



Climate Impact Report 2022

GoCardless

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Executive summary

Our progress

In 2021, we became co-founders of Tech Zero and signatories of Business Ambition for 1.5°C, committing to take action on climate change.



Our previous Climate Reports measure our impact in 2019, 2020 and 2021.

This latest Climate Report measures our Greenhouse Gas emissions in 2022, and demonstrates good progress as we look to reduce our impact and work towards our Science Based Targets.

Compared with previous years, we have reduced our emissions across all areas.

- For our scope 1 & 2 we have already surpassed our Science Based Target ahead of our 2027 goal.
- Within our scope 3, we have seen reductions per employee in our Supply Chain, Product, Home working, Commuting, Business Travel, and Waste.

2022 was the first year where investments were material within our measurement: the money we move for our customers, pensions, and the money we have in banks.

The climate impact of these investments is much larger than the rest of our scope 1, 2 and 3 - around 7 x larger.

Our projects

Whilst we prioritise reducing our Greenhouse Gas emissions, we also supported carbon removal projects that both help to tackle climate change and protect nature.

We did a lot of work to embed sustainability across GoCardless, with:

- Over 80 GoCardless employees becoming members of our internal Sustainability Group,
- 100 GoCardless employees taking part in environmental action days



- 172 GoCardless employees taking part in our Race to Nature, where we collectively ran/walk/swam/cycled/pushed/climbed 32,000 KM, contributing to projects that tackle climate change, protect nature and support communities.

Collaborating externally is crucial, and we spent a lot of time building tools and resources for other businesses to use. Our free GoCardless Greenhouse Gas Calculator has helped over 1000 businesses get started on their own climate journey.



Why

Start with why

The Greenhouse effect is something many of us learnt about in school, where Greenhouse Gases such as Carbon Dioxide, Methane and Nitrous Oxide trap heat within a planet's atmosphere. This was first discovered back in 1856 by [Eunice Newton Foote](#) — an American scientist and women's rights campaigner — and it is one of the reasons why Earth has developed an atmosphere that can support life.

Back in 1856, the amount of carbon dioxide (CO₂) in the atmosphere was **285 PPM** (parts-per-million). In the 800,000 years preceding this the average CO₂ levels in the atmosphere had stayed pretty stable — between **170 and 300 PPM** — in a period that experienced eight ice ages and corresponding warmer periods.

But during the 11,700 years since the last ice age — an era known as the Holocene — we have seen a stable “goldilocks” period, enabling human civilization to thrive. During the Holocene, CO₂ levels remained even more stable, hovering between **260 and 280 PPM**.

Yet following the industrial revolution and moving forward to “the great acceleration” in the 1950's, the levels of CO₂ in the atmosphere began to rise rapidly. In 1950, the CO₂ PPM had already reached **311 PPM**, higher than anytime in the previous 800,000 years.

In fact, many now believe we have entered a new Geological era — known as the Anthropocene — whereby humans are now the driving influence upon the planet's climate and ecosystems.

The rise in CO₂ in the atmosphere since the industrial revolution started to cause our “greenhouse” to trap more heat. Put simply: Greenhouse Gases are like a blanket around the Earth. Throughout the Holocene, the blanket was just the right thickness to help civilization develop, but over recent years, the blanket has been getting

thicker and thicker due to the level of Greenhouse Gases in the atmosphere, trapping more and more and more heat.

Fast forward to 1989 and CO₂ levels had risen to **353 PPM**, an increase of +42 PPM in just 39 years. For context, in the previous 11,700 years, the variance was ±20 PPM. That year, the then Prime Minister of the UK Margaret Thatcher [addressed the UN General Assembly](#), highlighting the urgent need to curb Greenhouse Gas emissions and stop the negative impact on the natural world.

In 2003 the phrase “Carbon Footprint” entered the public lexicon via a marketing campaign by British Oil and Gas company BP. The campaign encouraged individuals to measure their own “carbon footprint” — a campaign which some point to for focussing on individuals rather than corporations.

159 years after Eunice Newton Foote discovered the Greenhouse Gas effect, the Paris Agreement was reached in 2015, a global accord with the core aim of halting the increase in Greenhouse Gas emissions and the resulting rise in average temperatures:

“Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognising that this would significantly reduce the risks and impacts of climate change.”

Why is 1.5°C important?

In the year of the Paris Agreement global levels of CO₂ surpassed 400 PPM for the first time in recorded history, resulting in a global average temperature rise at 0.9°C above pre-industrial levels.

In the years since the Paris agreement, we have seen the 8 hottest years on record.

In 2022, the Intergovernmental Panel on Climate Change published a [report](#) highlighting the need to rapidly reduce global emissions: “Limiting warming to around 1.5°C (2.7°F) requires global greenhouse gas emissions to peak before 2025 at the latest, and be reduced by 43% by 2030.”

Well, this is still a best-case scenario of limiting average global temperature rise to still dangerously high levels.

Every slight increase in global temperature increases the harm caused to both people and the planet. But 1.5°C also represents irreversible “[tipping points](#)” — limits that if passed, could accelerate further warming. This includes permafrost thawing in the Arctic, coral reef die-off, Antarctica ice sheet collapse, or Amazon dieback.

[In her speech to Cop26](#), the Prime Minister of Barbados Mia Mottley addressed 1.5°C in stark terms:



Mia Mottley
Prime Minister of Barbados

“For those who have eyes to see. For those who have ears to listen. And for those who have a heart to feel. 1.5°C is what we need to survive. 2°C is a death sentence for the people of Antigua and Barbuda, for the people of the Maldives, the people of Dominica and Fiji, the people of Kenya and Mozambique, and for the people of Samoa and Barbados. We do not want that dreaded death sentence. The world, the planet, needs our actions now, not next year.”

Yet in 2022, the PPM level rose to **419 PPM**, and this year we have already seen the [three hottest days ever recorded](#), all within the same week.

The World Economic Forums' Global Risk Report [highlights](#) climate change-related risks as the most likely and impactful for the last 12 years in a row. **167** years after the Greenhouse effect was recorded, the global mean temperature in June 2023 was **1.47°C** above pre-industrial levels (although the El Nino effect was officially declared for June 2023 which can add **0.2°C** to the global average), whilst some places are experiencing much faster levels of warming than the global average. In Svalbard — the Norwegian archipelago in the Arctic circle — the consensus is that [warming is already at 4°C](#) in the last **50** years.

It is clear that action is needed to reduce Greenhouse Gasses to halt climate change. Not in 2030, or 2050, but now.

And let's be clear. Climate change is not just an environmental issue. Climate change will impact the well-being of communities, humans and nature — and businesses and economies — globally. We are already seeing the physical impacts of extreme heat, flooding, drought and wildfires. But this will lead to increased pressure on health, water, and food. Those who need to work outside will see their livelihoods impacted, whilst access to resources will lead to climate refugees and increased conflict.

Yet those people least responsible for the impact of climate change are those most at risk. Countries with the lowest CO2 emissions are those at the front-line of climate change. Women and girls are disproportionately affected, yet countries that empower women are shown to take more action. The richest **10%** globally are responsible for nearly **50%** of lifestyle emissions, whilst children being born in 2023 are being brought into a world that is seeing dramatic changes to climate, to which they have had no responsibility for causing.

Taking action on climate change is not about “saving the planet.” It's about ensuring that everyone has access to an equitable future where they can continue to live and thrive.

At GoCardless, we Care Deeply, meaning we take the action that is required to do all we can to leave a sustainable and equitable world in which we can all continue to exist. This report measures our Climate Impact, reviews our actions to date, and looks toward what more we can do.

See more at:

gocardless.com/sustainability



Summary

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.



Catherine Birkett
Chief Financial Officer
GoCardless

Our targets

In 2022, our targets were validated by the Science Based Targets initiative. These targets are:

2027

Scope 1 & 2

92% reduction from 2019

Scope 3

90% reduction per employee from 2019

2035

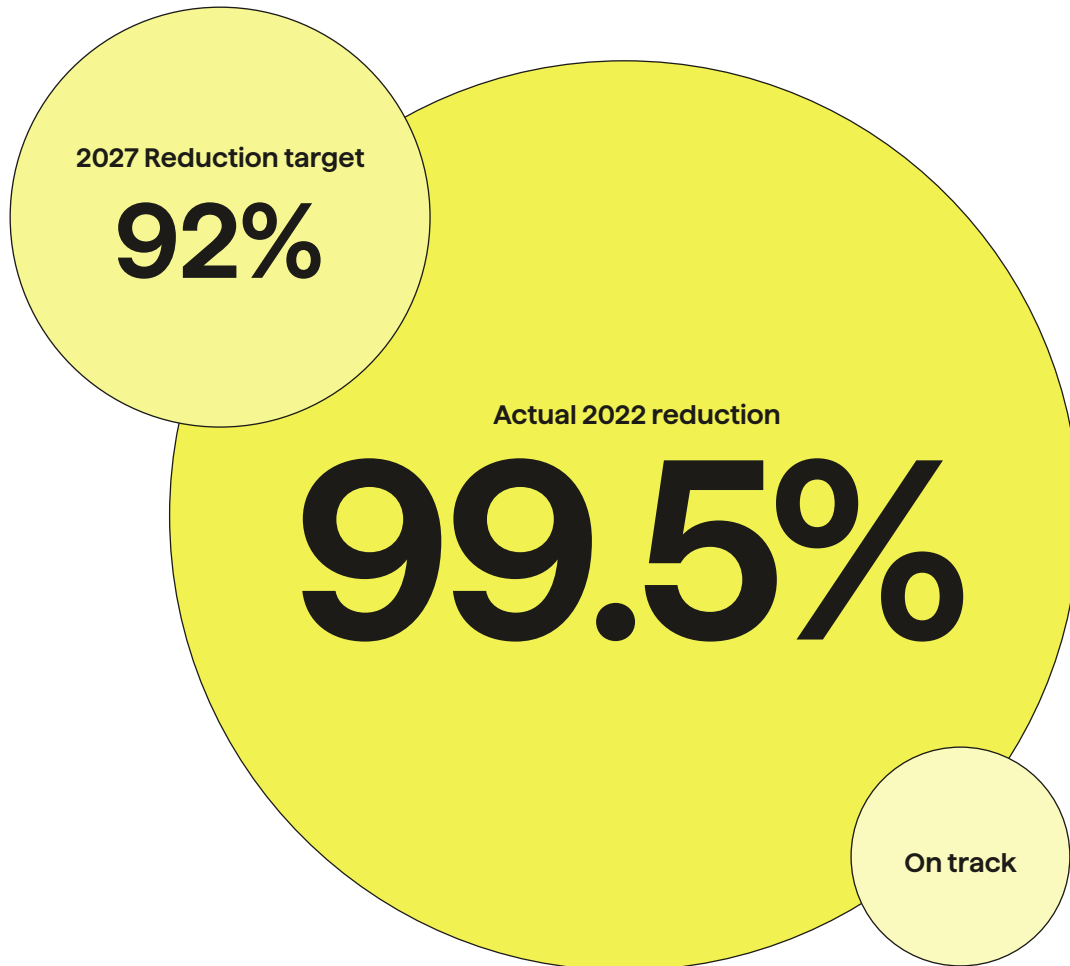
Long-term science based target (net-zero)

Scope 3

Scope 3: 97% reduction per employee from 2019

[See our commitments on the SBTi website](#)

In 2022, we published our Environmental Sustainability Strategy and Net-Zero Action Plan which sets out how we will take action to reach these vital goals.



We began looking to see how we could reduce our Greenhouse Gas emissions across all areas straight away, and have already seen good progress. **We have already surpassed our 2027 target (92% reduction)**, with our Scope 1 & 2 emissions in 2023 being reduced from 31.68 tCO₂e in 2019 to 2.21 tCO₂e in 2022, a 93% reduction. Taking into account our purchasing of renewable energy, our market-based 2022 scope 1 & 2 was reduced to 0.15 tCO₂e — a 99.5% reduction.

On areas of scope 3 that we have previously measured, we have been able to take action and start making reductions towards our 2027 near-term target. This includes emissions from our Supply Chain, Business Travel, Commuting, Home working, Waste, and our Product.

The reductions we have seen in these previously measured scope 3 categories mean that we have already made good progress towards our scope 3 Science Based Targets.

This is shown below:

Scope 3

Category	2027 Reduction target	2022 Target intensity	2022 Actual intensity	On track?
Purchased goods & services	81%	8.46	4.08	Yes
Business travel	61%	2.5	1.54	Yes
Home working	70%	0.92	0.40	Yes
Commuting	90%	0.08	0.12	No
Waste	90%	0.01	0.0003	Yes
Product	77%	0.46	0.07	Yes

However, it is important that each year we improve our measurements and take into account any change in the business operation. This year we have been able to make improvements upon previous years, whilst measuring new impact areas that were not present in previous years.

This will enable us to review our actions to date, and understand where we can focus our efforts going forward to continue to drive real change.

Improving on our measurements

A key part of this journey towards Net-Zero is measuring our impact each year to track our progress, and this report sets out our Greenhouse Gas emissions across Scope 1, 2 and 3 for the calendar year 2022 in line with the [Greenhouse Gas Protocol](#).

“Climate reporting is like sculpting — it’s important to continue to improve the measurements each year to go from an approximate outline to more detailed and refined calculation.”

Our first Climate Impact Report was for the calendar year 2020, which our second report (2021) built upon, improving the accuracy of measurements and addressing missing data gaps. Additionally, this report also measured our 2019 emissions, important for establishing our baseline for our Science Based Targets.

However, we could still improve our measurements, and have made some significant improvements this year. Furthermore, as the business has grown and evolved, we have added in measurements for areas not previously material.

Improvements include:

- The accuracy of our home working emissions measurement by widening the questions we asked of our employees in our survey (including measuring energy use for home based electric heating systems)
- The accuracy of our supply chain measurements, moving from sector based averages to supplier based data wherever possible
- Increasing the accuracy of our sector based calculations, using the updated DEFRA data set
- Using actual use-data for business travel instead of spend based calculations
- The addition of measured data packet sizes for open banking payments (provided by Pay UK) over estimates

Additions include:

- The addition of capital goods (none in previous years)
- The acquisition of Nordigen as an investment which occurred in July 2022
- The addition of investments (none in previous years). Some of this sits within our scope 3 (investments), and whilst some is part of our wider climate impact (outside of scope).
 - **Corporate cash** — The money that we use as a business which is held within banks
 - **The money we move** — The money that we move on behalf of our customers which is held within banks
 - **Pensions** — The money invested in pensions funds for our employees.

More detailed information and additions can be found in the full report.

Our 2022 Greenhouse Gas emissions

Whilst our scope 1, 2 and 3 emissions have decreased when compared like-for-like to previous years' categories, the addition of Capital Goods and Investments in 2022 has resulted in a noticeable increase in our overall emissions, as shown below.

However, this provides us with the opportunity to further reduce our impact going forward.

Overall emissions

Total (Scope 1, 2 and 3)	2019	2020	2021	2022 Without investments	2022
Location based tCO ₂ e	6272.90	5902.86	8293.66	5874.17	27491.29
Market based tCO ₂ e	6085.77	5459.84	7923.24	5516.92	27134.05
Market based tCO ₂ e (Post EAC)				5514.72	27131.84

Column D (2022 without investments) above shows a direct comparison with previous years. However, column E (2022) is the important one - this shows our total emissions in 2022 regardless of previous years, and is what we can now act upon.

Below shows our emissions intensity taking into account the addition of investments:

Emissions intensity

Market based metrics (Scope 1, 2 and 3 post-EAC)	2019	2020	2021	2022 Without investments	2022
Intensity per employee (tCO ₂ e/FTE)	17.81	13.62	13.23	6.96	34.46
Intensity per payment (gCO ₂ e/ Payment)	63.76	41.79	47.84	26.60	131.58

Climate impact

Measuring our Greenhouse Gas emissions - both our scope 1, 2, and 3 and out of scope elements - enables us to identify the main areas of impact:

2022 TOP 5 AREAS OF CLIMATE IMPACT(SCOPE 1, 2 AND 3 PLUS OUT OF SCOPE)

1

Investments: moved money
28589.01 tCO₂e

2

Purchased goods and services
3211.71 tCO₂e

3

Investments: corporate cash
5141/15 tCO₂e

4

Investments: pensions
1955.56 tCO₂e

5

Business travel
1208.38 tCO₂e



Progress

Although the headline shows an increase in our total emissions, we have seen good progress on areas we have been (so far) been able to take action upon. In previous years there were no Investments within our scope 3, but measuring the impact is the important first step to understanding how we can reduce these overtime.

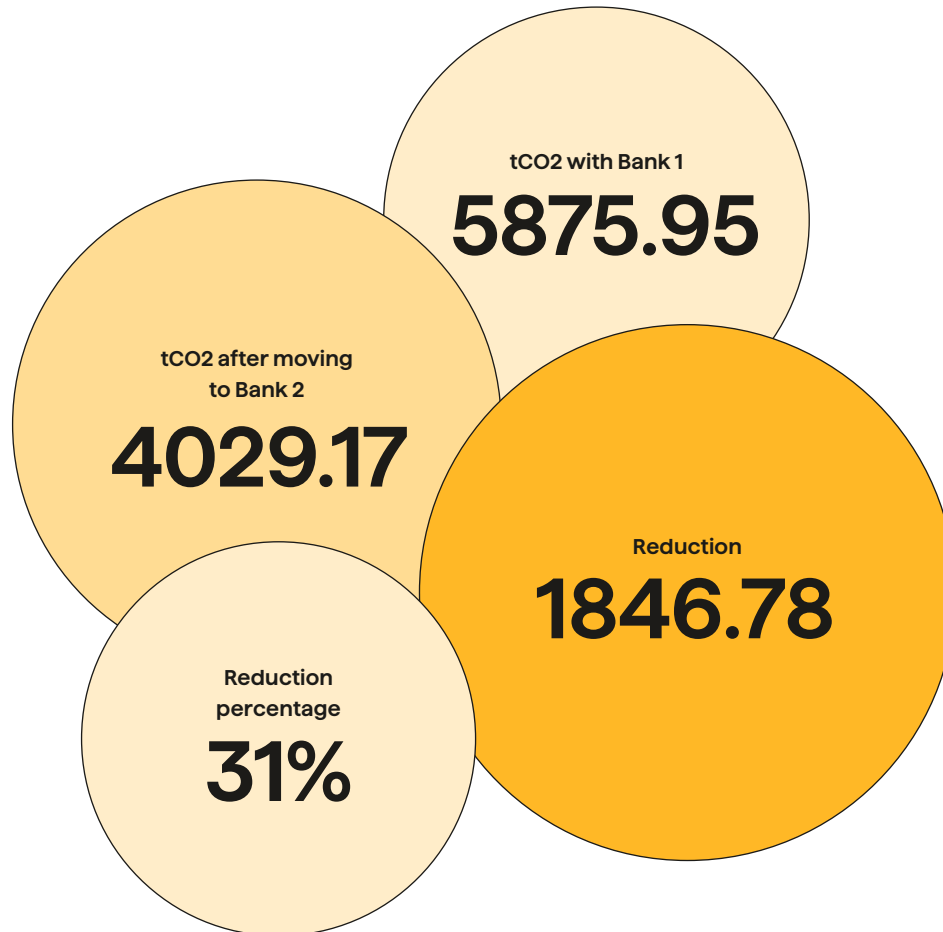
After launching our strategy in 2022, we immediately started working on reducing our emissions across GoCardless. To compare like for like progress against previously measured areas, we have seen good progress:

GoCardless emissions

Market based tonnes CO2e	Baseline (2019) tCO2e	Baseline tCO2e per employee	2022 tCO2e	2022 tCO2e per employee	Increased or reduced per employee?
Scope 1 & 2	31.68	0.09	2.21	0.00	Reduced
Scope 1 & 2 (post EAC)	31.68	0.09	0.15	0.00	Reduced
Scope 3: Purchased goods and services	4508.62	13.29	3211.71	4.08	Reduced
Scope 3: Home working	476.58	1.39	295.75	0.38	Reduced
Scope 3: Business travel	1090.30	3.19	1208.38	1.54	Reduced
Scope 3: Commuting	142.21	0.42	81.22	0.12	Reduced
Scope 3: Waste	2.03	0.01	0.24	0.00	Reduced
Scope 3: Product	224.11	0.66	58.13	0.07	Reduced
Scope 3: Purchased IT	35.96	0.11	44.20	0.06	Reduced

The impact of finance

Once we started to measure the impact of our investments, our team got to work looking at how to reduce this impact too. As a result we have already identified an opportunity to decrease the “money we move” in 2023 by switching to a banking partner with increased climate strategies:



Applying this reduction to the rest of our emissions from finance could see a major climate impact:

- Total tonnes CO₂e from investments, banking and pensions in 2022 (both within scope and outside of scope): **35645.72 tCO₂e**
- Total from the rest of our market-based scope 1, 2 and 3 in 2022: **5516.92 tCO₂e**

Compared to the rest of our Scope 1, 2 and 3, this is nearly **7x** the impact. If we could reduce our investments plus our wider out-of-scope emissions by the same amount, this could see a reduction of **11050tCO₂e**.

Therefore, going forward we will look at how we can continue to reduce our Scope 1, 2 and 3 emissions, but also how we can reduce the impact of finance.

See more at the [MotherTree Bank League Table](#), [The Carbon Bankroll](#), and [Banking on Climate Chaos](#).

Baseline average

In order for us to measure our emissions reduction, it is necessary to set a baseline year. To set our target, we used our previously most accurate “business as usual” year prior to the Covid-19 pandemic; 2019.

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

	2019	2019-20 Baseline	2020	2021
Total market based emissions (tCO ₂ e)	6085.77	6521.24	5459.84	7923.24
Total emissions per employee (tCO ₂ e)	17.81	19.08	13.62	13.23

However, with the increase in scope in 2022, we will review our baseline to ascertain whether we now need to re-baseline and update our Net-Zero target.

Summary for our customers

In order for our customers to calculate the emissions related to using GoCardless as a product/service, 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 Greenhouse Gas 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.

2020	Market based emissions kg CO2e per £ spend
Scope 1 & 2	0.000029
Scope 1 & 2 (Post EAC)	0.000002
Scope 1, 2 & 3	0.334955

HOW DO YOU USE THIS DATA?

If you have spent £1000 on GoCardless as a supplier, this would equate to scope 3 emissions of:

$$\begin{array}{c} \text{1000} \end{array} \times \begin{array}{c} \text{0.000002} \end{array} = \begin{array}{c} \text{0.002 kg} \\ \text{CO2e} \end{array}$$

In tonnes CO2e, this would be:

$$\begin{array}{c} \text{0.027} \end{array} \div \begin{array}{c} \text{1000} \end{array} = \begin{array}{c} \text{0.000002} \\ \text{tCO2e} \end{array}$$

A close-up, artistic photograph of several flowers in shades of pink and orange, filling the entire background. The petals are layered and overlapping, creating a soft, textured appearance. The lighting is warm, highlighting the delicate edges of the petals.

Report

Objective and scope

- Identify and measure Greenhouse Gas 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 [Greenhouse 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 2022 to 31st December 2022

Definitions

- Scope 1: All Direct Greenhouse Gas emissions from the activities of our organisation or under our control
- Scope 2: Indirect Emissions from electricity purchased
- Scope 3: All Other Indirect Emissions from activities of the organisation
- Greenhouse Gases: Water vapour (H₂O), Carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O), Ozone (O₃), Chlorofluorocarbons (CFCs), Hydro fluorocarbons (includes HCFCs and HFCs)
- Global Warming Potentials: Greenhouse Gases 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 Intergovernmental Panel on Climate Change in the [Fifth Assessment Report \(AR5\)](#).
- CO₂e: Carbon Dioxide Equivalent, encompassing all Greenhouse Gases.
- 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 2022 was gathered across the business, including energy consumption, travel, cloud use, waste, investments, capital goods, and purchased goods and services. These measurements are summarised below across scopes 1, 2 and 3. Our measurements for previous years are also shown alongside.

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 for information.

London HVAC

	2019	2020	2021	2022
Potential emissions tCO ₂ e	160.36	160.36	160.36	160.36
Actual emissions tCO ₂ e	0	0	0	0

1.2 London office CO₂ tap

Our London offices uses CO₂ gas canisters for drinks. Each canister holds 3.15 kg of CO₂.

London office tap

	2019	2020	2021	2022
Location based tCO ₂ e	0.24	0.19	0.19	0.15
Market based tCO ₂ e	0.24	0.19	0.19	0.15

Scope 1 total

	2019	2020	2021	2022
Location based tCO ₂ e	0.24	0.19	0.19	0.15
Market based tCO ₂ e	0.24	0.19	0.19	0.15

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 2022, 100% of our electricity came from renewables, leading to market-based zero emissions.

To help us reduce the overall energy use in our London HQ, we have recently partnered with [Grid Duck](#) to help us monitor and automate our energy systems.

London office				
	2019	2020	2021	2022
Location based tCO2e	67.38	43.97	42.12	39.16
Market based tCO2e	31.41	17.81	0	0

100%

Of electricity used during 2022 came from renewables, leading to market-based zero emissions.

2.2 Global offices – purchased electricity

Our global offices are located in serviced offices 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 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.

Paris office

	2019	2020	2021	2022
Location based tCO2e	N/A	N/A	0.16	0.30
Market based tCO2e	N/A	N/A	0	0

Melbourne office

	2019	2020	2021	2022
Location based tCO2e	N/A	N/A	3.95	3.09
Market based tCO2e	N/A	N/A	1.19	0.17

US offices

	2019	2020	2021	2022
Location based tCO2e	N/A	N/A	0.84	2.03
Market based tCO2e	N/A	N/A	0.84	2.03

Scope 2 total

	2019	2020	2021	2022
Location based tCO2e	31.44	18.88	2.85	44.58
Market based tCO2e	67.40	44.75	47.64	2.21
Market based tCO2e (Post-EACs)				0.00

Scope 3

3.1 Data centres: Google Cloud Service

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 was used. For 2021 and 2022, 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	2022
Location based tCO ₂ e	150.57	259.95	110.85	287.52
Market based tCO ₂ e	0	0	0	0

3.2 Purchased goods and services

The emissions from purchased goods and services 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 Greenhouse Gas emissions.

To increase the accuracy this year, we moved from a solely spend-based approach to using supplier specific data. Where data was not available, we reverted to using the DEFRA spend based emissions factors.

Purchased goods and services

	2019	2020	2021	2022
Location based tCO ₂ e			6889.92	3211.71
Market based tCO ₂ e			6683.07	3211.71

3.3 Capital goods – Purchased IT equipment

The impact of purchased IT equipment was calculated by using [data sheets](#) for products and the quantity we had purchased.

Purchased IT equipment

	2019	2020	2021	2022
Spend-based tCO ₂ e	35.96	27.27	73.88	44.20

3.4 Capital goods - London HQ fit-out

In 2022, we carried out a fit-out of our HQ in London. Our workplace team did an amazing job ensuring sustainability was considered at every step of the process - from energy and waste, to materials and energy automation.

The CO₂e related to the Capital Goods has been calculated using an average of the DEFRA spend-based factors for construction and furniture.

Other capital goods

	2019	2020	2021	2022
Spend-based tCO ₂ e	N/A	N/A	N/A	564.96

3.5 London office – Purchased electricity – Transportation and 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 transportation and distribution

	2019	2020	2021	2022
Location based tCO ₂ e	4.98	3.78	3.75	3.58
Market based tCO ₂ e	4.98	3.78	3.75	3.58

3.6 Global offices – Purchased electricity – Transportation and distribution

Transportation and distribution emissions for electricity use in our global offices is based on a prorated basis vs headcount of London.

Global transportation and distribution

	2019	2020	2021	2022
Munich	0	0.03	0.02	N/A
Paris	N/A	N/A	0.01	0.03
Melbourne	N/A	N/A	0.04	0.41
USA	N/A	N/A	0.04	0.11

3.7 Logistics

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

Logistics

	2019	2020	2021	2022
Spend-based tCO2e	4.77	7.14	10.82	5.65

3.8 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	2022
London	2.01	2.26	3.32	0.22
Paris	N/A	N/A	0.09	0.01
Munich	0.02	0.02	0.02	N/A
Melbourne	N/A	N/A	0.09	0.005
USA	N/A	N/A	0.21	0.01
London HQ fit out	N/A	N/A	N/A	0.72

At our London HQ in 2021 our food waste was going to landfill - producing methane. So in 2022, we installed food waste bins so our food waste is turned into energy.

Furthermore, our recycling and general waste is transported via barge to the processing facility, reducing the need for road transport. Plus, our general waste is also turned into energy, meaning no waste ends up in Landfill.

3.9 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. For 2022, we have received use-data from our supplier for air travel and hotels. For road and rail travel, we continue to use spend-based calculation.

Travel

	2019	2020	2021	2022
Spend-based tCO2e	1090.30	370.53	221.63	1208.38

3.10 Employee commuting

Each year we ask our employees to complete our sustainability survey, where we 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	2022
Market based tCO2e	142.21	19.00	57.11	90.51

3.11 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 and 2022, 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	2022
Location based tCO2e	198.08	326.79	31.74	19.60
Market based tCO2e	198.08	326.79	31.74	19.60

3.12 Use of product: 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	2022
Location based tCO2e	13.52	15.75	22.70	17.60
Market based tCO2e	13.52	15.75	22.70	17.60

In 2020, our website generated 1.32 gCO2e/visit. In 2021 our team took part in a Digital Sustainability Workshop with Tom Greenwood from [Wholegrain Digital](#), which looked at how energy use can be reduced in digital design, and as a result in 2022 the emissions per visit to our website have been reduced by 56% to 0.59 gCO2e/visit.

56%

In 2022 the emissions per visit to our website have been reduced by 56% to 0.59 gCO2e/visit

3.13 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 and 2022.

Payments

	2019	2020	2021	2022
Location based tCO ₂ e	12.51	17.13	21.35	20.93
Market based tCO ₂ e	12.51	17.13	21.35	20.93

3.14 Home working emissions

With many employees working from home since 2020, home working emissions are a key element of our impact - and will continue to be so going forward. We conduct an extensive survey to ascertain how many hours employees work from home, and where they live. To improve on previous years, we also asked how many months and hours they use heating and cooling, and what they use for heating and cooling. 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.

The reduction is a combination of employees moving to renewable energy sources, improving the accuracy of measurements, and the role-out of low-carbon heating to our employees.

Home working

	2019	2020	2021	2022
Location Based tCO ₂ e	476.58	567.54	798.21	321.51
Market Based tCO ₂ e	476.58	557.37	790.28	295.75

3.15 Investments

In 2022, we saw Investments become part of our scope 3. As a FinTech, we move a lot of money for our customers, which has to be held within banks. These banks then use that money to invest in projects - some may invest in renewable energy projects, some may invest in fossil fuels. We worked with [MotherTree](#) to analyse the climate-impact of this money. See more about the impact of finance (and the methodology) at:

[MotherTree Bank League Table](#)

[The Carbon Bankroll](#)

We also measured the impact of our pensions (provided by [Smart Pensions](#)), plus Greenhouse Gas emissions associated with the acquisition of Nordigen.

Investments

	2019	2020	2021	2022
Nordigen	0	0	0	30.90
Corporate cash	0	0	0	514.15
Pensions	0	0	0	288.61
Moved money	0	0	0	20787.36

Our total scope 3 (including investments) for 2022 was:

Scope 3 total

	2019	2020	2021	2022
Location based tCO ₂ e	6205.27	5857.93	8188.72	27446.56
Market based tCO ₂ e	6054.09	5440.77	7920.20	27131.69

3.16 Outside of scope

We also used the methodology applied to our investments for financial elements that sit outside of scope.

The reason these are not within scope 3 is because no interest was generated from the money (in the cash of the “Corporate Cash” and “Moved Money”), or the Pensions is the financed emissions of the pension provider. However, it is still important to measure the impact of this as part of our wider climate impact.

Investments

	2019	2020	2021	2022
Corporate cash	0	0	0	4560.00
Pensions	0	0	0	1666.95
Moved money	0	0	0	7801.65

Summary

The combination of the above scope 1, 2 and 3 Greenhouse Gas emissions (including investments) equate to totals of:

Total market-based emissions

	2019	2020	2021	2022
Scope 1	0.24	0.19	0.19	0.15
Scope 2	31.44	18.88	2.85	2.21
Scope 2 (Post EAC)				0
Scope 3	6054.09	5440.77	7920.20	27131.84
Total Scope 1, 2 and 3 (Post EAC)				27303.88
Outside of scope				14028.60

Our emissions are shown below as market-based intensity metrics:

Market based metrics (Scope 1, 2 and 3 post-EAC)

	2019	2020	2021	2022
Intensity per employee (tCO ₂ e/ FTE)	17.81	13.62	13.23	34.46
Intensity per payment (gCO ₂ e/ Payment)	63.76	41.79	47.84	131.58

Renewable energy, REGO's, and EAC's

In the above calculations, you will see “Post-EAC” and think - what does this mean?

Where we have control over the energy we use - such as our London office - we ensure we use 100% renewable energy sources. However, we don't have this control in other areas, such as our serviced offices.

For these areas, we work with [Big Clean Switch](#) to measure and purchase renewable energy from generators in the region (known as Energy Attribute Certificates). This means all of our energy use is matched by 100% renewable energy. This is not as good as being able to control (or generate!) our own electricity, but it's a good step.

This is the [wind turbine](#) that provided our UK renewable energy.

Furthermore, we also measure our energy use in our scope 3, when our employees are working from home, and when our customers use our product.

We also apply the EACs to these elements to ensure we are matching all our energy use to renewables.

Under the Greenhouse Gas Protocol, this is not categorised as a reduction, and so we do not show this in our figures. However, the below shows how this reduces our scope 2 and 3 in real terms.

EAC reductions	tCO2e in 2022
Scope 2 (Market based tCO2e)	2.07
Scope 2 post-EACs (Market based tCO2e)	0.00
Product (Market based tCO2e)	58.13
Product post-EAC (Market based tCO2e)	0.00
Home working (Market based tCO2e)	297.75
Home working post-EAC (Market based tCO2e)	207.64
Total reduction (tCO2e)	90.11

Targets and objectives for future reports

We aim to increase the accuracy and range of scope of our 2023 calculations by improving data collection across the following business areas:

SCOPE 2:

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

SCOPE 3:

Improve number of suppliers providing use-data to further move to supplier-specific calculations

Seek data on waste for global offices

Improve measurement of Investments



Creating Change

Creating positive change

Whilst Reducing Our Impact is the first pillar of our sustainability strategy, we aim to go beyond “not doing harm” and become regenerative, creating a positive impact on the world around us. Here are some of the projects we have been working on with some amazing organisations

Tree planting for nature

We planted 5000 native trees in the UK, specifically chosen to have a positive impact on biodiversity. We worked with [Carma](#) and [The Green Task Force](#), who employ and support veterans on their pathway to recovery. [See more here.](#)

Teaching training

We helped Apps for Good to train 10 teachers to deliver the [Innovate for Climate Change](#) course in schools, helping young people understand climate change and biodiversity loss, but also teach them the tech skills to tackle the problems.



Nature conservation

We helped a volunteer group in London to build and install floating bio havens, hedgerows, and floating platforms to provide food and homes for local wildlife.

Kelp restoration

We partnered with Green the UK to help protect and restore 5 kelp forests in the English Channel, to help enhance biodiversity. [You can see the case study here.](#)

Sea dragon conservation

We supported the [Sea Dragon Search](#) project in Australia to help protect Sea Dragon populations.



Wildflower and hedgerow planting

We worked with a community group in Surrey to plant several hundreds of metres of native hedgerows and sow wildflowers to help provide food and habitats for local wildlife.

Carbon removals

We worked with [Lune](#) and [Patch](#) to support projects to remove CO2 from the atmosphere, from biochar and sea kelp to regenerative agriculture and biodiversity conservation in Australia.

River clean ups

We worked with [Thames 21](#) to help remove waste from waterways in London, helping to protect biodiversity.

Park restoration

Our team in New York helped the [City Parks Foundation](#) to restore parks and plant native hedges for biodiversity.



Urban beach cleans

We supported the [Whale and Dolphin Conservation](#) Climate Giant Project, carrying out several Urban Beach Cleans in the UK and Latvia.



Embedding sustainability

Whilst setting targets and strategies are key, they don't amount to much if the people doing the work - in our case, our wonderful GoCardless employees - are not engaged in sustainability and empowered to take action. That is why we place a lot of emphasis on embedding sustainability across GoCardless, and enabling our team to see their role through the lens of sustainability, climate change, and nature.

Here are some of our highlights:

GoCardless Sustainability Group

Our employee volunteer group is key to sustainability at GoCardless. We have over 80 employees actively engaged in helping us deliver our sustainability strategy, providing key points of contact in all teams across the entire business.

Ailuna

We are often asked "how can I learn more about sustainability in my personal life?" To answer this, we have been working with [Ailuna](#) to give our employees access to a sustainability habit-building app, where they can find ways to make an impact in their day to day actions.

Race to Nature

In the summer of 2022, we challenge our team to collectively run, walk, push, swim, cycle and row the distance to Cop28 and back - 15,000 KM - with every KM counting towards projects that tackle climate change, protect nature, and support communities. We ended up with 172 employees covering over 32,000 KM in 10 weeks, which not only delivered impact by supporting projects, but served as a fantastic opportunity for employee engagement through the lens of well-being, fitness, access to nature, and a sprinkle of competitiveness.

Couch to Carbon Zero

We have run two [Couch to Carbon Zero](#) campaigns for our employees, a 10 day sprint to help everyone take action on climate and biodiversity with easy, impactful actions - with fantastic feedback from everyone who has taken part.

Learning and Development

All of our new joiners take part in our DEI & Sustainability On-boarding session, where they find out about our strategy and how they can get involved. For those who want to learn more, we provide Sustainability 101 e-learning courses, and Carbon Literacy workshops

Environmental Action Days

Over 100 GoCardless employees have already taken part in our Environmental Action Days, where they volunteer their time to actively create a positive impact on their local environment - from tree planting to river clear ups.

Collaborating for change

Just as we are connected to the world around us, as a business we are also connected with our suppliers, customers, investors, and other businesses.

With over 85000 customers - many of whom are SME's - helping them to better understand their impact and take their first steps on their sustainability journey is really important.

Mindful that many of our customers and suppliers may not have the resources to start this journey, we have begun to build tools to share best practice.

In 2021, we launched our free to access and free to use [GoCardless Greenhouse Gas Calculator](#). So far, this has had thousands of businesses use this to help them understand their emissions.

Our next step is to provide a free tool kit so that others can also begin to reduce their impact on the planet.

Supporting documents

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

- GoCardless Greenhouse Gas Calculations
- Data Sheets: Apple Macbook, Gas bottles (Suregas),
- Data Sheets: Energy Suppliers, Google Cloud
- Utility Bills and Waste Data for London Office
- Supplier Climate Reports
- Smart Pension TCFD Report
- [MotherTree Banking League Table](#)
- [Banking on Climate Chaos](#)