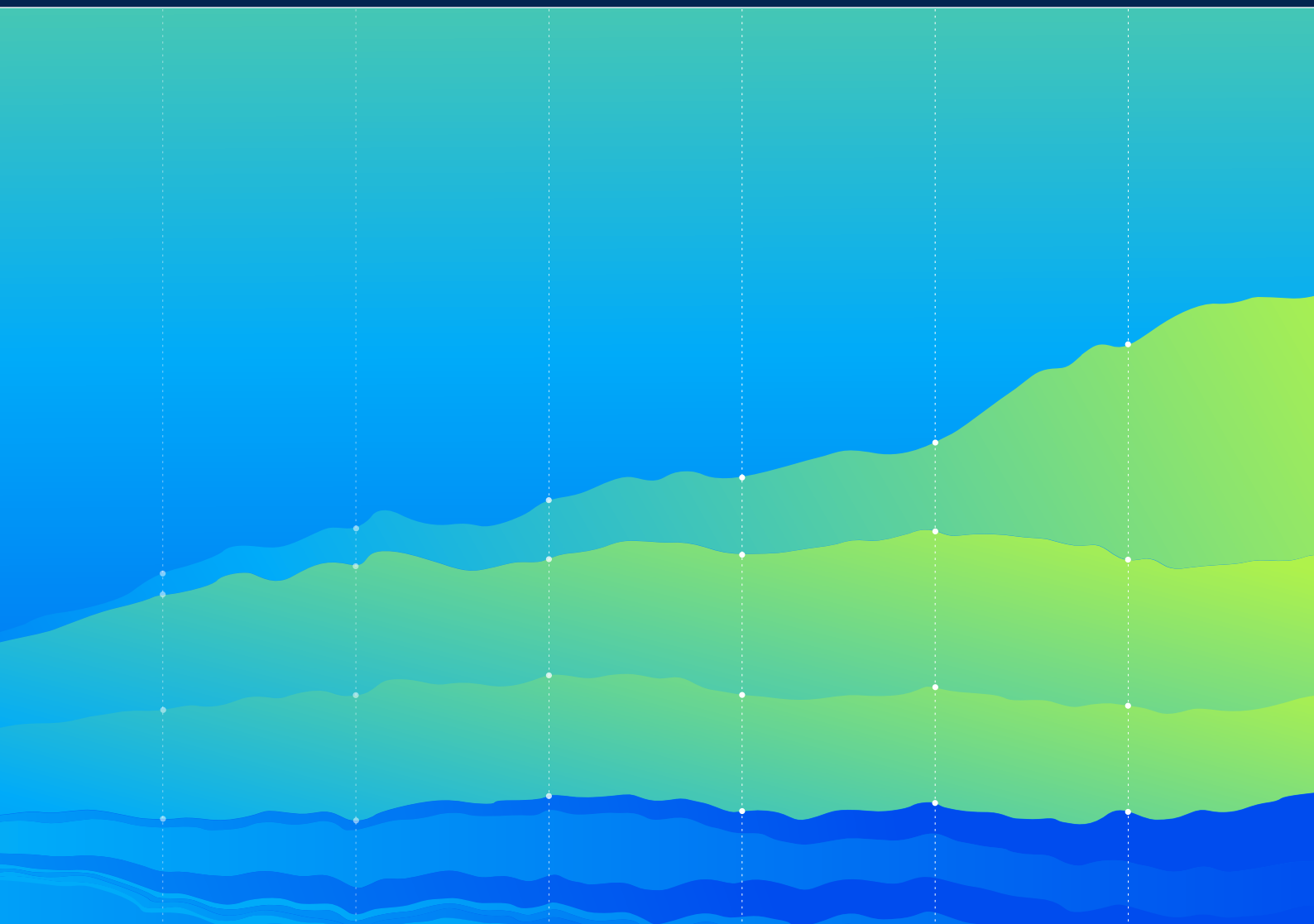


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# Climate Impact Report 2020



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# 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.

This year we embarked upon our journey towards Net-Zero. We are committed to achieving this in a responsible manner in line with climate science and the Paris Agreement; we do not want to simply "offset" our impact but aim to reduce our emissions in a manner consistent with limiting global temperature rise to 1.5°C, and neutralising (via removals) any residual emissions that we cannot reduce.

This report is the first step on this pathway as we measure our impact ahead of developing our strategy. To establish our 2020 Baseline, we measured our impact across Scope 1, 2 and 3 emissions in line with the Green House Gas Protocol.

In the calendar year 2020, our total market-based GHG emissions were:

# 5,437.69 Tonnes CO<sub>2</sub>e

This is equivalent to:

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**0.04KG**  
per transaction  
processed in 2020

(based on 130.7m transactions)

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**13.17 Tonnes CO<sub>2</sub>e**  
per GeeCee  
(FTE) in 2020

(based on 412.8 FTE)

In the reporting year, we consumed 275596 kWh of energy.

# Our 5 highest areas of impact in 2020:

1. Financial Services: **24%**

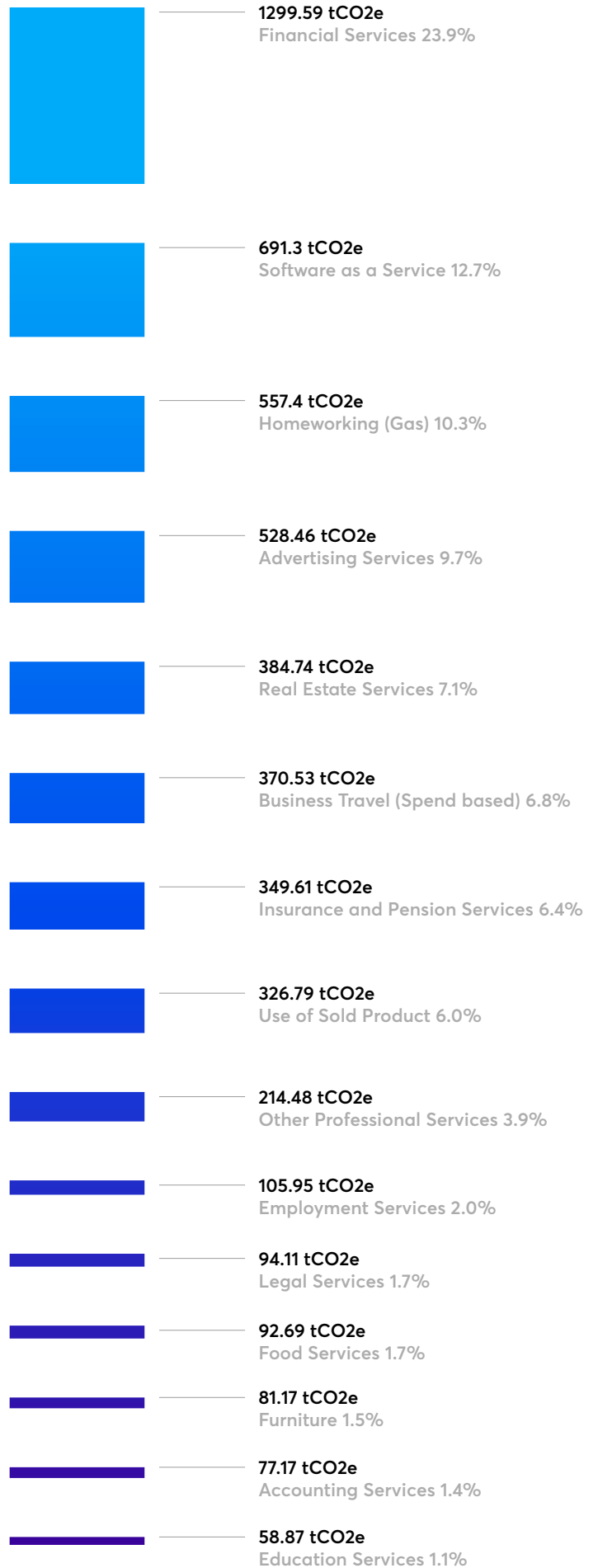
2. SaaS and related services: **13%**

3. Homeworking (Gas & Electricity): **11%**

4. Advertising Services: **10%**

5. Real Estate Services: **7%**

Corporate Travel: **7%**



# Overview

At GoCardless, we understand the importance of operating in a responsible and sustainable manner.

To minimise our impact on the natural environment we are committed to reducing our Greenhouse Gas (GHG) Emissions and reaching Net-Zero emissions; where our GHG emissions are reduced as far as possible and residual emissions are neutralised. The first step of this strategy is identifying the current GHG impact ("carbon footprint") across our business so that we can map out our pathway for responsible reduction, whilst identifying opportunities to improve the accuracy of our measurements.

## Objective and Scope:

- 
- **Identify** and measure GHG emissions across our business including both **direct** and **indirect** (scope 1, 2 and 3 GHG emissions)
- 
- Utilise the process to **identify areas** in which we can strengthen and widen the scope of our calculation over coming years
- 
- Externally **verify** our calculations in line with the Greenhouse Gas Protocol
- 
- Where actual use-data is not available, we will use **worse-case** scenarios for modelling our impact in line with best practice
- 
- Where market-based data is not available, we will use location-based data
- 
- We will use **IEA** and **DEFRA Emission Factors** for our calculations
- 
- We will consolidate emissions via **operational control approach**

# Definitions

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## Scope 1:

All Direct GHG Emissions from the activities of our organisation or under our control, such as fuel combustion (on site such as generators), fleet vehicles and air-conditioning

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## Scope 2:

Indirect Emissions from electricity purchased

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## Scope 3:

All Other Indirect Emissions from activities of the organisation, occurring from sources that we do not own or control

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## Green House Gases:

Water vapor (H<sub>2</sub>O), Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous oxide (N<sub>2</sub>O), Ozone (O<sub>3</sub>), Chlorofluorocarbons (CFCs), Hydrofluorocarbons (includes HCFCs and HFCs)

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## Global Warming Potentials:

Each GHG has its own Global Warming Potential (GWP) which is its ability to trap extra heat in the atmosphere over time relative to carbon dioxide (CO<sub>2</sub>). This is defined by the IPCC in the Fifth Assessment Report (AR5)

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## CO<sub>2</sub>e:

Carbon Dioxide Equivalent, encompassing all GHGs

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## Tonne (t):

Metric tonne (1000kg)

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## 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 2020 was gathered across the business, including energy consumption, travel (both business travel and commuting) and purchased goods and services. These measurements are summarised below across scopes 1, 2 and 3. Full calculations are available in the supporting documents.

## Scope 1

### 1.1 London HVAC – Refrigerant Gas Loss

The 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 1kg of R410A = 2088kg CO<sub>2</sub>E. No leaks have been recorded to date.

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Potential Emissions:  
**160.36 tCO<sub>2</sub>e**

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Total Emissions:  
**0 tCO<sub>2</sub>e**

### 1.2 London Office CO<sub>2</sub> Tap

The London offices uses CO<sub>2</sub> gas canisters for drinking water. Each canister holds 18.6kg of CO<sub>2</sub>.

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Total Emissions:  
**0.11 tCO<sub>2</sub>e**

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Scope 1 Total: **0.11 tCO<sub>2</sub>e**

# Scope 2

## 2.1 London Office Energy Consumption – Purchased Electricity

The UK office is located within a multi-tenanted building which houses our general office. The building uses electricity for which we receive actual-use data from the energy provider. During the reporting year, our provider changed. This meant our supply changed from 0.157kg CO<sub>2</sub>e/KWH, to 0kg CO<sub>2</sub>e/kwh.

Total location-based emissions:  
**43.97 tCO<sub>2</sub>e**

Total market-based emissions:  
**8.23 tCO<sub>2</sub>e**

## 2.2 Germany Office – Purchased Electricity

The Germany office is within a serviced office, where no use-data is available. The energy use is calculated using the London energy-use prorated by location headcount. The location-based emission factor and residual mix are used for location and market-based emissions.

Total location-based emissions:  
**0.72 tCO<sub>2</sub>e**

Total market-based emissions:  
**0.99 tCO<sub>2</sub>e**

Scope 2 Total: **9.22 tCO<sub>2</sub>e**





# Scope 3

## 3.1 Data Centres: Google Cloud Services

We use Google Cloud Services for our data storage. Currently, energy-use data is not available, so a spend-based calculation has been used. The service is provided at 100% Renewable energy, and so the market-based emissions are zero.

|   |   |
|---|---|
| Total spend-based emissions:<br><b>259.95 tCo2e</b> | Total market-based emissions:<br><b>0 tCo2e</b> |
|---|---|

## 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 SaaS and mapped out 78% of our providers and whether they have 100% renewable/Net-Zero operations. For example, Looker, Salesforce, Google and Atlassian are already at Net-zero for scope 1 and 2. We then used this to calculate our market-based emissions for SaaS.

|   |  |
|---|--|
| Total spend-based emissions:<br><b>838.32 tCO2e</b> | Total market-based emissions:<br><b>691.30 tCO2e</b> |
|---|--|

## 3.3 Financial Services

The impact of financial services was measured using the spend based method. Using financial services, insurance and pensions has a large wider impact, depending on how and where the money is used and invested. This is known as Financed Emissions and will be shown for insight in future reports.

|  |
|--|
| Total spend-based emissions:<br><b>1299.59 tCO2e</b> |
|--|

### 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 from a supplier, the way in which those goods or services are provided in turn 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 sector.

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

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**3.4 Insurance & Pension Services:**

Total spend-based emissions: **349.61 tCO<sub>2</sub>e**

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**3.14 Education Services (Learning/Development):**

Total spend-based emissions: **58.87 tCO<sub>2</sub>e**

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**3.5 Food Services:**

Total spend-based emissions: **92.69 tCO<sub>2</sub>e**

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**3.15 Creative Services:**

Total spend-based emissions: **26.48 tCO<sub>2</sub>e**

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**3.6 Real Estate Services:**

Total spend-based emissions: **384.74 tCO<sub>2</sub>e**

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**3.16 Membership Organisation Services:** Total  
spend-based emissions: **3.93 tCO<sub>2</sub>e**

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**3.7 Legal Services:**

Total spend-based emissions: **94.11 tCO<sub>2</sub>e**

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**3.17 Repair of Goods:**

Total spend-based emissions: **3.66 tCO<sub>2</sub>e**

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**3.8 Accounting Services:**

Total spend-based emissions: **77.17 tCO<sub>2</sub>e**

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**3.18 Telecoms Services:**

Total spend-based emissions: **12.30 tCO<sub>2</sub>e**

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**3.9 Advertising Services:**

Total spend-based emissions: **528.46 tCO<sub>2</sub>e**

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**3.19 Furniture:**

Total spend-based emissions: **81.17 tCO<sub>2</sub>e**

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**3.10 Other Professional Services:**

Total spend-based emissions: **214.48 tCO<sub>2</sub>e**

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**3.20 Other Manufactured Goods:**

Total spend-based emissions: **25.19 tCO<sub>2</sub>e**

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**3.11 Employment Services:**

Total spend-based emissions: **105.95 tCO<sub>2</sub>e**

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**3.21 Media Services:**

Total spend-based emissions: **28.53 tCO<sub>2</sub>e**

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**3.12 Travel Services:**

Total spend-based emissions: **5.85 tCO<sub>2</sub>e**

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**3.22 Purchased IT Equipment**

The impact of purchased IT Equipment was calculated by using data sheets for products and new-joiner numbers.

Total product-based emissions: **19.63 tCO<sub>2</sub>e**

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**3.13 Security Services:**

Total spend-based emissions: **9.64 tCO<sub>2</sub>e**

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### 3.23 London Office Energy Consumption – Purchased Electricity – Transportation & Distribution

Transportation and Distribution emissions for electricity use in the London office, based on received use data from the provider. DEFRA Emission factors were used to calculate the emissions.

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Total location-based emissions:  
**3.78 tCO<sub>2</sub>e**

### 3.24 Germany Energy Consumption – Purchased Electricity – Transportation & Distribution

Transportation and Distribution emissions for electricity use in the Germany office, based on a pro-rate basis vs headcount of London. IEA Emission factors were used to calculate the emissions.

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Total location-based emissions:  
**0.03 tCO<sub>2</sub>e**

### 3.25 Logistics

We use various logistics providers to ship equipment globally and calculated the resulting emissions using the Spend-Based Method.

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Total spend-based emissions:  
**7.14 tCO<sub>2</sub>e**

### 3.26 Waste

Out of scope for 2020: No data available

### 3.27 Travel: Business (expensed)

For 2020, this calculation was based on 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/£)

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Total spend-based emissions:  
**370.53 tCO<sub>2</sub>e**

### 3.28 Travel: 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 pro-rated to account for headcount.

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Total emissions:  
**19.00 tCO<sub>2</sub>e**

### 3.29 Use of Product

Whilst the energy and services behind the GoCardless system are measured above, the actual energy needed by a customer to use the platform is also a consideration. With no actual-use data available, this was modelled 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.

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Total location-based emissions:  
**326.79 tCO<sub>2</sub>e**

### 3.30 Use of Product: Use of Website

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

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Total location-based emissions:  
**15.75 tCO<sub>2</sub>e**

### 3.31 Homeworking Emissions (Electricity)

With many employees working from home in 2020, homeworking emissions are a key element of our impact. We conducted an extensive survey to ascertain how many hours employees work from home, and where they live. We have 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.

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Total location-based emissions:  
**23.09 tCO<sub>2</sub>e**

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Total market-based emissions:  
**14.60 tCO<sub>2</sub>e**

### 3.32 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 the inventory period.

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Total location-based emissions:  
**557.40 tCO<sub>2</sub>e**

### 3.33 Investments

No investments in inventory year.

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Scope 3 Total: **5,428.36 tCO<sub>2</sub>e**



## Summary

The combination of the above scope 1, 2 and 3 emissions equate to a total market-based Greenhouse Gas impact ("carbon footprint") in 2020 of:

# 5,437.69 Tonnes CO<sub>2</sub>e

This is equivalent to:

---

**0.04KG**  
**per transaction**  
**processed in 2020**

(based on 130.7m transactions)

---

**13.17 Tonnes CO<sub>2</sub>e**  
**per GeeCee**  
**(FTE) in 2020**

(based on 412.8 FTE)

**In the reporting year, we**  
**consumed 275596 kWh**  
**of energy.**

Our scope 1 emissions are very low at 0.11 Tonnes CO<sub>2</sub>e, whilst our scope 2 emissions are also comparatively low at 9.22 Tonnes CO<sub>2</sub>e. An important consideration for scope 2 is the impact of Covid-19 and the limited use of offices in 2020, as this is likely to increase as the workplace returns to post-Covid operations. The opening of additional global offices will also add to this energy use.

Our Scope 3 Emissions are the largest component (99.8%) of this total, with high impact areas including – unsurprisingly for a FinTech business - Financial Services and Software related services. Other areas of high impact include homeworking and business travel which is strategically important to note with 2020 being a year of very low travel, as this likely to increase in 2021.

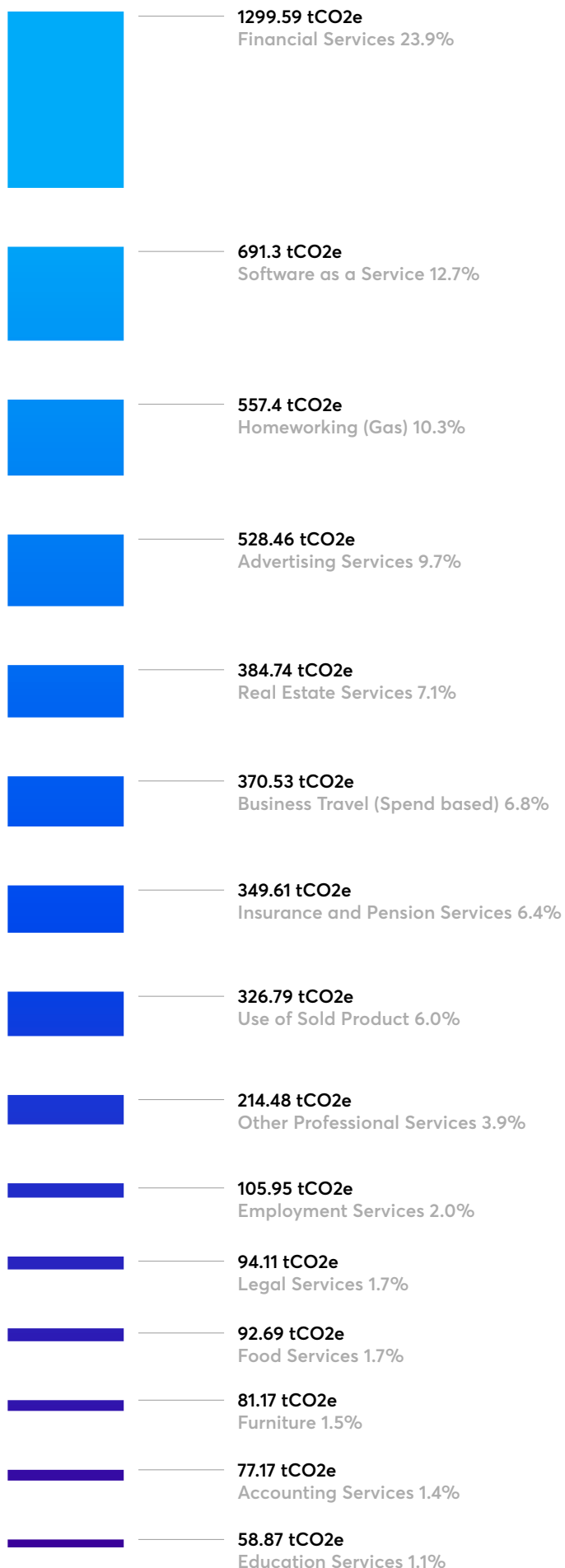
# CO<sub>2</sub>e

## cost-per-transaction

The measuring of the greenhouse gases across our business allows for the assessment of the carbon-cost of one GoCardless transaction based upon current attainable data. For one of the 130.7m transactions in 2020, each has a CO<sub>2</sub>e impact of:

**0.04KG CO<sub>2</sub>e/transaction**

This is equivalent in mass to five UK 50p coins.

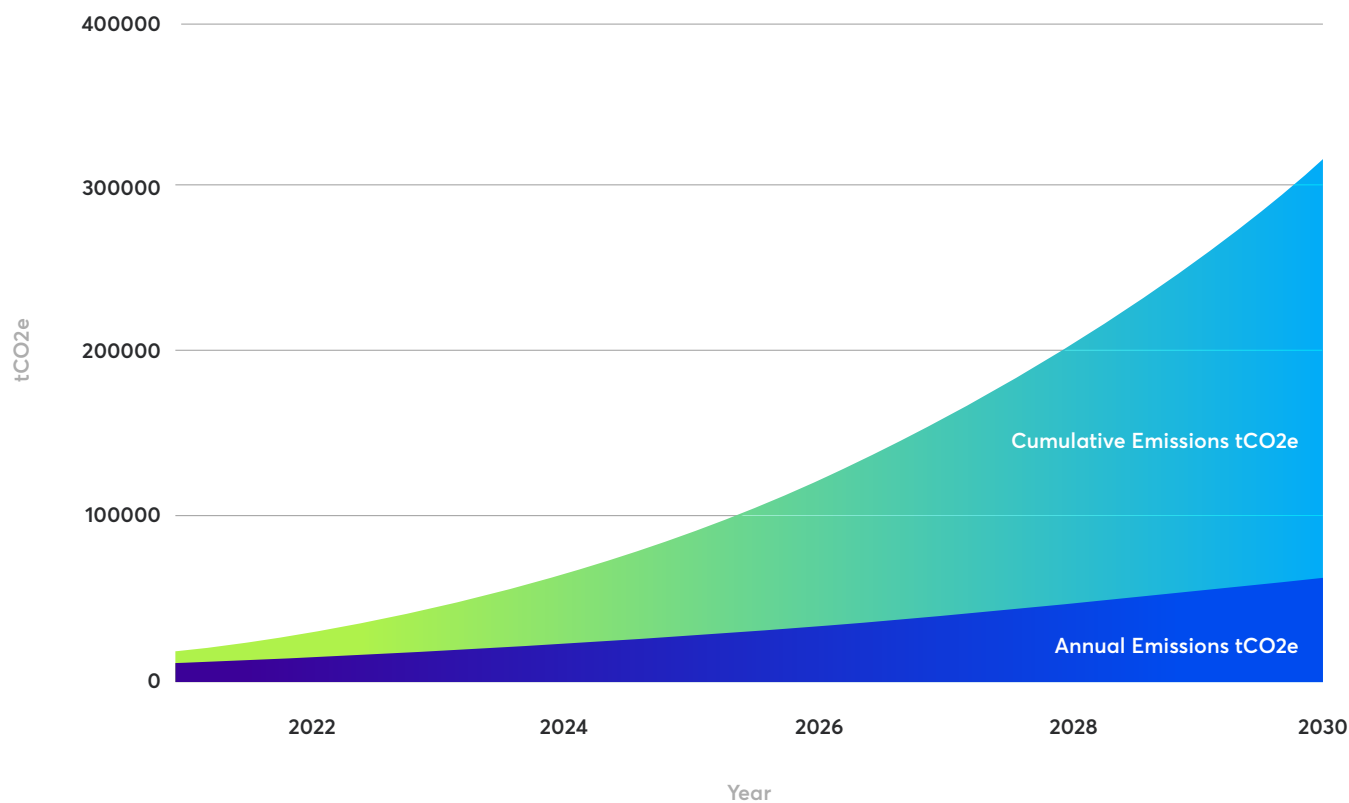


# Projections

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 includes:

- ✓ Increased employee numbers year-on-year
- ✓ Increasing purchased goods & services, travel, homeworking and purchased IT equipment, plus the addition of global offices and increases energy use
- ✓ The addition of further out of scope elements to our calculations such as waste
- ✓ Improvements in measurements of our customer-use data

Annual & Cumulative Emissions tCO2e







## Targets and Objectives

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

### Scope 1

- ✓ Gather further data for London office gas bottles
- ✓ Gather HVAC data for global offices

### Scope 2

- ✓ Improve energy-use data for global offices

### Scope 3

- ✓ Improve data for purchased goods and services, such as supplier-specific emissions factors
- ✓ Seek to use a travel provider for more accurate travel data
- ✓ Widen survey for better collection of data for commuting and homeworking
- ✓ Seek data on waste for global offices
- ✓ Improve use of product calculations, using measurements where possible

Improving the accuracy and range of our 2021 calculations will enable us to better understand our impact and improve our Net-Zero strategy and Science-Based Targets.

# 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
- ✓ Commuting and Homeworking Emissions Calculations
- ✓ Data Sheets: Apple Macbook
- ✓ Utility Bills for London Office (EDF and British Gas)
- ✓ EDF Supply Data Sheet
- ✓ Scope 3 Emissions Factors

