

HEROtsc GHG Emissions Calculation

For the period; 1st April 2008 to 31st March 2009.

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GHG Emissions Calculation Report for HEROtsc Ltd

Executive Summary

The carbon footprint of HEROtsc's UK operation for the period 1st April 2008 to 31st March 2009 was 5929 tonnes CO₂e. In addition to the core emissions arising from electricity and gas consumption the calculation includes emissions from employee business travel, commuting and waste to landfill.

The footprint represents a 4.3% reduction on the previous baseline year and shows we are currently on track to meet our target of a 10% reduction in emissions in 3 years.

A number of improvements have been made in the reporting process including the appointment of Environmental Coordinator with responsibility for footprint data collation, processing and reporting centralising the data. A company-wide employee survey was also conducted to improve the data on employee commuting.

The footprint report has been verified in accordance with the GHG Corporate Reporting Protocol by Green Energy Partners Ltd.

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1. Summary

The Greenhouse Gas Protocol Initiative (GHGPI) produces the GHG Protocol Corporate Accounting and Reporting Standard, which provide a step-by-step guide for companies to use in quantifying and reporting their GHG emissions (GHGPI, 2009). This standard has been used to quantify, where possible, our Greenhouse Gas (GHG) emissions, and where values cannot be quantified a qualitative comment has been included. This report has been verified by Green Energy Partners.

Our GHG Emissions (or Carbon Footprint) have been calculated for the period 1st April 2008 to 31st March 2009, where possible (where omissions, representations or estimations have occurred there will be comment and recommendation).
The total calculated emissions are 5928.96 tCO_{2e} p.a.. This equates to a figure of 2.72 tCO_{2e} per employee per year (average 2177 employees). This calculation is based on the boundary conditions and emission types detailed below.

This report also includes recommendations for improvements in the company's monitoring procedures to allow more accurate calculations of the GHG emissions in the future.

This report also includes mention of where improvements and alterations have been made based on the recommendations of the 2007 TSC GHGP Report.

With the application of company-wide, employee surveying (30% of average population), this report is truly engaging with, and representative of, the business and our colleagues.

Comparison with the previous report

The total calculated emissions were 6194 tCO_{2e} p.a. for the period of April 2007 to March 2008 in the 2007 TSC GHGP Report (TSC, 2008). This equated to a figure of 3.10 tCO_{2e} per employee per year (average 2500 employees).

The total calculated emissions were 5928.96 tCO_{2e} p.a. for the period of April 2008 to March 2009 in the 2008 HEROtsc GHGP Report (HEROtsc, 2008). This equated to a figure of 2.72 tCO_{2e} per employee per year.

Comparing the 2007 & 2008 TSC GHGP Reports shows that there has been a 265.04 tCO_{2e} reduction in absolute GHG Emissions (See Annex). This equates to a reduction of 0.38 tCO_{2e} per employee.

2. Background

This year an Environmental Policy has been drafted and signed by our Chief Executive Officer.

We have committed to achieving the following reductions from 2008 baseline levels within 3 years:

- 10% reduction in CO₂ emissions from gas and electricity per annum, saving 375 tonnes CO₂, equivalent to removing 86 cars from the UK roads
- 20% reduction in waste to landfill
- 20% reduction in water consumption

We also aim to be ISO 14001 compliant by 2010. This report is the baseline for the reductions.

3. Reporting Boundaries

Setting the Boundary

In accordance with the GHG Protocol two sets of boundaries are considered: Organisational Boundaries and Operational Boundaries.

The Organisation covered by this report is us; HEROtsc, including our wholly owned subsidiary Sigdev Ltd.

There are emissions from approximately 250 staff working for HEROtsc in Erskine for a campaign client, who are fully outsourced to this 3rd party, working at the 3rd party site and so for the purposes of this report are considered to be out with the operational boundary.

Our ultimate parent, the Hero Group, has a diverse portfolio of investments worldwide. It was therefore decided to limit the boundary to the UK activities related to call centres.

Scope 1: Direct GHG emissions

Direct GHG emissions occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment.

GHG emissions not covered by the Kyoto Protocol, e.g. CFCs, NOx, etc. shall not be included in scope 1 but may be reported separately.

Scope 2: Electricity indirect GHG emissions

Scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organizational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated.

Scope 3: Other indirect GHG emissions

Scope 3 is an optional reporting category that allows for the treatment of all other indirect emissions. Scope 3 emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company. Some examples of scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of sold products and services.

4. Quantified Emissions Breakdown

The table below shows our GHG emissions for the period 1st April 2008 to 31st March 2009.

Emissions Type	Emissions Source	Emissions	
		tCO _{2e}	
Direct Emissions Scope 1	Mains Gas	307.89	
	Fleet	4.76	
	Generators	6.05	
	R22	93.00	
	R407c	0.00	
	R404a	0.65	
	Sub-Total Scope 1		
Imported Power/ Utilities Scope 2	Emissions from purchase of electricity	3382.17	
	Sub-Total Scope 2		3382.17
Other indirect emissions (i.e. not owned) Scope 3	Waste Water	5.23	
	Employee Commute (Car)	1768.36	
	Employee Travel Car	83.64	
	Employee Travel Taxi	5.70	
	Employee Travel Ferry	0.06	
	Employee Travel Train	16.52	
	Employee Flights (UK)	20.28	
	Employee Flights (Long Haul)	19.75	
	Waste to Landfill	214.90	
	Sub-Total Scope 3		
	Total	5928.96	

5. Improvements to Company Data Collection for GHG Emission Calculation

Emissions Source	Comment/ Suggested Improvement
Scope 1: Owned Vehicle	A record of the mileage and fuel consumed by the company van is being kept as part of company monitoring procedures, after suggestion in the 2007 TSC GHGP Report.
Scope 1: Generators	This is a recent addition after review of the previous GHGP Emissions Report.
Scope 3: Employee Travel	Train, flight, taxi journeys and car hire journey details have been monitored in line with recommendations from the 2007 TSC GHGP Report.
Scope 3: Commuting	<p>After recommendation in the 2007 TSC GHGP Report, a travel survey has been conducted (30% take up of the average employee population) and referenced against postcode data.</p> <p>This area was defined as being difficult to quantify, but this system gives a relatively accurate representation and breakdown of the average commute by a HEROtsc employee.</p>
Scope 3: Waste to landfill	<p>The issue of weighing skips has not yet been resolved in line with the recommendations of the 2007 TSC GHGP Report.</p> <p>However, there has been an increasingly granular assessment of our contracts and invoices regarding waste to land fill, and recycling.</p> <p>There has been an increase in the tendency to recycle resources and waste, and recycled wastes have been omitted from emissions calculations, as HEROtsc has complied with the duty of care in transferring ownership of wastes.</p>
Gas and electricity on the sites where energy is not directly billed to HEROtsc.	<p>In line with recommendations from the 2007 TSC GHGP Report recommendations, HEROtsc has improved the metering and contracts for electricity, by making Half Hourly Metering a standard.</p> <p>Where contracts were not previously in place for gas, interim monitoring of gas has taken place and a contracts has been put in place and the omission rectified.</p> <p>Where primary and secondary emissions occur through HEROTSC business practices, but where bills are settled through tenancy agreement, the ownership of those emissions have been placed with the landlord. This has been rationalised as also having communal application and benefit, which is not easily quantified.</p>

6. Assumptions and factors used in calculation of GHG emissions

Ref. No.	Emissions Source	Source of Information	Base unit	Factor	Comments
1.1	Mains Gas	HEROtsc	kWh	0.185 kgCO ₂ e/kWh	A HEROtsc site (Victory Court, Greenock) does not receive billing for gas consumption. Utilities payment is settled in the lease agreement. In this case, emissions due to consumption of gas are considered to form part of the GHG emissions of the payee of the energy bills. Due to an oversight, and on investigation, it was found that gas consumption at one site has not been official monitored. It has been monitored in the interim, and calculated for the current report.
1.2	Fleet	HEROtsc	Miles	0.3027 kgCO ₂ e/mile	Medium diesel car from 1.7 to 2 litre
1.3	Generators	HEROtsc	L	2.63 kgCO ₂ e/L	Figures come from service records. This terms from February 2008 to February 2009, but this is representative, and is viewed and accurate but still an estimate. The procedure will be amended to current practice.
1.4	Fugative Emissions R22	HEROtsc via a servicing contractor	kg	1500 kgCO ₂ e/kg	This gas is due to be outlawed in 2015.
1.5	Fugative Emissions R407c	HEROtsc via a servicing contractor	kg	1520 kgCO ₂ e/kg	According to the servicing contractor, this refrigerant gas has been replaced with a blend called R404a (see 1.6)
1.6	Fugative Emissions R404a	HEROtsc via a servicing contractor	kg	3260 kgCO ₂ e/kg	According to the servicing contractor, this is a blend of refrigerant gases.
2.1	Electricity	HEROtsc	kWh	0.537 tCO ₂ e/kWh	A HEROtsc site (Victory Court, Greenock) does not receive billing for gas consumption. Utilities payment is settled in the lease agreement. In this case, emissions due to consumption of electricity are considered to form part of the GHG emissions of the payee of the energy bills.

3.1	Waste Water	HEROtsc	m ³	0.4 kgCO ₂ e/m ³	<p>A HEROtsc site (Victory Court, Greenock) does not receive billing for water consumption. Utilities payment is settled in the lease agreement. In this case, emissions due to consumption of electricity are considered to form part of the GHG emissions of the payee of the energy bills.</p> <p>AMR meters for water should be installed where the current meter is in confined or inaccessible locations (Aviemore; Water meter positioned in confined space, therefore safety implications).</p>
3.2.1	Employee Commute - Car	HEROtsc	miles	0.2075 kgCO ₂ e/km	Employee survey information applied to postcode information. Average car, unknown fuel.
3.2.2	Employee Commute - Taxi	HEROtsc	pkm	0.1593 kgCO ₂ e/mile	Employee survey information applied to postcode information.
3.2.3	Employee Commute - Ferry	HEROtsc	pkm	0.1152 kgCO ₂ e/mile	Employee survey information applied to postcode information.
3.2.4	Employee Commute - Bus	HEROtsc	pkm	0.0891 kgCO ₂ e/pkm	Employee survey information applied to postcode information.
3.2.5	Employee Commute - Train	HEROtsc	pkm	0.0602 kgCO ₂ e/pkm	Employee survey information applied to postcode information.
3.3	Employee Travel – Car	HEROtsc	miles	0.3304 kgCO ₂ e/mile	Business claimed mileage information added to Business booked costing for Care Hire.
3.4	Employee Travel – Taxi	HEROtsc	pkm	0.1593 kgCO ₂ e/km	Business booked costing extrapolated into passenger km based on standard fares.
3.5	Employee Travel – Train	HEROtsc	pkm	0.0602 kgCO ₂ e/km	<p>Business booked journeys converted into passenger km through station distance.</p> <p>ConvertUnits.com. (accessed 29/05/09).The Distance between Cities, Airports, and Countries. http://www.convertunits.com/distance/</p>
3.6	Employee Ferry	HEROtsc	pkm	0.1152 kgCO ₂ e/km	Business booked journeys converted into passenger km through ferry terminal distance.

3.7	Employee Flights – (UK)	HEROtsc	pkm	0.158 kgCO ₂ /km	Business booked journeys converted into passenger km through station distance. ConvertUnits.com. (accessed 29/05/09).The Distance between Cities, Airports, and Countries. http://www.convertunits.com/distance/
3.8	Employee Flights – (Long Haul)	HEROtsc	pkm	0.1056 kgCO ₂ /km	Business booked journeys converted into passenger km through station distance. ConvertUnits.com. (accessed 29/05/09).The Distance between Cities, Airports, and Countries. http://www.convertunits.com/distance/
3.9	Waste to landfill	HEROtsc	tonnes	548 kgCO ₂ e/tonne	Waste quantity calculated from frequency of uplift, volume of skips, average fullness of skip, and a determined density from in-house monitoring.

7. Comparison 2008 and 2009

Emissions Type	Emissions Source	Emissions 2007/8		Emissions Source	Emissions 2008/9	Difference		Change %
		tCO _{2e}			tCO _{2e}	tCO _{2e}		
Direct Emissions Scope 1	Gas	327		Mains Gas	307.89	-19.1117		-5.84
	Owned vehicle	6		Fleet	4.76	-1.24		-20.67
				Generators	6.05	6.05		100.00
				R22	93.00			
	Fugitive emissions	98		R407c	0.00	-4.35		-4.44
				R404a	0.65			
	Sub-Total Scope 1		432	Sub-Total Scope 1	412.35	-18.65		-4.55
Imported Power/ Utilities Scope 2	Emissions from purchase of electricity	3579		Emissions from purchase of electricity	3382.17	-196.83		-5.50
	Sub-Total Scope 2		3579	Sub-Total Scope 2	3382.17	-196.8		-5.50
Other indirect emissions (i.e. not owned) Scope 3	Water use	6		Waste Water	5.23	-0.77		-12.83
	Commuting	1,656		Employee Commute	1768.36	112.36		6.79
				Employee Travel Car	83.64	83.64		100.00
				Employee Travel Taxi	5.70	5.70		100.00
				Employee Travel Ferry	0.06	0.06		100.00
				Employee Travel Train	16.52	16.52		100.00
	Employee Travel – Aeroplane Domestic	45		Employee Flights (UK)	20.28	-24.72		-54.93
	Employee Travel – Aeroplane Long Haul	30		Employee Flights (Long Haul)	19.75	-10.25		-34.17
	Waste to Landfill	270		Waste to Landfill	214.9	-55.1		-20.41
		Sub-Total Scope 3		2,184	Sub-Total Scope 3	2134.44	-49.6	
Total		6,194		Total	5928.96	-265.04		-4.28

8. Comparison By-Site 2008 and 2009

CO2e Emissions By-Site Comparison	Scope 1					Scope 2 Electricity	Scope 3			Scope Totals			Total	
	Gas	Generators	Fugitive Emissions				Water	Employee	Waste	Commute	Scope 1	Scope 2		Scope 3
			R22	R407C	R404A									
2007/8	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	
Aviemore	n/a	0.0	0.0	0.0	0.0	347.5	0.4	0.0	116.8	0.0	347.5	117.2	464.7	
Dearne Valley	155.3	0.0	0.0	0.0	0.0	1205.4	1.9	0.0	136.5	155.3	1205.4	138.4	1499.1	
Dunoon (Caledonia)	36.9	0.0	0.0	0.0	0.0	189.5	0.3	0.0	24.0	36.9	189.5	24.3	250.7	
Dunoon (Waverley)	n/a	0.0	14.4	0.0	0.0	116.0	0.3	0.0	0.0	14.4	116.0	0.3	130.6	
Falkirk	69.4	0.0	0.0	38.6	0.0	895.9	1.4	0.0	116.8	108.0	895.9	118.3	1122.2	
Greenock (Holt)	48.7	0.0	0.0	0.0	0.0	67.8	0.4	0.0	12.0	48.7	67.8	12.4	128.9	
Kilmarnock	0.0	0.0	0.0	45.6	0.0	533.2	1.1	0.0	58.4	45.6	533.2	59.5	638.3	
Livingston	13.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	13.0	1.2	0.0	14.2	
Rothesay	n/a	0.0	0.0	0.0	0.0	222.2	0.4	0.0	28.8	0.0	222.2	29.2	251.4	
Total	323.2		14.4	84.2		3578.7	6.1	1656.0	493.5	421.8	3578.7	2155.6	6156.1	
2008/9	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	tCO _{2e}	
Aviemore	n/a	0.3	0.0	0.0	0.0	335.3	0.4	228.3	1.3	0.3	335.3	229.9	565.4	
Dearne Valley	123.7	3.1	64.5	0.0	0.7	1097.6	1.5	529.2	58.0	192.0	1097.6	588.7	1878.3	
Dunoon (Caledonia)	33.4	0.7	0.0	0.0	0.0	228.8	0.3	31.6	14.1	34.1	228.8	46.1	309.0	
Dunoon (Waverley)	n/a	0.1	0.0	0.0	0.0	55.3	0.2	0.0	11.7	0.1	55.3	11.9	67.2	
Falkirk	86.9	0.9	3.0	0.0	0.0	899.8	1.4	494.8	59.3	90.8	899.8	555.4	1546.0	
Greenock (Holt)	51.8	0.1	0.0	0.0	0.0	62.5	0.4	127.3	20.9	51.9	62.5	148.6	263.1	
Kilmarnock	13.3	0.5	25.5	0.0	0.0	486.0	0.7	354.0	28.6	39.3	486.0	383.3	908.6	
Livingston	1.9	0.0	0.0	0.0	0.0	1.2	0.0	0.0	9.3	1.9	1.2	9.3	12.5	
Rothesay	n/a	0.3	0.0	0.0	0.0	215.7	0.3	3.2	11.7	0.3	215.7	15.2	231.3	
Total	311.0	6.1	93.0	0.0	0.7	3382.2	5.2	1768.4	214.9	410.7	3382.2	1988.5	5781.4	
Difference	%	%	%	%	%	%	%	%	%	%	%	%	%	
Aviemore		100.0	0.0	0.0	0.0	-3.5	-12.0	100.0	-98.9	100.0	-3.5	96.1	21.7	
Dearne Valley	-20.3	100.0	100.0	0.0	100.0	-8.9	-18.8	100.0	-57.5	23.6	-8.9	325.4	25.3	
Dunoon (Caledonia)	-9.3	100.0	0.0	0.0	0.0	20.7	5.7	100.0	-41.4	-7.3	20.7	89.3	23.2	
Dunoon (Waverley)		100.0	-100.0	0.0	0.0	-52.4	-39.2	0.0	100.0	-99.5	-52.4	4474.6	-48.5	
Falkirk	25.2	100.0	100.0	-100.0	0.0	0.4	-5.3	100.0	-49.2	-15.9	0.4	369.6	37.8	
Greenock (Holt)	6.4	100.0	0.0	0.0	0.0	-7.9	18.3	100.0	73.8	6.7	-7.9	1101.8	104.1	
Kilmarnock	100.0	100.0	100.0	-100.0	0.0	-8.8	-30.3	100.0	-51.1	-13.8	-8.8	544.5	42.4	
Livingston	-85.4	100.0	0.0	0.0	0.0	0.4	-100.0		100.0	-85.4	0.4	93169.6	-12.5	
Rothesay		100.0	0.0	0.0	0.0	-2.9	-17.3	100.0	-59.3	100.0	-2.9	-47.9	-8.0	
Total	-3.8	100.0	545.8	-100.0	100.0	-5.5	-14.6	6.8	-56.4	-2.6	-5.5	-7.8	-6.1	

9. References

- 1.1 Carbon Trust. (accessed 24/04/09). Carbon conversion factors.
http://www.carbontrust.co.uk/resource/conversion_factors/
- 1.2 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007).
<http://www.defra.gov.uk/environment/business/reporting/pdf/conversion-factors.pdf>
- 1.3 Carbon Trust. (accessed 24/04/09). Carbon conversion factors.
http://www.carbontrust.co.uk/resource/conversion_factors/
- 1.4 Market Transformation Programme. (accessed 25/05/2009). BNCR35: Overview of New and Alternative Refrigerants (v.1.2). <http://mtprog.com/spm/download/document/id/679>
- 1.5 Market Transformation Programme. (accessed 25/05/2009). BNCR35: Overview of New and Alternative Refrigerants (v.1.2). <http://mtprog.com/spm/download/document/id/680>
- 1.6 Market Transformation Programme. (accessed 25/05/2009). BNCR35: Overview of New and Alternative Refrigerants (v.1.2). <http://mtprog.com/spm/download/document/id/681>
- 2.1 Carbon Trust. (accessed 24/04/09). Carbon conversion factors.
http://www.carbontrust.co.uk/resource/conversion_factors/
- 3.1 Carbon Trust Local Authority Carbon Management Programme. (accessed 25/05/09). Baseline & Targeting Tool for UK Local Authorities (v.2.1).
http://www.carbontrust.co.uk/NR/rdonlyres/5671B61B-E392-4E57-BEEC-80CE60358954/0/CarbonTrust_Baseline_Tool_for_LAs_Sample_Dec03.xls
- 3.2.1 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007).
<http://www.defra.gov.uk/environment/business/reporting/pdf/conversion-factors.pdf>
- 3.2.2 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007).
<http://www.defra.gov.uk/environment/business/reporting/pdf/conversion-factors.pdf>
- 3.2.3 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007). <http://www.defra.gov.uk/environment/business/reporting/pdf/ghg-cf-guidelines-annexes2008.pdf>
- 3.2.4 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007).
<http://www.defra.gov.uk/environment/business/reporting/pdf/conversion-factors.pdf>
- 3.2.5 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007).
<http://www.defra.gov.uk/environment/business/reporting/pdf/conversion-factors.pdf>
- 3.3 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007).
<http://www.defra.gov.uk/environment/business/reporting/pdf/conversion-factors.pdf>
- 3.4 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007).
<http://www.defra.gov.uk/environment/business/reporting/pdf/conversion-factors.pdf>
- 3.5 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007).
<http://www.defra.gov.uk/environment/business/reporting/pdf/conversion-factors.pdf>

- 3.6 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007). <http://www.defra.gov.uk/environment/business/reporting/pdf/ghg-cf-guidelines-annexes2008.pdf>
- 3.7 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007). <http://www.defra.gov.uk/environment/business/reporting/pdf/conversion-factors.pdf>
- 3.8 Defra. (accessed 27/05/09) Guidelines to Defra's GHG conversion factors for company reporting (Annexes updated June 2007). <http://www.defra.gov.uk/environment/business/reporting/pdf/conversion-factors.pdf>
- 3.9 Carbon Trust Local Authority Carbon Management Programme. (accessed 25/05/09). Baseline & Targeting Tool for UK Local Authorities (v.2.1). http://www.carbontrust.co.uk/NR/rdonlyres/5671B61B-E392-4E57-BEEC-80CE60358954/0/CarbonTrust_Baseline_Tool_for_LAs_Sample_Dec03.xls
- GHGPI. (accessed: 12/06/09). The Green House Gas Protocol Initiative- A Corporate Accounting and Reporting Standard; Revised Edition. <http://www.ghgprotocol.org/files/ghg-protocol-revised.pdf>
- TSC Ltd. (2008). GHG Emissions Calculations for TSC Ltd; 2007/8. Telecom Service Centres Ltd; SHE Department Document Store.

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