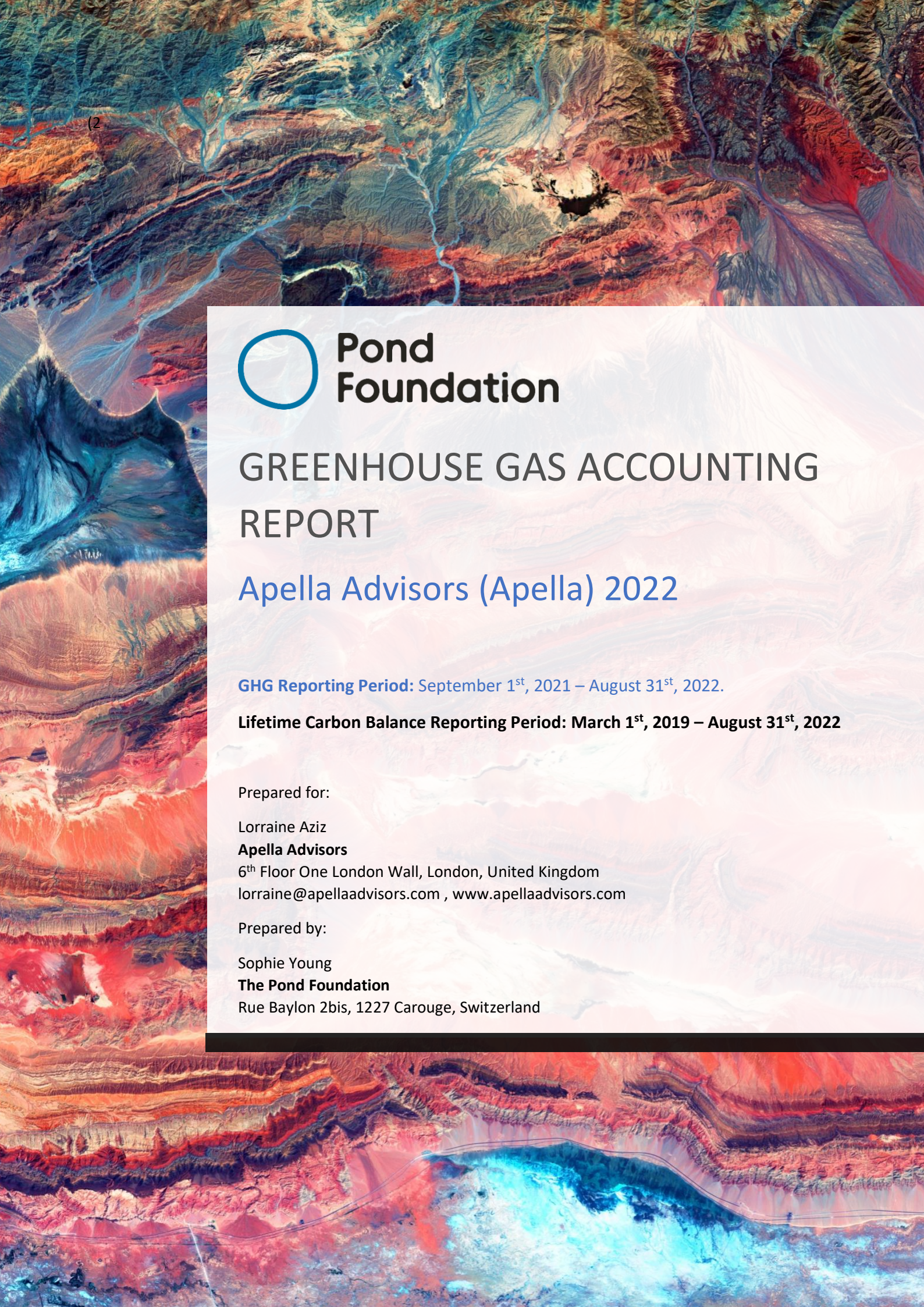

Pond Foundation

# GREENHOUSE GAS ACCOUNTING REPORT

## Apella Advisors (Apella) 2022

**GHG Reporting Period:** September 1st, 2021 – August 31st, 2022.

**Lifetime Carbon Balance Reporting Period: March 1st, 2019 – August 31st, 2022**


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**ISO 14064-1 Self-Declaration**: This GHG accounting report was produced in accordance with the ISO 14064-1 (2018-12) standard on "Specification with guidance at Apella level for quantification and reporting of greenhouse gas emissions and removals."

## Acronyms and abbreviations

| | |
|---|---|
| CBS | Carbon Balance Sheet |
| CIP | Carbon Investment Portfolio |
| CO2 | Carbon Dioxide |
| CO2e | Carbon dioxide equivalent |
| DEFRA | UK Department for Environment, Food & Rural Affairs |
| GHG | Greenhouse Gas |
| kg | Kilogram |
| km | Kilometre |
| kWh | Kilowatt hour |
| LCB | Lifetime Carbon Balance |
| pkm | passenger-kilometre |
| t | tonnes |
| WBCSD | World Business Council for Sustainable Development |
| WRI | World Resources Institute |

# Introduction

## Apella Advisors

This report provides a summary of the estimated greenhouse gas emissions from Apella's operations in '2022', and their Lifetime Carbon Balance (LCB) since 2019.

*Table 1. Apella company information table*

| Company information | |
|---|---|
| **Website:** | https://www.apellaadvisors.com/ |
| **Business Area:** | Communications |
| **Base year Reporting period:** | September 1st, 2021 – August 31st, 2022 |
| **LCB Reporting Period:** | March 1st, 2019 – August 31st, 2022 |
| **Number of Employees (current):** | 14 |

# System Boundaries

System boundaries for GHG reporting can fall under two approaches, the control, and the share-percentage approach. Under the control approach, a company takes responsibility for emissions from entities that are under their operational or financial control. Under the share-percentage approach, the company takes responsibility for the emissions from all entities that they invest in, proportional to the share they hold, whether they have control or not.

### Organisational boundaries

System boundaries for this GHG report were defined by the control approach, covering all entities where Apella has operational and financial control.

### Reporting boundaries

The GHG accounting and reporting procedure is based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard Revised Edition (GHG Protocol), the most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions. It was developed in a partnership between the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) in 2004.

According to the GHG Protocol, emissions are divided into direct and indirect emissions. Direct emissions are emissions originating from owned or controlled sources by the reporting entity. Indirect emissions are generated as a consequence of the reporting entity's activities, yet they occur at sources owned or controlled by another entity. The direct and indirect emissions are:

- **Scope 1**: All direct GHG emissions, such as combustion of fuels in stationary and mobile sources. These would primarily arise from transportation or refrigeration of goods for a retail business.
- **Scope 2**: Indirect GHG emissions from the generation of purchased electricity, heat or cooling consumed by the company. This includes electricity, heat or cooling consumed during working hours from a remote-working location (eg. employees' home).
- **Scope 3**: Other indirect emissions, such as business/commuter travels, IT equipment (production, use, and end-of-life emissions), waste, paper, investments, leased assets, assets

under management (see page 7), and many more. Reporting Scope 3 emissions is officially optional, but for most businesses, this is the largest source of emissions.

Significant indirect emission sources for quantification in this report were selected by assigning values to each known emission source according to access & data of data, level of influence, frequency of emission generation, sector-specific guidance, risk/opportunity, and outsourcing. Values were assigned to emission factors based on the criteria described in Annex II, and emission sources with cumulative significance values of 10 or above were quantified in this 2022 report.

## Accounting principles

The GHG accounting was based on the ISO 14061-1 accounting principles of:

- Relevance: Select the GHG sources, GHG sinks, GHG reservoirs, data and methodologies appropriate to the needs of the intended user.
- Completeness: Include all relevant GHG emissions and removals.
- Consistency: Enable meaningful comparisons in GHG-related information.
- Accuracy: Reduce bias and uncertainties as far as is practical.
- Transparency: Disclose sufficient and appropriate GHG-related information to allow intended users to make decisions with reasonable confidence.

## Global warming potentials

Global warming potential (GWP) is a measure of the climate impact of a GHG compared to carbon dioxide over a time horizon. For GWP 100, which is used in this report, the time horizon is 100 years. GHGs have different GWP values depending on their efficiency to absorb longwave radiation and the atmospheric lifetime of the gas. The GWP expresses the different GHGs as CO2-equivalents. The GWP values used in the GHG accounting are the six GHGs covered by the Kyoto Protocol and are presented in table 2.

*Table 2. Applied global warming potentials*

| GHG | GWP (100 years) |
|---|---|
| **$CO_2$** | 1 |
| **$CH_{4\ fossil\text{-}origin}$** | 29.8 |
| **$CH_{4\ non\text{-}fossil\text{-}origin}$** | 27.2 |
| **$N_2O$** | 273 |

Source: IPCC Sixth Assessment Report (AR6) (2021)

## Data inventory

Office energy use data was collected directly from the office space managers and used to calculate scope 1 and 2 emissions. The rest of the data was collected through a survey to all 14 employees. See Annex III for a summary of quantification approaches and GHG conversion factor sources.

# Results – 2022

## Summary of emission sources

GHG emissions from 2022 were estimated in-depth, by scope and emission source and are outlined below. The total annual emission figures from these were used to estimate Apella's LCB.

The total GHG emissions from Apella's operations in 2022 were found to be 24.84 $tCO_2e$ – at approximately 1.77 $tCO_2e$ per full-time employee per year, compared to 1.90 $tCO_2e$ per full-time employee per year in 2021.

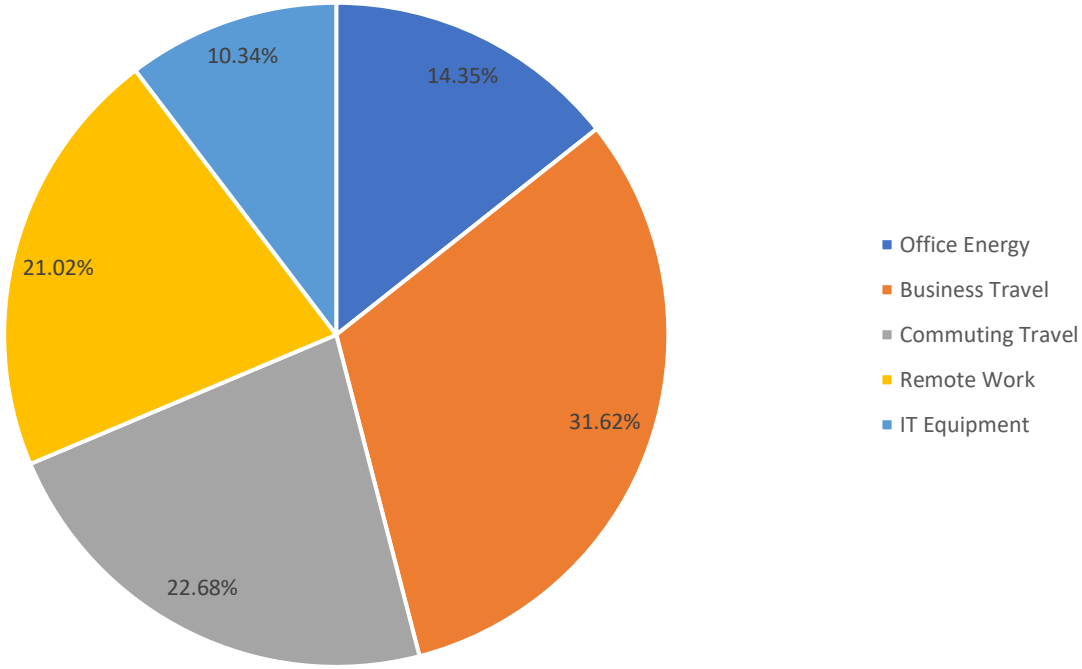


*Figure 1. Summary of emissions by source for 2022*

For Apella, the main GHG emissions sources are Business Travel and then Commuting or Remote Energy (Working from Home). Such energy usage has probably increased in 2022 due to a more hybrid style of working from home, and in the office, being favoured post COVID-19 pandemic.

*Table 3. Summary of emissions by source and scope for 2022*

| Activity | Consumption | Unit | Emissions ($tCO_2e$) | Percentage of total (%) |
|---|---|---|---|---|
| | | | | |
| **Scope 1** | | | **0.32** | **1.27%** |
| Natural Gas consumption | 1,582.40 | kWh | 0.32 | 1.27% |
| | | | | |
| **Scope 2** | | | **1.24** | **4.99%** |
| Electricity Use | 5,835.13 | kWh | 1.24 | 4.99% |
| | | | | |
| **Scope 3** | | | **23.28** | **93.74%** |
| Energy Related Emissions | 7,417.53 | kWh | 2.01 | 8.08% |
| Grid electricity (Res + T&D) | 5,835.13 | kWh | 1.95 | 7.86% |
| Gas (WTT) | 1,582.40 | kWh | 0.05 | 0.22% |
| Remote Work | 15,321.60 | hours | 5.22 | 21.02% |
| Heating | 15,321.60 | hours | 4.74 | 19.07% |
| Equipment use | 15,321.60 | hours | 0.49 | 1.95% |
| IT Equipment | 42.00 | units | 2.57 | 10.34% |
| Monitors | 14.00 | units | 1.50 | 6.03% |
| Laptops | 14.00 | units | 0.86 | 3.46% |
| Mobile phones | 14.00 | units | 0.21 | 0.85% |
| Business Travel | 82,946.99 | km | 7.85 | 31.62% |
| Air travel | 0.00 | km | 0.00 | 0.00% |
| Car travel | 23,359.57 | km | 3.92 | 15.79% |
| Train/Bus travel | 59,587.42 | km | 3.93 | 15.83% |
| Commuter Travel | 93,434.93 | km | 5.63 | 22.68% |
| Car travel | 3,617.73 | km | 0.62 | 2.48% |
| Train/Bus travel | 84,370.78 | km | 5.02 | 20.20% |
| Foot/Bicycle travel | 5,446.42 | km | 0.00 | 0.00% |
| | | | | |
| **TOTAL** | | | **24.84** | **100.00%** |

## Technical summary

*Table 4. Direct & Indirect GHG emissions for Apella in the reporting period.*

| Emission sources during reporting period | TOTAL ($tCO_2e$) | $CO_2$ * (kg) | $CH_4$ * (kg) | $N_2O$ * (kg) | $NF_3$ * (kg) | $SF_6$ * (kg) |
|---|---|---|---|---|---|---|
| Scope 1 - Direct Emissions | 0.32 | 319.45 | 0.44 | 0.17 | - | - |
| Scope 2 - Indirect Emissions from imported energy | 1.24 | - | - | - | - | - |
| Scope 3 - Other significant indirect emissions | 23.28 | - | - | - | - | - |

**Emissions of each GHG are reported in tonnes of $CO_2$ equivalents.*

*Table 5. Biogenic CO2 emissions*

| Biogenic $CO_2$ emissions. Categories: | $tCO_2$ |
|---|---|
| Biomass combustion & other processes (e.g., aerobic and anaerobic decomposition of biomass and soil organic matter) | 0 |
| Natural disasters (e.g., wildfire or infestation by insects) or natural evolution (e.g., growth, decomposition) | 0 |
| Total | 0 |

## Uncertainty assessment

Assessments of overall certainty, listed below are any assumptions made within the GHG emissions calculation process. These could have affected the uncertainty of figures generated.

### Office Energy

The assumption that as Apella occupies 1.09% of the building area, they also account for 1.09% of the total annual gas and electricity usage was made.

### IT Supplies

In order to calculate device usage figures, we started with the assumption that every employee would have one desktop, one phone and one laptop. For the purpose of out calculations, the emissions data for an average iPhone 12, Dell monitor and MacBook Pro were used. It is also assumed that the average device (as listed) has a LCA of 5 years.

### Working From Home

Assuming 228 working days in a year (256 minus a minimum of 28 days leave). It is assumed that there were no hybrid days (where the employee worked both at home and in the office), and that they remained in their house for the full 8 hours (FTE work hours per day per person). Emissions figures estimating the average energy usage for heating and office equipment were used, as of current our calculations don't take energy type, number of bedrooms or energy ratings into consideration.

### Business Travel

Calculations assume that designated mode of transport 'Train/Bus' is a direct split between the average emissions of both transport by train (National Rail) and bus (Average Bus). For the Electric Vehicles (EV), an average sized battery-operated car was assumed, as no further data was provided. Generic 'Car' miles were assumed to be from an average car type which used petrol as fuel.

### Commuting Travel

Figures assumed 228 working days in a year (256 minus a minimum of 28 days leave). Calculations also assume that there are no emissions consequential to walking or riding a bike when commuting. An estimated public transport figure is also generated from the average emissions of both transport by train (National Rail) and bus (Average Bus).

# Additional information

## Lifetime Carbon Balance

The total GHG emissions from Apella's operations from 2019 to 2022 are estimated to be **66.38 $tCO_2e$**. Annual emissions estimates can be found below in Table 6.

Apella has already invested in **66 $tCO_2e$** of carbon credits, more or less equally invested in Durrell Rewild Carbon, Husk, Ricehouse and Kijani Forestry. Thus, their current cumulative lifetime carbon balance is **0.38 $tCO_2e$, as of the 31st of August 2022.**

Apella's cumulative GHG emissions can be seen in Figure 2, along with their cumulative carbon balance, reflecting these carbon removals.

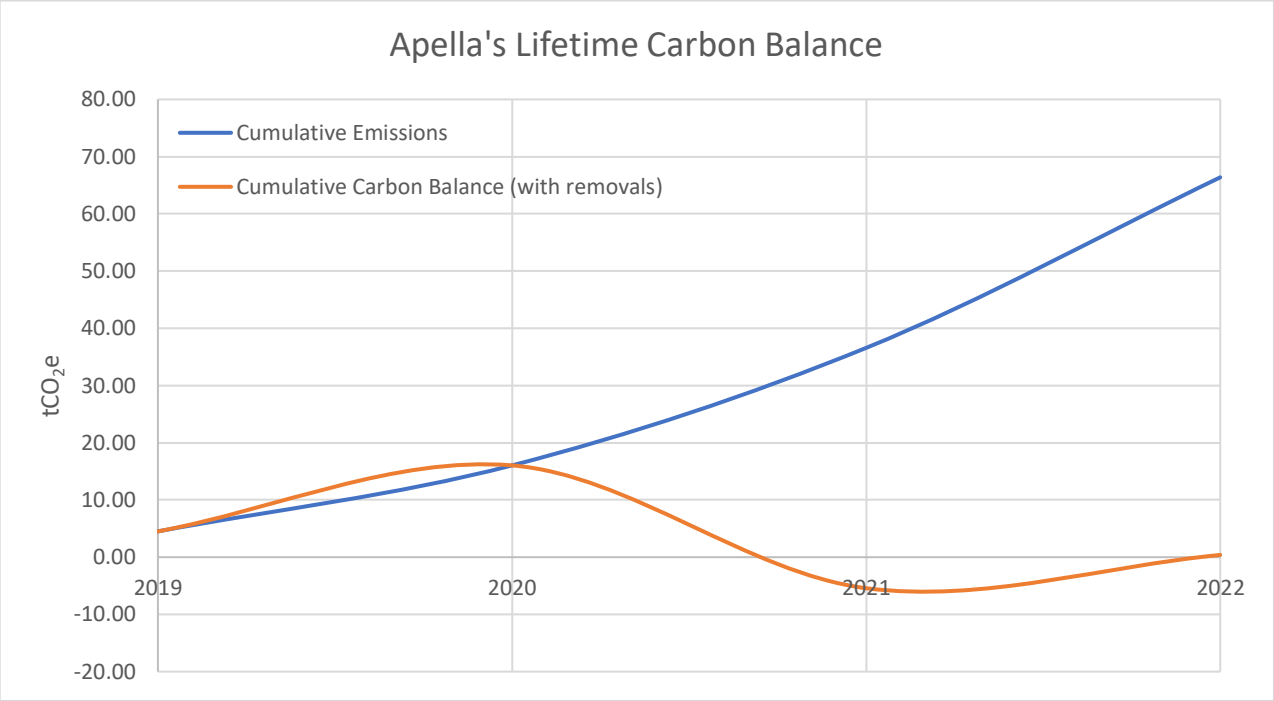


*Figure 2. Annual distribution of GHG emissions since Apella's inception*

## LCB timeline

This timeline in Table 6 outlines annual GHG emissions for Apella, along with their annual emissions per employee (a key intensity ratio). While Apella's annual emissions have grown since 2021, their emissions per employee has actually reduced, which is fantastic.

*Table 6. Timeline of annual GHG emissions*

| Year* | Employees | Annual Emissions ($tCO_2e$) | Annual Emissions per employee ($tCO_2e$) |
|---|---|---|---|
| 2019 | 7 | 3.75 | 0.54 |
| 2020 | 9 | 9.61 | 1.07 |
| 2021 | 9 | 17.11 | 1.90 |
| 2022 | 14 | 24.84 | 1.77 |

## Conclusions

Apella's GHG emissions from September 1st, 2021, to August 31st, 2022, are estimated to be **24.84 $tCO_2e$**, and Lifetime Carbon Balance is estimated to be **66.38 $tCO_2e$**, as of August 31st, 2022, which is now approximately **0.38 $tCO_2e$** thanks to their carbon removal credits.

This commitment to carbon removal is incredibly commendable and makes Apella one of the only companies to be truly lifetime carbon zero, as of August 31st, 2021. On top of these carbon removal credit investments, Apella managed to reduce their (already very low) annual emissions per employee from 2021.

### How does Apella compare?

Figure 3 gives an insight as to where Apella sits against organisations from a range of industries, in terms of emissions per full-time employee per year, as the most widely used GHG emissions intensity ratio for comparison.

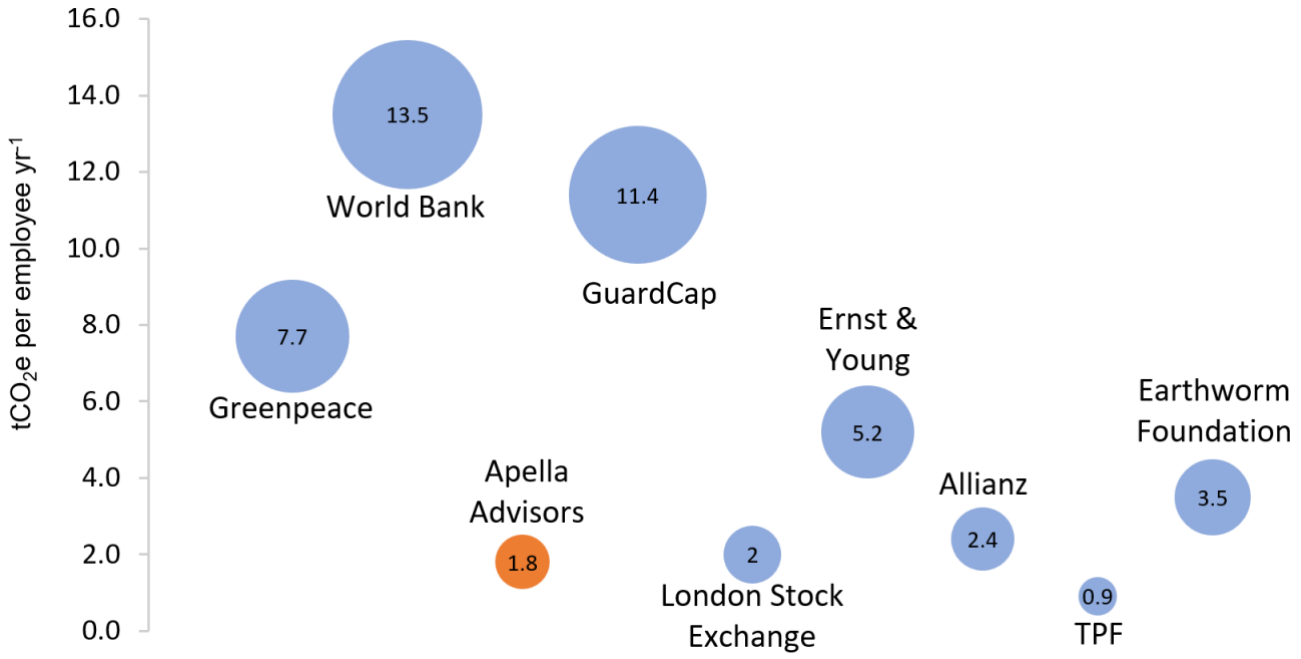


*Figure 3. Comparison between Apella and other organisations per full-time employee per year.*

## RRRI Action Plan

**R1 –** The Pond Foundation will be in touch to work with Apella to determine how they can aim to reduce their emissions per employee even further in 2023.

**R2** – Apella may consider promoting global impact on climate change by supporting an SDG education program, supporting education in the developing world, or supporting their employees to remove carbon by matching their carbon credit contributions. The Pond Foundation can facilitate any of these.

**R3** – To stay up to date with their GHG emissions, Apella can choose to either stay ahead of their carbon balance by investing in carbon removal credits now (putting them into lifetime carbon negative) or wait until their 2023 report is finalized to make investments. Apella may also consider investing into additional carbon removal credits go beyond their LCB.

**I** – Apella can continue to inspire other companies to promote credible climate action and Pond Foundation membership!

## Apella's Carbon Balance Sheet (CBS) as of August 31st, 2022

*Table 7. Apella's CBS as of August 31st 2022*

| **Assets** | **2019-2022 $tCO_2e$** |
|---|---|
| | |
| R1 Carbon reduction strategy | 0 |
| R3 Carbon project investment* | 66 |
| | |
| **Total Assets** | **66** |
| | |
| **Liabilities** | |
| LCB | **66.38** |
| | |
| **Total liabilities** | **66.38** |
| | |
| **Carbon Balance** | **0.38** |

*R3 investments sequester emissions directly, which are the projects we promote on our website.

R2 investments do not appear in the CBS, but they are a critical part of a credible climate action plan. These investments result in reductions in emissions elsewhere, and do not directly sequester carbon.

# Annex I – Bibliography

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## Annex II – Criteria for selection of significant emission sources

| Criteria | Assigned Value | Description |
|---|---|---|
| **Access to & Quality of data** | 3 | High: It is possible to collect information from communications with stakeholders directly related to the organization. Primary data is available. |
| | 2 | Medium: although there is no direct communication with the parties in charge of the information, it is possible to identify basic information from the source. Secondary data is available. |
| | 1 | Low: the party in charge of the information is unknown. |
| **Level of influence** | 3 | High: it is possible to directly influence the generation of emissions from the source. |
| | 2 | Medium: the party in charge can be influenced to ensure the reduction of emissions from the source. |
| | 1 | Low: there is no reasonable possibility of influencing the emissions of the source. |
| **Frequency of emission generation** | 3 | High: the emission is generated on a daily basis |
| | 2 | Medium: the emission is generated more than once per month but less than once per day. |
| | 1 | Low: the emission is generated less than once per month. |
| **Sector-specific guidance** | 3 | High: There is secondary data or reliable reference sources that indicate that the source could have high significance within the inventory. |
| | 2 | Medium: The baseline data used do not conclude that the expected emission is high. |
| | 1 | Low: according to the information used, the consideration of this emission source is not described. |
| **Risk / Opportunity** | 3 | High: Increased emissions from the source expose the organization to reputational, operational, or other risk. |
| | 2 | Medium: The analysis determines opportunities but not necessarily major risks. |
| | 1 | Low: No significant risks or opportunities associated with the emission source are identified. |
| **Outsourcing** | 3 | High: the process is contracted externally and constitute essential business activities. |
| | 2 | Medium: it is contracted externally but does not constitute an essential business activity. |
| | 1 | Low: is not contracted externally by the organization. |

## Annex III – GHG emission quantification approaches & assumptions

| Emission Source | Methodology and assumptions |
|---|---|
| Office Space Energy Use | In order to calculate both Scope 2 and Scope 3 electricity usage the figures provided from the 'Annual Electricity Consumption, Expenditure, Unit Rates & (Nominal) CO2 Emissions sheet were used. The electricity consumption figures (kWh) were combined to find an annual figure for the entire building. The assumption that as Apella Advisor's occupies 1.09% of the building area, they also account for 1.09% of the total annual electricity usage was made. For Scope 2 the total Apella Advisor electricity consumption was multiplied with the Generation (production) figures for energy use in the UK. For Scope 3 the consumption figure was multiplied by the combination of T&D and Residual figures for energy use in the UK.<br><br>**Country** \| **Production fuel mix factor ($kgCO_2e$ per kWh)** \| **Residual fuel mix factor ($kgCO_2e$ per kWh)**<br>**United Kingdom** \| Gen: 0.21233<br>T&D: 0.01879 \| 0.316 |
| Remote Working Energy Use | In order to calculate WFH figures we took the stated number of days the employees WFH from an average working week (5 days). Assuming 228 working days in a year (256 minus a minimum of 28 days leave), a figure for total days where they worked from home was calculated.<br><br>It is assumed that there were no hybrid days (where the employee worked both at home and in the office), and that they remained in their house for the full 8 hours (FTE work hours per day per person). Emissions figures estimating the average energy usage for heating and office equipment were used, as of current our calculations don't take energy type, number of bedrooms or energy ratings into consideration. |
| IT Equipment | In order to calculate device usage figures, we started with the assumption that every employee would have one desktop, one phone and one laptop.<br><br>For the purpose of out calculations, the emissions data for an average iPhone 12, Dell monitor and MacBook Pro were used. It is also assumed that the average device (as listed) has a LCA of 5 years, thus, company figures were divided by 5. A total of 14 of each appliance was then multiplied against the one-year emissions figure for each device. |
| Business Travel | In order to calculate business travel figures the total travel distance for each different mode of transport were combined. Then using average emission data from DEFRA, figures of carbon dioxide and GHG emissions were made for each mode of transport. Calculations assume that designated mode of transport 'Train/Bus' is a direct split between the average emissions of both transport by train (National Rail) and bus (Average Bus).<br><br>For the Electric Vehicles (EV), an average sized battery-operated car was assumed, as no further data was provided. Generic 'Car' miles were assumed to |

| | |
|---|---|
| | be from an average car type which used petrol as fuel. The total emissions related to 'Car Travel' in the Final Scopes figures combine both the EV and petrol cars. |
| Commuter travel | In order to calculate commuting figures, we deducted the stated number of days the employees WFH from an average working week (5 days). Assuming 228 working days in a year (256 minus a minimum of 28 days leave), a figure for total days where they travelled a two-way commute was calculated. The number days were then multiplied by the distance of commute by each mode of transport. Then using average emission data from DEFRA, figures of carbon dioxide and GHG emissions were made for each mode of transport.<br><br>Calculations assume that there is no emissions consequential to walking or riding a bike when commuting. An estimated public transport figure is also generated from the average emissions of both transport by train (National Rail) and bus (Average Bus). |