ClimatePartner

Report

Corporate Carbon Footprint

Group: Scott Tallon Walker Architects, 2021

May 2022

Scott Tallon Walker Architects

Corporate Carbon Footprint

Scott Tallon Walker Architects has worked with ClimatePartner to calculate several of their company's carbon footprints: Corporate Carbon Footprints (CCFs).
The CCF is the sum of the CO_2 emissions released by the company within the defined system boundaries over a specified period of time. In this report, the different CCFs are grouped together as **Scott Tallon Walker Architects, 2021** and include the following individual calculations: **Cork, Dublin, Galway** and **London**.

The calculations were based on the guidelines of the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol).

CCF - the first step to take climate action

Calculate, reduce, offset - these are the crucial steps that should be taken in order to tackle climate change in line with the Paris Agreement.

The foundation for any climate action starts with calculation: a company with a CCF understands which parts of their business are creating the greatest emissions (carbon hotspots). If these emissions are offset the company can credibly claim carbon neutrality.
In addition, having a carbon footprint makes it possible to understand the areas with the greatest potential for avoidance and reduction, to develop and implement appropriate reduction measures, and to set reduction targets. Annual CCF reports allow companies to check their progress against reduction targets and to identify new hotspots that drive further reduction measures.

Overall results

This is the result of the calculation for the group's business activities **Scott Tallon Walker Architects, 2021**.

CO_2 emissions

	Result
Overall results	240,368.31 kg CO_2

For comparison

The emissions correspond to the carbon footprint of 28 Europeans.

One person in Europe emits an average of 8.7 t of CO_2 per year [1]

1) Source: EEA 2019, European Environment Agency: EEA greenhouse gas - data viewer, EU-27 value for total emissions with international transport (CO_2e), https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer (retrieved 01/31/2022.)

Our calculation approach

Principles

In preparing the Corporate Carbon Footprint and this report, five basic principles were observed - in accordance with the GHG Protocol.

Relevance: The calculation should account for all greenhouse gas emissions that are material to the company's carbon footprint. This report is designed to support internal and external decision-making.

Completeness: The report must include all GHG emissions within the selected system boundaries. If any data is excluded, we will document and justify its exclusion.

Consistency: In order to allow a company's footprint to be compared over time, we will use consistent methodologies.

Transparency: All material activities of a company will be recorded and any assumptions, data gaps and resulting extrapolations or data exclusions will be presented clearly and openly in this report.

Accuracy: We aim for this report to be sufficiently accurate so that it gives the reader confidence that they have useful data that will enable them to make good decisions. We aim to calculate footprints that are neither to high nor too low and use approaches that minimise uncertainties.

Data collection and calculation

CO_2 emissions were calculated using the company's consumption data and emission factors researched by ClimatePartner. Wherever possible, primary data were used. If no primary data were available, secondary data from highly credible sources were used. Emission factors were taken from scientifically recognized databases such as ecoinvent and DEFRA.

CO_2-equivalent

The Corporate Carbon Footprint calculates all emissions as CO_2 equivalents (CO_2e) but refers to as "CO_2" elsewhere in this report for simplicity's sake.

This means that all relevant greenhouse gases, as stated in the IPCC Assessment Report, were taken into account in the calculations. These include Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), Hydrofluorocarbons (HFC/HFC), Perfluorocarbons (PFC/PFC), Sulfur Hexafluoride (SF_6), and Nitrogen Trifluoride (NF_3). Each of these gases has a different ability to warm the Earth's atmosphere and remains in the atmosphere for different lengths of time. To make their effect comparable, they are converted into CO_2 equivalents (CO_2e) using global warming potentials. The global warming potential describes how strongly a gas can warm the atmosphere compared to CO_2, and usually refers to a time horizon of 100 years.

For example, methane has a global warming potential of 28, so the warming effect of methane is 28 times greater than CO_2 over 100 years. [2]

Electricity: Market-based and location-based approaches

Emissions for electricity were calculated using both the market-based method and the location-based method as recommended by the GHG Protocol.

For the market-based method, the preferred approach is for the company to provide specific emission factors for the electricity they have purchased. If these specific factors were not available, we would seek to use factors for the residual mix for the country of operation (residual mix is the average emissions released by the country's electricity grid, excluding any renewable energy sources). In some countries, a residual mix factor is not available. If this was the case, the average grid mix (including renewables) of the country was used.

The report also states the location-based method. Here we used the average electricity grid mix for the country.

2) Source: Intergovernmental Panel on climate change, “Climate Change 2021 The Physical Science Basis”, S. 1842, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf (retrieved on 31.01.2022)

Operational System Boundaries

Operational System Boundaries indicate which of the company's activities are taken into account for the individual carbon footprints of **Scott Tallon Walker Architects, 2021**. The various emission sources have been divided into three scopes in accordance with the GHG Protocol:

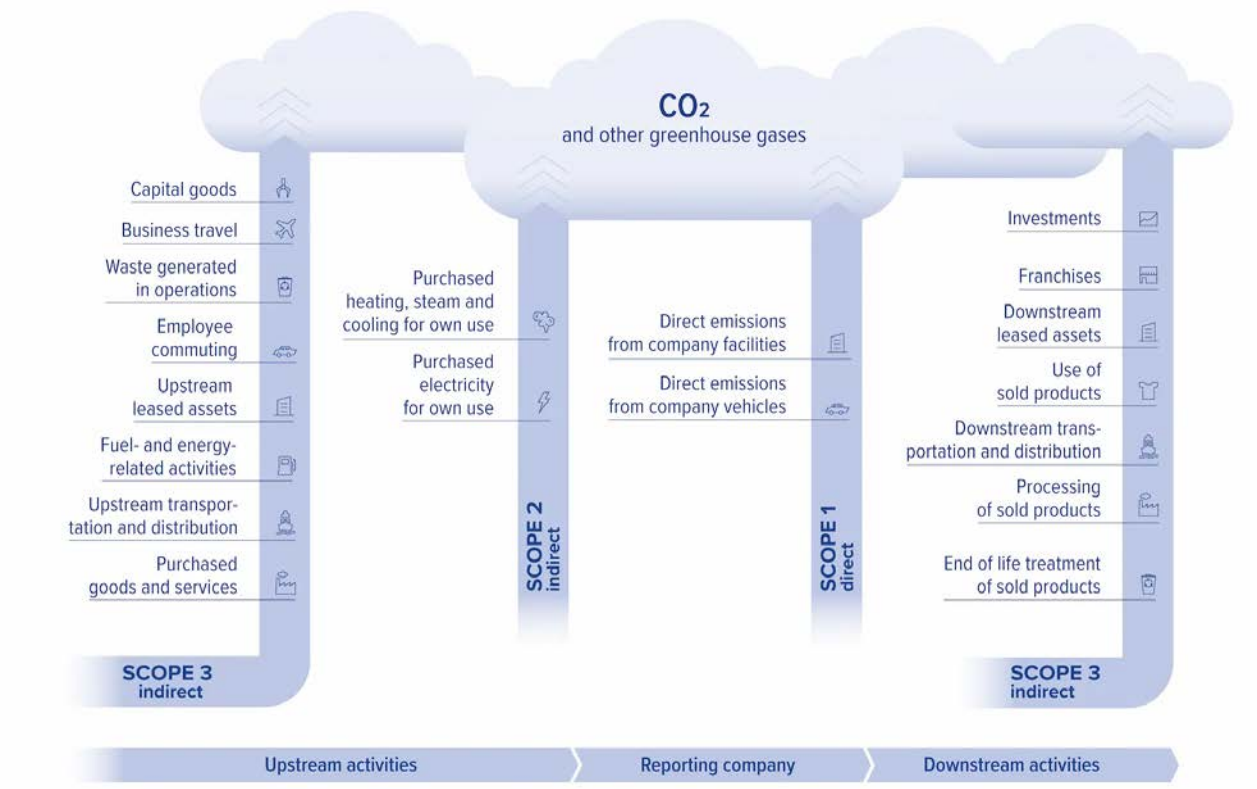
Scope 1 includes all emissions generated directly by **Scott Tallon Walker Architects**, for example by company-owned equipment or vehicle fleets.

Scope 2 lists emissions generated by purchased energy, for example electricity and district heating.

Scope 3 includes all other emissions that are not under direct corporate control, such as employee travel or product disposal.

Figure

Activities divided by scope

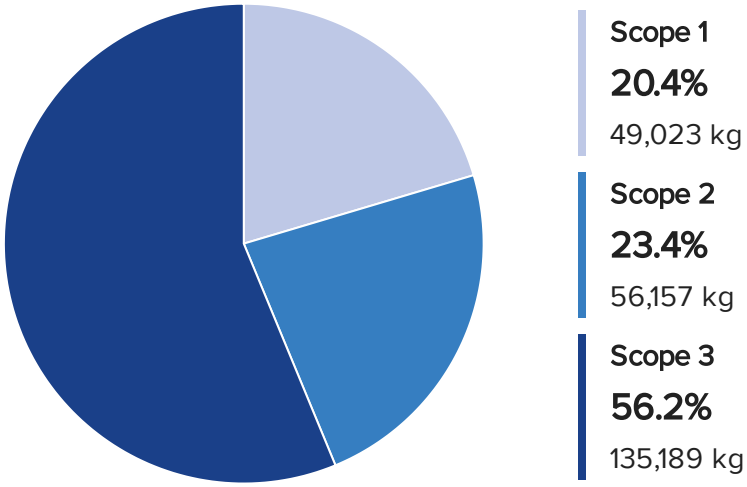


Largest emission sources - greatest reduction potential

The CCF identifies the largest sources of emissions of the group **Scott Tallon Walker Architects, 2021**. This is important in driving climate action as it highlights which areas should be prioritised in relation to emission reduction and avoidance.

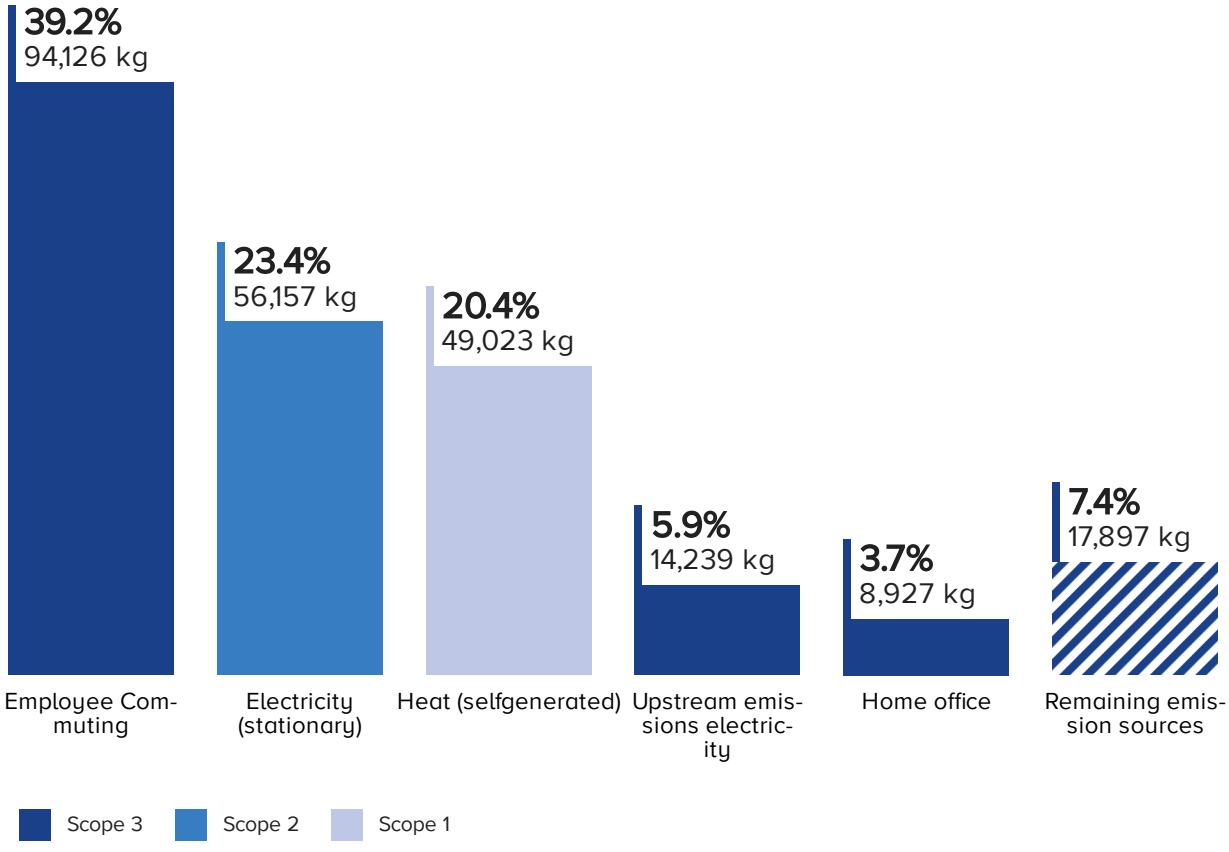
Figure

Allocation of CO_2 emissions to Scope 1, 2 and 3



Figure

The largest CO_2 emission sources



CCF Results Table: Scott Tallon Walker Architects

Total results for the group **Scott Tallon Walker Architects, 2021**

Emission sources	kg CO_2	%
Scope 1	**49,022.53**	**20.4**
Direct emissions from company facilities	49,022.53	20.4
Heat (self-generated)	49,022.53	20.4
Scope 2	**56,157.04**	**23.4**
Purchased electricity for own use [3]	56,157.04	23.4
Electricity (stationary)	56,157.04	23.4
Scope 3	**135,188.73**	**56.2**
Employee commuting	103,052.67	42.9
Employee Commuting	94,126.03	39.2
Home office	8,926.64	3.7
Fuel- and energy-related activities	22,629.99	9.4
Upstream emissions electricity	14,239.38	5.9
Upstream emissions heat	8,390.61	3.5
Purchased goods and services	6,780.57	2.8
Electronic devices	6,049.65	2.5
Gastronomy	730.40	0.3
Office paper	0.52	0.0
Business travel	2,725.50	1.1
Flights	1,916.92	0.8
Rail	362.96	0.2
Hotel nights	245.10	0.1
Rental and private vehicles	200.52	0.1
Waste generated in operations	0.00	0.0
Operational waste	0.00	0.0
Overall results	**240,368.31**	**100.0**

3) Calculated using the market-based method. Emissions calculated using the location-based method are 57,055.15 kg CO_2.

CCF Results Table: Scott Tallon Walker Architects

For comparison, the total emissions of all individual calculations

Scott Tallon Walker Architects, 2021	kg CO_2	%
Cork	28,477.24	11.8
Dublin	171,347.88	71.3
Galway	7,405.14	3.1
London	33,138.05	13.8

CCF Results Table: Scott Tallon Walker Architects

Results of the individual calculation **Cork**

Emission sources	kg CO_2	%
Scope 2	**11,250.52**	**39.5**
Purchased electricity for own use [4]	11,250.52	39.5
Electricity (stationary)	11,250.52	39.5
Scope 3	**17,226.72**	**60.5**
Employee commuting	14,430.53	50.7
Employee Commuting	13,736.45	48.2
Home office	694.08	2.4
Fuel- and energy-related activities	2,796.19	9.8
Upstream emissions electricity	2,796.19	9.8
Overall results	**28,477.24**	**100.0**

4) Calculated using the market-based method. Emissions calculated using the location-based method are 12,093.31 kg CO_2.

CCF Results Table: Scott Tallon Walker Architects

Results of the individual calculation **Dublin**

Emission sources	kg CO_2	%
Scope 1	**46,179.13**	**27.0**
Direct emissions from company facilities	46,179.13	27.0
Heat (self-generated)	46,179.13	27.0
Scope 2	**25,344.30**	**14.8**
Purchased electricity for own use [5]	25,344.30	14.8
Electricity (stationary)	25,344.30	14.8
Scope 3	**99,824.46**	**58.3**
Employee commuting	75,737.48	44.2
Employee Commuting	68,025.48	39.7
Home office	7,712.00	4.5
Fuel- and energy-related activities	14,580.91	8.5
Upstream emissions heat	7,903.94	4.6
Upstream emissions electricity	6,676.97	3.9
Purchased goods and services	6,780.57	4.0
Electronic devices	6,049.65	3.5
Gastronomy	730.40	0.4
Office paper	0.52	0.0
Business travel	2,725.50	1.6
Flights	1,916.92	1.1
Rail	362.96	0.2
Hotel nights	245.10	0.1
Rental and private vehicles	200.52	0.1
Waste generated in operations	0.00	0.0
Operational waste	0.00	0.0
Overall results	**171,347.88**	**100.0**

5) Calculated using the market-based method. Emissions calculated using the location-based method are 28,877.43 kg CO_2.

CCF Results Table: Scott Tallon Walker Architects

Results of the individual calculation **Galway**

Emission sources	kg CO_2	%
Scope 2	**2,632.50**	**35.5**
Purchased electricity for own use [6]	2,632.50	35.5
Electricity (stationary)	2,632.50	35.5
Scope 3	**4,772.64**	**64.5**
Employee commuting	4,079.10	55.1
Employee Commuting	4,079.10	55.1
Fuel- and energy-related activities	693.53	9.4
Upstream emissions electricity	693.53	9.4
Overall results	**7,405.14**	**100.0**

6) Calculated using the market-based method. Emissions calculated using the location-based method are 2,999.48 kg CO_2.

CCF Results Table: Scott Tallon Walker Architects

Results of the individual calculation **London**

Emission sources	kg CO_2	%
Scope 1	**2,843.41**	**8.6**
Direct emissions from company facilities	2,843.41	8.6
Heat (self-generated)	2,843.41	8.6
Scope 2	**16,929.72**	**51.1**
Purchased electricity for own use [7]	16,929.72	51.1
Electricity (stationary)	16,929.72	51.1
Scope 3	**13,364.92**	**40.3**
Employee commuting	8,805.56	26.6
Employee Commuting	8,285.00	25.0
Home office	520.56	1.6
Fuel- and energy-related activities	4,559.36	13.8
Upstream emissions electricity	4,072.69	12.3
Upstream emissions heat	486.67	1.5
Overall results	**33,138.05**	**100.0**

7) Calculated using the market-based method. Emissions calculated using the location-based method are 13,084.93 kg CO_2.

Next steps

Now **Scott Tallon Walker Architects** should use the findings to drive meaningful climate action. This will include finding ways to continuously reduce emissions as well as offsetting any emissions that cannot immediately be reduced. By offsetting, the company becomes carbon neutral and can use the ClimatePartner Carbon Neutral Company label.

Reducing Emissions

The concentration of greenhouse gases in the atmosphere is responsible for global warming so we must reduce our emissions as quickly and broadly as possible. Defining clear and measurable reduction targets are the best way to start. A reduction plan detailing specific actions and team responsibilities will help the organisation to make quick and meaningful progress.

A creative and courageous approach is needed. Reduction targets should be ambitious and reflective of current scientific and technological understanding. ClimatePartner recommends differentiating between short- medium- and long-term reduction targets because some measures can be implemented quickly whilst others take time. Changes to processes, product design and supply chains can be complex and long-term, but often simple changes are possible in the short-term to initiate rapid reductions. Creating reduction plans is a continuous, iterative process which should be an integral part of the corporate strategy.

Reduction Guide

The general rule is that any reduction measures should be relevant to the needs of the company: there are no standard solutions. The Corporate Carbon Footprint enables **Scott Tallon Walker Architects** to understand their reduction potentials and use this knowledge to define individual reduction measures.

At a high level, there are two ways to reduce emissions:

Decrease activities that emit greenhouse gases, for example by reducing energy consumption, use of raw materials or the number of business trips taken by employees.

Reduce the intensity of emissions by selecting services, raw materials and energy products that have lower emission factors e.g. switch to a green electricity tarrif.

See below for a selection of possibilities you could adopt to take climate action.[8]

Scope 1 + 2

- **Use renewable energy sources** by switching to biogas, green electricity etc.
- **Use more climate-friendly refrigerants** by switching to ammonia, propane, etc.
- **Increase energy efficiency** through newer machines etc
- **Optimisation of processes and products** through new procedures, improved product design, etc.

Scope 3

- **Conservation of resources** through avoidance, i.e. fewer business trips, less packaging, less printing, etc.
- **Use low emission raw materials** such as plant-based, regional and recycled raw materials
- **Switch everyday actions to low emission options,** such as taking the train over flights or choosing digital over print options
- **Engage with your suppliers** and encourage them to do more to take climate action by sharing best practices, knowledge, and networks etc.
- **Partner with your employees** by offering incentives to implement low carbon measures and engage them with your climate action journey.

8) This overview is not intended to be exhaustive. Each measure must be appropriate for the company.

Offsetting emissions

We must act now to limit global warming to 1.5 °C. Implementing CO_2 reduction measures usually needs a step by step approach over the long term. ClimatePartner therefore recommends that **Scott Tallon Walker Architects** offsets any remaining emissions (those which cannot currently be reduced) immediately by supporting certified climate action projects. In doing so, companies take responsibility for the emissions they are emitting today whilst taking action to reduce their emissions over time.

Why offsets work

Greenhouse gases such as CO_2 are evenly distributed in the atmosphere. The greenhouse gas concentration is therefore similar everywhere on earth. Emissions that cannot yet be avoided at **Scott Tallon Walker Architects** can therefore be offset by projects anywhere in the world.

More than just a carbon impact

Offset projects act in different ways. Some remove CO_2 from the atmosphere, for example through reforestation projects, whilst others prevent further CO_2 from being emitted, for example through the expansion of renewable energies.

Our high-quality offset projects also have benefits beyond reducing or avoiding greenhouse gas emissions, though. Each project promotes the economic, social and sustainable development of the region in specific ways. Each of our projects are certified according to international standards which ensures they improve the lives of local communities as well as the global climate.

Verified

The exact amount of CO_2 saved by each project is determined by independent organisations. The project developers can then sell these CO_2 savings in the form of certified emission reductions. The resulting income then finances the project, which would be unable to function without it. Further information is available at: https://www.climatepartner.com/en/carbon-offset-projects

Carbon neutrality

Once **Scott Tallon Walker Architects** offsets their emissions, they become carbon neutral.

To ensure that all emissions generated are offset within the system boundaries, a safety margin of 10% is applied to the total footprint. This compensates for uncertainties in the underlying data that naturally arise from the use of database values, assumptions or estimates.

CO2 Offsets

	kg CO_2
Overall results	**240,368.31**
Not yet carbon neutral	240,368.31
Already carbon neutral	0.00
CO_2 emissions to be offset incl. 10% safety margin	**264,405.14**

Effective climate action

Our ClimatePartner team are happy to help you take further climate action!

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Imprint

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