02 |
| Melbourne | N/A | N/A | 0.09 |
| USA | N/A | N/A | 0.21 |

### 3.10 BUSINESS TRAVEL

For 2019, 2020, and 2021, our emissions from travel were calculated using the spend-based method; combining air travel, accommodation, and vehicle use. The DEFRA and Quantis emission factors were used, taking the highest factor in each case:

*Road (0.96kg/£), Air (3.00kg/£0) and Accommodation (0.45kg/£)*

| Travel | 2019 | 2020 | 2021 |
|---|---|---|---|
| Spend-Based tCo2e | 1090.30 | 370.53 | 221.63 |

## Did you know?

Food Waste from our London office is now converted into biogas! This will vastly reduce the emissions that would occur if the food waste ended up in landfill.

3.11 Employee Commuting

An extensive employee survey was carried out to accurately measure how our employees get to work, and how often they travel. DEFRA emissions factors for each mode of transport were used. The results were prorated to account for headcount.

| Commuting | 2019 | 2020 | 2021 |
|---|---|---|---|
| Market Based tCo2e | 142.21 | 19.00 | 57.11 |

### 3.12 USE OF PRODUCT: DASHBOARDS

Whilst the energy use behind the GoCardless system is measured above in Scope 2, the energy needed by a customer to use our service is also a consideration. With no actual-use data available for 2019 and 2020, this was modeled on customer quantities, and the power needed to run the most power-hungry web browser for 1 hour per week, for 52 weeks in a year.

For 2021, we were able to access actual user-data, including time spent on our platforms and location of access, enabling us to create an accurate measurement of the energy used and related emissions.

| Product Use | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 198.08 | 326.79 | 31.74 |
| Market Based tCo2e | 198.08 | 326.79 | 31.74 |

### 3.13 USE OF PRODUCT: USE OF WEBSITE

The emissions generated by visits to our website were calculated based on the total number of visits using the website carbon tool.

| Website Use | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 13.52 | 15.75 | 22.70 |
| Market Based tCo2e | 13.52 | 15.75 | 22.70 |

In 2020, our website generated 1.32 gCo2e/visit. In 2022, this has been reduced by 36% to 0.84 gCo2e/visit.

### 3.14 USE OF PRODUCT: PAYMENTS

The energy associated with processing our payments is based upon the total number of payments, the average of 1.8kwh/GB of energy used to move data and the average data size of a payment. A global average of tCo2e/KWH is used for 2019 and 2020, while an average of where our customers are located is used for 2021.

| Payments | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 12.51 | 17.13 | 21.35 |
| Market Based tCo2e | 12.51 | 17.13 | 21.35 |

### 3.15 HOMEWORKING EMISSIONS (ELECTRICITY)

With many employees working from home in 2020 and 2021, homeworking emissions are a key element of our impact — and will continue to be so going forward. We conducted an extensive survey to ascertain how many hours employees work from home, and where they live. We used an average power consumption per employee (based on the EcoAct Whitepaper) and calculated emissions based on location using DEFRA (UK) and IEA emission factors. Some employees used renewable energy providers, and this is considered in the market-based emissions. For those not using renewables, we used the residual emissions factor.

| Homeworking (Elec) | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 1.37 | 24.35 | 28.61 |
| Market Based tCo2e | 0.76 | 14.17 | 20.68 |

### 3.16 HOMEWORKING EMISSIONS (GAS)

We have used an average power consumption per employee, and calculated emissions based on location using DEFRA emission factors. We have assumed all employees use gas for heating in all locations, until a further survey is carried out.

| Homeworking (Gas) | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 40.34 | 543.19 | 769.60 |
| Market Based tCo2e | 40.34 | 543.19 | 769.60 |

### 3.17 INVESTMENTS

No investments in inventory year.

| Scope 3 Total | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 6205.27 | 5857.93 | 8188.72 |
| Market Based tCo2e | 6054.09 | 5440.77 | 7920.20 |

### 4.1 SUMMARY

The combination of the above scope 1, 2 and 3 GHG emissions equate to totals of:

| Total (Scope 1, 2 and 3) | 2019 | 2020 | 2021 |
|---|---|---|---|
| Location Based tCo2e | 6272.90 | 5902.86 | 8293.66 |
| Market Based tCo2e | 6085.77 | 5459.84 | 7923.24 |

This is broken down by scope as shown below:

| Total market-based emissions by Scope | 2019 | 2020 | 2021 |
|---|---|---|---|
| Scope 1 | 0.24 | 0.19 | 0.19 |
| Scope 2 | 31.44 | 18.88 | 2.85 |
| Scope 3 | 6054.09 | 5440.77 | 7920.20 |

Our emissions are shown below as market-based intensity metrics, alongside our total energy use across the business.

| Market Based Metrics | 2019 | 2020 | 2021 |
|---|---|---|---|
| Intensity per employee (tCo2e/FTE) | 17.81 | 13.62 | 13.23 |
| Intensity per payment (gCo2e/Payment) | 63.76 | 41.79 | 47.84 |
| Energy Used (Offices, homeworking, customers) | 270 MWH | 279 MWH | 501 MWH |

Our emissions are shown below as market-based intensity metrics, alongside our total energy use across the business.

Our **scope 1 and 2 emissions** now make up a very small percentage of our emissions each year, as from 2019 to 2021 we achieved a 90% reduction in our market-based Scope 2 emissions.

The impact of Covid-19 has produced changes across several areas. The emissions from commuting to the office were reduced by 60%, whilst business travel was reduced by 80% from 2019 to 2021. However, the shift to working from home produced an 19x increase in related emissions.

Our **Scope 3 Emissions** are the largest component of our emissions, at 99.96% of our total in 2021. The high impact areas include – unsurprisingly for a FinTech business - Financial Services and Software related services.

### 4.2 FUTURE PROJECTIONS

Allowing for projected future growth within the business – and assuming no actions are taken to reduce our emissions – the estimated increase in emissions (in parallel with cumulative emissions) over the next decade is shown below. This is based upon our baseline emissions per employee, multiplied by projected headcount growth.

This also shows our path to Net-Zero, how decoupling our emissions from our growth will enable us to reduce our emissions consistent with climate science.

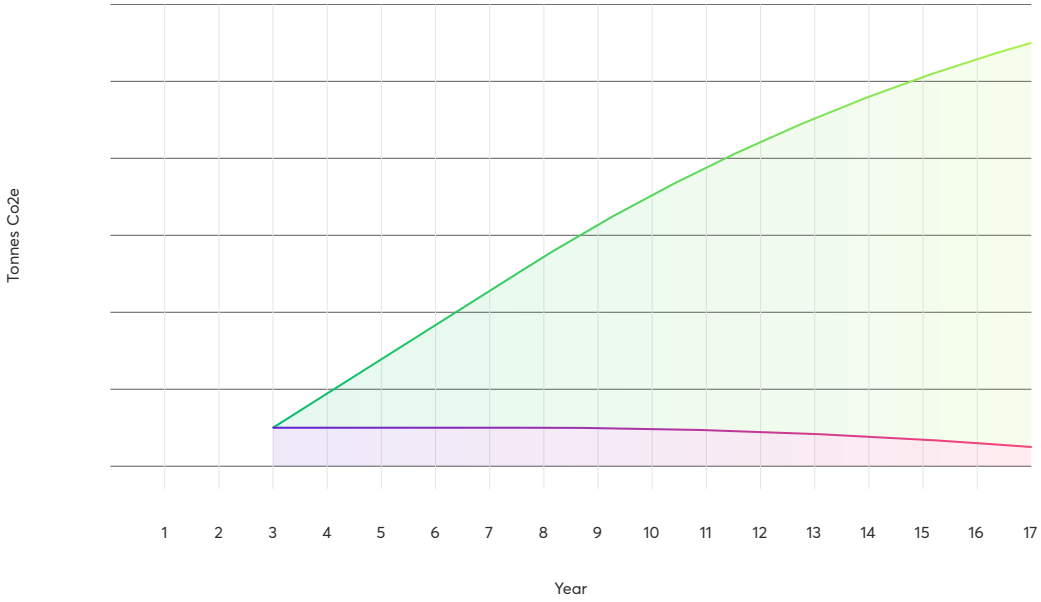



Figure 3. 2020 – 2030 Projections

#### 4.3 TARGETS AND OBJECTIVES FOR FUTURE REPORTS

We aim to increase the accuracy and range of scope of our 2022 calculations by improving data collection across the following business areas:

## Scope 2:

- ✓ Improve energy-use data for global offices to move beyond estimations

## Scope 3:

- ✓ Improve data for purchased goods and services, and moving to supplier-specific calculations
- ✓ Include use-data from newly appointed travel provider
- ✓ Widen employee survey for better collection of data for commuting and homeworking
- ✓ Seek data on waste for global offices
- ✓ Improve measurements where possible for the energy use of our product
- ✓ Improving the accuracy of our calculations will enable us to better understand our impact and improve our Net-Zero strategy.

#### 4.4 SUPPORTING DOCUMENTS

The following documents show the workings and data sources for all the calculations. Full versions of all documents are available for viewing.

- ✓ GC GHG Calculations
- ✓ Scope 3 Emissions Factors
- ✓ Data Sheets: Apple Macbook, Gas bottles (Suregas),
- ✓ Data Sheets: Energy Suppliers, Google Cloud
- ✓ Utility Bills and Waste Data for London Office

GOCARDLESS