

# Becoming Carbon Neutral



# Greenhouse Gas Emissions Report 2021



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## Introduction

Founded in 2001 eAccess is a turnkey global eCommerce provider for high value brand manufacturers. As the first independent wireless data solution provider in the USA, eAccess built an eCommerce platform from the ground up to accommodate our customer's growing needs for software, devices, and accessories. Our award-winning ecommerce platform, highly rated customer service and diverse omni channel product marketing capabilities increase direct to consumer product sales and brand visibility.

Among serving our brands and customers, sustainability has always been at the forefront of our business. We acknowledge the severity of our changing climate and the need for global response. An essential part of addressing this environmental issue is reducing greenhouse gas emissions from all levels of society. We recognize this importance of reducing emissions, which is why we have become carbon neutral and strive to foster meaningful climate action around the world.

*“One of our primary goals as an eCommerce business is to continually evolve the on-line shopping experience. An essential part of this has always been through brand representation and customer interaction. Becoming a carbon neutral company demonstrates our commitment to the brands we represent, the customers we serve and the planet we inhabit.”*

**Dave Bean**  
CEO & Founder

## What Carbon Neutral Means

Being carbon neutral means that we remove the same amount of our net greenhouse gas emissions as we emit for a defined duration.

## Why It Matters

People around the world are already experiencing the devastating effects of climate change such as rising sea levels, more frequent and intense weather events, and forced displacements. If we do not act now and greenhouse gas levels continue to rise, the Earth's global average temperature is projected to exceed three degrees Celsius this century. This would further intensify the impacts of climate change likely resulting in agricultural failures and species' extinctions. Becoming carbon neutral and proactively reducing emissions at the source is the best step companies can take to prevent any rise in global temperature and the adverse effects of climate change that come with it.

## About Our Certification and this Report

We achieved CarbonNeutral® company certification, working with Natural Capital Partners, the leading experts on carbon neutrality and climate finance. Our certification recognizes that we have achieved carbon neutrality across our operations in accordance with [The CarbonNeutral Protocol](#), which ensures the quality and credibility of our achievement. We underwent a combination of internal emissions reductions and supporting emission reduction projects to make this achievement possible.

Much of this report and the data within it was composed and provided by RSK, on behalf of Natural Capital Partners. RSK served as an independent third-party assessor who carried out our greenhouse gas assessment and calculations. Their verification process follows a recognized verification standard (such as ISO 14064:3 or ISAE 3410) to confirm that the quality of our input data, greenhouse gas assessment, and use of the CarbonNeutral® certification logo meets the requirements of the CarbonNeutral® company certification and is in line with the approach and principles of The CarbonNeutral Protocol.

## About Natural Capital Partners



With more than 300 clients in 34 countries, including Microsoft, MetLife, Logitech, PwC, Sky and Ørsted, Natural Capital Partners is harnessing the power of business to create a more sustainable world. Through a global network of projects, the company delivers the highest quality solutions which make real change possible: reducing carbon emissions, generating renewable energy, building resilience in supply chains, conserving and restoring forests and biodiversity, and improving health and livelihoods.

Natural Capital Partners was founded in 1997 and has teams in the US, Europe and Central America. It has been recognized as Environmental Finance Best Offset Retailer for the past nine years. The CarbonNeutral Protocol was created and is managed by Natural Capital Partners. It was the first clear set of guidelines for

businesses to achieve carbon neutrality back in 2002, and every year since then Natural Capital Partners has continued its commitment to providing a robust framework for clear, transparent and high quality carbon neutral action. The Protocol is updated annually with input from an Advisory Council of external experts to ensure it reflects the latest industry and scientific best practice.

[naturalcapitalpartners.com](http://naturalcapitalpartners.com)

[carbonneutral.com](http://carbonneutral.com)

## About RSK



RSK is a global leader in the delivery of sustainable solutions. Our family of over 130 environmental, engineering and technical services businesses works together to provide practical solutions to some of the greatest challenges societies have ever faced. These challenges, and the responses to them, are perhaps best captured by the United Nations Sustainable Development Goals: “a shared blueprint for peace and prosperity for people and the planet, now and into the future”.

We must achieve a truly sustainable future, and to get there, all nations, businesses, organizations, and individuals must play a role. RSK is enabling clients around the world to do their bit. We operate in most sectors of the economy, including many of those most critical to future global sustainability, such as water, energy, food and drink, infrastructure, urban development, mining and waste. With our integrated offering across research and development, consultancy, and on-the-ground application, we can deliver a complete solution that is unrivalled in the market.

<https://rskgroup.com/>

Here at eAccess we believe in transparency and accountability. This report allows us to be transparent about our emissions and the eco-friendly initiatives we are taking to continuously reduce our environmental footprint and stand by our commitment to the planet.

# 1 Context

## 1.1 Why Measure Greenhouse Gas Emissions?

Greenhouse gas (GHG) emissions assessments quantify the total GHGs produced directly and indirectly from a business or organization’s activities. GHG assessments may also be conducted for products or services. Also known as a “carbon footprint”, a GHG assessment is an essential tool in the process of monitoring and reducing an organization’s climate change impact as it allows reduction targets to be set and action plans formulated.

GHG assessment results can also allow organizations to be transparent about their climate change impacts through reporting of GHG emissions to customers, shareholders, employees and other stakeholders. Regular assessments allow clients to track their progress in achieving reductions over time and provide evidence to support green claims in external marketing initiatives such as product labelling or Corporate Social Responsibility (CSR) reporting.

## 1.2 The Kyoto Protocol GHGs

GHG assessments quantify the Kyoto Protocol greenhouse gases, as applicable, and are measured in terms of tonnes carbon dioxide (CO<sub>2</sub>) equivalence, or tCO<sub>2</sub>e, where equivalence means having the same warming effect as CO<sub>2</sub> over 100 years.

The six Kyoto Protocol gas groups are CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF<sub>6</sub>) and perfluorocarbons (PFCs). The global warming potential (GWP) of each is presented in Table 1.

**Table 1: Kyoto Protocol GHGs and their Global Warming Potential (GWP)**

Greenhouse gas/group	Chemical Formula	GWP (CO <sub>2</sub> e)
Carbon dioxide	CO <sub>2</sub>	1
Methane	CH <sub>4</sub>	25
Nitrous oxide	N <sub>2</sub> O	298
Hydrofluorocarbons	HFCs	Depends on specific gas
Sulphur hexafluoride	SF <sub>6</sub>	22,800
Perfluorocarbons	PFCs	Depends on specific gas

# 1 Context

## 1.3 Calculating Emissions

GHG assessments use client-supplied activity data (such as kWh of electricity or litres of fuel used), from which GHG emissions estimates are quantified by applying the most relevant emission factor(s) from published reputable sources (e.g., Defra, the UK's Department for Environment, Food and Rural Affairs).

An emission factor is a representative value that relates the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. Emission factors are typically available from government publications, independent agencies, and scientific research journals; however, the quality and accuracy of such factors can vary significantly. Factors can differ depending on the research body and/or underlying methodologies applied. It is therefore good practice to apply emission factors only from reputable sources, such as Defra.

## 1.4 Reporting Standards

GHG assessments are generally carried out in accordance with one of two recognized standards for accounting and reporting corporate GHG emissions. The best-known is the

*"Greenhouse Gas Protocol Corporate Accounting and Reporting Standard"* (GHG Protocol, 2011) developed in a partnership of the World Business Council for Sustainable Development (WBCSD) and the World Resource Institute (WRI).

The International Organization for Standardization (ISO) also produced the *ISO14064*<sup>1</sup> specification series, detailing specification and guidance for the organization and project levels, as well as for the validation and verification of emissions.

The CarbonNeutral® Protocol developed by Natural Capital Partners (NCP) is an additional layer on top of the GHG Protocol and describes the requirements for achieving specific CarbonNeutral® compliant certifications (i.e., CarbonNeutral® 'Company', 'Product', 'Event' etc.).

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<sup>1</sup> 'ISO 14064 – Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals'

# 1 Context

## 1.5 Emissions Scopes

The aforementioned standards break down emission sources into three distinct categories, known as scopes.

### 1.5.1 Scope 1

Scope 1 accounts for direct emissions released from sources that are owned or controlled by the reporting company (such as corporate car fleets, power generation facilities, fuel combustion for heating and power, refrigerant gas losses and where applicable process emissions).

### 1.5.2 Scope 2

Scope 2 accounts for indirect emissions associated with off-site generation of purchased electricity, heat and steam and cooling.

In 2015, the GHG Protocol published its Scope 2 Guidance, an amendment to the Corporate Standard. These guidelines state that any operations in markets providing product- or supplier-specific data in the form of contractual instruments shall report scope 2 emissions in two ways: one based on the location-based method, and one based on the market-based method, with each result labelled according to the respective method.

This is also termed 'dual reporting'.

#### 1.5.2.1 Location-Based Reporting

The location-based method reflects the average emissions intensity of grids on which energy consumption occurs. This method applies to all locations where grids are used for the distribution of energy, where electricity demand causes the need for energy generation and distribution. Grid-average emission factors are used, which are based on statistical emissions information and electricity output, aggregated and averaged within a defined geographic boundary and a defined time frame. This includes regional/subnational grid averages and national production grid averages.

#### 1.5.2.2 Market-Based Reporting

The market-based method reflects proportional emissions from specific electricity tariffs that companies actively select in the market. Under this method of scope 2 accounting, an energy consumer uses the emissions factor associated with the qualifying contractual instruments it owns.

# 1 Context

Markets differ as to what contractual instruments are commonly available or used by companies to purchase energy or claim its specific attributes, but can include Energy Attribute Certificates (RECs, GOs, I-RECs), Power Purchase Agreements (PPAs) and green electricity products purchased from energy suppliers.

As per The CarbonNeutral<sup>®</sup> Protocol, zero emissions may only be awarded when doublecounting is avoided. Any businesses seeking to make a scope 2 reporting declaration in support of CarbonNeutral<sup>®</sup> certification must complete and sign a disclosure form provided by NCP, which outlines the contractual instrument(s) purchased, the total consumption covered (MWh), and the reporting period it applies to. If a company either does not have any such contracts or its instruments do not meet the quality criteria, then a residual mix factor is applied representing the untracked or unclaimed energy and emissions for that region. If the residual mix is not available, then the location-based method is applied, utilizing either regional / sub-national grid averages or national grid averages. In this case, the reported market-based scope 2 total will be the same as the location-based total.

## 1.5.3 Scope 3

Scope 3 includes all other indirect emissions sources not accounted for within scope 1 and 2. This depends on the company's activities but might include business travel, staff commuting, water consumption, waste disposal, or outsourced activities such as deliveries.

The GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (WRI and WBCSD, 2011) groups scope 3 emissions into 15 distinct categories to provide companies with a framework to organize, understand and report their emissions from wider upstream and downstream impacts.

The GHG Protocol describes the quantification of scope 1 and 2 as mandatory, whereas scope 3 emissions are optional. The CarbonNeutral<sup>®</sup> Protocol requires inclusion of certain scope 3 emissions (typically waste and business travel) depending on the certification targeted. Other scope 3 sources may be included at the discretion of the client.

Depending on the nature and remit of an organization, scope 3 activities can contribute a significant proportion of overall emissions. To gain a proper understanding of an organization's GHG emissions it is thus advisable to include all relevant sources.

# 1 Context

## 1.6 Measuring Climate Impacts from Aviation

From 2014, it is a requirement of The CarbonNeutral<sup>®</sup> Protocol that clients consider the evidence regarding the overall effect of aviation on climate, aside from simply GHG emissions released during combustion of jet fuel including, but not limited to, soot particles and aviation induced clouds. Having considered the evidence, clients may elect to calculate their aviation carbon impact by considering only GHG emissions with a small uplift to account for the wider impacts of aviation (an Aviation Impact Factor (AIF) of 1.4), or alternatively may elect to address the full wider effects of aviation by applying an AIF of 2.

## 1.7 Homeworking Emissions

For the 2020/21 reporting period, office working was reduced for many companies as some employees begin working from home. Thus from 2020 homeworking emissions must be included within CN Company assessments as a required emissions source. However, as this data is not widely available, RSK has benchmarked an average homeworking day accounting for IT, HVAC and lighting.

To calculate homeworking emissions, contracted homeworking and homeworking due to COVID 19 are considered. For the former, the number of contracted homeworkers is simply multiplied by 240 (assumed annual working days) then multiplied again by RSK's benchmarked emission factor.

For Covid-induced homeworking, emissions are estimated by multiplying the average percentage of time an employee works from home by total annual working days, then again by RSK's benchmarked emission factor.

## 1.8 GHG Accounting Principles

RSK's approach to carbon accounting is to follow the GHG Protocol's core principles where possible:

- **Relevance:** selecting an appropriate inventory boundary that reflects the GHG activities of the company and serves the decision-making needs of users.
- **Completeness:** accounting for all emission sources within the chosen inventory boundary, with any specific exclusions disclosed and justified.

# 1 Context

- Consistency: aiming to collect meaningful and consistent data over time whilst transparently documenting any significant changes to data quality and/or format.
- Transparency: addressing all relevant issues in a coherent and clear manner.
- Accuracy: minimizing uncertainty and avoiding systematic over- or underquantification of emissions, and ensuring any necessary estimates or assumptions required are conservative and guided by industry standards.

## 1.9 Data Quality and Accuracy

The accuracy of a GHG assessment is directly related to the quality of the activity data provided. Primary data should always be used where available, which denotes actual activities which occurred during the reporting period (such as metered electricity consumption).

It is accepted that secondary data (such as estimates, extrapolations, benchmarks, and proxy data such as distance travelled) may be used when primary data is not available. Assessments based largely on secondary data should only be viewed as an estimate of GHG emissions impact, and actual emissions may vary significantly.

In general reporting organizations should aim to improve the proportion of primary data over time as this will improve the accuracy of the reported emissions.

## 2 Methodology

### 2.1 Introduction

This GHG assessment has been prepared by RSK, on behalf of NCP, to estimate GHG emissions associated with the operations of eAccess Solutions, Inc. during the reporting period 1<sup>st</sup> January 2021 to 31<sup>st</sup> December 2021.

### 2.2 Approach

On project commencement, RSK completed a quality assurance form to review all activity data provided by the client, with conservative assumptions proposed where necessary to ensure a best practice approach was adhered to.

GHG emissions were then quantified by applying the most relevant emission factors. GHG emission factors relating to the 2021 reporting year are predominantly sourced from the Defra and BEIS 2021 *UK Government GHG Conversion Factors for Company Reporting* (July 2021). See Appendix A for details of all GHG emissions factors used in this assessment.

Results within the tables of this report are accurate to the number of significant figures presented. Therefore, any inconsistencies in totals versus individual values are due to rounding and should not be viewed as erroneous.

### 2.3 Operational Boundary and Data Quality

Table 2 displays the operational boundary applied for this assessment along with an overview of the quality of data provided by the client. The total quantity of primary data used for this assessment amounts to 90%.

**Table 2: Operational Boundary and Data Quality**

Scope	Emissions Source	Requirement	Data provided and quality	Suggested Action
1	Refrigerant gas losses	Required	< Not applicable	N/A
	Stationary sources	Required	< Primary data provided in kWh	
	Mobile sources	Required	< Primary data provided in mileage	
2	Electricity consumption	Required	< Primary data provided in kWh	

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## 2 Methodology

3	Water	Recommended	< Primary data provided in m <sup>3</sup>	
	T&D losses <sup>2</sup>	Required	< See electricity consumption	N/A
	Upstream electricity (WTT <sup>3</sup> )	Recommended		
	Wastewater	Recommended	< See water consumption	N/A
	Waste	Required	< Secondary data provided in number of 44 gallon bin bags	Aim to collect primary data in terms of weight
	Business travel	Required	< Not applicable due to COVID	N/A
	Hotel stays	Recommended	< Not applicable due to COVID	N/A
	Staff commuting	Recommended	< Primary data provided in annual mileage by vehicle type	
	Outbound courier deliveries of packages	Recommended	< Not applicable	N/A
	Third party distribution and storage of inbound production-related goods	Recommended	< Not applicable	N/A
	Third party transportation of outbound final products	Required	< Primary data provided in weight, distance, no. of packages and type of vehicles used	
	Homeworking	Required	< Primary data provided in staff days	
<b>Assessment emissions based on primary data</b>			<b>~90%</b>	

### 2.4 Key Assumptions

Upon completion of the quality assurance phase, the following assumptions were agreed with the client:

- All commuting car journeys have been assumed as ‘average car size’.
- Waste data has been provided in terms of number of 44-gallon bags per week. It has been assumed that each 44-gallon bin bag is equivalent to 50kg for both landfill and recycled waste.

<sup>2</sup> Transmission and Distribution (T&D) losses refer to the scope 3 emissions associated with grid losses (the energy loss that occurs in getting the electricity from the power plant to the organisations that purchase it).

<sup>3</sup> Well-to-Tank (WTT) emissions refer to the impact of the extraction, refining and transportation of primary fuels before their use in the generation of electricity.

# 3 Results

## 3.1 CarbonNeutral® Company

Table 3 displays the CarbonNeutral® certification scope and emissions to be offset.

**Table 3: CarbonNeutral® Company Certification Summary**

Organization:		<b>eAccess Solutions, Inc.</b>				
CarbonNeutral® certification:		<b>CarbonNeutral® Company</b>				
Reporting period:		<b>1st January 2021 to 31<sup>st</sup> December 2021</b>				
Consolidation approach:		<b>Operational control</b>				
Scope	Emissions source category	Required or recommended	Included?	tCO <sub>2</sub> e		
1	Direct emissions from owned, leased or directly controlled stationary sources that use fossil fuels or emit fugitive gases	Required	✓	31.6		
	Direct emissions from owned, leased or directly controlled mobile sources	Required	✓	0.3		
2	Emissions from the generation of purchased electricity, heat, steam or cooling	Location-based	✓	14.0		
		Market-based		14.0		
3 (up-stream)	Purchased goods and services (e.g., water and consumable supplies)		Recommended	✓	0.1	
	Capital goods	Printers, laptops, computers etc.	Recommended	X	-	
	Fuel and energy related activities	Upstream emissions from purchased fuels		Recommended	X	-
		Upstream emissions from purchased electricity		Recommended	X	-
		Transmission and distribution (T&D) losses		Required	✓	0.7
	Upstream transportation and distribution	Outbound courier deliveries of packages		Recommended	X	-
		Third-party transportation and storage of inbound production-related goods		Recommended	X	-
	Wastewater		Recommended	✓	0.0	

All information and data on this page were formulated and provided by RSK, on behalf of Natural Capital Partners as part of eAccess Solutions, Inc. CarbonNeutral® Company Certification and 2021 Greenhouse Gas Assessment.

### 3 Results

	Waste generated in operations	Other waste	Required	✓	1.4
	Business travel	All transport by air, public transport, rented/leased vehicle and taxi	Required	X	-
Organization:			eAccess Solutions, Inc.		
CarbonNeutral® certification:			CarbonNeutral® Company		
Reporting period:			1st January 2021 to 31 <sup>st</sup> December 2021		
Consolidation approach:			Operational control		
Scope	Emissions source category		Required or recommended	Included?	tCO <sub>2</sub> e
		Emissions from hotel accommodation	Recommended	X	-
	Employee commuting	Employee transport between home and places of work	Recommended	✓	14.7
		Emissions arising from employee homeworking and remote work	Required	✓	1.3
3 (down-stream)	Downstream transportation and distribution	Third-party transportation and storage of sold products	Required	✓	93.4
	Use of sold products		Recommended	N/A	-
<b>Overall compliance: location-based scope 2</b>				✓	<b>157.1</b>
<b>Overall compliance: market-based scope 2</b>				✓	<b>157.1</b>
<b>Total for offset (tCO<sub>2</sub>e)</b>					<b>158</b>

### 3.2 GHG Emissions Summary

Table 4 shows total GHG emissions estimated during the reporting year, together with emissions displayed using metrics related to company activities. Absolute GHG emissions can vary over time and often correspond to the expansion or contraction of an organization. It is therefore useful to use

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## 3 Results

reporting metrics that take these effects into account to establish emissions intensity. Common emissions intensity metrics include tCO<sub>2</sub>e by turnover, per staff numbers, or per floor area.

**Table 4: 2021 GHG Emissions Summary**

Metric	GHG emissions (tCO <sub>2</sub> e)
Total GHG emissions (market)	156.2
<i>Total GHG emissions (location)</i>	<i>156.2</i>
GHG emissions per full-time employee (market)	14.3
GHG emissions per square meter of floor area (market)	0.09

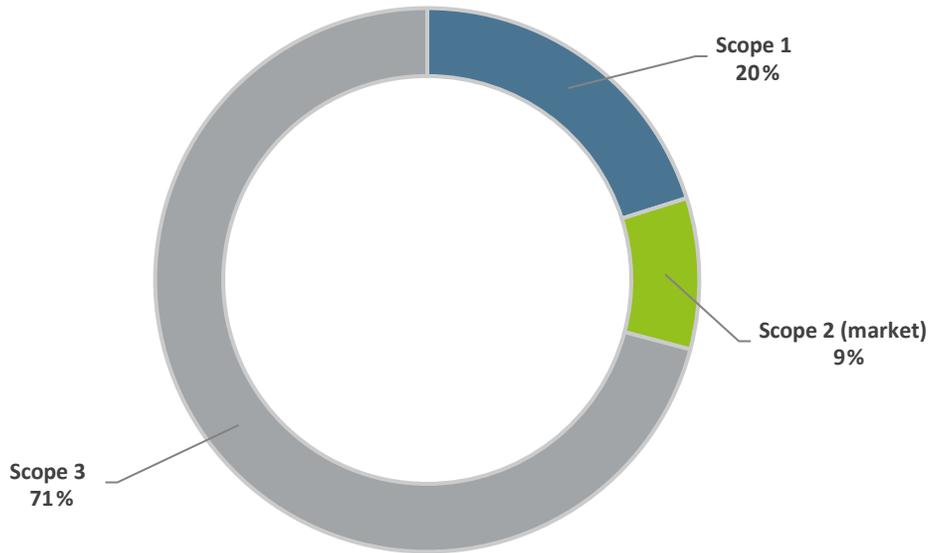
### 3.3 GHG Emissions by Scope

Table 5 and Figure 1 present GHG emissions by scope estimated for company activities.

**Table 5: 2021 GHG Market Emissions by Scope**

Emissions scope	GHG emissions (tCO <sub>2</sub> e)
Scope 1 – Direct emissions	31.4
Scope 2 – Indirect electricity emissions	14.0
Scope 3 – Other indirect emissions	111.7
<b>Total</b>	<b>157.1</b>

### 3 Results



**Figure 1. Market-Based GHG Emissions by Scope (tCO<sub>2</sub>e)**

Scope 3 (other indirect emissions) represent the largest emissions scope (approximately 71%), predominantly from third-part transportation and storage of sold product services, followed by scope 1 emissions (approximately 20%), predominantly from mains gas consumption. Scope 2 emissions from electricity consumption account for the remaining 9% of the carbon footprint.

#### 3.4 GHG Emissions by Source Category

Table 6 and Figure 2 present GHG emissions by source relating to company activities.

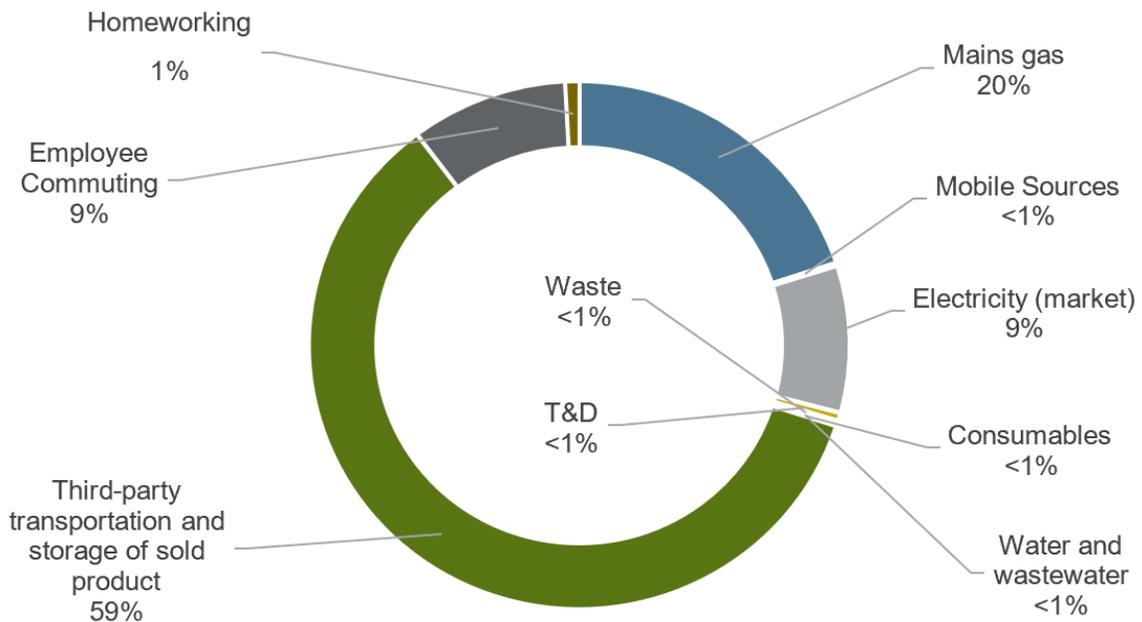
**Table 6: 2021 GHG Market Emissions by Source Category**

Activity	GHG emissions (tCO <sub>2</sub> e)	Sub-total (tCO <sub>2</sub> e)
<b>Premises</b>		
Mains Gas	31.1	<b>141.2</b>
Company Owned Vehicle	0.3	

All information and data on this page were formulated and provided by RSK, on behalf of Natural Capital Partners as part of eAccess Solutions, Inc. CarbonNeutral<sup>®</sup> Company Certification and 2021 Greenhouse Gas Assessment.

### 3 Results

Electricity, incl. T&D	14.8	
Consumables	0.1	
Water and wastewater	0.1	
Waste	1.4	
Third-party transportation and storage of sold products	93.4	
<b>Staff commuting</b>		
Car	14.7	<b>14.7</b>
<b>Homeworking</b>		
Homeworking	1.3	<b>1.3</b>
<b>Total</b>		<b>157.1</b>



**Figure 2. CarbonNeutral® Company Market-Based GHG Emissions by Source (tCO<sub>2</sub>e)**

All information and data on this page were formulated and provided by RSK, on behalf of Natural Capital Partners as part of eAccess Solutions, Inc. CarbonNeutral® Company Certification and 2021 Greenhouse Gas Assessment.



## 3 Results

Third-party distribution and storage of sold products is eAccess' largest source (approximately 59%), followed by mains gas (20%), employee commuting (9%), electricity (9%) and homeworking (1%).

Emissions from water supply, wastewater, other waste, T&D and consumables account for less than 1% each.

### 3.5 Impact of COVID-19

Due to the impacts of the Coronavirus pandemic, eAccess has not reported any business travel activity. It is likely that the 2022 reporting year will also be affected, and therefore these years may represent an anomaly. An opportunity has arisen from the pandemic in the way businesses can communicate remotely, and measures could be taken to prevent emissions from business travel increasing significantly again.

Given the gravity of the climate crisis and its consequences, it is crucial for companies to reduce their internal emissions to demonstrate climate action that is more meaningful and impactful. That is why we are taking steps to internally reduce our emissions where possible. We have made and will continue to make necessary changes across our operations. Some of our current and future initiatives to successfully cut down our emissions include:

- Repurposing about 75% of our packaging instead of creating additional containers in bulk.
- Moving half of our employees to a rotating work from home schedule, effectively preventing about 28 tonnes CO2 equivalent from being emitted into the atmosphere every year.
- Total revision of our facility's lighting and heating systems, which has improved our energy efficiency.
- Reconditioning our roof to have a white reflective layer, reducing our energy consumption needs. This is especially helpful during Illinois' hot summer months.
- Measuring and reporting our net greenhouse gas emissions annually to uphold our carbon neutral commitment.

We aim to reduce our internal emissions as much as possible and offset our remaining indirect emissions through supporting emission reduction projects.



## Project Information

We are currently supporting two emission reduction projects that are not only offsetting our emissions (of 158 tonnes CO<sub>2</sub>e), but also providing clean energy to many, improving health and well-being, and promoting environmental conservation within various communities. All these projects are sourced through Natural Capital Partners. They are independently verified to assure they meet the highest standards ([ICROA approved](#)) and that emissions reductions are occurring:

### Seneca Meadows Landfill Gas

New York, USA

**Type:** Sustainable Infrastructure | Waste Management

**Standard:** American Carbon Registry (ACR)

**Awards:** 2012 Gold Excellence Award, Donald G. Colvin Conservation Award



This award-winning project has created almost 420 acres of new wetlands, established an environmental education center and generates electricity from the landfill gas (LFG) to power 18,000 homes. The electricity is generated by capturing methane from LFG emitted by the 178-acre expansion to the Seneca Meadows landfill site - New York's largest non-hazardous solid waste facility. This project demonstrates that it is possible to make significant reductions in the greenhouse gas (GHG) impact of landfill projects, while showcasing how carbon finance can be used to extend environmental stewardship. This project captures methane leakage, which has 20 times the global warming potential of carbon dioxide.

*All project information, data and pictures on this page were formulated and provided by Natural Capital Partners.*

*Additional information on this project can be found at:*

<https://www.climateimpact.com/global-projects/seneca-meadows-landfill-gas-usa/>

# Project Information

In addition to delivering approximately 175,000 tonnes of emissions reductions annually to help take urgent action to combat climate change, this project delivers several United Nations Sustainable Development Goals (SDGs):



Additional project photos:



This Seneca Meadows Landfill Gas project we proudly support helps to offset 80 tonnes CO<sub>2</sub>e of our emissions.

All project information, data and pictures on this page were formulated and provided by Natural Capital Partners.

Additional information on this project can be found at:

<https://www.climateimpact.com/global-projects/seneca-meadows-landfill-gas-usa/>

# Project Information

## Solar Water Heating

India, Asia

**Type:** Health and Livelihoods | Micro Renewables

**Standard:** Clean Development Mechanism (CDM), Gold Standard



Solar water heaters (SWH) provide households, small and medium sized enterprises (SMEs) and institutions with an in-house hot water supply fueled by renewable energy rather than carbon intensive grid electricity.

This project is primarily focused on serving urban areas throughout the country, and manufactures, distributes, installs, and maintains solar water heaters for a variety of residential, commercial and community buildings. This project uses a range of channels to distribute the solar water heaters, primarily private entrepreneurs or larger entities that act as solar water heater dealers and franchise sub-dealers.

Some units are also sold directly to customers, and in some instances, partnerships with city, state and regional governments are also used for distribution. This project developer conducts awareness programs in schools and general public exhibitions to help increase uptake of its solar products.

*All project information, data and pictures on this page were formulated and provided by Natural Capital Partners.*

*Additional information on this project can be found at:*

<https://www.climateimpact.com/global-projects/solar-water-heating-india/>

# Project Information

In addition to delivering approximately 120,000 tonnes of emissions reductions annually to help take urgent action to combat climate change, the project delivers several United Nations Sustainable Development Goals (SDGs):



Additional project photos:



This Solar Water Heating project we proudly support helps to offset the remaining 78 tonnes CO<sub>2</sub>e of our emissions.

All project information, data and pictures on this page were formulated and provided by Natural Capital Partners.

Additional information on this project can be found at:

<https://www.climateimpact.com/global-projects/solar-water-heating-india/>

**These emission reduction projects we support help to offset our total 2021 emissions of 158 tonnes of CO<sub>2</sub>e**

**WHICH IS EQUIVALENT TO:**

**158**



soccer fields of forest growing for 1 year

**756,030**



cups of batch brew coffee (from cradle to grave)

**158**



one-way business class flights from NYC to London

*Sources:*

*Preserving an acre of forest sequesters 1.22 tonnes CO<sub>2</sub>e in a year (US EPA, 2012, The Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2010). Soccer fields can be between 1.03 acres and 2.69 (BBC Sport).*

*The carbon footprint of 1 cup of batch brew coffee is 0.209 kg CO<sub>2</sub>e from cradle to grave (23Degrees, 2021).*

*0.22969 kg CO<sub>2</sub>/km (excluding Radiative Forcing; BEIS, 2019, Greenhouse gas reporting: Conversion factors 2019: condensed set). New York to London is 5,555 km (gcm.com). The flight in reference emits 1.2 tCO<sub>2</sub>e.*

## Closing Thoughts

We strongly believe that the environment and the needs of society should always come before our business and operations. With our carbon neutral commitment, we aim to promote a more ecofriendly lifestyle at eAccess and around the world. We want our commitment to demonstrate meaningful climate action and environmental responsibility rather than just catchy taglines. Moving forward, we will be annually measuring and reporting our emissions, and internally reducing and offsetting them to meet our sustainability goals, drive accountability, and stand by our commitment to a greener planet.

We hope this report gives more insight into the carbon neutral process and encourages other organizations to join us in the fight against climate change – for the present and future generations.



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**Table 7: Applied Emission Factors**

Emissions source	Notes	Factor	Unit	Reference
Mains Gas	consumed	0.18316	kgCO <sub>2</sub> e/kWh	Defra 2021
Electricity	Illinois, consumed	0.25240	kgCO <sub>2</sub> e/kWh	US EPA eGrid 2021
	Illinois T&D losses	0.01338	kgCO <sub>2</sub> e/kWh	US EPA eGrid 2021
Water consumption	Water supply	0.149	kgCO <sub>2</sub> e/m <sup>3</sup>	Defra 2021
Wastewater	Water treatment	0.272	kgCO <sub>2</sub> e/m <sup>3</sup>	Defra 2021
Waste Landfill	Average commercial and industrial	467.0458	kgCO <sub>2</sub> e/t	Defra 2021
Waste recycled		21.29357	kgCO <sub>2</sub> e/t	Defra 2021
Car	Average car, petrol	0.17431	kgCO <sub>2</sub> e/km	Defra 2021
Vans	Class III (petrol)	0.31306	kgCO <sub>2</sub> e/km	Defra 2021
	Class III (diesel)	0.59232	kgCO <sub>2</sub> e/t.km	Defra 2021
Consumables	Paper	919.3963	kgCO <sub>2</sub> e/t	Defra 2021
Homeworking	Illinois, US	1.40	kgCO <sub>2</sub> e/day	RSK 2021
<p><b>Notes</b>                      Defra 2021 = UK Government GHG Conversion Factors for Company Reporting, Defra/BEIS, 2021</p>				