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# GREENHOUSE GAS ACCOUNTING TOOL & SCOPE 3

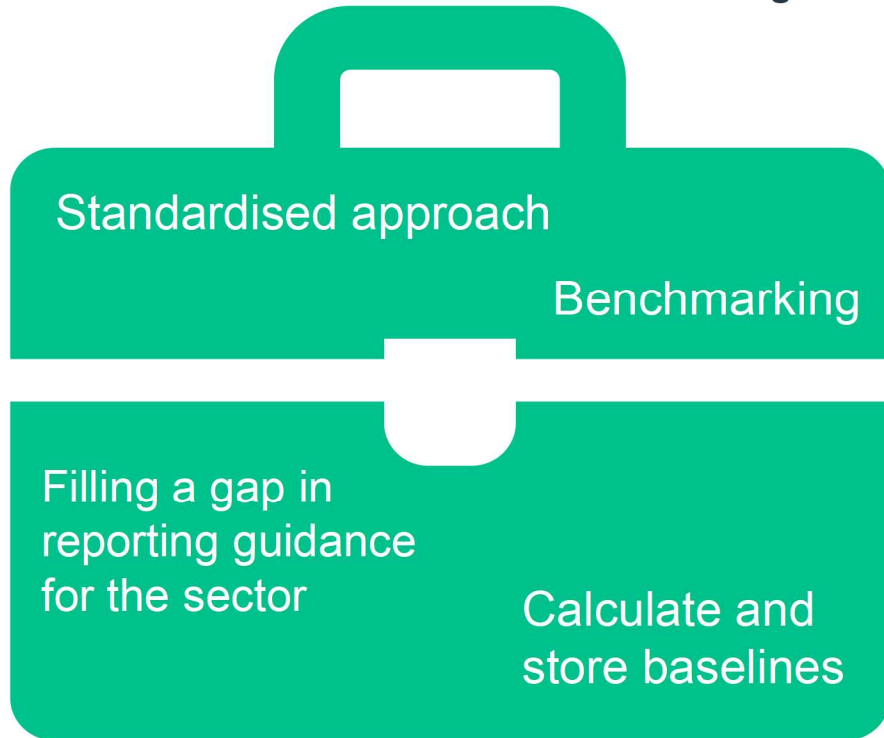
Rachel Toresen-Owuor, Senior Director, Local Partnerships

23/05/2024



# THE GREENHOUSE GAS ACCOUNTING TOOL

Well established for Local Authorities in England



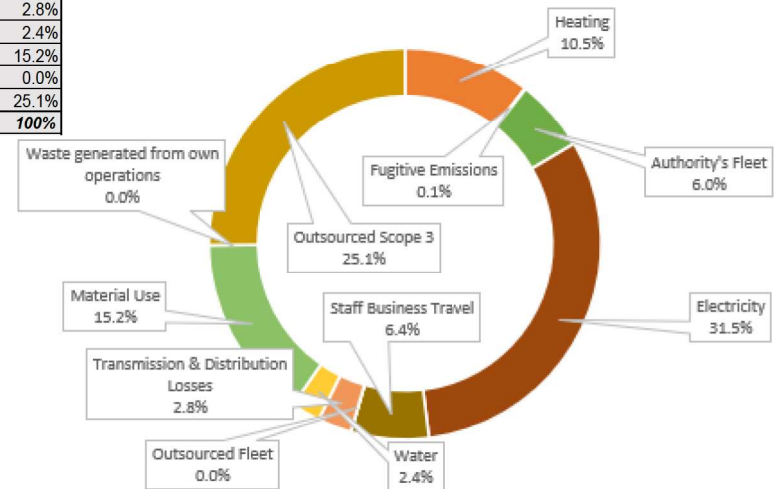
Department for  
Energy Security  
& Net Zero



# HOW THE GREENHOUSE GAS ACCOUNTING TOOL CAN HELP

## Summary

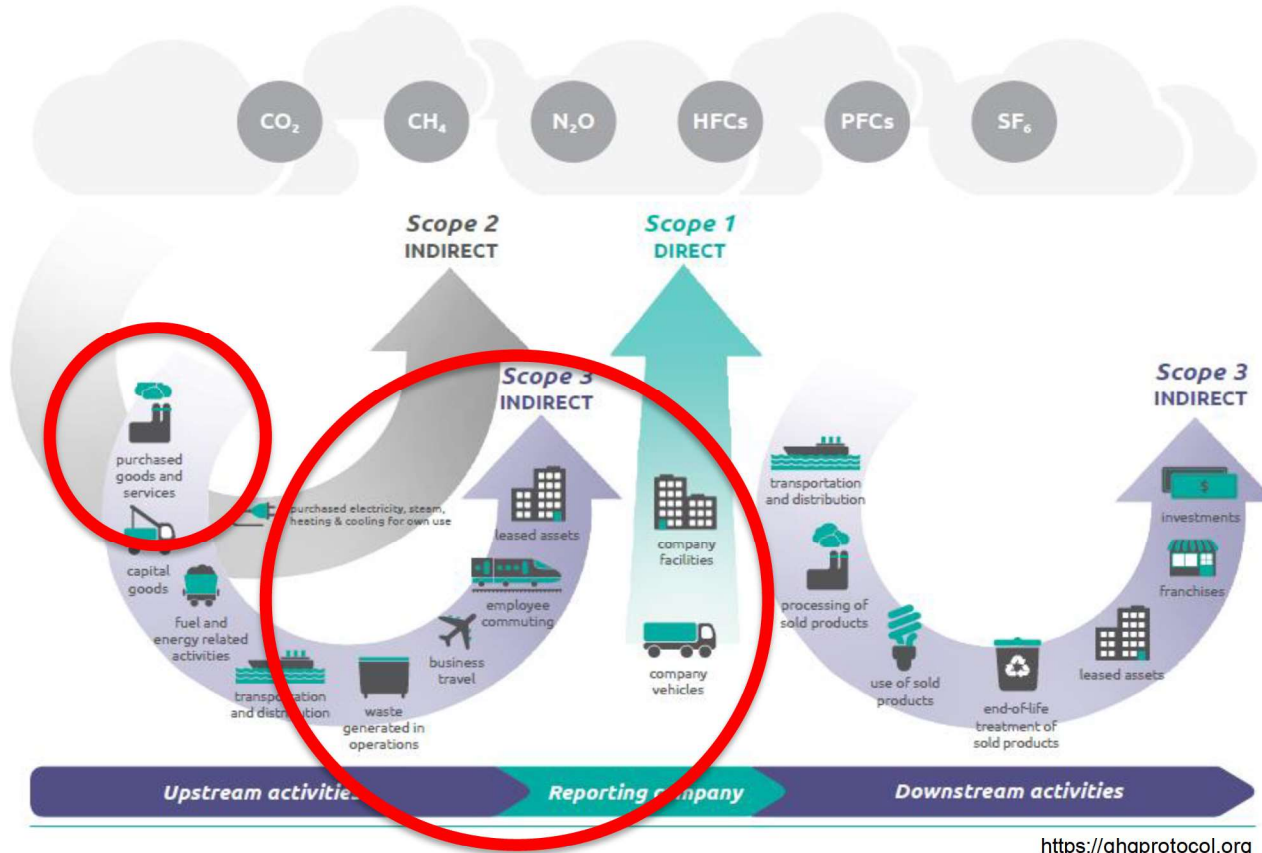
Scope	Emissions Type	Emissions (tCO <sub>2</sub> e)	Percentage of Total Emissions
Scope 1	Heating	917.94	10.5%
	Fugitive Emissions	6.75	0.1%
	Authority's Fleet	524.69	6.0%
Scope 2	Electricity	2,760.29	31.5%
Scope 3	Staff Business Travel	560.02	6.4%
	Outsourced Fleet	2.37	0.0%
	Transmission & Distribution Losses	244.99	2.8%
	Water	210.50	2.4%
	Material Use	1,335.21	15.2%
	Waste generated from own operations	0.00	0.0%
	Outsourced Scope 3	2,198.46	25.1%
<b>Total Emissions</b>		<b>8,761.22</b>	<b>100%</b>



- Heating
- Fugitive Emissions
- Authority's Fleet
- Electricity
- Staff Business Travel
- Outsourced Fleet
- Transmission & Distribution Losses
- Water
- Material Use
- Waste generated from own operations
- Outsourced Scope 3



# THE GREENHOUSE GAS PROTOCOL



<https://ghgprotocol.org>



## WHAT TYPE OF INFORMATION IS REQUIRED?

Activity	Consumption Units (Please Select)	Year	Consumption	Conversion Factor	Emissions (tCO <sub>2</sub> e)
Natural Gas	kWh (Gross CV)	2019-20	10,000	0.184	1.84
Burning Oil - Kerosene	kWh (Gross CV)	2019-20		0.247	Enter Consumption Figure
Gas Oil	kWh (Gross CV)	2019-20		0.257	Enter Consumption Figure
Wood Pellets	kWh (Gross CV)	2019-20		0.016	Enter Consumption Figure

Activity	Consumption Units	Year	Consumption	Conversion Factor	Emissions (tCO <sub>2</sub> e)
Building Use	kWh	2019-20		0.256	Enter Consumption Figure
Streetlighting	kWh	2019-20		0.256	Enter Consumption Figure

Activity	Consumption Units	Year	Consumption	Conversion Factor	Emissions (tCO <sub>2</sub> e)
Water Supply	Cubic Meter	2019-20		0.344	Enter Consumption Figure
Water Treatment	Cubic Meter	2019-20		0.708	Enter Consumption Figure

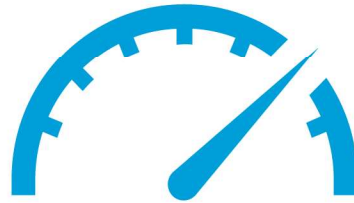
Activity* Engine sizes below are for indicative purposes only	Consumption Units (Please Select)	Year	Consumption	Conversion Factor	Emissions (tCO <sub>2</sub> e)
Small diesel car ≤ 1.7 litre	Litres	2019-20		2.594	Enter Consumption Figure
Medium diesel car, 1.7 - 2.0 litre	Mi	2019-20		0.275	Enter Consumption Figure
Large Diesel Car > 2.0 litre	Mi	2019-20		0.337	Enter Consumption Figure
MPV - Diesel	Mi	2019-20		0.291	Enter Consumption Figure
Diesel van Class I (up to 1.305 tonnes)	Mi	2019-20		0.241	Enter Consumption Figure
Diesel van Class II (1.305 to 1.74 tonnes)	Mi	2019-20		0.313	Enter Consumption Figure
Diesel van Class III (1.74 to 3.5 tonnes)	Mi	2019-20		0.447	Enter Consumption Figure



## WHERE DO I FIND THE INFORMATION FOR THE TOOL?



Utility invoices for gas, electricity etc.



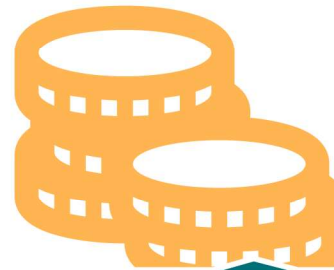
Data from smart meters / HH consumption data



Fuel purchase cards



Route mapping calculations for mileage



Travel expense claims



## Ongoing updates to the toolkit

- User feedback has been forthcoming and welcomed – please continue to engage
- Frequently Asked Questions updated
- Scope 3 Guidance published
- Additional update forthcoming in July when the next set of Department for Energy Security and Net Zero emissions factors are published
- Power BI – tab that can be used to import data into Power BI for your own dashboard development







## Scope 3 reporting categories for local authorities

Toolkit captures top level data, guidance within document for data collection and calculations



### Procured Goods, Material Use and Waste from Own Operations

- The toolkit uses volumes, as per the DESNZ dataset not a spend based conversion



### Homeworking

- DESNZ factor – enter the total number of FTE hours for home workers
- Uses benchmarks for calculation average home working emissions



### Employee Commuting

- Use travel survey data
- Likely to be estimated data – includes public transport



### Outsourced Services – NEW! CONTRACT LEVEL REPORTING

- Waste, Highways, Social Care, Leisure, Facilities Management
- Commissioning cycles





## Scope 3 reporting categories for local authorities

Toolkit captures top level data, guidance within document for data collection and calculations



### Staff Business Travel / Grey Fleet

- Mileage/fuel use for staff business travel including public transport



### Water use

- Volumes



### Transmission and Distribution Losses

- Auto calculated from Scope 2 reporting



### Outsourced Services – NEW! CONTRACT LEVEL REPORTING

- Waste, Highways, Social Care, Leisure, Facilities Management



## WHY REPORT ON SCOPE 3 ACTIVITY?

### Identification of emissions hot spots



Identify and understand risks and opportunities associated with supply chain emissions



Identify Greenhouse Gas reduction opportunities, set contract level reduction targets, and track performance



Engage supply chain partners in Greenhouse Gas management



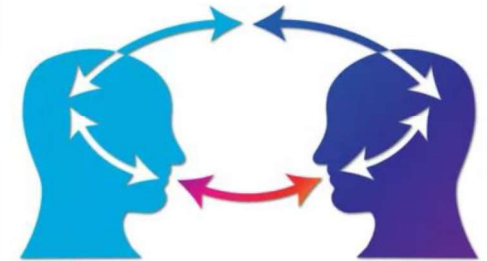
Enhance the authority's reputation through public reporting and the influencing role in the local supply chain, particularly for Small and Medium Enterprise (SME) sector



## SCOPE 3 BOUNDARY SETTING – CONTRACTS



Criteria
Size
Influence
Risk
Stakeholders
Outsourcing – commissioning cycle
Sector guidance



## Overview of toolkit tabs - demo



The Greenhouse Gas Accounting Tool has been developed by Local Partnerships, working with the LGA, to provide a straightforward and consistent approach for councils seeking to calculate their own carbon baseline. While currently local authority reporting on emissions is voluntary, consistent and easy calculation of an annual carbon baseline is an important part of managing the carbon in our organisations.

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# THE WASTE EMISSIONS CALCULATOR

Huw Russell, Director, Local Partnerships

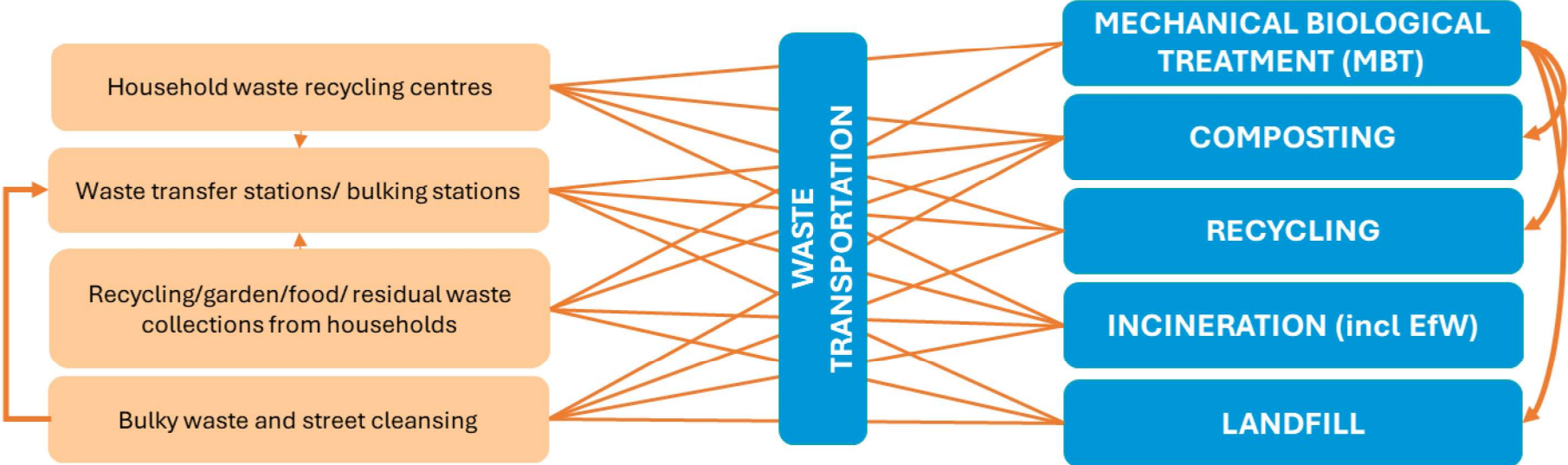
23/05/2024



# LGA NET ZERO INNOVATION PROGRAMME (past programme)



# Each tab corresponds to a specific method of waste treatment



# Summary tab

230110 Waste Emissions Calculator - Saved

Overall Results

(please insert the reporting year) 2023

Total amount of waste treated (tonnes/yr) (please insert the total) 30,000

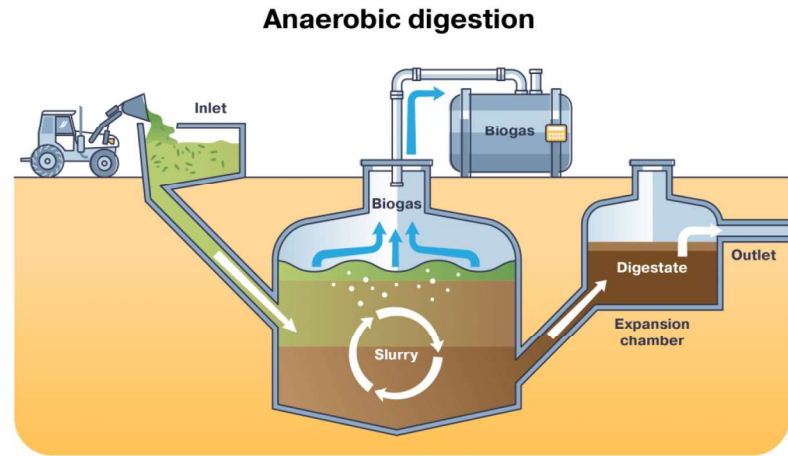
GHG emissions			
Waste management stage	GHG emissions not including biogenic CO <sub>2</sub> emissions	Biogenic CO <sub>2</sub> emissions, outside of scopes	Units
Transportation	10.00	50.00	tCO <sub>2</sub> e/yr
MBT	60.00	30.00	tCO <sub>2</sub> e/yr
Landfill	45.00	10.00	tCO <sub>2</sub> e/yr
Composting	115.06	15.00	tCO <sub>2</sub> e/yr
Recycling	8.00	20.00	tCO <sub>2</sub> e/yr
Incineration	25.00	50.00	tCO <sub>2</sub> e/yr
<b>Total</b>	<b>263.06</b>	<b>175.00</b>	<b>tCO<sub>2</sub>e/yr</b>
<b>Overall waste management GHG intensity</b>	<b>500.00</b>	<b>400.00</b>	<b>tCO<sub>2</sub>e/t waste treated</b>

CONTRIBUTION OF WASTE MANAGEMENT STAGES TO TOTAL WASTE MANAGEMENT GHG EMISSIONS

Stage	Contribution (%)
1	4%
2	23%
3	17%
4	44%
5	-
6	9%

Summary | Transportation | MBT | Composting | Recycling | Incineration | Landfill | Landfill (FOD) | UK electricity | Heat and steam | Fuels | WTT-fuels | WTT-pass w

# ANAEROBIC DIGESTION



# Carbon emissions factors – June/July 2024



Department for  
Energy Security  
& Net Zero

# Updated version – June/July 2024

**CLIMATE**

## SIMPLER RECYCLING - ENGLAND

GOVERNMENT RESPONSE TO COLLECTIONS CONSISTENCY CONSULTATION

**Dry recyclables:**  
 • Glass • Plastic  
 • Metal • Paper and card

**Organics:**  
 • Food waste  
 • Garden waste

**FUNDING?**  
 • EPR payments for packaging  
 • New burdens funding

**LOCAL AUTHORITIES WILL COLLECT A SPECIFIC SET OF MATERIALS**

**METHODS AND FREQUENCY OF COLLECTION**

For dry recyclables, local authorities can decide how to collect materials with flexibility in separation and container choice.

**Residual waste** needs to be collected at least fortnightly, with no specific container

**Food waste** must be collected weekly

**Garden waste** collection on request which can be charged.

**TIMELINE FOR IMPLEMENTATION**

**NON-HOUSEHOLD**  
 Dry recyclables & food waste by 31 March 2025.  
 Plastic film by 31 March 2027

**HOUSEHOLD**  
 Dry recyclables, garden & food\* waste by 31 March 2026  
 Plastic film by 31 March 2027  
\*subject to transition arrangements

Local Partnerships can help your local authority to **maximise use and minimise waste** and drive up recycling rates

The UK government has announced plans for **simpler recycling** in England.

Implications for local authorities and the next steps are on [localpartnerships.gov.uk/recycling](https://localpartnerships.gov.uk/recycling)

Support for simpler recycling is available from Local Partnerships.

Local Partnerships' client survey 2022/2023 demonstrates the continued **high regard** our clients have for the quality of our work.

For the 6th year running **100% RECOMMENDED**

**LOCALPARTNERSHIPS.GOV.UK**

<https://localpartnerships.gov.uk/resources/waste-emissions-calculator/>



# Overview of toolkit tabs - demo

Waste Emissions Calculator - Local x +

localpartnerships.gov.uk/resources/waste-emissions-calculator/

News Work Ecosia Google Maps LinkedIn NUF.com Outlook UK bank holidays Fantrax Fantasy Premier League Chat GPT Facebook

Resource Hub

Home / Resource Hub / Climate / Waste Emissions Calculator

## Waste Emissions Calculator

The Waste Emissions Calculator has primarily been designed with carbon footprinting in mind and covers a range of waste treatment processes. Data can be inputted retrospectively to produce a carbon footprint for any given period in the past. It is up to individual LAs to define their carbon reporting boundaries – and input only the data that fall within that boundary.

Waste Emissions Calculator that has been developed by Cambridgeshire County Council and UCL. This has been developed through the Net Zero Innovation Programme, which is a collaboration between the LGA and UCL.

Download Resources Partners Resource Collaborators

18:24 22/05/2024



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# QUESTIONS AND DISCUSSION

Cllr Andrew Cooper, Group Leader – Green Group, Kirklees Council

23/05/2024



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