

LSA PROTOCOL - CARBON FOOTPRINT SUMMARY



Name of firm **Cripps Harries Hall LLP**

Person completing submissions **Kathryn Leslie**

Position **Solicitor**

Contact email **kathryn.leslie@crippslaw.com**

Reporting period **1 May 2007 - 30 April 2008**

Number of employees **285**

TOTAL EMISSIONS **279.37** tonnes CO₂

Emissions per employee **0.98** tonnes CO₂

I give the LSA permission to publicly report my footprint (yes/no) **NO**

Carbon Emissions Sources

SCOPE 1

On-Site Combustion	1.65	tonnes CO ₂
Company Vehicles	0.00	tonnes CO ₂
Refrigerants	20.28	tonnes CO ₂

SCOPE 2

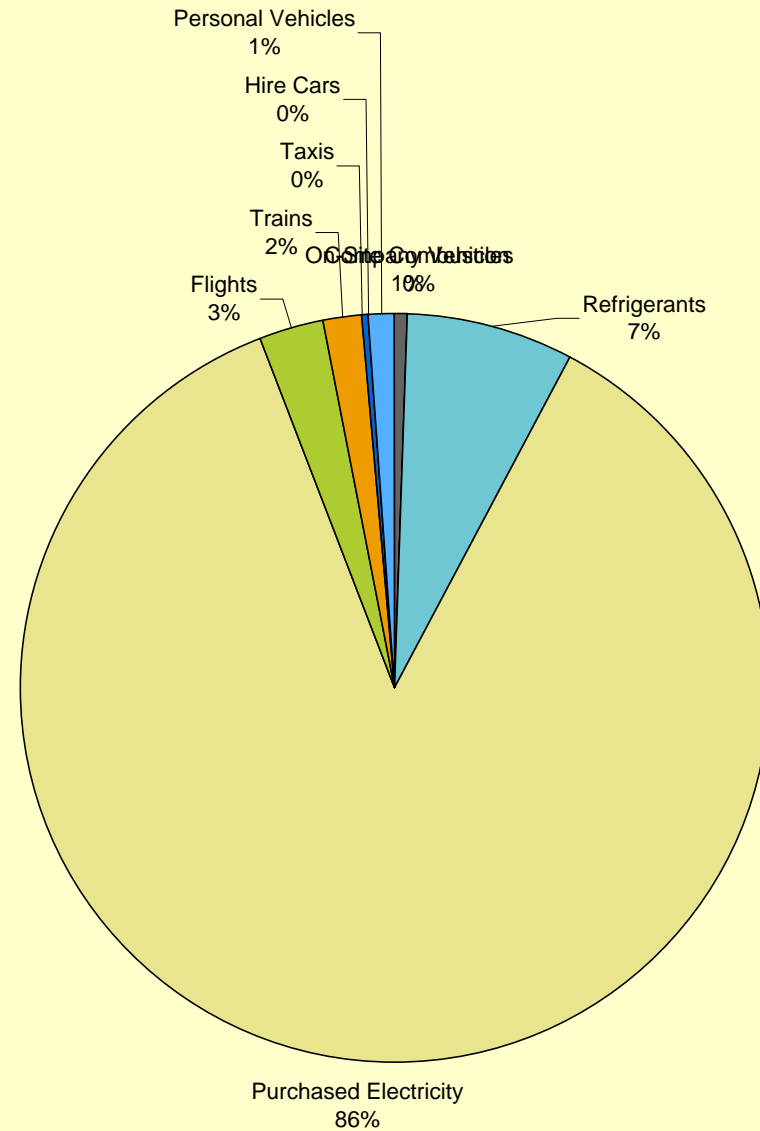
Purchased Electricity	241.13	tonnes CO ₂
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SCOPE 3

Flights	7.51	tonnes CO ₂
Trains	5.27	tonnes CO ₂
Taxis	0.14	tonnes CO ₂
Hire Cars	0.00	tonnes CO ₂
Personal Vehicles	3.40	tonnes CO ₂

Carbon Mitigation Activities

Renewable energy	0.00	tonnes CO ₂
Voluntary carbon offsetting	0.00	tonnes CO ₂



Indirect CO₂ Emissions from Purchased Electricity



Color Key

Standard label
User entry cells
Calculation steps

LEGAL SECTOR
ALLIANCE
 ACTING ON CLIMATE CHANGE

A*	B	C	D
Facility / source description	Electricity purchased	CO ₂ emission factor	CO ₂ emissions (tonnes)
rename if you wish	kWh	kg CO ₂ / kWh	tonnes CO ₂
Wallside	128,793	0.54	69.2
Windsor	117,513	0.54	63.1
Brook East	88,951	0.54	47.8
Brook West	59,559	0.54	32.0
Seymour	54,194	0.54	29.1
Site 6		0.54	0.0
Site 7		0.54	0.0
Site 8		0.54	0.0
Site 9		0.54	0.0
Site 10		0.54	0.0
CO₂ emissions (tonnes):			241.1

Emissions factors based on Defra Conversion Factors (2008)

Indirect CO₂ Emissions from On-Site Combustion



Color Key

- Standard label
- User entry cells
- Calculation steps

LEGAL SECTOR
ALLIANCE
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* Please ensure that emission factor units in column B are consistent with activity data units in column A.

Facility / source description	A - NATURAL GAS			B - HEATING OIL			C - DIESEL CONSUMPTION			D
	Natural gas consumption	CO ₂ emission factor for natural gas	CO ₂ emissions from natural gas	Heating oil consumption	CO ₂ emission factor for heating oil	CO ₂ emissions from heating oil	Diesel consumption	CO ₂ emission factor for diesel	CO ₂ emissions from diesel	CO ₂ emissions (tonnes)
rename if you wish	kWh	kg CO ₂ / kWh	tonnes CO ₂	litres	kg CO ₂ / litre	tonnes CO ₂	litres	kg CO ₂ / litre	tonnes CO ₂	tonnes CO ₂
Wallside	3,153	0.185	0.6		2.674	0.0		2.630	0.0	0.6
Windsor	2,068	0.185	0.4		2.674	0.0		2.630	0.0	0.4
Brook East	1,229	0.185	0.2		2.674	0.0		2.630	0.0	0.2
Brook West	1,229	0.185	0.2		2.674	0.0		2.630	0.0	0.2
Seymour	1,229	0.185	0.2		2.674	0.0		2.630	0.0	0.2
Site 6		0.185	0.0		2.674	0.0		2.630	0.0	0.0
Site 7		0.185	0.0		2.674	0.0		2.630	0.0	0.0
Site 8		0.185	0.0		2.674	0.0		2.630	0.0	0.0
Site 9		0.185	0.0		2.674	0.0		2.630	0.0	0.0
Site 10		0.185	0.0		2.674	0.0		2.630	0.0	0.0
CO₂ emissions (tonnes):										1.6

Emissions factors based on Defra Conversion Factors (2008)

If you have a Combined Heat and Power (CHP) plant, please enter its fuel consumption on this page under the relevant fuel type.

Emissions factor for heating oil is based on the assumption that it is predominantly gas oil

CO₂ Emissions from Air Travel



Color Key

Standard label
User entry cells
Calculation steps



	A	B	C	D	E	F
	Distance	Calculation methodology	Distance travelled	Unit	Select a unit	CO ₂ emissions (tonnes)
Domestic	Less than 500km	Distance			0.31	
	Distance	Calculation methodology	Distance travelled	Unit	Emissions factor (kg CO ₂ /mile)	CO ₂ emissions (tonnes)
Short haul	500km - 3,700km	Distance	2,498	miles	0.17	0.4
	Distance	Calculation methodology	Distance travelled	Unit	Emissions factor (kg CO ₂ /mile)	CO ₂ emissions (tonnes)
Long haul	More than 3,700km	Distance	17,235	miles	0.41	7.1
CO₂ emissions (tonnes):						7.5

All emissions factors based on Defra conversion factors (2008)

Domestic based on emission factor for domestic travel in average cabin class plus 109% uplift factor
 Short haul based on emission factor for short-haul international travel in average class cabin plus 109% uplift factor
 Long haul based on emission factor for long-haul international travel in business class cabin plus 109% uplift factor

PLEASE NOTE THAT THESE FIGURES MAY VARY FROM OTHER CARBON CALCULATORS BECAUSE OF TRAVEL CLASSES USED

Calculations List
 Distance
 Flights

Distance List
 km
 miles

Flights List
 flights

CO₂ Emissions from Train Travel



Color Key

Standard label

User entry cells

Calculation steps

LEGAL SECTOR

ALLIANCE

ACTING ON CLIMATE CHANGE

Mode of Transportation	A	B	C	D	E
	Distance Traveled	Unit	CO ₂ emission factor kg/unit	Unit	CO ₂ emissions (tonnes)
General Rail	53,085	miles	0.10	kg/mile	5.1
Eurostar	4,605	miles	0.03	kg/mile	0.1

CO₂ emissions (tonnes):

5.3

All emissions factors based on Defra conversion factors (2008)

CO₂ Emissions from Taxi Use



Color Key

Standard label
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LEGAL SECTOR

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ACTING ON CLIMATE CHANGE

TAXIS

Calculation Method	A	B	C	D	E
	Quantity	Unit	CO ₂ emission factor (kg/unit)	kg/Unit	CO ₂ emissions (tonnes)
Distance travelled		miles	0.333	kg/mile	0.0
Number of journeys		journeys	1.50	kg/journey	0.0
Total taxi spend	£1,238.85	pounds sterling	0.11	kg/£	0.1

CO₂ emissions (tonnes): **0.1**

HIRE CARS

Mode of Transportation	Description	A	B	C	D	E
		Distance Travelled	Unit	CO ₂ emission factor (kg/unit)	kg/Unit	CO ₂ emissions (tonnes)
Distance Travelled method						
Hire Cars	Average petrol car		miles	0.333	kg/mile	0.0
	Average diesel car		miles	0.318	kg/mile	0.0
	LPG car		miles	0.361	kg/mile	0.0
	Hybrid car		miles	0.203	kg/mile	0.0
Expense claim method						
		Expenses Claimed				
Hire Cars	All cars	£0.00	pounds sterling	0.833	kg/£	0.0

CO₂ emissions (tonnes): **0.0**

All emissions factors based on Defra conversion factors (2008) and Dft (2003)

Calculations are based on the assumption that most taxi travel is taken in London black cabs

Emissions from 'expense claim method' hire cars are based upon average petrol cars as a worst case scenario

CO₂ Emissions from Company-Owned Vehicles



Color Key

Standard label
User entry cells
Calculation steps

LEGAL SECTOR
ALLIANCE
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COMPANY VEHICLES

Mode of Transportation	Description	A Distance Travelled	B Unit	C CO ₂ emission factor kg/unit	D kg/Unit	E CO ₂ emissions (tonnes)
Company Vehicles	Average petrol car		miles	0.333	kg/mile	0.0
	Average diesel car		miles	0.318	kg/mile	0.0
	LPG car		miles	0.361	kg/mile	0.0
	Hybrid car		miles	0.203	kg/mile	0.0
	Company Van		miles	0.428	kg/mile	0.0

CO₂ emissions (tonnes): **0.0**

PERSONAL CAR USE

Mode of Transportation	Description	A Distance Travelled	B Unit	C CO ₂ emission factor kg/unit	D kg/Unit	E CO ₂ emissions (tonnes)
Distance Travelled method						
Personal Vehicles	Average petrol car		miles	0.333	kg/mile	0.0
	Average diesel car		miles	0.318	kg/mile	0.0
	LPG car		miles	0.361	kg/mile	0.0
	Hybrid car		miles	0.203	kg/mile	0.0

Expenses method		Expenses Claimed	Mileage Rate (£/mile)	CO ₂ emission factor	kg/Unit	CO ₂ emissions (tonnes)
Personal Vehicles	All cars	£4,590.39	£0.45	0.740	kg/£	3.4

CO₂ emissions (tonnes): **3.4**

All emissions factors based on Defra conversion factors (2008)

Emissions from 'expense claim method' personal cars are based upon average petrol cars as a worst case scenario

CO2 Credits from Green Energy and Offset Schemes

Color Key **Standard label**
User entry cells
Calculation steps



Type of Carbon Credit	Description	kWh	CO ₂ credits (tonnes)
Green energy purchased (ROCs)			0
Carbon credits purchased			

CO₂ Credits (tonnes): **0.0**

kWh
ROCs Retired

When carbon credits and green energy are taken into account, the net carbon footprint is: tonnes CO₂
 On a per capita basis, this equates to : tonnes CO₂ per person

Please note that these figures are given for indicative purposes only, and will not be used by the LSA.

CO2 Credits from Green Energy and Offset Schemes

Color Key **Standard label**
User entry cells
Calculation steps



Type of Carbon Credit	Description	kWh	CO ₂ credits (tonnes)
Green energy purchased (ROCs)			0
Carbon credits purchased			

CO₂ Credits (tonnes): **0.0**

kWh
ROCs Retired

When carbon credits and green energy are taken into account, the net carbon footprint is: tonnes CO₂
 On a per capita basis, this equates to : tonnes CO₂ per person

Please note that these figures are given for indicative purposes only, and will not be used by the LSA.

Emissions factors

1 km equals 0.6214 miles
1 mile equals 1.6093 km

Category	Specific	UNIT 1		UNIT 2		Source
		Emissions Factor	Measurement Units	Emissions Factor	Measurement Units	
On-Site Combustion	UK Natural Gas	0.185 kg CO2 per kWh				Defra 2008
	Heating Oil (gas oil)	2.674 kg CO2 per Litre				Defra 2008
	Diesel	2.63 kg CO2 per Litre				Defra 2008
Purchased Electricity	UK Electricity	0.53702 kg CO2 per kWh				Defra 2008
Flights	Domestic	0.175 kg CO2 per km		0.282 kg CO2 per mile		Defra 2008
	Short-haul international	0.098 kg CO2 per km		0.158 kg CO2 per mile		Defra 2008 for average class flights
	Long-haul international	0.234 kg CO2 per km		0.377 kg CO2 per mile		Defra 2008 for business class flights
	Average Short Haul Distance	463 km		287.708 miles		Defra 2008
	Average Medium Haul Distance	1108 km		688.511 miles		Defra 2008
	Average Long Haul Distance	6482 km		4027.915 miles		Defra 2008
	Uplift Factor	109%				IPCC Aviation via Defra 2008
	Radiative forcing	100%				IPCC, 1999. Aviation and the Global Atmosphere, Ch 6.1.3 Aviation Scenarios Adopted for Climate Assessment. http://www.grida.no/climate/ipcc/aviation/068.htm
Trains	UK Trains	0.060 kg CO2 per km		0.097 kg CO2 per mile		Defra 2008
	Eurostar	0.018 kg CO2 per km		0.028 kg CO2 per mile		Defra 2008
Cars	Average petrol car	0.207 kg CO2 per km		0.333 kg CO2 per mile		Defra 2008
	Average diesel car	0.198 kg CO2 per km		0.318 kg CO2 per mile		Defra 2008
	LPG car	0.224 kg CO2 per km		0.361 kg CO2 per mile		Defra 2008
	Hybrid car	0.126 kg CO2 per km		0.203 kg CO2 per mile		Defra 2008
	Company van	0.266 kg CO2 per km		0.428 kg CO2 per mile		Defra 2008
	Average annual car mileage	25542.6 km		15871.9 miles		UK Commission for Integrated Transport (and Vehicle Certification Tables) - http://www.cfrit.gov.uk/docs/2001/scot0122/scot0122/ac.htm
	Average daily car mileage	69.980 km		43.485 miles		
	Average daily cost of hire car	£39.50 £				Based on 24 hour rental using Streetcar
	Daily emissions from hire car	14.486 kg CO2				
	Average expense allowances	£0.25 £/km		£0.40 £/mile		
Taxis	Taxi emissions	0.172 kg CO2 per km		0.277 kg CO2 per mile		London Black Cab (Defra 2008)
	Average journey distance	7.567 km		4.702 miles		Dft - personal travel factsheet no. 5
	Average journey cost	£11.89 £		£11.89 £		Based on Tariff 1 of London black cab
	Average taxi cost per km	£1.57 £ per km		£2.53 £ per km		Average journey cost / average journey distance
	CO2 per £ taxi spend	0.11 kg CO2 per £		0.11 kg CO2 per £		
Refrigerants	CO2	1 kg CO2 per kg				Various sources
	Forane FX-80	2360 kg CO2 per kg				
	Isceon 89	3090 kg CO2 per kg				
	R11	4750 kg CO2 per kg				
	R12	10890 kg CO2 per kg				
	R13	8100 kg CO2 per kg				
	R14	6500 kg CO2 per kg				
	R22	1810 kg CO2 per kg				
	R23	11980 kg CO2 per kg				
	R32	581 kg CO2 per kg				
	R113	6130 kg CO2 per kg				

R114	10040 kg CO2 per kg	
R115	7370 kg CO2 per kg	
R123	77 kg CO2 per kg	
R124	609 kg CO2 per kg	
R125	3217 kg CO2 per kg	
R134	1063 kg CO2 per kg	
R134a	1300 kg CO2 per kg	
R141b	440 kg CO2 per kg	
R142b	1800 kg CO2 per kg	
R143a	4167 kg CO2 per kg	
R152a	127 kg CO2 per kg	
R227ea	3353 kg CO2 per kg	
R236fa	8450 kg CO2 per kg	
R245fa	985 kg CO2 per kg	
R290	20 kg CO2 per kg	
R401a	1127 kg CO2 per kg	
R401b	1224 kg CO2 per kg	
R401c	901 kg CO2 per kg	
R402a	2250 kg CO2 per kg	
R402b	1960 kg CO2 per kg	
R403b	3570 kg CO2 per kg	
R404a	3784 kg CO2 per kg	
R407a	1990 kg CO2 per kg	
R407c	1653 kg CO2 per kg	
R407e	1400 kg CO2 per kg	
R408a	2764 kg CO2 per kg	
R409a	1535 kg CO2 per kg	
R409b	1270 kg CO2 per kg	
R410a	1975 kg CO2 per kg	
R413a	1774 kg CO2 per kg	
R417a	1950 kg CO2 per kg	
R422a	2530 kg CO2 per kg	
R422d	2230 kg CO2 per kg	
R427a	1830 kg CO2 per kg	
R507	1982 kg CO2 per kg	
R508b	11850 kg CO2 per kg	
R600a	20 kg CO2 per kg	
R717	0 kg CO2 per kg	