

# CARBON FOOTPRINT REPORT



01<sup>st</sup> March 2024 – 28<sup>th</sup> February 2025



## ELLIS Patents Ltd. Carbon Footprint Report FY2024/25

### 1. Outline

Carbon footprint report of Ellis Patents Ltd. From 01<sup>st</sup> March 2024 to 28<sup>th</sup> February 2025.

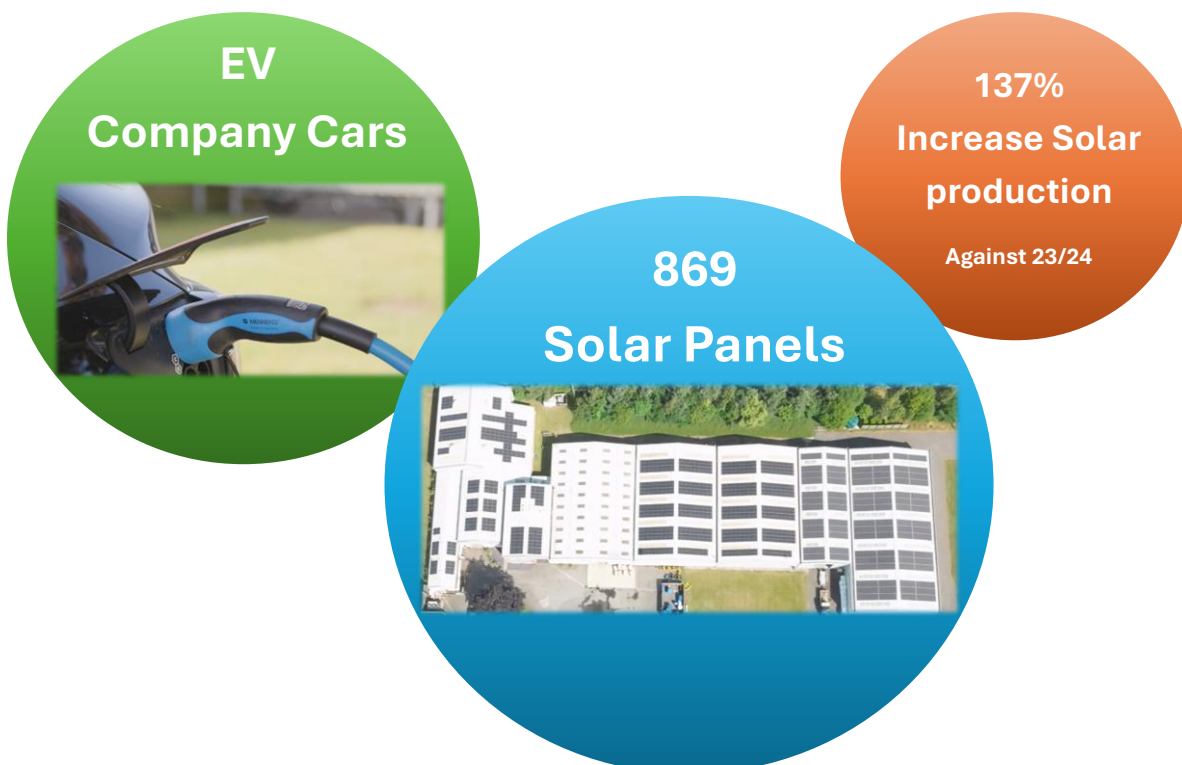
Ellis Patents Ltd. emitted 150 tCO<sub>2</sub>e (tons of carbon dioxide equivalent) in 2024/25 (across scope 1 & 2). This value has an intensity indicator of 2.0 tCO<sub>2</sub>e per full-time equivalent employee (FTE) and 12.2 tCO<sub>2</sub>e per million GBP turnover (£m Turnover).

The addition of scope 3 emissions brings the total to 283 tCO<sub>2</sub>e.

Ellis has implemented significant carbon reduction measures from the year 2017/18 to 2024/25 resulting in a **55% decrease** in greenhouse gas (GHG) emissions (across scope 1 & 2). From 334 tCO<sub>2</sub>e in FY2017/18, to 150 tCO<sub>2</sub>e in FY2024/25.

These reductions are primarily the result of initiatives we have implemented and continue to advance, including the installation of solar panels, the site-wide adoption of LED lighting, the ongoing electrification of our company vehicle fleet, and sustained energy-saving measures—particularly those led by our energy team, which focus directly on optimizing manufacturing equipment and facility installations

Across the year FY2024/25, Ellis generated 260,780kWh and exported 34,580 kWh renewable energy back to the National Grid. This is enough energy to power over 12 homes UK homes for an entire year and saved 54 tCO<sub>2</sub>e by generating energy from PV Production.



## 2. Methodology & Definitions

### **Methodology**

TRACC methodology has been implemented to produce the data for the carbon footprint reports in line with the GHG Protocol, maintaining:

- Transparency
- Relevance
- Accuracy
- Consistency
- Completeness

The DESNZ GHG Conversion Factors 2024 have been used to translate the data collected into CO<sub>2</sub>e GHG emissions.

CO<sub>2</sub>e is the universal unit of measurement used to represent the global warming potential (GWP) of greenhouse gases (GHGs) where 1 kgCO<sub>2</sub>e = GWP of 1 kg CO<sub>2</sub>. There are many different greenhouse gases with different global warming potentials, and the CO<sub>2</sub>e unit allows like for like comparison between all.

More information regarding the methodology can be provided upon request.

### **Definitions:**

£m Turnover = Million GDP Turnover

FTE = Full time Employee

GHG = Greenhouse Gases

GWP = Global Warming Potential

RF = Radiative Forcing

T&D = Transmission & Distribution

WTT = Well-to-tank

Scope 1 - Direct GHG emissions that occur from sources controlled / owned by an organisation.

Scope 2 - Indirect GHG emissions from the purchase or acquired electricity, steam, heat and cooling. Scope 2 emissions physically occur at the facility where they are generated, but they are included in an organisation's GHG emissions because they are a result of the organisation's energy use.

Scope 3 - Indirect GHG emissions from activities from assets not owned or controlled by the reporting organisation, but that the organisation indirectly affects in its value chain. This includes upstream and downstream activities.

### 3. Results

Table 1. GHG emissions table for period 01<sup>st</sup> March 2024 to 28<sup>th</sup> February 2025.

Emission Source	Unit	kg CO <sub>2</sub> e	tCO <sub>2</sub> e
<b>Scope 1</b>			
Burning Oil	22,183 l	56,348	56.35
Medium Car (plug-in hybrid)	35,256 km	2,863	2.86
Van - Average (up to 3.5 tonnes) (diesel)	31,225 km	7,813	7.81
<b>Total Scope 1</b>		<b>67,024</b>	<b>67.02</b>

Emission Source	Unit	kg CO <sub>2</sub> e	tCO <sub>2</sub> e
<b>Scope 2</b>			
UK National Grid Electricity	395,280 kWh	81,843	81.84
EV Charging	3,196 kWh	743	0.74
<b>Total Scope 2</b>		<b>82,586</b>	<b>82.59</b>
Exported Solar Energy	226,210 kWh	46,837	46.84
<b>Total Scope 2 minus Exported Solar Energy</b>		<b>35,749</b>	<b>35.75</b>

<b>Total Scope 1 &amp; 2</b>			<b>149.6</b>
<b>Total tCO<sub>2</sub>e per *FTE on gross Scope 1 &amp; 2</b>			<b>2.0</b>
<b>Total tCO<sub>2</sub>e per *£m Turnover on gross Scope 1 &amp; 2</b>			<b>12.2</b>

Emission Source	Unit	kg CO <sub>2</sub> e	tCO <sub>2</sub> e
<b>Scope 3 (Category – Emission Source)</b>			
1 - Water Supply	598 m <sup>3</sup>	91	0.09
3 - Water Treatment	598 m <sup>3</sup>	111	0.11
3 - Transmission & Distribution of UK National Grid Electricity	395,280 kWh	7,234	7.23
3 - WTT - UK Electricity (generation)	395,280 kWh	18,143	18.1
3 - WTT - UK Electricity (T&D)	395,280 kWh	1,569	1.57
3 - WTT - Burning Oil	22,183 l	15,426	15.4
3 - WTT – Business - Average Car (diesel)	5,925 km	261	0.26
3 - WTT – Business - Medium Car (plug-in Hybrid)	35,256 km	890	0.89
3 - WTT - Employee Commuting - Average Car (plug-in Hybrid)	8,497 km	249	0.25

Emission Source	Unit	kg CO <sub>2</sub> e	tCO <sub>2</sub> e
3 - WTT – Employee Commuting - Average Car (diesel)	176,241 km	7,307	7.31
3 - WTT - Employee Commuting - Average Car (petrol)	83,954 km	3,861	3.86
3 - WTT - Van - Average (up to 3.5 tonnes) (diesel)	31,225 km	1,913	1.91
3 - WTT - Regular taxi	2,114 km	109	0.11
3 - WTT - National Rail	5,957 passenger.km	53	0.05
3 - WTT – Light Rail & Tram	199 passenger.km	1.5	0.001
3 - WTT - London Underground	263 passenger.km	1.9	0.002
3 - WTT - Business - Local bus (not London)	288 passenger.km	9.1	0.01
3 - WTT - Employee Commuting - Local bus (not London)	10,343 passenger.km	328	0.33
3 - WTT - Ferry (foot passenger)	271 passenger.km	1.15	0.001
3 - WTT - Ferry (car passenger)	271 passenger.km	7.95	0.01
3 - WTT - Flights (Domestic, Economy Class, with RF)	651 passenger.km	21.8	0.02
3 - WTT - Flights (Short-haul, Economy Class, with RF)	35,135 passenger.km	803.2	0.80
3 - WTT - Flights (Long-haul, Economy Class, with RF)	53,006 passenger.km	1,703	1.70
5 - Waste generated in operations	47,907 kg	307	0.31
6 – Business - Local bus (not London)	288 passenger.km	37	0.04
6 - Flights (Domestic, Economy Class, with RF)	651 passenger.km	178	0.18
6 - Flights (Short-haul, Economy Class, with RF)	35,135 passenger.km	6,425	6.43
6 - Flights (Long-haul, Economy Class, with RF)	53,006 passenger.km	10,607	10.6
6 - Ferry (foot passenger)	271	5	0.005

Emission Source	Unit	kg CO <sub>2</sub> e	tCO <sub>2</sub> e
	passenger.km		
6 - Ferry (car passenger)	271 passenger.km	35	0.04
6 - Business - Average Car (petrol)	1,910 km	314	0.31
6 - Business - Average Car (diesel)	5,925 km	1,006	1.01
6 - Business - Regular taxi	2,114 passenger.km	440	0.44
6 - Business - National Rail	5,957 passenger.km	211	0.21
6 - Business - Light Rail & Tram	199 passenger.km	5.7	0.01
6 - Business - London Underground	263 passenger.km	7.3	0.01
6 - Business - Hotel Stay (Various Countries)	211 nights	5,048	5.05
7 - Employee Commuting -Local bus (not London)	10,343 passenger.km	1,344	1.34
7 - Employee Commuting - Average Car (petrol)	83,954 km	13,810	13.8
7 - Employee Commuting - Average Car (diesel)	176,241 km	29,933	29.9
7 - Employee Commuting - Average Car (plug-in Hybrid)	8,497 km	1,071	1.07
7 - Employee Commuting - Average Car (electric)	36,822 km	1,747	1.75
7 - Homeworking	1,633 hrs	545	0.55
<b>Total Scope 3</b>		<b>133,175</b>	<b>133.17</b>
<b>Total Scope 1, 2 &amp; 3</b>			<b>283</b>
<b>Total tCO<sub>2</sub>e per *FTE on gross Scope 1, 2 &amp; 3</b>			<b>3.72</b>
<b>Total tCO<sub>2</sub>e per *£m Turnover on gross Scope 1, 2 &amp; 3</b>			<b>23.03</b>

Notes: For 01<sup>st</sup> March 2024 to 28<sup>th</sup> February 2025 the number of FTE's was 76 and the turnover was £12,279,058.

## 4. Results Analysis & Carbon Reduction

ELLIS has reduced its carbon footprint significantly since FY2017/18. Across scope 1 & 2 a 55% overall reduction. Comparing intensity factors (per FTE / £m Turnover) across scope 1 & 2 the reduction is greater than 65%.

Table 2. Emissions over time per scope.

Scope	FY2017/18 (tCO <sub>2</sub> e)	FY2022/23 (tCO <sub>2</sub> e)	FY2023/24 (tCO <sub>2</sub> e)	FY2024/25 (tCO <sub>2</sub> e)	% Change from Base Line
1	122	73	64	67	-45%
2	212	92	82	83	-61%
3	202	143	147	133	-34%
1 & 2	334	165	146	150	-55%
1, 2 & 3	537	308	294	283	-47%

Figure 1. Emissions over time per scope.

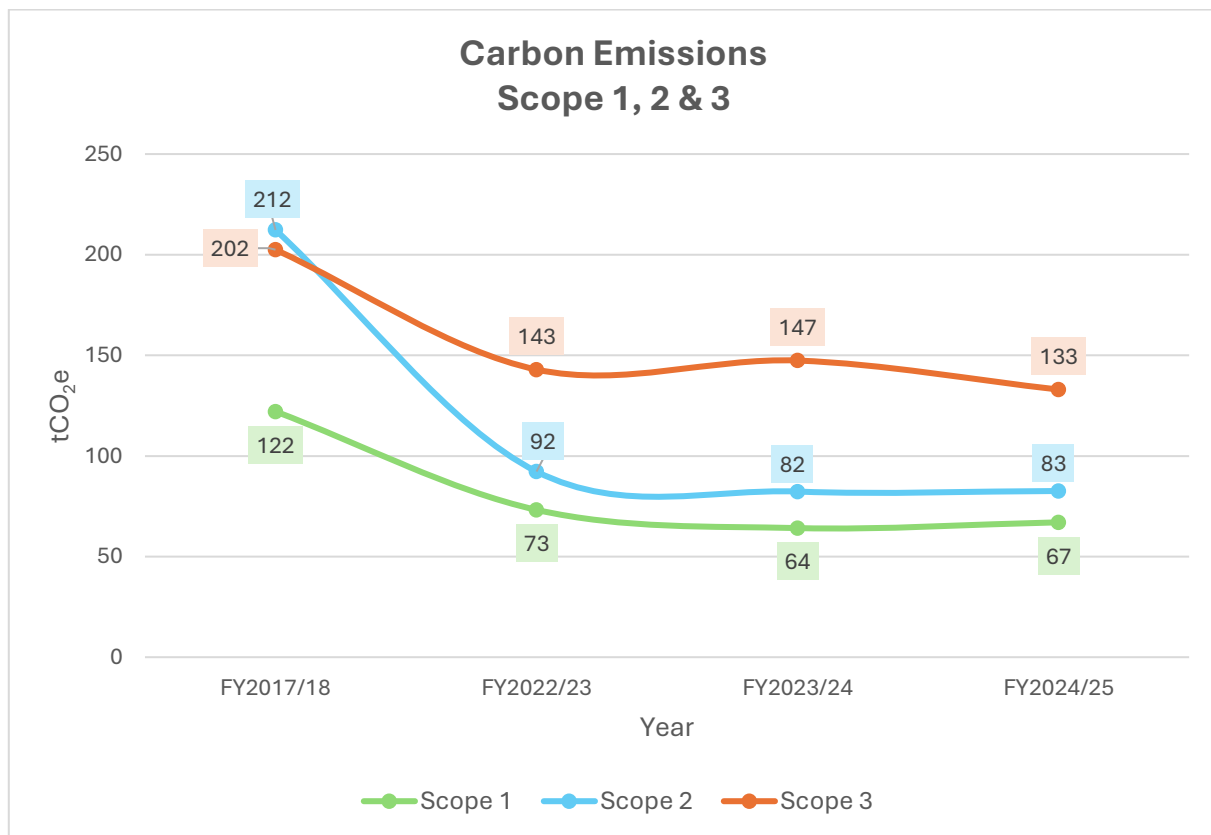


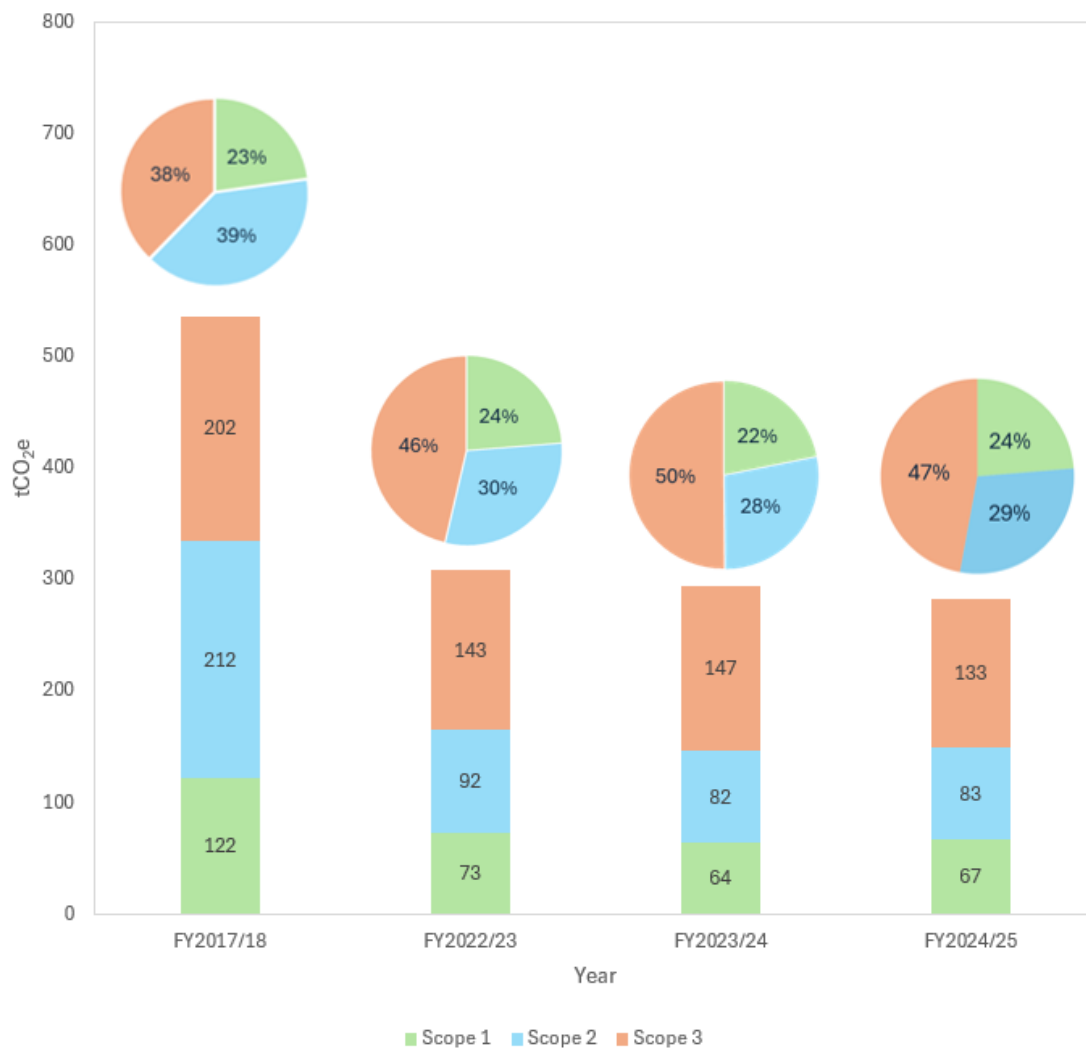
Table 3. Emissions per FTE over time.

Scope	FY2017/18 (tCO <sub>2</sub> e per FTE)	FY2022/23 (tCO <sub>2</sub> e per FTE)	FY2023/24 (tCO <sub>2</sub> e per FTE)	FY2024/25 (tCO <sub>2</sub> e per FTE)	% Change from Base Line
1 & 2	5.7	2.6	2.2	2.0	-65%
1, 2 & 3	9.1	4.7	4.4	3.7	-59%

Table 4. Emissions over time per £m Turnover.

Scope	FY2017/18 (tCO <sub>2</sub> e per £m Turnover)	FY2022/23 (tCO <sub>2</sub> e per £m Turnover)	FY2023/24 (tCO <sub>2</sub> e per £m Turnover)	FY2024/25 (tCO <sub>2</sub> e per £m Turnover)	% Change from Base Line
1 & 2	43.4	18.6	15.3	12.2	-72%
1, 2 & 3	69.8	34.6	30.7	23.0	-67%

Figure 2. Emissions over time by scope and corresponding percentage share



Ellis has achieved a significant reduction of approximately 55% in its Scope 1 and 2 emissions from FY2017/18 to the current year. Scope 2 emissions now only account for 29% of the total emissions compared to 39% in FY2017/18.

Scope 3 emissions have increased in FY2024/25, primarily due to the expanded reporting boundary, which now includes a more refined calculations, such as well-to-tank emissions associated with fuel and energy-related activities.

Figure 3. Emissions over time split into categories. Small contributors are not given data labels.

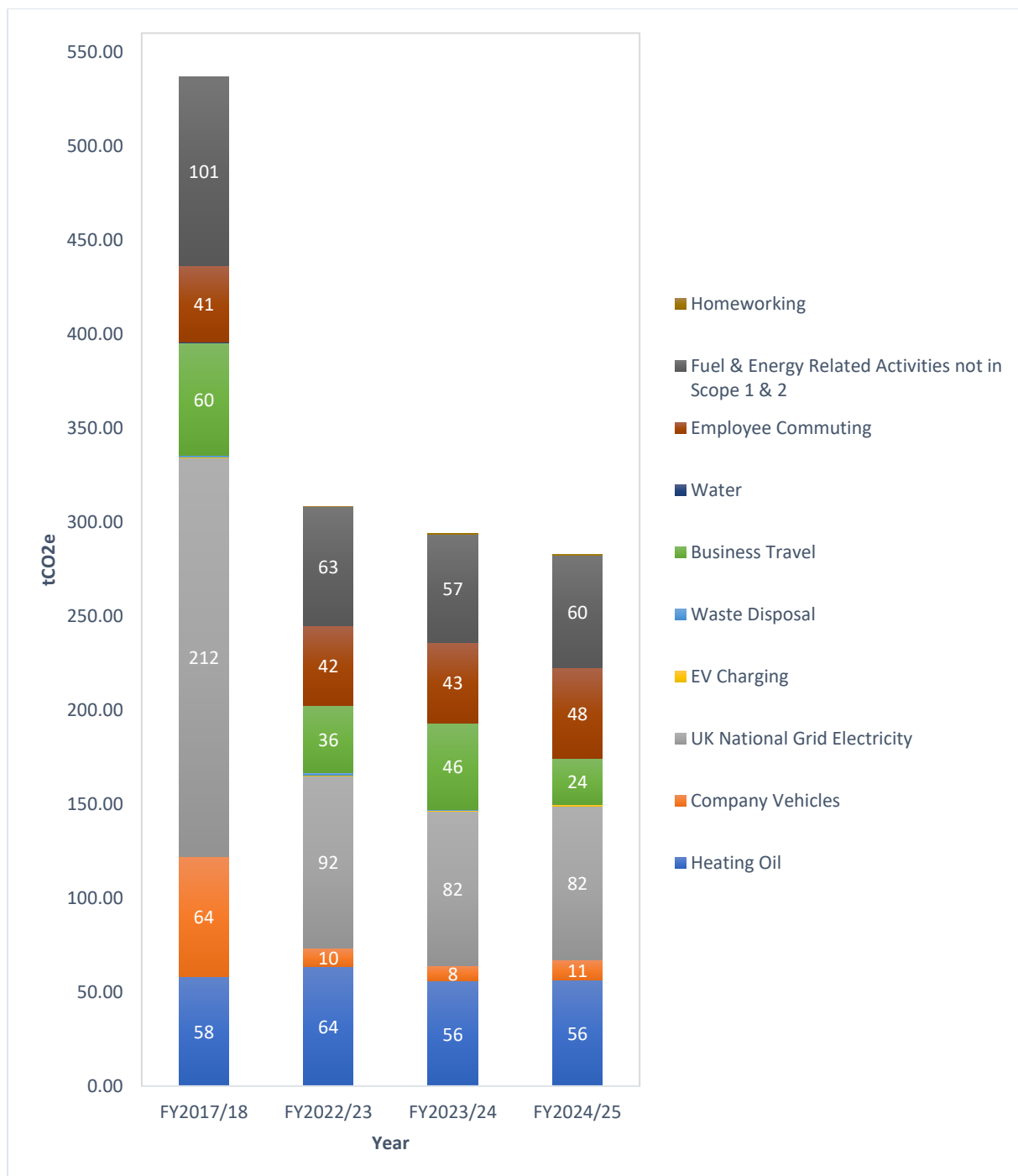
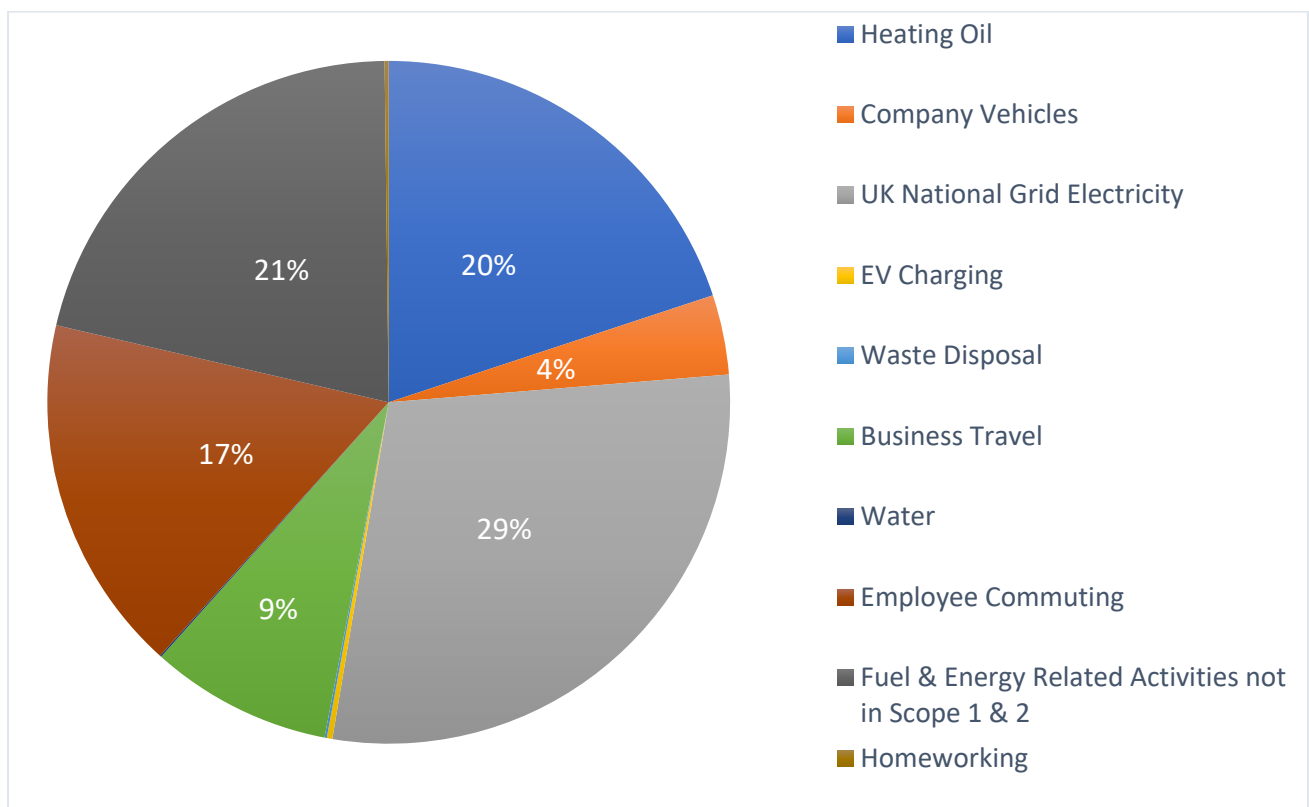


Figure 4 breaks down emissions into categories demonstrating the three largest contributors Ellis GHG emissions are:

1. UK National Grid Electricity (82 tCO<sub>2</sub>e, 29%)
2. Fuel & Energy Related Activities Not Included in Scope 1 & 2 (60 tCO<sub>2</sub>e, 21%)
3. Heating Oil (56 tCO<sub>2</sub>e, 20%)

\* Green = Scope 1, Blue = Scope 2, Orange = Scope 3

Figure 4. Emissions by categories as a percentage FY2024/25.



While Scopes 1 and 2 emissions remain largely stable and reflect effective operational controls, the increase in Scope 3 emissions underscores the need for strategic interventions, particularly in areas such as supplier engagement, comprehensive life cycle assessments, and the integration of sustainable procurement practices across the value chain.