



Tonbridge and Malling Borough Council
Base Year Carbon Audit:
2019/2020

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1. Summary

This carbon audit for the 2019/2020 fiscal year represents Tonbridge and Malling Borough Councils (TMBC) base year, by which all future audits will be compared against. This base year was originally calculated by L.A.S.E.R. in 2020, however, has since been recalculated to include further emissions sources and to account for methodological changes.

Carbon audits prepared by TMBC are developed in accordance with the Greenhouse Gas Protocol 'Corporate Accounting and Reporting Standard and the 'Environmental Reporting Guidelines' developed by the Department of Business, Energy, and Industrial Strategy (BEIS). All emissions are calculated using official greenhouse gas conversion factors, set by BEIS.

In 2019/2020 TMBC emitted 3,379 tonnes of carbon dioxide equivalent¹ (tCO₂e).

2. Scope emissions

The following section provides an overview of TMBC's emissions scopes:

Scope 1: Gas consumption, oil consumption, TMBC vehicle fleet.

Scope 2: Electricity consumption.

Scope 3: Transmission and distribution losses, water supply, water treatment, TMBC business travel, TMBC commuting, contractor travel (refuse), leisure centres, grounds maintenance.

Carbon offsets: Renewable electricity tariff.

3. Emissions overview

<i>TMBC Emissions (tCO₂e)</i>	
Emissions Year	2019/2020
Scope 1	139.0
Scope 2	198.0
Scope 3	3,042.4
Total Gross Emissions	3,379.4
Carbon Offsets	0.0
Total Net Emissions	3,379.4

¹ Carbon Dioxide Equivalent (CO₂e) = Carbon Dioxide, Methane and Nitrous Oxide represented as one equivalent unit, to measure the climate change impact of multiple gasses under one metric.

4. Emissions breakdown

<i>Emissions Sources</i>	<i>Consumption</i>		<i>Emissions Data</i>
Scope 1	Activity Data	Unit	t CO₂e
Gas Consumption	668121.0	<i>kWh</i>	122.8
LPG Consumption	0.0	<i>tonnes</i>	0.0
Oil Consumption	0.0	<i>litres</i>	0.0
Council Vehicle Fleet	-	-	-
Diesel Vehicle	6228.0	<i>litres</i>	16.2
Petrol Vehicle	0.0	<i>litres</i>	0.0
Gas Oil	0.0	<i>litres</i>	0.0
Total Scope 1	-	-	139.0

Scope 2	Activity Data	Unit	t CO₂e
Electricity Consumption	774715.0	<i>kWh</i>	198.0
Total Scope 2	-	-	198.0

Scope 3	Activity Data	Unit	t CO₂e
Transmission & Distribution Losses	774715.0	<i>kWh</i>	16.8
Water Supply	2478.0	<i>m³</i>	0.9
Water Treatment	2354.1	<i>m³</i>	1.7
Business Travel	-	-	-
Car	141050.0	<i>miles</i>	40.20
Bus	0.0	<i>passenger km</i>	0.0
Taxi	0.0	<i>passenger km</i>	0.0
Rail	0.0	<i>passenger km</i>	0.0
Ferry	0.0	<i>passenger km</i>	0.0
Plane	0.0	<i>passenger km</i>	0.0
Commuting	-	-	-
Diesel Commuter Miles	575246.8	<i>miles</i>	160.5
Petrol Commuter Miles	1632985.9	<i>miles</i>	475.2
Hybrid Car	8016.0	<i>miles</i>	0.9
Electric Car	26035.2	<i>miles</i>	0.0
Motorbike	0.0	<i>miles</i>	0.0
Train	3216.0	<i>passenger km</i>	0.1
Contractor Travel	-	-	-
Refuse Collection Vehicles	198258.6	<i>litres</i>	514.3
Leisure Centres	-	-	-
Electricity	3,108,245.4	<i>kWh</i>	794.5
Gas	4,899,792.3	<i>kWh</i>	900.8
Kerosene	14,192.0	<i>litres</i>	36.1
Diesel	7,514.0	<i>litres</i>	19.5
Water Supply	48,765.0	<i>m³</i>	16.8
Water Treatment	46,326.8	<i>m³</i>	32.8
Grey Fleet - Average Car / Unknown Fuel	15,855.0	<i>miles</i>	4.5

Waste DMR	2.8	tonnes	0.1
Waste Municipal	5.3	tonnes	0.1
Grounds Maintenance	-	-	-
Electricity	21,795.0	kWh	5.6
Diesel	4,043.1	litres	10.5
Petrol	1,274.1	litres	2.8
Gas Oil	1,200.0	litres	3.3
Water Supply	4,043.1	m ³	1.4
Water Treatment	3,840.9	m ³	2.7
Waste Composting / Anaerobic Digestion	34.9	tonnes	0.4
Municipal Waste / Combustion	0.0	tonnes	0.0
Total Scope 3	-	-	3,042.4

TMBC Gross Emissions Total	-	-	3,379.4
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Carbon Offsets / Renewable Tariffs	Activity Data	Unit	t CO₂e
Renewable Electricity Tariff	0.0	kWh	0.0
Total	-	-	-

TMBC Net Emissions Total	-	-	3,379.4
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5. Company Information

The Tonbridge and Malling Borough Council is a local authority located in Kent, within the Southeast of England.

6. Reporting period

This reporting period is from 01/04/2019 to 31/03/2020.

7. Emissions overview

7.1. Scope 1

Scope 1 emissions totalled at 139.0 tCO₂e in 2019/2020.

Gas consumption contributed the most, emitting 122.8 tCO₂e. The TMBC vehicle fleet emitted 16.2 tCO₂e.

Scope 1 was the smallest contributor to TMBC emissions, contributing just 4% to TMBCs total gross emissions for 2019/2020.

7.2. Scope 2

Scope 2 emissions totalled at 198.0 tCO₂e in 2019/2020.

Scope 2 contributed only 6% of TMBCs total gross emissions, making it only a slightly larger contributor than scope 1 emissions. However, these emissions only come from one source: electricity.

7.3. Scope 3

Scope 3 emissions totalled at 3,042.4 tCO₂e in 2019/2020.

Leisure centres contributed over half of scope 3 emissions, emitting 1,805.1 tCO₂e, or 59% of total scope 3 emissions. Commuting by car and refuse collection vehicles contributed 636.7 tCO₂e and 514.3 tCO₂e, respectively. Together, these three sources (Leisure centres, commuting by car, and refuse collection vehicles) accounted for 97% of scope 3 emissions.

Business travel was the fourth highest emitted from scope 3, emitting 40.2 tCO₂e, followed by grounds maintenance, emitting 26.7 tCO₂e and, transmission and distribution losses which emitted 16.8 tCO₂e. Finally, water treatment and water supply emitted 1.7 tCO₂e and 0.9 tCO₂e, respectively.

Scope 3 was the largest contributor to TMBC gross emissions, accounting for 90% of total emissions in 2019/2020.

8. Measuring and reporting

Reporting on TMBC emissions will take place annually, following the greenhouse gas protocol and BEIS reporting guidelines.

This carbon audit will be reported to management team, and consequently taken through any relevant scrutiny process.

9. Scope Explanation

Scope	Activity	Description	Data Source
Scope 1	Gas Consumption	Used to heat our buildings.	Data obtained from council utility bills.
Scope 1	Oil Consumption	Used to heat our buildings.	Data obtained from council utility bills.
Scope 1	Vehicle Fleet	The council's vehicle fleet.	Data obtained from council fuel invoices.
Scope 2	Purchased electricity	Electricity purchased from the national grid to power the council's buildings.	Data obtained from council utility bills.
Scope 3	Transmission and Distribution Losses	Indirect emissions from the transmission and distribution of our purchased electricity.	Data obtained from council utility bills.
Scope 3	Water Supply	The supply of water to our buildings.	Data obtained from council utility bills.
Scope 3	Water Treatment	The water we return to the system (90% return to sewer rate).	Data obtained from council utility bills.
Scope 3	Business Travel	Staff and member travel in their own vehicles on business grounds.	Obtained using employee mileage claims.
Scope 3	Commuting	Staff travel to and from work premises.	Obtained using staff surveys.
Scope 3	Contractor Travel	Travel by contractors to conduct work commissioned by the council, e.g., waste collection.	Obtained through contractor fuel records.
Scope 3	Leisure Centres	Emissions from leisure centre use of electricity, gas, fuel, water, vehicles, and disposal of waste.	Data obtained from council bills, and mileage claims.
Scope 3	Grounds Maintenance	Emissions from Grounds Maintenance use of electricity, gas, fuel, water, vehicles, and disposal of waste.	Data obtained from council bills, and mileage claims.

10. Organisational boundary

Our organisation boundary is (as defined by BEIS) activities in which the organisation has financial and operational control. Therefore, the boundary covers everything that TMBC has the above control over. This follows previous guidance from the previous National Indicator 185:

"The indicator is to include all CO₂ emissions from the delivery of local authority functions. In terms of the meaning of the word in legislation "function" covers both the duties and powers of an authority. It covers all an authority's own operations and outsourced services" (DEFRA, 2008, p.3).

11. Geographical breakdown

All TMBC activities are contained to within Tonbridge and Malling District, except for some staff and member business travel and commuting activities.

12. Base year

TMBCs base year is: 01/04/2019 to 31/03/2020.

13. Base year recalculation policy

This base year will be recalculated following any significant structural or methodological changes. If lack of data prevents the base year from being recalculated, then the following year will be recalculated instead.

As of September 2022, the base year has already been recalculated to include commuting emissions data. As of January 2023, the base year for Leisure Centres was recalculated following a data quality assurance exercise.

14. Emissions target

TMBC has a 2030 net-zero emissions target.

15. Intensity measurement

No intensity measurement has been conducted.

16. External assurance statement

No external assurance has been conducted. However, the initial base year calculation was produced externally and then recalculated internally.

17. Carbon offsetting

No carbon offsetting has been conducted for 2019/2020.

18. Renewable / green tariffs

TMBC was not on a renewable tariff for 2019/2020.

19. Background documents

- Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard.
- HM Government: Environmental Reporting Guidelines.

20. References

- Department for Business Energy and Industrial Strategy (BEIS), 2019. *UK Government GHG Conversion Factors for Company Reporting*. Available at: <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2019>. Last accessed 06/09/2022.
- Department for Environment, Food and Rural Affairs (DEFRA), 2008. *Guidance to local authorities and Government Offices on National Indicator 185*. London, UK: DEFRA. pp. 3.

21. Annex 1: Detailed emissions statement

Please see page 9 and 10 for our complete emissions statement. This details the following gasses, in addition to carbon dioxide equivalent (CO₂e): carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O).

TMBC Detailed Emission Statement 2019/2020

<i>Emissions Sources</i>	<i>Consumption</i>		<i>Emissions (tonnes)</i>			
Scope 1	Activity Data	Unit	t CO₂e	t CO₂	t CH₄	t N₂O
Gas Consumption	668,121.0	<i>kWh</i>	122.8	122.6	0.2	0.1
LPG Consumption	0.0	<i>tonnes</i>	0.0	0.0	0.0	0.0
Oil Consumption	0.0	<i>litres</i>	0.0	0.0	0.0	0.0
Council Vehicle Fleet	-	-	-	-	-	-
Diesel Vehicle	6,228.0	<i>litres</i>	16.2	15.9	0.0	0.2
Petrol Vehicle	0.0	<i>litres</i>	0.0	0.0	0.0	0.0
Gas Oil	0.0	<i>litres</i>	0.0	0.0	0.0	0.0
Total Scope 1	-	-	139.0	138.5	0.2	0.3

Scope 2	Activity Data	Unit	t CO₂e	t CO₂	t CH₄	t N₂O
Electricity Consumption	774,715.0	<i>kWh</i>	198.0	196.5	0.5	1.1
Total Scope 2	-	-	198.0	196.5	0.5	1.1

Scope 3	Activity Data	Unit	t CO₂e	t CO₂	t CH₄	t N₂O
Transmission & Distribution Losses	774,715.0	<i>kWh</i>	16.8	16.7	0.0	0.1
Water Supply	2,478.0	<i>m³</i>	0.9	0.0	0.0	0.0
Water Treatment	2,354.1	<i>m³</i>	1.7	0.0	0.0	0.0
Business Travel	-	-	-	-	-	-
Small Car	141,050.0	<i>miles</i>	40.2	39.9	0.0	0.3
Bus	0.0	<i>passenger km</i>	0.0	0.0	0.0	0.0
Taxi	0.0	<i>passenger km</i>	0.0	0.0	0.0	0.0
Rail	0.0	<i>passenger km</i>	0.0	0.0	0.0	0.0
Ferry	0.0	<i>passenger km</i>	0.0	0.0	0.0	0.0

Plane	0.0	<i>passenger km</i>	0.0	0.0	0.0	0.0
Commuting	-	-	-	-	-	-
Diesel Commuter Miles	575,246.8	<i>miles</i>	160.5	158.8	0.0	1.7
Petrol Commuter Miles	1,632,985.9	<i>miles</i>	475.2	473.4	0.8	1.0
Hybrid Car	8,016.0	<i>miles</i>	0.9	0.9	0.0	0.0
Electric Car	26,035.2	<i>miles</i>	0.0	0.0	0.0	0.0
Motorbike	0.0	<i>miles</i>	0.0	0.0	0.0	0.0
Train	3216.0	<i>passenger km</i>	0.1	0.1	0.0	0.0
Contractor Travel	-	-	-	-	-	-
Refuse Collection Vehicles	198,258.6	<i>litres</i>	514.3	507.5	0.1	6.8
Leisure Centres	-	-	-	-	-	-
Electricity	3,108,245.4	<i>kWh</i>	794.5	788.2	2.0	4.3
Gas	4,899,792.3	<i>kWh</i>	900.8	899.2	1.2	0.5
Kerosene	14,192.0	<i>litres</i>	36.1	35.9	0.1	0.1
Diesel	7,514.0	<i>litres</i>	19.5	19.2	0.0	0.3
Water Supply	48,765.0	<i>m³</i>	16.8	0.0	0.0	0.0
Water Treatment	46,326.8	<i>m³</i>	32.8	0.0	0.0	0.0
Grey Fleet - Average Car / Unknown Fuel	15,855.0	<i>miles</i>	4.5	4.5	0.0	0.0
Waste DMR	2.8	<i>tonnes</i>	0.1	0.0	0.0	0.0
Waste Municipal	5.3	<i>tonnes</i>	0.1	0.0	0.0	0.0
Grounds Maintenance	-	-	-	-	-	-
Electricity	21,795.0	<i>kWh</i>	5.6	5.5	0.0	0.0
Diesel	4,043.1	<i>litres</i>	10.5	10.3	0.0	0.1
Petrol	1,274.1	<i>litres</i>	2.8	2.8	0.0	0.0
Gas Oil	1,200.0	<i>litres</i>	3.3	3.3	0.0	0.0
Water Supply	4,043.1	<i>m³</i>	1.4	0.0	0.0	0.0
Water Treatment	3,840.9	<i>m³</i>	2.7	0.0	0.0	0.0

Waste Composting / Anaerobic Digestion	34.9	tonnes	0.4	0.0	0.0	0.0
Municipal Waste / Combustion	0.0	tonnes	0.0	0.0	0.0	0.0
Total Scope 3	-	-	3,042.4	2,965.1	4.3	15.2

TMBC Gross Emissions Total	-	-	3,379.4	3,301.2	5.0	16.5
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Carbon Offsets / Renewable Tariffs	Activity Data	Unit	t CO ₂ e	t CO ₂	t CH ₄	t N ₂ O
Renewable Electricity Tariff	0.0	kWh	0.0	0.0	0.0	0.0
Total	-	-	-	-	-	-

	-	-	t CO ₂ e	t CO ₂	t CH ₄	t N ₂ O
TMBC Net Emissions Total	-	-	3,379.4	3,301.2	5.0	16.5

