

The background of the cover is a photograph of a large array of solar panels installed on a roof. The panels are arranged in a grid pattern and are tilted towards the sun. The sky in the background is a mix of orange, yellow, and blue, suggesting a sunset or sunrise. The overall image has a clean, modern feel with a blue border around the text area.

Tortilla

NET-ZERO METHODOLOGY

Method, Data and Calculations

FY2022

TORTILLA



An intelligent approach to energy, waste & sustainability

Contents

1. Introduction.....	1
2. Strategy	2
2.1. Boundaries	2
2.2. Operational Boundaries Defined.....	3
3. Green House Gases.....	6
4. Base Year.....	6
4.1. Recalculation Policy.....	7
4.1.1. Adjusting for Structural Changes.....	7
4.1.2. Adjusting for Methodological Changes and Corrections.....	8
4.2. Adjustments to Base Year.....	9
5. Emissions Calculations.....	10
5.1. Scope 1.....	10
Scope 1: Stationary Combustion (natural gas).....	10
Scope 1: Fugitive emissions of refrigerant gases.....	11
5.2. Scope 2	12
Scope 2: Location-based emissions from electricity consumption.....	12
5.3. Scope 3	13
Scope 3 – Category 1: Purchased Goods and Services	13
Scope 3 – Category 2: Capital Goods.....	15
Scope 3 – Category 3: Fuel and Energy-Related Activities (not included in Scope 1 and 2).....	16
Scope 3 – Category 4: Upstream Transportation and Distribution.....	18
Scope 3 – Category 5: Waste Generated in Operations.....	20
Scope 3 – Category 6: Business Travel.....	21
Scope 3 – Category 7: Employee Commuting	22
Scope 3 – Category 7: Working from Home.....	24
Scope 3 – Category 9: Downstream Transportation.....	26
Scope 3 – Category 12: End of life treatment sold products.....	27
Scope 3 – Category 14: Franchises.....	28

1. Introduction

Founded in October 2007, Tortilla is the UK's largest fast-casual Mexican restaurant brand, offering a high-quality, affordable and freshly prepared California-style Mexican menu. The Tortilla brands, Tortilla and Chilango, together have over 80 owned and franchised locations across the UK and Middle East. A breakdown of sites and franchises is shown in Table 1.

Table 1 Breakdown of Tortilla's sites and franchises

Site location		
Cambridge	Clapham	Islington
Camden	Finchley	Islington C
Canary Wharf	Harrow	Peckham
Greenwich	Kings Cross	Wood Green
Leadenhall	Oxford Circus	Bath
London Bridge	Russell Square	Bournemouth
London Wall	Strand	Bristol Cribbs Causeway
Soho	Watford	Bristol Cabot Circus
Southwark	Windsor	Cardiff
Spitalfields	Bluewater	Exeter
Stratford	Brighton	Gunwharf Quays
Victoria	Guildford	Oxford
Birmingham Grand Central	Hammersmith	Reading
Birmingham Victoria Square	Kingston	Southampton
Cheshire Oaks	Lakeside	Durham
Coventry	New Westfield	Edinburgh
Derby	Putney	Glasgow
Leicester	Richmond	Leeds
Lincoln	Wimbledon	Manchester
Liverpool	Balham	Newcastle
Nottingham IVC	Brewer Street	
Nott'm Clumber St	Chancery Lane	
Canterbury	Croydon BoxPark	

Franchise 1	Franchise 2	Franchise 3
Brunel	Abu Dhabi Galleria Mall	BRS Tortilla AS
Middlesex	Dubai Festival City	Euston Tortilla
Salford	Dubai Marina Mall	LGW Tortilla N AS
Sussex	Dubai Silicone Oasis	LGW Tortilla N AS
Swansea	Dubai The Gate (DIFC)	LGW Tortilla N AS
	Hessa	MSA Leeds Tortilla
	Mall of Emirates	
	Office Park	

As part of Tortilla's continued commitment to reducing greenhouse gas (GHG) emissions and reaching net-zero emissions goals by December 2045, the company has continued its partnership with expert sustainability consultants for calculating their carbon emissions for 2022. Tortilla can use this to evaluate where they are on their net-zero journey compared to their 2022 baseline year. This data can be used to help focus efforts to bring GHG emissions down and allow Tortilla's customers to easily make sustainable choices. Overall, this process provides Tortilla with detailed data allowing them to assess where they are on their way to achieving their goal of net-zero.

2. Strategy

Tortilla has calculated its GHG emissions in line with the Green House Gas Protocol as set out by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).¹

2.1. Boundaries

The GHG protocol states that a company's organisational boundaries can be set in two possible ways. '*Equity Share*' where the boundary is defined by the amount of equity a company has in an operation or '*Control Approach*' where the boundary is

¹ <https://ghgprotocol.org/>

defined by how much control a company exerts over an operation. Control can be defined by either operational or financial control.

Tortilla has chosen to use the '*Operational Control*' approach meaning that it includes in its emissions inventory any and all operations which it or one of its subsidiaries has full authority to control operating policies. Tortilla has chosen this as it best reflects the areas where it can influence and affect policies that directly and indirectly relate to GHG emissions.

2.2. Operational Boundaries Defined

Operational boundary conditions provide depth to a corporate inventory by identifying which emissions sources will be accounted for within the organisational boundaries.

The GHG Protocol outlines three categories of emissions sources (referred to as "scopes"):

- **Scope 1, 'Direct Emissions,'** represent emissions from combustible fuels and other sources that occur directly on-site and mobile emission sources
- **Scope 2, 'Indirect Emissions,'** represent emissions that occur off-site to produce electricity or steam purchased for use at a company's locations
- **Scope 3, 'Other Indirect Emissions,'** represent emissions from activities upstream or downstream from a company's core business such as purchased goods and services, waste disposal, commuting, and business travel.

Scope 1 (Direct Emission Sources)

Scope 1 sources included in the inventory are onsite (or "stationary") natural gas combustion and fugitive emissions of refrigerant gasses. Excluded from the inventory are mobile fuel combustion from leased and owned vehicles as Tortilla does not own or lease any vehicles.

Scope 2 (Indirect Emission Sources)

Purchased electricity was the only identified scope 2 emissions source. Per the GHG Protocol Scope 2 and the UK Government's Environmental Reporting Guidelines, scope 2 emissions have been calculated in two ways using the location-based and

the market-based methodology. A location-based method reflects the average emissions intensity of the grids on which energy consumption occurs. A market-based method reflects emissions from renewable electricity sources/locations that Tortilla has purposefully chosen (e.g., specific green energy supply contracts, renewable energy guarantees of origin (REGO), green power purchase agreements (green PPA).

Scope 3 (Indirect Emission Sources)

The GHG Protocol identifies fifteen categories of scope 3 emissions. Tortilla's fiscal year (FY) 2022 inventory includes ten of these categories, identified in Table 2 below.

Table 2. Scope 3 Categories included in the inventory

Category	Definition	Status
Category 1: Purchased goods and services	Extraction, production, and transportation of products purchased or acquired by Tortilla in the reporting year	Calculated
Category 2: Capital goods	Extraction, production, and transportation of capital goods purchased or acquired by Tortilla in the reporting year	Calculated
Category 3: Fuel- and energy-related emissions	Extraction, production, and transportation of fuels and energy purchased or acquired by Tortilla in the reporting year, not already accounted for in scope 1 or 2	Calculated
Category 4: Upstream transportation & distribution	The transportation of goods from Tier 1 suppliers to Tortilla's sites in the reporting year	Calculated
Category 5: Waste generated in operations	Disposal and treatment of waste generated in operations in the reporting year	Calculated

Category 6: Business travel	Transportation of employees for business-related activities during the reporting year	Calculated
Category 7: Employee commuting	Transportation of employees between their homes and their worksites during the reporting year and emissions related to working from home	Calculated
Category 8: Upstream leased assets	Operation of assets leased in the reporting year and not included in scope 1 and scope 2	Not relevant
Category 9: Downstream transportation & distribution	The transport of sold products (i.e. takeaway deliveries) between Tortilla's operations and the end consumer in the reporting year. These services are not paid for by Tortilla	Calculated
Category 10: Processing of sold products	Processing of intermediate products sold in the reporting year by downstream companies	Not relevant
Category 11: Use of sold products	Emissions from the use of goods sold in the reporting year.	Not relevant
Category 12: End-of-life treatment of sold products	Waste disposal and treatment of products sold by Tortilla in the reporting year at the end of their life (this is the packaging waste from takeaway meals/deliveries).	Calculated
Category 13: Downstream leased assets	Operation of assets owned and leased to other entities in the reporting year, not included in scope 1 and scope 2	Not relevant
Category 14: Franchises	Operation of franchises in the reporting year, not included in scope 1 and scope 2	Calculated
Category 15: Investments	Operation of investments (including equity and debt investments and project finance) in the reporting year, not included in scope 1 or scope 2.	Not relevant

Exclusions

No material exclusions were made in this calculation

Table 2. Exclusions from the inventory

Exclusion	Scope	Explanation
None	N/A	N/A

The FY 2022 inventory covers all of Tortilla's operations.

3. Green House Gases

Seven major GHGs contribute to the majority of worldwide GHG emissions, are covered under the Kyoto Protocol, and must be included in GHG inventories according to the GHG Protocol. For ease of understanding in this inventory, all GHGs were calculated in terms of tCO₂e. tCO₂e is the number of tonnes of CO₂ emissions with the same global warming potential (GWP) as one tonne of another greenhouse gas. Table 3 shows the GWP of the other relevant GHGs for Tortilla's operations:

Table 3. Greenhouse gases global warming potentials

Greenhouse gas	GWP
CO ₂ (carbon dioxide)	1
CH ₄ (methane or natural gas)	28
N ₂ O (nitrous oxide)	265
HFC-134a (1,1,1,2-tetrafluoroethane)	1300

4. Base Year

As part of the journey to net-zero, companies must set a 'base year.' The selection of the base year should be done on the basis of the availability and completeness of GHG emissions data and take into account how well it represents the business

operations i.e., includes relevant subsidiaries, business model and/or production methods. The base year is chosen to act as a comparison year to track emissions over time and is used as the basis for setting and monitoring GHG reduction targets. Due to changes in companies' operations or subsidiaries, the base year can be recalculated to better reflect the company's current make-up.

Tortilla has chosen FY2022 as the base year for its GHG emissions inventory. Tortilla chose this year due to the completeness and availability of data for all emissions sources within the boundary conditions. FY2022 was chosen as it best represented Tortilla's 'normal' business operations. Tortilla will use the FY 2022 inventory as the baseline to which future years' inventories are compared. Any changes in inventory methodology, boundary conditions (operational or organisational), or facility portfolio will be tracked against the FY 2022 inventory, and re-baselining will be completed if necessary.

4.1. Recalculation Policy

The GHG inventory will be adjusted in response to the aggregate impact of any structural or methodological changes if the resulting adjustment would equate to more than 5% of base year emissions. Adjustments below this threshold are considered insignificant and will be decided case by case.

4.1.1. Adjusting for Structural Changes

Table 4 and Table 5 below list the conditions that would necessitate a recalculation of the base year, as well as changes to Tortilla's portfolio that would not require any recalculation.

Table 4. Baseline adjustment in the case of organic growth or decline

Change Condition	Baseline Adjustment Action
Organic growth under 5%: Increase in production output Changes in product mix resulting in increased emissions Significant opening of new locations or operating units	No baseline adjustment
Organic decline under 5%:	No baseline adjustment

Decrease in sales and locations output
Changes in product mix resulting in decreased emissions
Closing of facilities or operating units

Table 5. Baseline adjustment action for mergers, acquisitions & divestitures

Change Condition	Baseline Adjustment Action
In the event a location is bought during the base year	New location emissions added to base year emissions total
Acquisition of location that did not exist during the base year	No baseline adjustment.
Any divestiture from a location that existed during the base year	Subtract the divested location's emissions from overall entity base year emissions.
Divestiture of a location that did not exist during the base year	No baseline adjustment
Transfer of ownership/control of emissions sources	Transfer of operational control to Tortilla is considered the same as an acquisition. Transfer of operational control away from Tortilla (e.g. outsourcing) should be treated the same as a divestiture.

4.1.2. Adjusting for Methodological Changes and Corrections

Should improvements in quantification methodologies be made in the future, these methodologies will be applied to Tortilla's GHG inventory methodology. If these changes affect all years of Tortilla's GHG inventory, changes to all years – including the base year – will be applied. Table 6 lists methodology change conditions and the necessary baseline adjustment actions.

Table 6. Baseline adjustment actions for methodology changes

Change Condition	Baseline Adjustment Action
Changes in quantification methodologies or discovery of previous errors	Adjust baseline emissions to be consistent with new approach or to correct errors.
Changes in emissions factors	Select the most up-to-date and accurate emissions factors.

4.2. Adjustments to Base Year

When completing the annual GHG emissions inventory it will be decided if there have been any changes, outlined above, in the reporting year and if they require an adjustment to the base year. These changes are outlined in Table 7.

Table 7. Changes that could trigger a change in Tortilla's FY 2022 inventory

Change	Description of change	Reflected in the base year calculation?
N/A	N/A	N/A

5. Emissions Calculations

GHG emissions calculations have been performed in accordance with the methodologies outlined by the GHG Protocol using the emissions factors, global warming potentials, primary data sources, and estimation techniques described within this document.

5.1. Scope 1

Scope 1: Stationary Combustion (natural gas)
Source data SECR report provided for FY 2022
Calculation approach $tCO_2e \text{ Emissions [tonnes]} = \text{Total Annual Fuel Consumed [kWh or litres]} \times \text{Emission Factor}$
Source of emission factors UK Department for Business, Energy, and Industrial Strategy: https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022
Notes None

Scope 1: Fugitive emissions of refrigerant gases**Source data**

Square footage was provided for all sites

Calculation approach

$tCO_2e \text{ Emissions [tonnes]} = \text{Total Area [m}^2\text{]} \times \text{Rate of Loss [kg m}^{-2}\text{]}$

Rate of Loss = 0.0022 kg m⁻²

Refrigerant assumed to be HFC-134a

Source of emission factors

UK Department for Business, Energy and Industrial Strategy:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Rate of loss was derived from “The World Bank Group Emissions Inventory Management Plan for Internal Business Operations 2014”

<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/319541467991904684/the-world-bank-group-greenhouse-gas-emissions-inventory-management-plan-for-internal-business-operations-2014>

Notes

In future years maintenance reports for each refrigerant containing pieces of equipment should be collected to assess the actual amount and type of refrigerant added to the equipment during the maintenance period

5.2. Scope 2

Scope 2: Location-based emissions from electricity consumption

Source data

SECR report provided for FY 2022

Calculation approach

Annual Fuel Consumption [kWh] = Total Annual Fuel Consumed [kWh] × Emission Factor [UKGOV]

Source of emission factors

UK Department for Business, Energy and Industrial Strategy:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Notes

In line with the WRI and WBCSD GHG Protocol Corporate Standard, scope 2 emissions have been reported in two ways: location-based and market-based. Location-based uses grid average emissions factors to calculate the emissions, the kWh is multiplied by the region- or country-specific emissions factor. Whereas market-based reflects emissions from energy Tortilla has opted to purchase (or elected not to purchase) through a specific supplier from specific sources, i.e., guaranteed green energy contracts or installation of green energy production on-site (solar panels/wind turbines etc.)

5.3. Scope 3

Scope 3 – Category 1: Purchased Goods and Services

Source data

Direct spend (GBP) and volume (kg) data was provided broken down by goods and services for the year.

Separate datasets were provided for:

- Food (sourced through Equinixe)
- Drinks (sourced through Equinixe)
- Expense sheet items (purchased directly by Tortilla)
- Packaging and other consumables (sourced through Equinixe)

Calculation approach

Emissions inventory for spend data was conducted using Environmentally Extended Input-Out (EEIO) analysis. Emissions were estimated by multiplying spend with the corresponding, sector-specific EEIO emission factor, as follows:

$$tCO_2e \text{ Emissions [tonnes]} = \text{Total spend in 2021 [USD]} \times \text{Emission Factor [Mass/US\$]} \\ (\text{adjusted for inflation to 2021 Spend [US\$]})$$

Where volume data was available and relevant, the EcolInvent LCIA V 3.8 database was used. The Environmental Footprint (EF) LCI European Platform on LCA 2018 emission factors were used in this case:

$$tCO_2e \text{ Emissions [tonnes]} = \text{Total volume [Kg]} \times \text{Emission Factor [EF LCA 2018]}$$

In cases where the relevant emissions factor was not available on the databases listed above, other sources were used, these are listed below.

Source of emission factors

EEIO factors:

US EPA Supply Chain Greenhouse Gas Emission Factors for US Industries and Commodities <https://catalog.data.gov/dataset/supply-chain-greenhouse-gas-emission-factors-for-us-industries-and-commodities>

LCA factors:

EcolInvent LCIA 3.8 (LCA database)

Inflation data:

CPI Inflation Calculator https://www.bls.gov/data/inflation_calculator.htm

Notes

EEIO analysis uses spend data to estimate the emissions associated with purchased goods and services by multiplying the amount spent on different types of goods and services by publicly available emission factors for different industrial activities (kg CO₂e/\$ spent). These emission factors are derived by allocating national GHG emissions to groups of finished products based on economic flows between industry sectors.

Since spend based analysis utilises industry averages and associated emissions which are linked to the carbon calculations, for set volumes (masses) for food which Tortilla purchases, we've calculated using a more accurate system.

Since the spend based data is within the services which support the management of Tortilla, the natural next steps would be to start supplier surveys in order to best help Tortilla to reduce emissions within this category and improve data accuracy.

Scope 3 – Category 2: Capital Goods**Source data**

Direct spend (GBP) capex additions data was provided

Calculation approach

Emissions inventory for spend data was conducted using Environmentally Extended Input-Out (EEIO) analysis. Emissions were estimated by multiplying spend with the corresponding, sector-specific EEIO emission factor, as follows:

$$tCO_2e \text{ Emissions [tonnes]} = \text{Total spend in 2021 [USD]} \times \text{Emission Factor [Mass/US\$]} \\ (\text{adjusted for inflation to 2021 Spend [US\$]})$$

Source of emission factors**EEIO factors:**

US EPA Supply Chain Greenhouse Gas Emission Factors for US Industries and Commodities <https://catalog.data.gov/dataset/supply-chain-greenhouse-gas-emission-factors-for-us-industries-and-commodities>

Inflation data:

CPI Inflation Calculator https://www.bls.gov/data/inflation_calculator.htm

Notes

EEIO analysis uses spend data to estimate the emissions associated with purchased goods and services by multiplying the amount spent on different types of goods and services by publicly available emission factors for different industrial activities (kg CO₂e/\$ spent). These emission factors are derived by allocating national GHG emissions to groups of finished products based on economic flows between industry sectors.

In the future, by utilising the relationships with suppliers, Tortilla can demonstrate to all internal and external stakeholders improved methodologies for carbon accounting. As suggested in the previous category, this would start with carrying out supplier surveys to gather more granular data.

Scope 3 – Category 3: Fuel and Energy-Related Activities (not included in Scope 1 and 2)**Source data**

The following data was provided:

- SECR report
- Business travel distance travelled / spend by transport type (Car / Air / Rail) [km or miles]
- Employee days worked over year

Calculation approach

The calculations accounted for several upstream sources connected to Tortilla's use of energy:

Travel:

WTT emissions for Business Travel and Employee Commuting (same formula):

tCO_{2e} Emissions [tonnes] = Total distance travelled [km or miles] × specific transport type Emissions Factor

Electricity use:

WTT Electricity Generation emissions, representing the upstream emissions associated with consumed electricity:

tCO_{2e} Emissions [tonnes] = Total Electricity Consumed [kWh] × WTT Generation Emission Factor

Electricity T&D (Transmission & Distribution) Loss emissions, representing the generation emissions associated with energy lost due to T&D:

tCO_{2e} Emissions [tonnes] = Total Electricity Consumed, by country [kWh] × T&D Emissions Factor

Electricity WTT T&D Loss emissions, representing the WTT emissions associated with T&D losses:

tCO_{2e} Emissions [tonnes] = Total Electricity Consumed [kWh] × Country-specific T&D WTT Emission Factor

Source of emission factors

UK Department for Business, Energy and Industrial Strategy:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Notes

None

Scope 3 – Category 4: Upstream Transportation and Distribution**Source data**

Food and beverage quantities were provided with the origin of most products stipulated

Calculation approach

For goods provided, the emissions related to their transport was calculated by initially running a series of calculations; some assumptions were necessary:

- Weights were calculated based on research on the average weight of food and beverage items
- It was assumed all food was being shipped from Fresh Food depot in Oxfordshire, Bicester
- Items were separated into three regions – south east, south west and north. A potential haulage route was calculated for each
- The assumption was made that goods were being freighted once per week, 52 times a year
- Distance was calculated based on coordinates and a straight line between them. Total distance for each region was taken, with 15% added on top to account for trip length versus as the crow flies
- A split of each region was based on number of restaurants
- For food originating outside the UK, it was assumed the country capital as the starting location
- Food equally split into ambient / chilled / frozen

Emissions were calculated by taking the average distance travelled by different transport types:

tCO_{2e} Emissions [tonnes] = purchased goods weight [tonnes] × distance travelled [km in year] × transport type emission factor [tonne.km]

Source of emission factors

UK Department for Business, Energy and Industrial Strategy:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Notes

Upstream Transport and Distribution was only calculated for food and beverage products (which make up a large percentage of Tortilla's goods purchased).

To improve accuracy in future year calculations, the following data should be measured:

- Origin and delivery destination for all food and beverage products
- Number of deliveries made per route per year
- Total weight of each food item transported
- Accurate temperature transportation type (i.e. ambient / chilled / frozen)
- Make and model of the lorries used alongside the fuel used for transporting these goods

Scope 3 – Category 5: Waste Generated in Operations**Source data**

Waste volume generated at all sites [kg] and disposal streams [recycled, landfill, incineration etc] were provided for all sites managed by Biffa for April – December 2022
 First mile reports for head office and Wimbledon sites were provided
 2022 annual revenues for all restaurants was provided

Calculation approach

Initial calculations and assumptions made:

- Using Biffa data, 12-month volumes were extrapolated
- A kg/£ ratio was calculated using the Biffa waste report data and the total revenues for those restaurants
- For restaurants where no waste data was provided, an estimated total annual volume of waste (in kgs) was determined
- UK national waste disposal statistics were used to determine estimates of disposal methods including landfill, incineration, recycled and other

Carbon emissions calculations were made using the formula below:

tCO_{2e} Emissions [tonnes] = Total Waste Produced, by waste type [kg] × specific waste disposal method and waste type Emission Factor

Source of emission factors

UK Department for Business, Energy and Industry Strategy:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Notes

None

Scope 3 – Category 6: Business Travel**Source data**

- Reimbursed spend for car mileage reclaim
- Car mileage provided [miles / km]
- Spend for journeys by transport type (i.e. flight, bus, train, tube, taxi)
- For some journeys, origin and destination were provided

Calculation approach

For spend data calculations, distance was calculated using an average cost per mile multiplier.

For journeys where origin and destination were provided, the distance was measured and used to calculate the associated emissions.

Once total distance per vehicle type had been calculated / estimated, the following formula was used to calculate emissions:

$\text{tCO}_2\text{e Emissions [tonnes]} = \text{total distance travelled [km]} \times \text{transport type emissions factor}^*$

Source of emission factors

UK Department for Business, Energy and Industrial Strategy:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Average train journey distance:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/663116/rail-factsheet-2017.pdf

Average flight distance:

https://en.wikipedia.org/wiki/Flight_length

Notes

For air travel, it has been assumed that all flights were short-haul for calculating distance and applying the correct emission factor.

In the future, more granular data on all flights and train origin and destination, and the class of travel (business, economy etc) should be collected for better GHG emissions calculation

Scope 3 – Category 7: Employee Commuting**Source data**

A list of shift working patterns was provided for each day of the week for each restaurant venue. This was used to derive the commuting behaviours for all employees.

Calculation approach

Employee commuting GHG emissions were estimated:

Average commuting transport type for the UK [car*, cycle**, bus, rail, walk**] and the average distance for each commute type used to calculate transport distances per day:

Distance travelled per day [km or miles] per transport type = number of journeys to sites made by all employees in the year × % transport type × average distance of commute for that transport type [km or miles]

Emissions were then calculated by applying the appropriate Emissions Factor:

tCO_{2e} Emissions [tonnes] = Total distance travelled [km or miles] × Mode-specific Emission Factor

* Broken down further into fuel types petrol, diesel, hybrid, electric – national average commuting statistics used

**Have no emissions associated with these transport types

Source of emission factors

UK Department for Business, Energy and Industrial Strategy:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Average commuting transport type:

<https://www.gov.uk/government/collections/transport-statistics-great-britain>

Average commuting transport distance:

<https://www.gov.uk/government/statistical-data-sets/nts03-modal-comparisons>

Car fuel type:

<https://www.rac.co.uk/drive/electric-cars/choosing/road-to-electric/>

<https://www.racfoundation.org/motoring-faqs/environment#a8>

Notes

In future years commuting surveys should be used to acquire more accurate data for transport types specific to Tortilla's employees

Scope 3 – Category 7: Working from Home**Source data**

For employees who can work from home, Tortilla provided a working from home policy, this included the types of working from home patterns observed in a typical working week.

Calculation approach

To calculate the energy consumption required for employees to work from home (heating and electricity for office equipment) the number of working from home days was calculated:

Total Number of Days Working from Home = Number of Employees Working from Home × 260 (average UK person working days per year)

To Calculate Emissions:

tCO_{2e} Emissions Energy Consumption [tonnes] = Total Number of Days Working from Home × Emissions Factor

To calculate the emissions from waste produced from working from home UK average household waste per person numbers were used and it was assumed that 1/3 of this waste was a result of working from home this was then split into recycled and landfill using average household recycling patterns then calculated the same as for waste.

To calculate water usage as a result of working from home. The average number of times people use the toilet in a day was multiplied by the average cistern volume divided by two assuming this would be use during working hours then multiplied by the number of employees working from home:

Total Water Use Toilets [litres] = Total Number of Days Working from Home × Average Cistern Volume [Litres] × Average Number of Toilet Uses Per Day × 0.5

It was also assumed that people drink 1 litre of water while at work

Total Water Use Drinking [litres] = Total Number of Days Working from Home × Average Amount of Water Drunk at Work [litres]

Source of emission factors

UK Department for Business, Energy, and Industrial Strategy:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Notes

Waste Data:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1040756/Statistics_on_waste_managed_by_local_authorities_in_England_in_2020_v2rev_accessible.pdf

<https://www.statista.com/statistics/322535/total-household-waste-volumes-in-england-uk-per-person/>

Water Data:

<https://www.waterwise.org.uk/save-water/>

<https://www.bladderandbowel.org/bladder/bladder-conditions-and-symptoms/frequency/>

<https://www.nhs.uk/live-well/eat-well/food-guidelines-and-food-labels/the-eatwell-guide/>

Scope 3 – Category 9: Downstream Transportation

Source data

Total number of deliveries, delivery radius, percentage breakdown of vehicle type (although no breakdown of fuel type for cars) for deliveries, and average weight order provided

Calculation approach

50% of maximum delivery distance used as a reasonable distance average for all deliveries.

To calculate the total journey distance per vehicle type, the average distance was multiplied by the number of journeys made per vehicle type:

Total distance [km] = number of trips by transport type × average journey length for transport type [km]

To calculate the emissions for each delivery type:

tCO_{2e} Emissions [tonnes] = total distance travelled [km] × transport type emissions factor

Source of emission factors

UK Department for Business, Energy, and Industrial Strategy:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Notes

In future years Tortilla should track the distances travelled by their delivery drivers and the fuel consumed.

Scope 3 – Category 12: End of life treatment sold products**Source data**

Total delivery orders for Deliveroo and UberEats, average order composition (1 x burritos and 1 x bowl) and packaging of average order composition items provided

Calculation approach

It was assumed that a similar number of takeaway orders were made directly at restaurants as they were through delivery partners.

Total volume of packaging was calculated by multiplying the packaging used for an average order and the total number of deliveries made over the year. It was assumed that one kraft bag was used per delivery.

To calculate the volume (kg) for total packing, publicly available information on weight of materials was sourced.

UK average waste disposal methods used to calculate estimated waste stream quantities

To calculate the emissions:

tCO₂e Emissions [tonnes] = Total Waste Produced, by waste type [kg] × specific waste disposal method and waste type Emission Factor

Source of emission factors

UK Department for Business, Energy, and Industrial Strategy:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Notes

In the future, the following should be tracked to provide more accurate data:

- Volume of specific packaging distributed via all takeaways, including through both Tortilla delivery partners and directly at restaurants
- Run a survey to gather more accurate data on customer disposal methods of takeaway packaging and using this to influence the recyclability of our packaging and positively change disposal behaviours

Scope 3 – Category 14: Franchises**Source data**

Total annual electricity or site square meterage provided for all franchise restaurants

Calculation approach

Where square meterage was provided, electricity use was estimated using national average electricity intensity factors

Scope 1 and 2 emissions calculated for each franchise restaurant as below:

tCO₂e Emissions [tonnes] = Total Annual Fuel Consumed [kWh] × Emission Factor [UKGOV]

Source of emission factors

UK Department for Business, Energy, and Industrial Strategy:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Notes

In future years Tortilla will aim to collect electricity and gas consumption data using a survey with our franchises