

# **Disposal-based audit Commercial and industrial waste stream in the regulated areas of New South Wales**

**Main report**



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# Contents

Executive summary .....	1
1. Introduction.....	8
1.1 Sub-regions included in the audit.....	8
1.2 Aims of the waste audit.....	9
1.3 About the waste audit .....	10
1.4 Methodology .....	11
1.4.1 Sample size .....	11
1.4.2 Gatehouse survey.....	12
1.4.3 Visual assessment.....	13
1.4.4 Plastic bag assessment .....	14
1.4.5 Data entry and analysis.....	16
1.4.6 Statistical design.....	16
1.5 Study limitations.....	16
1.5.1 Timeframe.....	16
1.5.2 Representative sample .....	16
1.5.3 Weight-based analysis.....	17
2. Key findings – NSW regulated area .....	18
2.1 Where is C&I waste disposed? .....	18
2.2 Composition of C&I waste.....	19
2.2.1 All load types – mixed and single material loads .....	19
2.2.2 Composition of overall mixed loads.....	23
2.2.3 Composition of overall single-material loads .....	25
2.3 Focus category: degradable organic material .....	27
2.4 Focus category: packaging waste.....	30
2.5 Focus category: food waste .....	34
2.6 Focus category: wood.....	35
2.7 Focus category: plastic.....	37
2.8 Focus category: paper/cardboard .....	39
2.9 Focus category: masonry materials .....	41
2.10 Focus category: garbage bags.....	43
2.11 Focus category: e-waste.....	46
2.12 Who generates C&I waste? .....	48
2.12.1 C&I generation by industry sector .....	48
2.12.2 Garbage bag generation by industry sector.....	51
2.12.3 Focus sector: manufacturing .....	52
2.12.4 Focus sector: mixed small businesses .....	54
2.12.5 Focus sector: retail.....	55
2.12.6 Focus sector: healthcare and social assistance .....	57
2.13 Vehicle types .....	60
2.13.1 Vehicle types by facility type .....	60

2.13.2	Vehicle types by industry sector .....	61
2.14	Recoverable materials .....	62
2.14.1	Potential recovery of C&I waste currently disposed .....	62
2.15	Level of mixing in mixed C&I loads .....	66
2.16	C&I potentially recovered/recycled – by industry sector .....	68
2.16.1	Potential recovery: manufacturing .....	70
2.16.2	Potential recovery: mixed small businesses .....	72
2.16.3	Potential recovery: retail .....	74
2.16.4	Potential recovery: healthcare and social assistance .....	76
3.	Key findings: Sydney Metropolitan Area (SMA) .....	78
3.1	Composition of C&I waste in the SMA .....	78
3.2	SMA C&I waste by industry sector .....	84
3.2.1	Manufacturing .....	85
3.2.2	Mixed small businesses .....	86
3.2.3	Retail .....	87
3.2.4	Healthcare and social assistance .....	88
3.2	Recoverable materials .....	89
3.3	Trends in C&I waste in the SMA .....	92
3.4.1	Comparison of C&I waste composition .....	93
3.4.2	Industry sources of C&I waste .....	95
3.4.3	Types of loads .....	97
4.	Results: Extended Regulated Area (ERA) .....	98
4.1	ERA C&I waste composition .....	98
4.2	ERA C&I by industry sector .....	104
4.2.1	Mixed small businesses .....	105
4.2.2	Manufacturing .....	106
4.2.3	Retail .....	107
4.2.4	Shopping centres .....	108
4.2.5	Arts and recreation services .....	108
4.3	Recoverable materials .....	109
5.	Results: Regional Regulated Area (RRA) .....	111
5.1	C&I waste composition .....	111
5.2	RRA C&I by industry sector .....	116
5.2.1	Accommodation and food services .....	117
5.2.2	Manufacturing .....	118
5.2.3	Retail .....	119
5.2.4	Healthcare and social services .....	119
5.3	Recoverable materials .....	120
6.	Results: Regional groupings .....	123
6.1	Southern Sydney Regional Organisation of Councils (SSROC) .....	125
6.1.1	SSROC waste composition .....	125
6.1.2	SSROC waste generation by industry sector .....	129

6.1.3	SSROC recoverable materials .....	133
6.2	Western Sydney Regional Organisation of Councils (WSROC) .....	135
6.2.1	WSROC waste composition .....	135
6.2.2	WSROC waste generation by industry sector .....	139
6.2.3	WSROC recoverable materials .....	143
6.3	Northern Sydney Regional Organisation of Councils (NSROC) .....	145
6.3.1	NSROC waste composition .....	145
6.3.2	NSROC waste generation by industry sector .....	149
6.3.3	NSROC recoverable materials .....	153
6.4	Hunter Councils Inc. ....	156
6.4.1	Hunter Councils Inc. waste composition .....	156
6.4.2	Hunter Councils Inc. waste generation by industry sector .....	160
6.4.3	Hunter Councils Inc. recoverable materials .....	164
6.5	MIDWASTE .....	166
6.5.1	MIDWASTE waste composition .....	166
6.5.2	MIDWASTE waste generation by industry sector .....	170
6.5.3	MIDWASTE recoverable materials .....	173
7.	Statistical analysis .....	175
7.1	Individual material categories .....	176
7.2	Consolidated material categories .....	178
7.3	Scaled vs. unscaled results .....	179
7.4	Data extrapolation .....	180
8.	Discussion .....	181
8.1	NSW regulated area .....	181
8.2	SMA .....	186
8.3	ERA .....	187
8.4	RRA .....	187
9.	Conclusion .....	188
10.	Appendices .....	189
	Appendix A 2014 C&I Waste Stream Audit Methodology in NSW Regulated Areas 189	
	Disposal-based audit (DBA) – vehicles .....	189
	Disposal-based audit (DBA) – garbage bags .....	197
	Appendix B Industry sector definitions .....	212
	Appendix C Material categories and definitions .....	214
	Appendix D Material density conversion factors .....	216
	Appendix E Consolidated material categories .....	218
	Appendix F Data .....	219
	Potential recovery of C&I currently disposed .....	225
	Sydney Metropolitan Area (SMA) .....	235
	Extended Regulated Area (ERA) .....	243
	Regional Regulated Area (RRA) .....	251

Southern Sydney Regional Organisation of Councils (SSROC) .....	259
Western Sydney Regional Organisation of Councils (WSROC) .....	267
Northern Sydney Regional Organisation of Councils (NSROC) .....	275
Hunter Councils Inc. ....	283
MIDWASTE .....	291
C&I disposal, composition and potential recovery by industry sector .....	299
C&I composition by industry sector, overall region .....	300
C&I generation by industry sector, showing regions.....	309
Industry sector: Manufacturing.....	313
Industry sector: Mixed small businesses .....	328
Industry sector: Retail .....	343
Industry sector: Healthcare and social assistance.....	358
Industry sector: Accommodation and food services .....	373
Industry sector: Wholesale trade.....	383
Industry sector: Transport, postal and warehousing .....	393
Industry sector: Education and training .....	403
Industry sector: Arts and recreation services .....	413
Industry sector: Offices .....	423
Industry sector: Shopping centres.....	433
Count of individual e-waste items recorded during the audit .....	443
Garbage bag composition .....	443

## List of tables

Table 1: DBA (vehicles) and DBA (garbage bags) sampling .....	11
Table 2: C&I divisions/subdivisions to be included in audits and reporting outputs .....	12
Table 3: C&I waste composition – garbage bags as a category .....	19
Table 4: C&I waste composition – detail of ‘other’ material category.....	20
Table 5: Overall C&I waste: composition of garbage bags.....	21
Table 6: Overall C&I waste composition – garbage bags distributed.....	22
Table 7: Composition of mixed loads, garbage bags as a category .....	23
Table 8: Composition of overall mixed loads, garbage bags distributed.....	24
Table 9: Overall composition of single-material loads, garbage bags as a category .....	25
Table 10: Overall composition of single-material loads, garbage bags distributed .....	26
Table 11: Organic material in mixed C&I waste, garbage bags distributed.....	28
Table 12: Organic material in single loads of C&I waste, garbage bags distributed .....	29
Table 13: Composition of packaging material in mixed C&I waste, bags distributed .....	31
Table 14: Composition of packaging material in single-material C&I loads, bags distributed .....	32
Table 15: Composition of food waste in mixed C&I waste, garbage bags distributed.....	34
Table 16: Composition of food waste in single material C&I loads, garbage bags distributed .....	34
Table 17: Composition of wood/timber in mixed C&I waste, bags distributed.....	35
Table 18: Composition of wood/timber in single-material C&I loads, bags distributed.....	36
Table 19: Composition of plastics in mixed C&I waste, bags distributed .....	37
Table 20: Composition of plastics in single-material C&I loads, bags distributed .....	38
Table 21: Composition of paper/cardboard in mixed C&I waste, bags distributed .....	39
Table 22: Composition of paper/cardboard in single-material C&I loads, bags distributed .....	40
Table 23: Breakdown of masonry materials in overall C&I waste .....	42
Table 24: Contents of masonry materials in mixed C&I loads .....	42
Table 25: Contents of masonry materials in single material C&I loads.....	43
Table 26: Contents of garbage bags in mixed C&I loads .....	44
Table 27: Contents of garbage bags in single material C&I loads .....	45
Table 28: Composition of e-waste in mixed C&I waste, bags distributed.....	47
Table 29: Composition of e-waste in single material C&I loads, bags distributed .....	47
Table 30: Overall C&I waste disposal by industry sector.....	48
Table 31: C&I mixed loads disposal by industry sector .....	49
Table 32: C&I single loads disposal by industry sector .....	50
Table 33: Garbage bag disposal by industry sector .....	51
Table 34: C&I waste facility customers by industry sector.....	59
Table 35: Vehicle type by facility type .....	60

Table 36: Vehicle type by industry sector.....	61
Table 37: SMA C&I waste composition – garbage bags as a category .....	78
Table 38: SMA – contents of garbage bags in C&I waste .....	79
Table 39: SMA C&I waste composition – garbage bag contents distributed.....	80
Table 40: ERA C&I waste composition – bags as separate category.....	98
Table 41: ERA – composition of garbage bags in C&I waste .....	99
Table 42: ERA C&I waste composition – garbage bags distributed.....	100
Table 43: RRA C&I waste composition – bags as separate category.....	111
Table 44: RRA – composition of garbage bags in C&I waste .....	112
Table 45: RRA C&I waste composition – garbage bags distributed .....	113
Table 46: Composition of C&I waste – SSROC – garbage bags as a category.....	125
Table 47: SSROC C&I waste composition – garbage bags distributed .....	126
Table 48: WSROC – composition of C&I waste – bags as a category .....	135
Table 49: WSROC – C&I waste composition – garbage bags distributed .....	136
Table 50: Composition of C&I waste – NSROC – bags as a category .....	145
Table 51: NSROC C&I waste composition – garbage bags distributed .....	146
Table 52: Composition of C&I waste – Hunter Councils – garbage bags as a separate category .....	156
Table 53: Hunter Councils Inc. C&I waste composition – garbage bags distributed .....	157
Table 54: Composition of C&I waste – MIDWASTE – garbage bags as a separate category.....	166
Table 55: MIDWASTE C&I waste composition – garbage bags distributed.....	167
Table 56: Key statistical indicators for all individual materials (scaled, bagged materials distributed) .....	176
Table 57: Overall results unscaled and scaled by region .....	179
Table 58: Overall results unscaled and scaled by consolidated material category .....	180
Table 59: Extrapolated factors by region.....	180

## List of appendix tables

Table AF1	All load types – detailed .....	219
Table AF2	Overall NSW regulated area: mixed loads – detailed categories .....	221
Table AF3	Overall NSW regulated area – single material loads – detailed categories.....	223
Table AF4	C&I currently disposed that could be recycled – if bag contents not accessible – by region.....	225
Table AF5	C&I currently disposed that could be recycled – if bag contents not accessible – by Regional Grouping of Councils.....	225
Table AF6	C&I currently disposed that could be recycled – if bag contents are accessible – by region .....	226
Table AF7	C&I currently disposed that could be recycled – if bag contents are accessible – Regional Grouping of Councils .....	226
Table AF8	C&I currently disposed that could be recycled – recoverable now – bag contents not accessible – by material – by regions .....	227
Table AF9	C&I currently disposed that could be recycled – recoverable now – bag contents not accessible – by material – by Regional Grouping of Councils.....	228
Table AF10	C&I currently disposed that could be recycled – recoverable in the future – bag contents not accessible – by material – by region.....	229
Table AF11	C&I currently disposed that could be recycled – recoverable in the future – bag contents not accessible – by material – by Regional Grouping of Councils .....	230
Table AF12	C&I currently disposed that could be recycled – recoverable now – bag contents accessible – by material – by region.....	231
Table AF13	C&I currently disposed that could be recycled – recoverable now – bag contents accessible – by material – by Regional Grouping of Councils ...	232
Table AF14	C&I currently disposed that could be recycled – recoverable in the future – bag contents accessible – by material – by region .....	233
Table AF15	C&I currently disposed that could be recycled – recoverable in the future – bag contents accessible – by material – by Regional Grouping of Councils.....	234
Table AF16	SMA – mixed loads – bags as a category – consolidated composition.....	235
Table AF17	SMA – mixed loads – bags distributed – consolidated composition.....	236
Table AF18	SMA – single-material loads – consolidated composition.....	236
Table AF19	SMA – all load types – detailed categories.....	237
Table AF20	SMA – mixed loads – detailed categories .....	239
Table AF21	SMA – single-material loads – detailed categories.....	241
Table AF22	ERA – mixed loads – bags as a category – consolidated composition.....	243
Table AF23	ERA – mixed loads – bags distributed – consolidated composition.....	243

Table AF24	ERA – single-material loads – consolidated composition .....	244
Table AF25	ERA – all load types – detailed categories .....	245
Table AF26	ERA – mixed loads – detailed categories.....	247
Table AF27	ERA – single-material loads – detailed categories .....	249
Table AF28	RRA – mixed loads – bags as a category – consolidated composition.....	251
Table AF29	RRA – mixed loads – bags distributed – consolidated composition.....	251
Table AF30	RRA – single-material loads – consolidated composition .....	252
Table AF31	RRA – all load types – detailed categories.....	253
Table AF32	RRA – mixed loads – detailed categories.....	255
Table AF33	RRA – single-material loads – detailed categories .....	257
Table AF34	SSROC – mixed loads – bags as a category – consolidated composition.....	259
Table AF35	SSROC – mixed loads – bags distributed – consolidated composition.....	259
Table AF36	SSROC – single-material loads – consolidated composition .....	260
Table AF37	SSROC – all load types- detailed categories.....	261
Table AF38	SSROC – mixed loads – detailed categories.....	263
Table AF39	SSROC – single-material loads – detailed categories .....	265
Table AF40	WSROC – mixed loads – bags as a category – consolidated composition.....	267
Table AF41	WSROC – mixed loads – bags distributed – consolidated composition.....	267
Table AF42	WSROC – single-material loads – consolidated composition .....	268
Table AF43	WSROC – all load types- detailed categories.....	269
Table AF44	WSROC – mixed loads- detailed categories .....	271
Table AF45	WSROC – single-material loads – detailed categories .....	273
Table AF46	NSROC – mixed loads – bags as a category – consolidated composition.....	275
Table AF47	NSROC – mixed loads – bags distributed – consolidated composition.....	275
Table AF48	NSROC – single-material loads – consolidated composition.....	276
Table AF49	NSROC – all load types – detailed categories.....	277
Table AF50	NSROC – mixed loads – detailed categories .....	279
Table AF51	NSROC – single-material loads –detailed categories.....	281
Table AF52	Hunter Councils Inc – mixed loads – bags as a category – consolidated composition.....	283
Table AF53	Hunter Councils Inc – mixed loads – bags distributed – consolidated composition.....	283
Table AF54	Hunter Councils Inc – single-material loads – consolidated composition.....	284

Table AF55	Hunter Councils Inc – all load types – detailed categories.....	285
Table AF56	Hunter Councils Inc. – mixed loads – detailed categories .....	287
Table AF57	Hunter Councils Inc. – single-material loads – detailed categories.....	289
Table AF58	MIDWASTE – mixed loads – bags as a category – consolidated composition.....	291
Table AF59	MIDWASTE – mixed loads – bags distributed – consolidated composition.....	291
Table AF60	MIDWASTE – single-material loads – consolidated composition.....	292
Table AF61	MIDWASTE – all load types – detailed categories .....	293
Table AF62	MIDWASTE – mixed loads – detailed categories .....	295
Table AF63	MIDWASTE – single-material loads – detailed categories.....	297
Table AF64	Composition by industry sector, all load types (tonnes per year, scaled) – detailed categories.....	300
Table AF65	Composition by industry sector – mixed loads – (tonnes per year, scaled) – detailed categories.....	303
Table AF66	Composition by industry sector – single-material loads – (tonnes per year, scaled) – detailed categories.....	306
Table AF67	C&I generation by industry sector, mixed loads, by region.....	309
Table AF68	C&I generation by industry sector, mixed loads, by Regional Grouping of Councils.....	310
Table AF69	C&I generation by industry sector, single-material loads, by region.....	311
Table AF70	C&I generation by industry sector, single-material loads, by Regional Grouping of Councils.....	312
Table AF71	Composition of overall C&I waste from manufacturing sector, garbage bags separate, showing all regions .....	313
Table AF72	Composition of overall C&I waste from manufacturing sector, garbage bags distributed, showing all regions.....	314
Table AF73	Composition of mixed C&I loads from manufacturing sector, garbage bags separate, by region.....	315
Table AF74	Composition of single-material C&I loads from manufacturing sector, garbage bags separate, by region.....	317
Table AF75	Composition of mixed C&I loads from manufacturing sector, garbage bags separate, by Regional Grouping .....	319
Table AF76	Composition of single-material C&I loads from manufacturing sector, garbage bags separate, by Regional Grouping .....	321
Table AF77	Manufacturing: C&I currently disposed that could be recycled – if bag contents not accessible – by region.....	323
Table AF78	Manufacturing: C&I currently disposed that could be recycled – if bag contents are accessible – by region .....	323
Table AF79	Manufacturing: C&I currently disposed that could be recycled – recoverable now – bag contents not accessible – by material – by region.....	324

Table AF80	Manufacturing: C&I currently disposed that could be recycled – recoverable in the future – bag contents not accessible – by material – by region.....	325
Table AF81	Manufacturing: C&I currently disposed that could be recycled – recoverable now – bag contents accessible – by material – by region ....	326
Table AF82	Manufacturing: C&I currently disposed that could be recycled – recoverable in the future – bag contents accessible – by material – by region.....	327
Table AF83	Composition of overall C&I waste from mixed small businesses, garbage bags separate, showing all regions .....	328
Table AF84	Composition of overall C&I waste from mixed small businesses, garbage bags distributed, showing all regions.....	329
Table AF85	Composition of mixed C&I loads from mixed small businesses, garbage bags separate, by region.....	330
Table AF86	Composition of single-material C&I loads from mixed small businesses, garbage bags separate, by region.....	332
Table AF87	Composition of mixed C&I loads from mixed small businesses, garbage bags separate, by Regional Grouping .....	334
Table AF88	Composition of single-material C&I loads from mixed small businesses, garbage bags separate, by regional Grouping .....	336
Table AF89	Mixed small businesses: C&I currently disposed that could be recycled – if bag contents not accessible – by region.....	338
Table AF90	Mixed small businesses: C&I currently disposed that could be recycled – if bag contents are accessible – by region .....	338
Table AF91	Mixed small businesses: C&I currently disposed that could be recycled – recoverable now – bag contents not accessible – by material – by region.....	339
Table AF92	Mixed small businesses: C&I currently disposed that could be recycled – recoverable in the future – bag contents not accessible – by material – by region.....	340
Table AF93	Mixed small businesses: C&I currently disposed that could be recycled – recoverable now – bag contents are accessible – by material – by region.....	341
Table AF94	Mixed small businesses: C&I currently disposed that could be recycled – recoverable in the future – bag contents are accessible – by material – by region.....	342
Table AF95	Composition of C&I waste from the retail sector, garbage bags separate, showing all regions .....	343
Table AF96	Composition of C&I waste from the retail sector, garbage bags distributed, showing all regions.....	344
Table AF97	Composition of mixed C&I loads from the retail sector, garbage bags separate, showing by region.....	345
Table AF98	Composition of single-material C&I loads from the retail sector, garbage bags separate, by region.....	347
Table AF99	Composition of mixed C&I loads from the retail sector, garbage bags separate, by Regional Grouping.....	349

Table AF100	Composition of single-material C&I loads from the retail sector, garbage bags separate, by regional Grouping .....	351
Table AF101	Retail: C&I currently disposed that could be recycled – if bag contents not accessible – by region.....	353
Table AF102	Retail: C&I currently disposed that could be recycled – if bag contents are accessible – by region .....	353
Table AF103	Retail: C&I currently disposed that could be recycled – recoverable now – bag contents not accessible – by material – by region.....	354
Table AF104	Retail: C&I currently disposed that could be recycled – recoverable in the future – bag contents not accessible – by material – by region.....	355
Table AF105	Retail: C&I currently disposed that could be recycled – recoverable now – bag contents are accessible – by material – by region.....	356
Table AF106	Retail: C&I currently disposed that could be recycled – recoverable in the future – bag contents are accessible – by material – by region.....	357
Table AF107	Composition of C&I waste from healthcare/ social assistance, garbage bags separate, showing all regions .....	358
Table AF108	Composition of C&I waste from healthcare/ social assistance, garbage bags distributed, showing all regions.....	359
Table AF109	Composition of mixed C&I loads from healthcare/ social assistance, garbage bags separate, showing by region.....	360
Table AF110	Composition of single-material C&I loads from the healthcare/ social assistance, garbage bags separate, by region .....	362
Table AF111	Composition of mixed C&I loads from healthcare/ social assistance, garbage bags separate, by Regional Grouping .....	364
Table AF112	Composition of single-material C&I loads from healthcare/ social assistance, garbage bags separate, by Regional Grouping .....	366
Table AF113	Healthcare/ social assistance: C&I currently disposed that could be recycled – if bag contents not accessible – by region.....	368
Table AF114	Healthcare/ social assistance: C&I currently disposed that could be recycled – if bag contents are accessible – by region .....	368
Table AF115	Healthcare/ social assistance: C&I currently disposed that could be recycled – recoverable now – bag contents not accessible – by material – by region.....	369
Table AF116	Healthcare/ social assistance: C&I currently disposed that could be recycled – recoverable in the future – bag contents not accessible – by material – by region.....	370
Table AF117	Healthcare/ social assistance: C&I currently disposed that could be recycled – recoverable now – bag contents are accessible – by material – by region.....	371
Table AF118	Healthcare/ social assistance: C&I currently disposed that could be recycled – recoverable in the future – bag contents are accessible – by material – by region.....	372

Table AF119	Composition of overall C&I waste from accommodation/ food services, garbage bags separate, by region.....	373
Table AF120	Composition of overall C&I waste from accommodation/ food services, garbage bags distributed, by region .....	374
Table AF121	Composition of mixed C&I loads from accommodation/ food services, garbage bags separate, by region.....	375
Table AF122	Composition of single-material C&I loads from accommodation/ food services, garbage bags separate, by region.....	377
Table AF123	Composition of mixed C&I loads from accommodation/ food services, garbage bags separate, by Regional Grouping .....	379
Table AF124	Composition of single-material C&I loads from accommodation/ food services, garbage bags separate, by Regional Grouping .....	381
Table AF125	Composition of overall C&I waste from wholesale trade, garbage bags separate, showing all regions.....	383
Table AF126	Composition of overall C&I waste from wholesale trade, garbage bags distributed, showing all regions .....	384
Table AF127	Composition of mixed C&I loads from wholesale trade, garbage bags separate, showing all regions.....	385
Table AF128	Composition of single-material C&I loads from wholesale trade, garbage bags separate, showing all regions .....	387
Table AF129	Composition of mixed C&I loads from wholesale trade, garbage bags separate, by Regional Grouping.....	389
Table AF130	Composition of single-material C&I loads from wholesale trade, garbage bags separate, by Regional Grouping .....	391
Table AF131	Composition of overall C&I waste from transport/ postal/ warehousing, garbage bags separate, showing all regions .....	393
Table AF132	Composition of overall C&I waste from transport/ postal/ warehousing, garbage bags distributed, showing all regions.....	394
Table AF133	Composition of mixed C&I loads from transport/ postal/ warehousing, garbage bags separate, showing all regions .....	395
Table AF134	Composition of single-material C&I loads from transport/ postal/ warehousing, garbage bags separate, showing all regions .....	397
Table AF135	Composition of mixed C&I loads from transport/ postal/ warehousing, garbage bags separate, by Regional Grouping .....	399
Table AF136	Composition of single-material C&I loads from transport/ postal/ warehousing, garbage bags separate, by Regional Grouping .....	401
Table AF137	Composition of overall C&I waste from education/ training, garbage bags separate, showing all regions .....	403
Table AF138	Composition of overall C&I waste from education/ training, garbage bags distributed, showing all regions.....	404
Table AF139	Composition of mixed C&I loads from education/ training, garbage bags separate, showing all regions .....	405
Table AF140	Composition of single-material C&I loads from education/ training, garbage bags separate, showing all regions .....	407
Table AF141	Composition of mixed C&I loads from education/ training, garbage bags separate, by Regional Grouping .....	409

Table AF142	Composition of single-material C&I loads from education/ training, garbage bags separate, by Regional Grouping .....	411
Table AF143	Composition of overall C&I waste from arts/ recreation, garbage bags separate, showing all regions .....	413
Table AF144	Composition of overall C&I waste from arts/ recreation, garbage bags distributed, showing all regions.....	414
Table AF145	Composition of mixed C&I loads from arts/ recreation, garbage bags separate, showing all regions .....	415
Table AF146	Composition of single-material C&I loads from arts/ recreation, garbage bags separate, showing all regions .....	417
Table AF147	Composition of mixed C&I loads from arts/ recreation, garbage bags separate, by Regional Grouping.....	419
Table AF148	Composition of single-material C&I loads from arts/ recreation, garbage bags separate, by Regional Grouping .....	421
Table AF149	Composition of overall C&I waste from offices, garbage bags separate, showing all regions .....	423
Table AF150	Composition of overall C&I waste from offices, garbage bags distributed, showing all regions .....	424
Table AF151	Composition of mixed C&I loads from offices, garbage bags separate, showing all regions.....	425
Table AF152	Composition of single-material C&I loads from offices, garbage bags separate, showing all regions.....	427
Table AF153	Composition of mixed C&I loads from offices, garbage bags separate, by Regional Grouping .....	429
Table AF154	Composition of single-material C&I loads from offices, garbage bags separate, by Regional Grouping.....	431
Table AF155	Composition of overall C&I waste from shopping centres, garbage bags separate, showing all regions .....	433
Table AF156	Composition of overall C&I waste from shopping centres, garbage bags distributed, showing all regions.....	434
Table AF157	Composition of mixed C&I loads from shopping centres, garbage bags separate, showing all regions .....	435
Table AF158	Composition of single-material C&I loads from shopping centres, garbage bags separate, showing all regions .....	437
Table AF159	Composition of mixed C&I loads from shopping centres, garbage bags separate, by Regional Grouping.....	439
Table AF160	Composition of single-material C&I loads from shopping centres, garbage bags separate, by Regional Grouping .....	441
Table AF161	Count of e-waste items recorded .....	443
Table AF162	Garbage bag composition by region, consolidated categories .....	443
Table AF163	Garbage bag composition by region, detailed categories .....	444
Table AF164	Garbage bag composition by industry sector, consolidated categories .....	448
Table AF165	Garbage bag composition by industry sector, detailed categories.....	449

## List of charts

Chart 1	Annual C&I disposal by region.....	18
Chart 2	Overall C&I waste composition – garbage bags as a category .....	20
Chart 3	Overall C&I waste: composition of garbage bags .....	21
Chart 4	Overall C&I waste composition – garbage bags distributed .....	22
Chart 5	Overall mixed vs single material loads, by weight.....	23
Chart 6	Composition of overall mixed loads, garbage bags as a category.....	24
Chart 7	Composition of overall mixed loads, garbage bags distributed .....	25
Chart 8	Overall composition of single-material loads, garbage bags as a category ...	26
Chart 9	Composition of overall single-material loads, garbage bags distributed .....	27
Chart 10	Overall C&I waste disposal by industry sector .....	49
Chart 11	C&I mixed loads disposal by industry sector.....	50
Chart 12	C&I single material loads disposal by industry sector .....	51
Chart 13	Garbage bag disposal by industry sector.....	52
Chart 14	Composition of C&I loads from the manufacturing sector – garbage bags separate.....	53
Chart 15	Composition of C&I loads from the manufacturing sector – garbage bags distributed .....	53
Chart 16	Composition C&I loads from mixed small businesses – garbage bags separate.....	54
Chart 17	Composition of C&I loads from mixed small businesses – garbage bags distributed .....	55
Chart 18	Composition C&I loads from the retail sector – garbage bags separate.....	56
Chart 19	Composition of C&I loads from the retail sector – garbage bags distributed .....	56
Chart 20	Composition of C&I waste from the healthcare and social assistance sector.....	57
Chart 21	Composition of C&I waste from the healthcare and social assistance sector – bags distributed .....	58
Chart 22	C&I currently disposed that could be recycled .....	63
Chart 23	Detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible .....	64
Chart 24	Detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible .....	65
Chart 25	C&I potentially recyclable, by industry sector – garbage bag contents not accessible.....	68
Chart 26	C&I potentially recyclable, by industry sector – garbage bag contents accessible .....	69
Chart 27	Manufacturing: detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible .....	70

Chart 28	Manufacturing: detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible .....	71
Chart 29	Mixed small businesses: detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible .....	72
Chart 30	Mixed small businesses: detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible .....	73
Chart 31	Retail: disposed C&I waste that could be recycled – garbage bag contents not accessible .....	74
Chart 32	Retail: disposed C&I waste that could be recycled – garbage bag contents accessible .....	75
Chart 33	Healthcare/social assistance – disposed C&I waste that could be recycled – garbage bag contents not accessible .....	76
Chart 34	Healthcare/social assistance – disposed C&I waste that could be recycled – garbage bag contents accessible .....	77
Chart 35	SMA C&I composition – garbage bags as a category .....	79
Chart 36	SMA – contents of garbage bags in C&I waste.....	80
Chart 37	SMA – C&I composition – garbage bag contents distributed .....	81
Chart 38	SMA – mixed vs single material loads .....	81
Chart 39	SMA – composition of mixed C&I waste, garbage bags as a category .....	82
Chart 40	SMA – composition of mixed C&I waste, garbage bag contents distributed..	82
Chart 41	SMA – composition of single material C&I loads.....	83
Chart 42	SMA – C&I disposal by industry sector – mixed loads .....	84
Chart 43	SMA – C&I disposal by industry sector – single material loads .....	84
Chart 44	SMA – composition of mixed C&I loads from manufacturing.....	85
Chart 45	SMA – composition of single material C&I loads from manufacturing .....	85
Chart 46	SMA – composition of mixed C&I loads from mixed small businesses.....	86
Chart 47	SMA – composition of single-material C&I loads from mixed small businesses.....	86
Chart 48	SMA – composition of mixed C&I loads from retail .....	87
Chart 49	SMA – composition of single-material C&I loads from retail.....	87
Chart 50	SMA – composition of mixed C&I loads from healthcare and social assistance.....	88
Chart 51	SMA – composition of single-material C&I loads from healthcare/ social assistance.....	88
Chart 52	C&I waste currently disposed that could be recycled – SMA .....	89
Chart 53	SMA – detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible .....	90
Chart 54	SMA – detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible .....	91
Chart 55	Composition of NSW mixed C&I waste stream, 2003/14, bags separate .....	93
Chart 56	Composition of NSW mixed C&I waste stream, 2003/14, garbage bag contents distributed.....	94

Chart 57	Industry sector contribution to C&I waste disposed, by percentage – 2008 and 2014, mixed loads only .....	96
Chart 58	Industry sector contribution to C&I waste disposed, by tonnes – 2008 and 2014, mixed loads only .....	96
Chart 59	Mixed vs single-source loads, 2008 and 2014 .....	97
Chart 60	Vehicle type: 2008 and 2014 .....	97
Chart 61	ERA – C&I waste composition – garbage bags as a category .....	99
Chart 62	ERA – contents of garbage bags in C&I waste .....	100
Chart 63	ERA – C&I waste composition – bags distributed .....	101
Chart 64	ERA – mixed vs single material loads.....	101
Chart 65	ERA – composition of mixed C&I waste, garbage bags as a separate category .....	102
Chart 66	ERA – composition of mixed C&I waste, garbage bags distributed.....	102
Chart 67	ERA – composition of single material C&I loads .....	103
Chart 68	ERA – mixed loads C&I disposal by industry sector.....	104
Chart 69	ERA – single material loads C&I disposal by industry sector .....	104
Chart 70	ERA – composition of mixed C&I loads from mixed small businesses .....	105
Chart 71	ERA – composition of single-material C&I loads from mixed small businesses.....	105
Chart 72	ERA – composition of mixed C&I loads from manufacturing .....	106
Chart 73	ERA – composition of single material C&I loads from manufacturing.....	106
Chart 74	ERA – composition of mixed C&I loads from the retail sector .....	107
Chart 75	ERA – composition of single-material C&I loads from the retail sector.....	107
Chart 76	ERA – composition of mixed C&I loads from shopping centres .....	108
Chart 77	ERA – composition of single-material C&I loads from the arts and recreation sector .....	108
Chart 78	ERA – C&I currently disposed that could be recycled .....	109
Chart 79	ERA – detail of C&I waste currently disposed that could be recycled – garbage bag contents not accesible .....	110
Chart 80	ERA – detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible .....	110
Chart 81	RRA – C&I waste composition – garbage bags as a separate category .....	112
Chart 82	RRA – contents of garbage bags in C&I waste .....	113
Chart 83	RRA – overall C&I composition – garbage bags distributed.....	114
Chart 84	RRA – mixed vs single material loads .....	114
Chart 85	RRA – composition of mixed C&I waste, garbage bags as a separate category .....	115
Chart 86	RRA – composition of mixed C&I waste, garbage bags distributed.....	115
Chart 87	RRA – composition of single material C&I loads.....	116
Chart 88	RRA – C&I mixed loads disposal by industry sector .....	116
Chart 89	RRA – C&I single material loads disposal by industry sector .....	117

Chart 90	RRA – composition of mixed C&I loads from accommodation and food services .....	117
Chart 91	RRA – composition of mixed C&I loads from the manufacturing sector .....	118
Chart 92	RRA – composition of mixed C&I loads from the retail sector .....	119
Chart 93	RRA – composition of mixed C&I loads from healthcare and social services sector .....	119
Chart 94	RRA – C&I currently disposed that could be recycled .....	120
Chart 95	RRA – detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible .....	120
Chart 96	RRA – detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible .....	122
Chart 97	SSROC – overall C&I composition – garbage bags as a category .....	125
Chart 98	SSROC – C&I waste composition – garbage bags distributed .....	126
Chart 99	SSROC – mixed vs single material loads .....	127
Chart 100	SSROC – composition of mixed C&I waste, garbage bags separate .....	127
Chart 101	SSROC – composition of mixed C&I waste, garbage bags distributed .....	128
Chart 102	SSROC – composition of single material C&I waste .....	128
Chart 103	SSROC – C&I mixed loads generation by industry sector .....	129
Chart 104	SSROC – C&I single material loads generation by industry sector .....	129
Chart 105	SSROC – composition of mixed C&I loads from mixed small businesses .....	130
Chart 106	SSROC – composition of single-material C&I loads from mixed small businesses .....	130
Chart 107	SSROC – composition of mixed C&I loads from the retail sector .....	131
Chart 108	SSROC – composition of single-material C&I loads from the retail sector .....	131
Chart 109	SSROC – composition of mixed C&I loads from manufacturing .....	132
Chart 110	SSROC – composition of single material C&I loads from manufacturing .....	132
Chart 111	SSROC – C&I currently disposed that could be recycled .....	133
Chart 112	SSROC – detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible .....	134
Chart 113	SSROC – detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible .....	134
Chart 114	WSROC – C&I waste composition – garbage bags as a separate category .....	135
Chart 115	WSROC – C&I waste composition – garbage bags distributed .....	136
Chart 116	WSROC – mixed vs single material loads .....	137
Chart 117	WSROC – composition of mixed C&I waste, garbage bags as a separate category .....	137
Chart 118	WSROC – composition of mixed C&I waste, garbage bags distributed .....	138
Chart 119	WSROC – composition of single-material C&I waste .....	138
Chart 120	WSROC – C&I mixed loads generation by industry sector .....	139
Chart 121	WSROC – C&I single material loads generation by industry sector .....	139

Chart 122	WSROC – composition of mixed C&I loads from manufacturing.....	140
Chart 123	WSROC – composition of single material C&I loads from manufacturing ....	140
Chart 124	WSROC – composition of mixed C&I loads from mixed small businesses...	141
Chart 125	WSROC – composition of single-material C&I loads from mixed small businesses.....	141
Chart 126	WSROC – composition of mixed C&I loads from the retail sector .....	142
Chart 127	WSROC – composition of single-material C&I loads from the retail sector ..	142
Chart 128	WSROC – C&I currently disposed that could be recycled.....	143
Chart 129	WSROC – detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible .....	144
Chart 130	WSROC – detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible .....	144
Chart 131	NSROC – overall C&I composition – garbage bags as a category.....	145
Chart 132	NSROC – C&I waste composition – garbage bags distributed.....	146
Chart 133	NSROC – mixed vs single material loads .....	147
Chart 134	NSROC – composition of mixed C&I waste, garbage bags as a separate category .....	147
Chart 135	NSROC – composition of mixed C&I waste, garbage bags distributed .....	148
Chart 136	NSROC – composition of single material C&I waste.....	148
Chart 137	NSROC – C&I mixed loads generation by industry sector .....	149
Chart 138	NSROC – C&I single-material loads generation by industry sector .....	149
Chart 139	NSROC – composition of mixed C&I loads from healthcare/social assistance sector .....	150
Chart 140	NSROC – composition of single-material C&I loads from the healthcare and social assistance sector .....	150
Chart 141	NSROC – composition of mixed C&I loads from mixed small businesses....	151
Chart 142	NSROC – composition of single-material C&I loads from mixed small businesses.....	151
Chart 143	NSROC – composition of mixed C&I loads from manufacturing .....	152
Chart 144	NSROC – composition of single-material C&I loads from manufacturing ....	152
Chart 145	NSROC – C&I waste currently disposed that could be recycled .....	153
Chart 146	NSROC – detail of C&I waste currently disposed that could be recycled – bags mixed.....	154
Chart 147	NSROC – detail of C&I waste currently disposed that could be recycled – bags distributed.....	155
Chart 148	Hunter Councils – C&I waste composition – garbage bags as a separate category .....	156
Chart 149	Hunter Councils Inc. – C&I waste composition – garbage bags distributed..	157
Chart 150	Hunter Councils Inc. – mixed vs single material loads .....	158
Chart 151	Hunter Councils Inc. – composition of mixed C&I waste, garbage bags as a separate category .....	158

Chart 152	Hunter Councils Inc. – composition of mixed C&I waste, garbage bags distributed .....	159
Chart 153	Hunter Councils Inc. – composition of single material C&I waste.....	159
Chart 154	Hunter Councils Inc. – C&I mixed loads generation by industry sector .....	160
Chart 155	Hunter Councils Inc. – C&I single material loads generation by industry sector .....	160
Chart 156	Hunter Councils Inc. – composition of mixed C&I loads from manufacturing .....	161
Chart 157	Hunter Councils Inc. – composition of single material C&I loads from manufacturing.....	161
Chart 158	Hunter Councils – composition of mixed C&I loads from mixed small businesses .....	162
Chart 159	Hunter Councils Inc. – composition of single-material C&I loads from mixed small businesses .....	162
Chart 160	Hunter Councils Inc. – composition of mixed C&I loads from the retail sector .....	163
Chart 161	Hunter Councils Inc. – C&I currently disposed that could be recycled .....	164
Chart 162	Hunter Councils Inc. – detail of C&I waste currently disposed that could be recycled – garbage bags not included .....	165
Chart 163	Hunter Councils Inc – detail of C&I waste currently disposed that could be recycled –garbage bag contents accessible .....	165
Chart 164	MIDWASTE – C&I waste composition – garbage bags as a separate category .....	166
Chart 165	MIDWASTE – C&I waste composition – garbage bags distributed .....	167
Chart 166	MIDWASTE – mixed vs single material loads.....	168
Chart 167	MIDWASTE – composition of mixed C&I waste, garbage bags as a separate category .....	168
Chart 168	MIDWASTE – composition of mixed C&I waste, garbage bags distributed ..	169
Chart 169	MIDWASTE – composition of single material C&I waste .....	169
Chart 170	MIDWASTE – C&I mixed loads generation by industry sector .....	170
Chart 171	MIDWASTE – C&I single material loads generation by industry sector.....	170
Chart 172	MIDWASTE – composition of mixed C&I loads from manufacturing .....	171
Chart 173	MIDWASTE – composition of mixed C&I loads from accommodation/food services .....	171
Chart 174	MIDWASTE – composition of mixed C&I loads from the retail sector .....	172
Chart 175	MIDWASTE – C&I currently disposed that could be recycled .....	173
Chart 176	MIDWASTE – detail of C&I waste currently disposed that could be recycled – garbage bags not included.....	174
Chart 177	MIDWASTE – detail of C&I waste currently disposed that could be recycled – bags distributed.....	174

## List of figures

Figure 1: List of LGAs in NSW EPA regulated waste areas .....	8
Figure 2: Council members of regional groupings in the NSW regulated area .....	9
Figure 3: Disposal tonnes, vehicles and facilities assessed .....	10
Figure 4: Tonnes and vehicles assessed, by facility type .....	10
Figure 5: Degradable organic material in the overall C&I waste stream, by region and industry .....	28
Figure 6: Packaging in C&I waste, by region and industry, bags distributed .....	30
Figure 7: Food waste in C&I waste, by region and industry, bags distributed.....	34
Figure 8: Timber/wood in C&I waste, by region and industry, bags distributed .....	35
Figure 9: Plastic material in C&I waste, by region and industry, bags distributed .....	37
Figure 10: Paper/cardboard in C&I waste, by region and industry, bags distributed.....	39
Figure 11: Masonry materials in C&I waste, by region and industry, bags distributed .....	41
Figure 12: Garbage bags in C&I waste, by region and industry .....	43
Figure 13: E-waste in C&I waste, by region and industry .....	46
Figure 14: Material recyclability .....	62
Figure 15: C&I waste mixed loads: clumped vs highly mixed, by region.....	66
Figure 16: C&I waste mixed loads: clumped vs highly mixed, by facility type .....	66
Figure 17: Clumping of mixed loads in highest C&I-generating industry sectors .....	67
Figure 18: Clumping of mixed loads, by vehicle type .....	67
Figure 19: Local government areas in the Sydney Metropolitan regulated area .....	78
Figure 20: Industry sector category changes 2008 – 2014.....	95
Figure 21: Local government areas in the Extended Regulated Area .....	98
Figure 22: Local Government Areas in the Regional Regulated Area .....	111
Figure 23: Regional groupings in the NSW regulated area .....	123
Figure 24: Statistical validity of analysing regional groupings from this audit .....	124

## List of photos

Photo 1: C&I waste load at landfill .....	4
Photo 2: Cardboard in a C&I load .....	6
Photo 3: Textiles may be recoverable in the future .....	6
Photo 4: A C&I load at the tip face .....	10
Photo 5: A customer is interviewed to determine the industry sector and source location of the load.....	13
Photo 6: A transfer station load is visually assessed and photographed .....	13
Photo 7: An auditor records a C&I load at a landfill .....	13
Photo 8: Load of AWT residual .....	27
Photo 9: Load of MRF residual .....	27
Photo 10: Load of timber .....	27
Photo 11: Vegetation .....	29
Photo 12: Mattresses.....	29
Photo 13: Shredded paper.....	29
Photo 14: Cardboard .....	29
Photo 15: Waxed cardboard packaging .....	33
Photo 16: Plastic film .....	33
Photo 17: Plastic packaging.....	33
Photo 18: Plastic packaging.....	33
Photo 19: Pallets .....	36
Photo 20: Painted timber .....	36
Photo 21: Timber offcuts.....	36
Photo 22: Pallets .....	36
Photo 23: Plastic film .....	38
Photo 24: Rigid plastic packaging.....	38
Photo 25: Load containing mainly plastic.....	38
Photo 26: Expanded polystyrene .....	38
Photo 27: Cardboard boxes .....	40
Photo 28: Paper.....	40
Photo 29: Cardboard boxes .....	40
Photo 30: Cardboard boxes .....	40
Photo 31: Load containing masonry materials .....	41
Photo 32: Load of garbage bags.....	45
Photo 33: Photocopier disposed to landfill .....	46

## Executive summary

The NSW Government undertook surveys of the commercial and industrial (C&I) waste stream in Sydney in 2003 and 2008.

In February 2013, the NSW Government announced the five-year \$465.7 million Waste Less Recycle More initiative, including a \$60-million *Waste and Recycling Infrastructure Fund*.

This fund includes two audits of the Commercial and Industrial (C&I) Waste Stream in the regulated areas of New South Wales.- Sydney Metropolitan Area (SMA), Extended Regulated Area (ERA) and Regional Regulated Area (RRA). The first audit was completed in 2014 and a follow up audit is scheduled for 2017. These two audits aim to:

- inform infrastructure and other investment decisions made under the NSW Government's *Waste Less, Recycle More* program
- inform regional and sub-regional waste and resource recovery planning
- provide baseline data to assess the impact of the infrastructure funding program on resource recovery in the period 2013/14 to 2016/17 and beyond
- inform the waste and resource recovery industry and businesses from the key industry sectors about C&I waste composition, particularly information on recyclable materials
- inform the government, waste industry and businesses on the trends in the composition of the C&I waste stream in SMA for the period from 2003 to 2008 and 2014
- assist NSW EPA in developing business recycling programs to divert more materials away from landfills
- characterise the various streams or transport modes that enter landfills and transfer stations.

The 2014 C&I waste audit included a disposal-based audit of C&I loads delivered at selected landfills and transfer stations, an audit of garbage bags disposed at these facilities and a generator site audit. Key findings from these three audits are published online in separate reports.

This report presents the results of the comprehensive disposal-based waste audit that incorporates the composition of the garbage bag audit findings.

The audit included a gatehouse survey (to determine industry source and location of waste generation) and visual assessment of the composition of C&I loads at 14 selected disposal sites.

Two thousand loads of C&I waste (a total of almost 4000 tonnes, almost 19.5million litres) were assessed at 10 landfills and four transfer stations. The contents of over 3010 garbage bags from the delivered waste were also sorted into 85 categories and weighed.

C&I waste is made up of 'single material loads' (defined as loads where one material makes up over 90 per cent of the total load) and 'mixed loads' (all other loads).

The total of the C&I waste from the regulated areas of New South Wales is referred to in this report as 'overall C&I waste'.

The audit relied heavily on the co-operation of the audit sites and their customers. To assist their resource recovery efforts, each participating waste facility has received site-specific, confidential data from the audit.

The audit shows that the majority of C&I waste is from the manufacturing, mixed small businesses, retail and healthcare/social assistance sectors, and that the main components of the waste are garbage bags, material such as residue from waste processing - shredder floc and pulp, wood, masonry materials and plastic. C&I waste also contains food, cardboard, vegetation, paper, textiles, metals, and small amounts of glass, rubber and electrical items.

Of the C&I waste disposed of to landfill, 27 per cent is currently recyclable. The main opportunities for recovery are masonry materials, garden organics, paper, cardboard and plastic. In the future, better source segregation, new technologies, expanded Alternative Waste Treatment (AWT) facilities and the commissioning of energy-from-waste plants will enable more materials (such as treated wood and textiles) and garbage bag contents to be accessed for recycling. Theoretically, up to 83 per cent of the

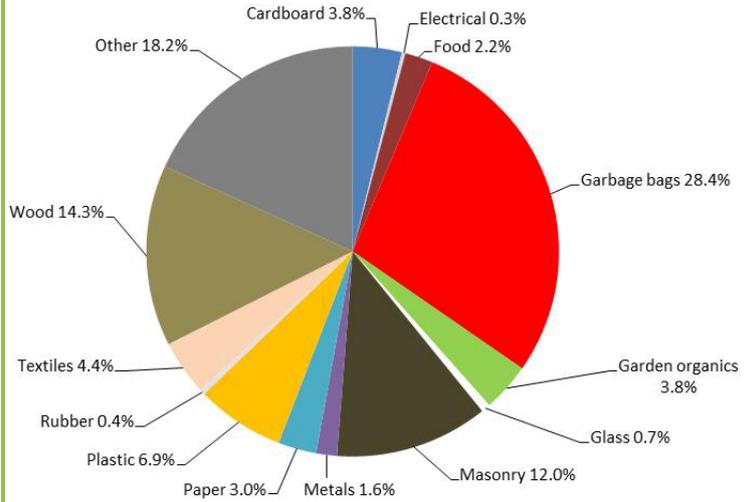
C&I waste currently landfilled could be potentially recovered for recycling, including shredder floc in energy-from-waste facilities.

A summary of the audit process and findings is presented below.

<p><b>How much commercial and industrial waste is sent to landfill in the regulated areas of New South Wales (overall C&amp;I waste)?</b></p> <p>In 2013-2014, almost 1.8 million tonnes of waste was sent to landfill from commercial and industrial (C&amp;I) businesses in the NSW regulated area.</p> <p>Eighty per cent was disposed of in the Sydney Metropolitan Area.</p>	<table border="1"> <caption>Waste Disposal in NSW Regulated Areas (2013-2014)</caption> <thead> <tr> <th>Area</th> <th>Tonnes/yr</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Sydney Metropolitan Area (SMA)</td> <td>1,415,561</td> <td>80%</td> </tr> <tr> <td>Extended Regulated Area (ERA)</td> <td>252,545</td> <td>14%</td> </tr> <tr> <td>Regional Regulated Area (RRA)</td> <td>106,539</td> <td>6%</td> </tr> </tbody> </table>	Area	Tonnes/yr	Percentage	Sydney Metropolitan Area (SMA)	1,415,561	80%	Extended Regulated Area (ERA)	252,545	14%	Regional Regulated Area (RRA)	106,539	6%			
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<p><b>The field survey</b></p> <p>The survey took place at 10 landfills and four transfer stations over 33 consecutive days during July and August 2014.</p> <p>It included:</p> <ul style="list-style-type: none"> <li>a visual assessment of the composition of 2000 C&amp;I loads weighing a combined 3950 tonnes</li> <li>a gatehouse survey of customers to identify the source of waste delivered to determine industry sectors</li> <li>sampling and sorting the contents of more than 3010 garbage bags into 85 categories to determine contents.</li> </ul>	<table border="1"> <caption>Field Survey Results</caption> <thead> <tr> <th>Area</th> <th>Tonnes assessed</th> <th>Vehicles assessed</th> </tr> </thead> <tbody> <tr> <td>Sydney Metro Area</td> <td>2740</td> <td>1424</td> </tr> <tr> <td>Extended Regulated Area</td> <td>950</td> <td>407</td> </tr> <tr> <td>Regional Regulated Area</td> <td>260</td> <td>169</td> </tr> <tr> <td><b>Total</b></td> <td><b>3950</b></td> <td><b>2000</b></td> </tr> </tbody> </table>	Area	Tonnes assessed	Vehicles assessed	Sydney Metro Area	2740	1424	Extended Regulated Area	950	407	Regional Regulated Area	260	169	<b>Total</b>	<b>3950</b>	<b>2000</b>
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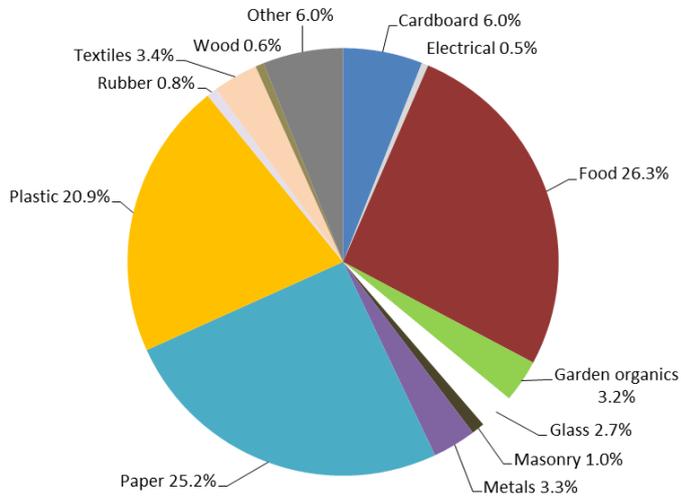
**What is in the C&I waste in the regulated areas?**

C&I waste contains (by weight) mainly garbage bags (28.4 per cent), other material, such as residue from waste processing, shredder floc and pulp (18.2 per cent), wood (14.3 per cent, mainly treated timber), masonry materials including soil (12 per cent) and plastic (6.9 per cent, of which almost half is plastic film). It also contains food, cardboard, vegetation, paper, textiles, metals, and small amounts of glass, rubber and electrical items.



**What is in the garbage bags in the overall C&I waste?**

Garbage bags in C&I waste contain (by weight) mainly food (26.3 per cent), paper (25.2 per cent) and plastic (20.9 per cent). They also contain cardboard, textiles, garden organics, metals, glass and small amounts of masonry, rubber, and wood.



**Which industry sectors generate most bags?**

The industry sectors generating the most garbage bags are the retail sector (23 per cent of all garbage bags disposed), the manufacturing sector (22 per cent), mixed small businesses (11 per cent) and accommodation/food services (11 per cent).

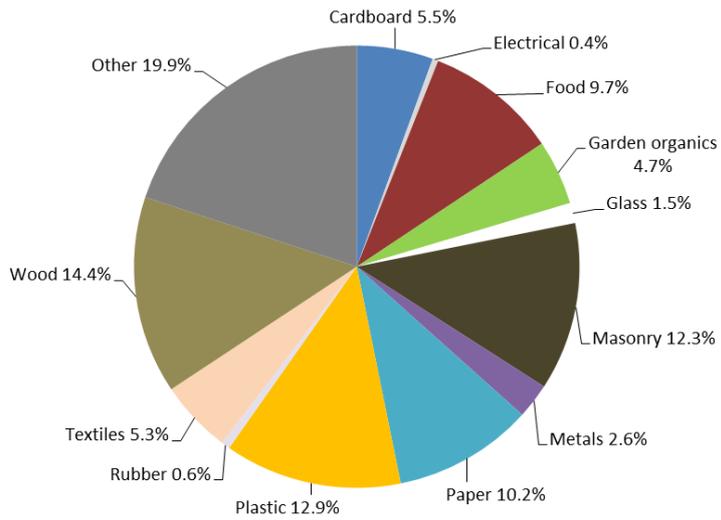
Healthcare/social assistance, education/training and shopping centres also contributed large amounts of garbage bags.

**What is the composition of the overall C&I waste when the garbage bag contents are included?**

When the contents of the garbage bags are distributed into material categories, the C&I waste is made up (by weight) of 19.9 per cent 'other' materials such as fines, shredder floc and pulp, 14.4 per cent wood, 12.9 per cent plastics, 12.3 per cent masonry, 10.2 per cent paper and 9.7 per cent food.

Fifty-one per cent of C&I waste is degradable organic material, such as wood, paper, cardboard, food, textiles, vegetation, and nappies.

Nineteen per cent of C&I waste is packaging made from materials including packaging plastic, paper, cardboard, glass and metal.



**How do C&I wastes arrive at landfills and transfer stations?**

Most C&I waste (68 per cent of total weight) arrives at the disposal point in mixed loads; 32 per cent arrives as single-material loads.

Front-lift trucks deliver the most C&I waste, followed by roll-on roll-off trucks, rear-lift trucks and trailers.

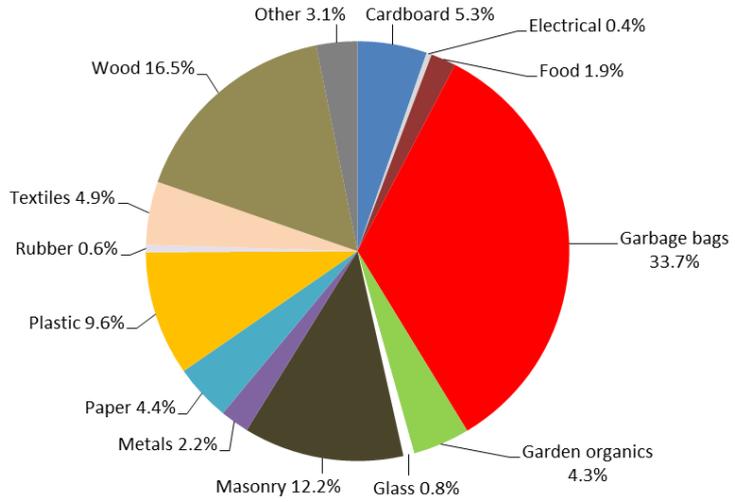


**Photo 1: C&I waste load at landfill**

**What is in mixed loads of overall C&I waste?**

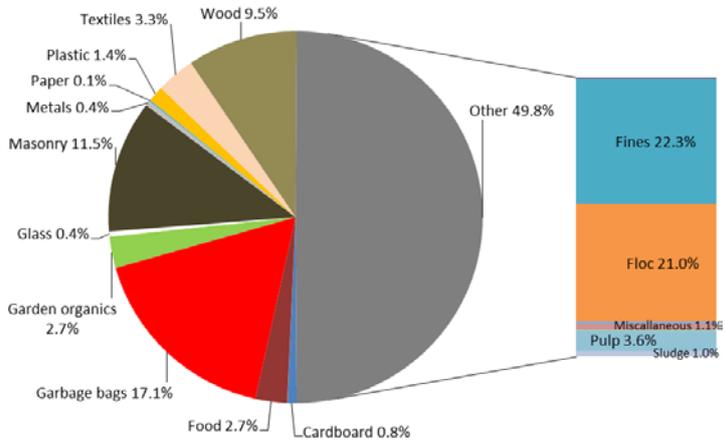
Mixed loads of C&I waste contain (by weight) mainly garbage bags (33.7 per cent), wood (16.5 per cent), masonry (12.2 per cent) and plastics (9.6 per cent).

They also contain cardboard (5.3 per cent), textiles (4.9 per cent), paper (4.4 per cent), garden organics (4.3 per cent) and metals (2.2 per cent).



**What is in single-material loads of overall C&I waste?**

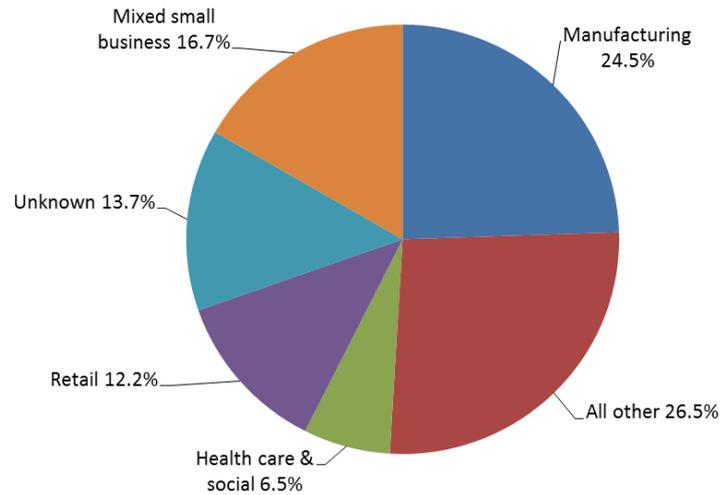
Single-material loads of C&I waste are mainly (by weight) loads of materials such as residual and fines from waste treatment, shredder floc, pulp and sludge (49.9 per cent), loads of garbage bags (17.1 per cent), loads of masonry (11.5 per cent) and loads of wood (9.5 per cent). Vegetation, glass, metals, paper, cardboard, plastic and textiles also arrive in these loads in lesser amounts.



**Who generates overall C&I waste?**

A quarter of all C&I waste disposed of (by weight) at landfills is from the manufacturing sector (24.5 per cent). Other major contributors are mixed small businesses (16.7 per cent), retail (12.2 per cent) and healthcare/social assistance sectors (6.5 per cent).

However, almost one-third of loads arriving at transfer stations are from mixed small businesses.



**What type of C&I waste is generated by the key industry sectors?**

Almost one-third of waste generated by the manufacturing sector is processing residuals (such as fines, shredder floc, pulp and sludge). Other materials are plastic, wood, paper and food.

Half of the waste from mixed small businesses is masonry materials and wood. Other key materials are plastic and textiles.

The retail sector generates mostly plastic, paper, food and wood.

Waste from the healthcare and social assistance sector is mostly wood, plastic, paper, food and textiles.

**What could be recycled now from C&I waste disposed at landfill?**

Using existing technology, collection systems and markets for recycled products, 27 per cent of C&I waste currently disposed to landfills is recyclable – mainly masonry materials, garden organics, plastic, paper and cardboard.

If the contents of garbage bags can also be accessed now for recycling, more paper, plastic and food becomes available, making a total of 50 per cent potentially recoverable.



**Photo 2: Cardboard in a C&I load**

**What could be recycled in the future from the overall C&I waste?**

If contents of garbage bags are still not accessible for recycling, a further 28 per cent (such as textiles and treated wood) is recoverable in the future when new facilities and technologies are available, increasing the amount potentially recoverable to 55 per cent.

But if the contents of garbage bags can also be accessed, then an extra 33 per cent is recoverable in the future, making a total of 83 per cent of C&I waste that is potentially recoverable in the future if garbage bag contents can be accessed.



**Photo 3: Textiles may be recoverable in the future**

**What are the trends?**

Despite increased economic activity, C&I waste disposed to landfill within the SMA between 2008 and 2014 has reduced by 800,000 tonnes from a reported 2,222,856 tonnes in 2007–2008 to 1,415,561 tonnes in 2014. While there are many reasons for this decrease, it is considered that investment in resource recovery by the private sector through commissioning of new remanufacturing and processing facilities, as well as the expansion of existing facilities, NSW Government resource recovery programs aimed at businesses avoiding waste and increasing recycling, and the increase in the landfill levy have all contributed.

The total percentage of cardboard and masonry appears to have reduced since 2003. This may be a result of the increased efforts in cardboard recycling and the increase in the landfill levy driving further recovery of masonry due to the heavy nature of this material.

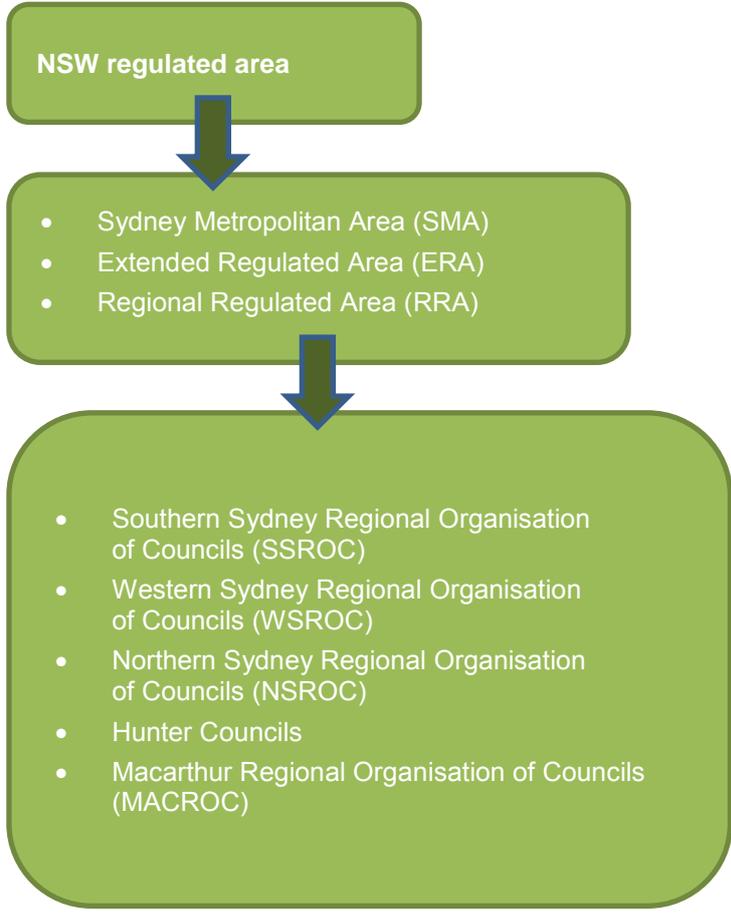
Food waste has also reduced, possibly due to the introduction of new organic waste processing facilities, the introduction of food waste collections at commercial premises, and wide support for charitable organisations such as Oz Harvest and Foodbank which aim to collect food waste from the commercial sector. A product destruction facility for food waste has also opened since 2008.

Wood, plastic and textiles have remained static. The ‘other’ category has increased substantially over time. For 2008, this is partly due to the inclusion of contaminated soil. However, in both 2008 and 2014, this category includes residuals from waste-processing facilities. Therefore, the large percentage of ‘other’ is at least in part the result of the increase in mixed waste processing at AWTs and the increase in the amount of co-mingled recycling, both of which result in an increase in the generation of residuals and fines. Shredder floc and paper pulp are also included in the ‘other’ category.

The 2014 audit showed a large reduction in the proportion of C&I waste from mixed small businesses. This may be due to changes to the definitions of industry divisions under the Australian and New Zealand Standard Industry Classification (ANZSIC) between 2008 and 2014, resulting in many small businesses being captured under other categories.

**Regions and sub-regions analysed in this report**

As well as the whole NSW regulated area, this report contains results and analysis specific to the SMA, ERA and RRA. Where it is statistically valid to do so, results and analysis are also provided for five regional groupings of councils within the regulated areas of New South Wales.



# 1. Introduction

The Waste and Resource Recovery branch of the NSW Environment Protection Authority (EPA) undertakes regular surveys of the commercial and industrial (C&I) waste stream in New South Wales (NSW). This report details the results of the 2014 audit of C&I waste streams, which covered C&I waste disposed of within the regulated areas of NSW (see map below).

## 1.1 Sub-regions included in the audit

The NSW regulated area comprises the Sydney Metropolitan Area (SMA), the Extended Regulated Area (ERA) and the Regional Regulated Area (RRA), as shown below. As well as results for the overall NSW regulated area, this report contains results and analysis specific to these three areas.

**Figure 1: List of LGAs in NSW EPA regulated waste areas**

Sydney Metropolitan Area (SMA)		Extended Regulated Area (ERA)	Regional Regulated Area (RRA)
Ashfield	Leichhardt	Cessnock	Ballina
Auburn	Liverpool	Gosford	Bellingen
Bankstown	Manly	Hawkesbury	Blue Mountains
Baulkham Hills	Marrickville	Kiama	Byron
Blacktown	Mosman	Lake Macquarie	Clarence Valley
Botany Bay	North Sydney	Maitland	Coffs Harbour
Burwood	Parramatta	Newcastle	Dungog
Camden	Penrith	Port Stephens	Gloucester
Campbelltown	Pittwater	Shellharbour	Great Lakes
Canada Bay	Randwick	Shoalhaven	Greater Taree
Canterbury	Rockdale	Wingecarribee	Kempsey
Fairfield	Ryde	Wollongong	Kyogle
Holroyd	Strathfield	Wyong	Lismore
Hornsby	Sutherland		Muswellbrook
Hunters Hill	Sydney		Nambucca
Hurstville	Warringah		Port Macquarie–Hastings
Kogarah	Waverley		Richmond Valley
Ku-ring-gai	Willoughby		Singleton
Lane Cove	Woollahra		Tweed
			Upper Hunter
			Wollondilly

Since the audit was conducted, the SMA and ERA have been combined into what is now known as the Metropolitan Levy Area, and the RRA is now known as the Regulated Levy Area.

NSW EPA has grouped local government areas into a number of regional groups to develop regional waste strategies, as shown below. Where it is statistically valid to do so, results and analysis are also provided for specific regional groupings of councils in New South Wales.

**Figure 2: Council members of regional groupings in the NSW regulated area**

<p><b>Hunter Councils Inc</b> Cessnock, Dungog, Lake Macquarie, Maitland, Muswellbrook, Newcastle, Port Stephens, Singleton, Upper Hunter.</p>	<p><b>Macarthur Regional Organisation of Councils (MACROC)</b> Camden, Campbelltown, Wollondilly.</p>	<p><b>MIDWASTE</b> Bellingen, Coffs Harbour, Gloucester, Great Lakes, Greater Taree, Hastings, Kempsey, Nambucca, Port Macquarie.</p>
<p><b>North East Waste (NEWaste)</b> Ballina, Byron, Clarence Valley, Kyogle, Lismore, Richmond Valley, Tweed.</p>	<p><b>Northern Sydney regional Organisation of Councils (NSROC)</b> Hornsby, Hunters Hill, Ku-ring-gai, Lane Cove, North Sydney, Ryde, Willoughby.</p>	<p><b>Shore Regional Organisation of Councils (SHROC)</b> Manly, Mosman, Pittwater, Warringah.</p>
<p><b>Southern Councils</b> Kiama, Shellharbour, Shoalhaven, Wingecarribee, Wollongong.</p>	<p><b>Southern Sydney Regional Organisation of Councils (SSROC)</b> Ashfield, Botany Bay, Burwood, Canada Bay, Canterbury, Hurstville, Kogarah, Leichhardt, Marrickville, Rockdale, Sutherland, Randwick, Sydney, Waverley, Woollahra.</p>	<p><b>Western Sydney Regional Organisation of Councils (WSROC)</b> Auburn, Bankstown, Blacktown, Blue Mountains, Fairfield, Hawkesbury, Holroyd, Liverpool, Parramatta, Penrith, The Hills.</p>

## 1.2 Aims of the waste audit

The data from this project will help to:

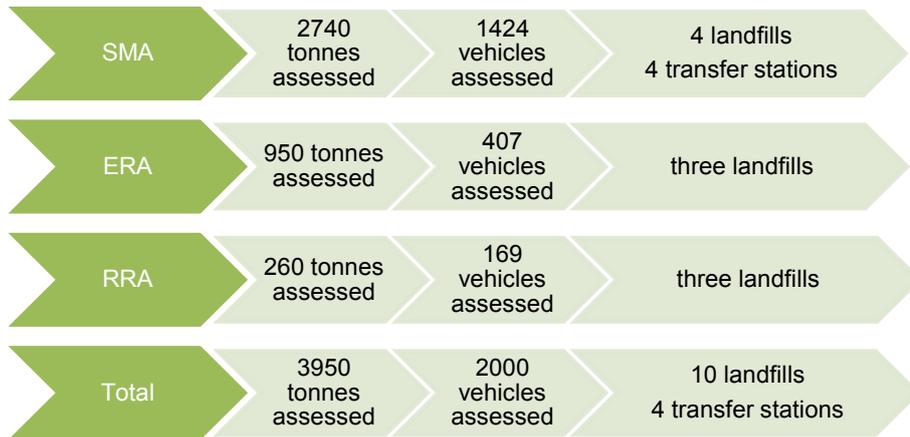
- inform infrastructure and other investment decisions made under the NSW Government's *Waste Less, Recycle More* initiative
- inform regional and sub-regional waste and resource recovery planning
- provide baseline data to assess the impact of the infrastructure funding program on resource recovery in the period 2013/14 to 2016/17 and beyond
- inform the waste and resource recovery industry and businesses from the key industry sectors about C&I waste composition, particularly information on recyclable materials
- inform the government, waste industry and businesses on the trends in the composition of the C&I waste stream in SMA for the period from 2003 to 2008 and 2014
- assist NSW EPA in developing business recycling programs to divert more materials away from landfills
- characterise the various streams or transport modes that enter landfills and transfer stations.

### 1.3 About the waste audit

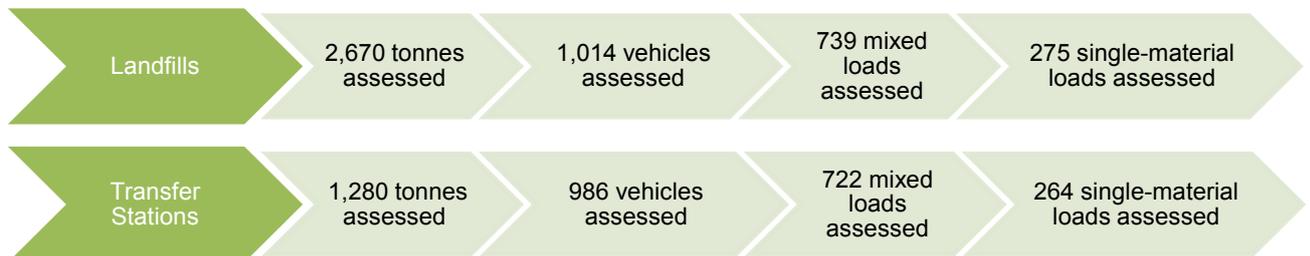
The audit included a gatehouse survey and visual assessment of the composition of C&I loads at 14 selected disposal sites over a period of seven weeks in July and August 2014.

Two thousand loads of C&I waste (a total of almost 4000 tonnes) were assessed at 10 landfills and four transfer stations. The contents of over 3010 garbage bags from the delivered waste were also sorted into 81 categories and weighed.

**Figure 3: Disposal tonnes, vehicles and facilities assessed**



**Figure 4: Tonnes and vehicles assessed, by facility type**



Note total figures may vary slightly due to rounding



**Photo 4: A C&I load at the tip face**

## 1.4 Methodology

The methodology used for this audit was based on the Methodology for the 2014 Commercial and Industrial Waste Stream Audit in the Regulated Areas in NSW prepared by Sustainable Resource Use (SRU) and refined by NSW EPA. An extract is provided in Appendix A. A brief overview of the methodology for the visual assessment and the garbage bag assessment is provided below.

### 1.4.1 Sample size

A sample size of 2000 loads and 300 garbage bags samples was specified as detailed in Table 1 below:

**Table 1: DBA (vehicles) and DBA (garbage bags) sampling**

Regulated area	Site type	DBA (vehicles)		DBA (garbage bags)	
		Number of sites audited	Approx. number of audits <sup>3</sup>	Number of sites audited	Approx. number of audits <sup>4</sup>
SMA <sup>1</sup>	Landfill	5	900	4	93
	Transfer station	4	700	4	104
ERA <sup>2</sup>	Landfill	3	240	3	62
	Transfer station	-	-	-	-
RRA	Landfill	2	160	1	42
	Transfer station	-	-	-	-
<b>Total</b>		<b>14</b>	<b>2000</b>	<b>12</b>	<b>301</b>

<sup>1</sup>. Sites to be selected to cover the bulk of the tonnages and the geographical area within SMA.

<sup>2</sup>. Both Illawarra and Hunter regions to be covered.

<sup>3</sup>. These vehicles numbers are for all loads recorded. Based upon the 2008 audit about 80 per cent of these loads will be mixed requiring visual audits. The remaining loads will need to be sighted, recorded and data used in the analysis.

<sup>4</sup>. 10 garbage bags per sample

The methodology states that a visual assessment be conducted on each C&I load being discharged at the point of disposal from the following Australian and New Zealand Standard Industrial Classification (ANZSIC) divisions.

**Table 2: C&I divisions/subdivisions to be included in audits and reporting outputs**

ANZSIC Division	Subdivision
C–Manufacturing	C11–Food Product Manufacturing
G–Retail trade	G41–Food Retailing
	G42–Other Store-Based Retailing
H–Accommodation and food services	H44–Accommodation
	H45–Food and Beverage Services
F–Wholesale trade	
P–Education and training	
R–Arts and recreation	
Offices	
I–Transport Postal and Warehousing	
Q–Healthcare and social assistance	
Mixed small businesses	
Shopping Centres	

#### 1.4.2 Gatehouse survey

A staff member was stationed at either the weighbridge, entrance to the Transfer Station receipt hall or in close proximity to the landfill to interview all deliveries to ascertain if the load was from the C&I sector, the industry source and location where the waste was generated. The following information was recorded:

- Date and time of the vehicle arrival
- Registration number
- Vehicle type
- Suburb of origin
- ANZSIC Industry sector codes
- Business name if single source
- Company delivering

ANZSIC codes and definitions are provided in Appendix B.



**Photo 5: A customer is interviewed to determine the industry sector and source location of the load**

### 1.4.3 Visual assessment

At the tipping point assessors visually inspected each targeted load delivered during opening hours, within safe and practical limitations. The following information was recorded at the disposal location:

- Date and time of the vehicle arrival
- Registration Number
- Vehicle type
- Volume
- Volume observed at discharge
- Degree of compaction (high/medium/low)
- Clumping of material (yes/no)
- Composition of the load

Definitions of the material categories used are provided in Appendix C. All data was recorded in litres.



**Photo 6: A transfer station load is visually assessed and photographed**



**Photo 7: An auditor records a C&I load at a landfill**

#### 1.4.4 Plastic bag assessment

Where bags comprised more than 20 per cent of the load a sample of 10 bags was extracted from C&I loads and removed for physical sorting. The results from the bagged waste were analysed separately and then integrated into the analysis to represent the bagged waste component of the visual audit data. The steps in the garbage bag sampling and collection process are:



##### Step 1

The garbage bag survey team wait in the base survey area until a suitable load arrives at the facility. The two person team then leave the area and adopts a position in a safe distance from moving vehicles.



##### Step 2

A C&I waste truck tips material at the waste and recycling facility. The rego and delivery truck details are recorded and communication is made with a gatehouse survey and visual survey teams, to ensure that the load is C&I material, and if so, which industry source and that the load is confirmed as containing more than 20 per cent garbage bags.



##### Step 3

A two person garbage bag collection team approaches the load once the garbage delivery truck exits the area. The team checks the surroundings to ensure a safe collection process. The team takes a trolley – or set of 240-litre mobile garbage bins (MGB) – to the delivered load to carry the bags with minimal manual handling risk.



##### Step 4

The team assess the proportion of the type and colour of bags delivered and the size of the bags in the load and randomly select a representative 12 bags from the industry sector. The bags are placed in hessian bags secured to them for secure movement to the base survey area.



##### Step 5

The bags are taken to the base survey area so the bag sources can be checked and two bags of the 12 sampled are removed if they are not from the same industry source or two bags are removed at random if all of the bags are from the same source. The bags are then weighed and a volume measured and loaded onto truck in hessian bags (one or two per sample of 10 bags). The sample details are recorded onto a runsheet and the bags are delivered to the sorting site.

The garbage bag sorting process is.



### Step 1

The survey team receive the garbage bags at the sorting site and line them up in order of the sample number. Bags from the same load are placed on top of each other.

The gate fees were paid on entry to the sorting facility after the tonnages removed from the collection facility, to ensure that the appropriate levies were only paid once.



### Step 2

In the sample number order, the bags are sorted by the sorting teams of up to eight staff. There are two to four people per team including one consultant per team for data entry, sorting compliance checking and general methods analysis.

The bags are first weighed as a complete sample to ensure the weight reconciles with the weight recorded at the collection site, and the weight of the separated materials following sorting.



### Step 3

The composition of the ten bags in each of the sorting categories are sorted by the teams into 60L sorting bins each labelled with the material category using laminated sorting bin labels.



### Step 4

The consultant records the weight of each material category in the 60L sorting bins. A tare and gross bin weight is taken by the data recorder. The material is then tipped into 240L MGB's and removed or recycled at the sorting site.

For more detail about the garbage bag audit, please refer to Appendix A.

### 1.4.5 Data entry and analysis

Data was entered into a data analysis tool with a quality control check. Volume data was then converted to weight using conversion factors which are a combination of the densities used in 2008 and new densities agreed for 2014. Refer Appendix D. Materials were consolidated into aggregated material categories for ease of interpretation as per Appendix E.

The registration number for each vehicle assessed was matched to the corresponding weighbridge data. Data was then scaled to the tonnage of the matched vehicle registration and all analysis was checked by a statistician for accuracy and to determine whether any outliers should be removed. The raw data of volume, weight (unscaled and scaled) and garbage bag composition is provided in Appendix F.

### 1.4.6 Statistical design

All surveys carry an element of sampling error, which is the mathematical error associated with using a sample to represent a total population. Sampling error can be reduced by taking larger samples. It should be noted that this audit contains the results of 2000 observations and the composition of 3010 garbage bags. These samples are deemed to represent all deliveries of C&I waste within the three regulated areas of NSW. Given the small number of assessments compared with overall deliveries, caution should be used in interpreting these results to represent all loads at all sites. The sampling error involved in waste audits is usually small and can be tabulated by producing estimates augmented by upper and lower confidence intervals.

This is the first time that the audit methodology for a C&I audit project of this size in New South Wales has included an estimation of confidence intervals and an understanding of the variability in composition across the survey samples. Statistical analysis indicates that overall, the results appear remarkably robust, due to the large sample size and also the comparatively low variances of material distributions. A table of percentages by material type shows quite low 90 per cent confidence intervals for most materials. This data should form the basis for very accurate estimates of material distributions in the C&I waste stream with no materials exceeding 90 per cent confidence intervals of seven per cent – the maximum 90 per cent confidence interval calculated for individual materials was 1.1 per cent (wood treated/painted).

This report contains a section on statistical analysis including confidence intervals to show the robustness of the data collected and analysis – refer to Section 7: Statistical Analysis.

## 1.5 Study limitations

The data for this study was collected and analysed using the best and most accurate methods available within the constraints of available time and budget. This study is a survey, which means that a relatively small amount of data has been collected and then treated as representative of the total. As in any survey there are limitations to the accuracy of the data, as described below.

### 1.5.1 Timeframe

This audit was carried out over 37 consecutive days at 14 waste disposal sites. The data collected has then been deemed to be representative of that disposal site and from that sector delivering the waste. It should be noted that seasonal trends (e.g. lower waste volumes in winter, the impact of weather events, high rainfall leading to larger amounts of organic waste) and economic activity may have contributed to the amount, source and composition of waste disposed. Thus, the results of this audit should be treated with due caution when analysing this report or comparing it to reports based on data taken at the same or different times of the year or in different years.

### 1.5.2 Representative sample

The sample for this audit is necessarily small due to the high per capita cost and resource-intensive nature of waste auditing. There is always a small probability of inadvertently sampling waste from atypical sources or atypical loads resulting in non-representative data. This audit was carried out at a diverse range of sites, stratified by geographic area, on random days, with every load where practicable delivering waste on that day was assessed. These combined factors do not eliminate the

chance of atypical data being observed. Waste by its very nature is highly variable. Statisticians in the audit team assessed the data for every site and determined whether any outliers existed that should be removed.

### **1.5.3 Weight-based analysis**

The collection of data for the visual observations was recorded by volume and then converted to weight-based data on a combination of material densities provided within the methodology, supplemented by other material densities obtained from reliable industry sources. All data was then scaled to the corresponding weighbridge weight of that load. This type of collection may cause some materials to appear to be present in quite small proportions as a result of their comparatively low densities, e.g. plastics and EPS, however they do consume large amounts of volume. Weight-based sorting of material categories was used for the garbage bag audit, which is standard procedure.

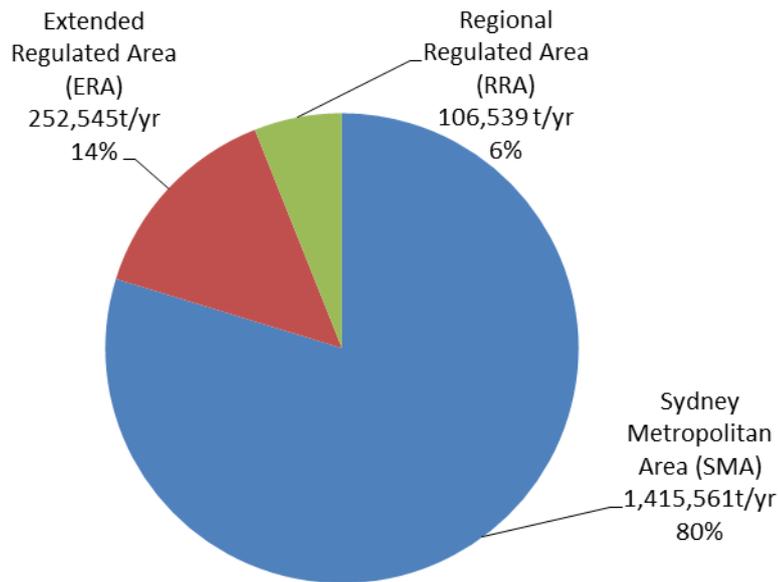
## 2. Key findings – NSW regulated area

All data is reported in tonnes and all percentages are by weight. All tonnage values over 10 have been rounded to the nearest 10. Values in the tables do not always add up to the displayed totals, as a result of rounding. Detailed data are included in Appendix F.

### 2.1 Where is C&I waste disposed?

Based on the Waste Contribution Monthly Report (WCMR) submitted by licensed disposal facilities in the regulated areas of NSW in 2013-14, 80 per cent of C&I waste is disposed in the Sydney Metropolitan Area (SMA) as shown in Chart 1.

**Chart 1: Annual C&I disposal by region**



## 2.2 Composition of C&I waste

Material categories and their definitions are provided in Appendix C. A list of the 40 material categories to 14 consolidation categories is provided in Appendix E. The material density conversion factors used to convert litres observed to tonnes is provided in Appendix D.

### 2.2.1 All load types – mixed and single material loads

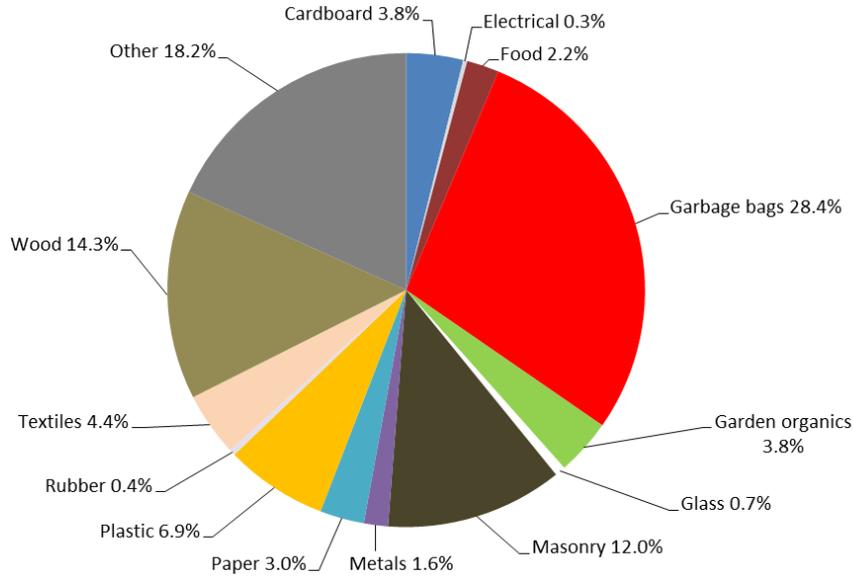
The main components of C&I waste are garbage bags (28.4 per cent), other materials (18.2 per cent – mainly fines and shredder floc – see Table 4), wood (14.3 per cent) and masonry products (12 per cent). There are smaller amounts of plastic, textiles, cardboard, garden organics, paper, food, metals, glass, rubber and electrical items.

**Table 3: C&I waste composition - garbage bags as a category**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Garbage bags	401,180	28.3%	65,610	26%	36,520	34.3%	503,310	28.4%
Other (see Table 4)	299,740	21.2%	14,590	5.8%	8720	8.2%	323,050	18.2%
Wood	202,780	14.3%	34,160	13.5%	16,090	15.1%	253,030	14.3%
Masonry *	119,480	8.4%	82,180	32.5%	11,370	10.7%	213,030	12%
Plastic	97,160	6.9%	16,750	6.6%	9190	8.6%	123,100	6.9%
Textiles	65,110	4.6%	8040	3.2%	4250	4%	77,400	4.4%
Cardboard	55,600	3.9%	7040	2.8%	5660	5.3%	68,290	3.8%
Garden organics	59,580	4.2%	5380	2.1%	3010	2.8%	67,970	3.8%
Paper	41,820	3%	6820	2.7%	4520	4.2%	53,160	3%
Food	31,620	2.2%	3530	1.4%	3560	3.3%	38,710	2.2%
Metals	22,250	1.6%	4940	2%	1840	1.7%	29,030	1.6%
Glass	10,000	0.7%	1700	0.7%	890	0.8%	12,590	0.7%
Rubber	4920	0.3%	1550	0.6%	630	0.6%	7100	0.4%
Electrical	4330	0.3%	270	0.1%	280	0.3%	4880	0.3%
<b>Total</b>	<b>1,415,560</b>	<b>100%</b>	<b>252,550</b>	<b>100%</b>	<b>106,540</b>	<b>100%</b>	<b>1,774,650</b>	<b>100%</b>

\* Masonry is typically generated from construction and demolition activity. A breakdown of masonry material in the C&I stream is provided in Section 0.

**Chart 2: Overall C&I waste composition – garbage bags as a category**



Refer to Table AF1 in Appendix F for detailed material category tonnages.

**Table 4: C&I waste composition - detail of 'other' material category**

The 'other material' category consists mainly of fine material (such as residue from waste processing), shredder floc and pulp.

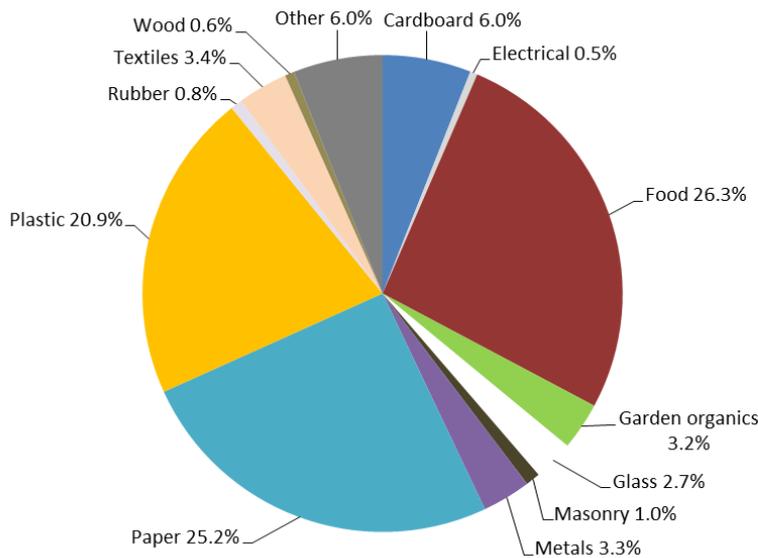
Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of other material	Tonnes per year	% of other material	Tonnes per year	% of other material	Tonnes per year	% of other material
Fines	126,540	42.2%	4620	31.7%	4370	50.1%	135,530	42%
Floc	120,480	40.2%	0	0%	0	0%	120,480	37.3%
Pulp	20,730	6.9%	0	0%	0	0%	20,730	6.4%
Miscellaneous	18,010	6%	730	5%	380	4.3%	19,120	5.9%
Sawdust	3330	1.1%	2780	19%	1730	19.8%	7830	2.4%
Insulation	4260	1.4%	750	5.1%	1770	20.3%	6770	2.1%
Sludge	1210	0.4%	5070	34.8%	0	0%	6280	1.9%
Building material	1590	0.5%	640	4.4%	470	5.4%	2700	0.8%
Process engineered fuel	1700	0.6%	0	0%	0	0%	1700	0.5%
Clinical	900	0.3%	0	0%	0	0%	900	0.3%
Pharmaceutical	620	0.2%	0	0%	0	0%	620	0.2%
Asbestos	280	0.1%	0	0%	4	0%	280	0.1%
Batteries	90	0%	0	0%	0	0%	90	0%
Gas bottles	5	0%	0	0%	0	0%	5	0%
<b>Total</b>	<b>299,740</b>	<b>100%</b>	<b>14,590</b>	<b>100%</b>	<b>8720</b>	<b>100%</b>	<b>323,050</b>	<b>100%</b>

**Table 5: Overall C&I waste: composition of garbage bags**

The garbage bags in C&I waste contain mostly food (26.3 per cent), paper (25.2 per cent) and plastic (20.9 per cent).

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	24,830	6.2%	3670	5.6%	1510	4.1%	30,010	6%
Electrical	2290	0.6%	160	0.2%	40	0.1%	2500	0.5%
Food	95,970	23.9%	24,720	37.7%	11,920	32.6%	132,600	26.3%
Garden organics	14,580	3.6%	1520	2.3%	100	0.3%	16,200	3.2%
Glass	9510	2.4%	2510	3.8%	1650	4.5%	13,670	2.7%
Masonry	4520	1.1%	180	0.3%	230	0.6%	4930	1%
Metals	13,930	3.5%	1540	2.4%	980	2.7%	16,450	3.3%
Paper	105,980	26.4%	13,020	19.8%	8080	22.1%	127,080	25.2%
Plastic	84,690	21.1%	12,910	19.7%	7820	21.4%	105,420	20.9%
Rubber	3180	0.8%	640	1%	200	0.5%	4010	0.8%
Textiles	14,020	3.5%	1590	2.4%	1360	3.7%	16,970	3.4%
Wood	3000	0.7%	160	0.3%	10	0%	3180	0.6%
Other	24,680	6.2%	2980	4.5%	2630	7.2%	30,290	6%
<b>Total</b>	<b>401,180</b>	<b>100%</b>	<b>65,610</b>	<b>100%</b>	<b>36,520</b>	<b>100%</b>	<b>503,310</b>	<b>100%</b>

**Chart 3: Overall C&I waste: composition of garbage bags**



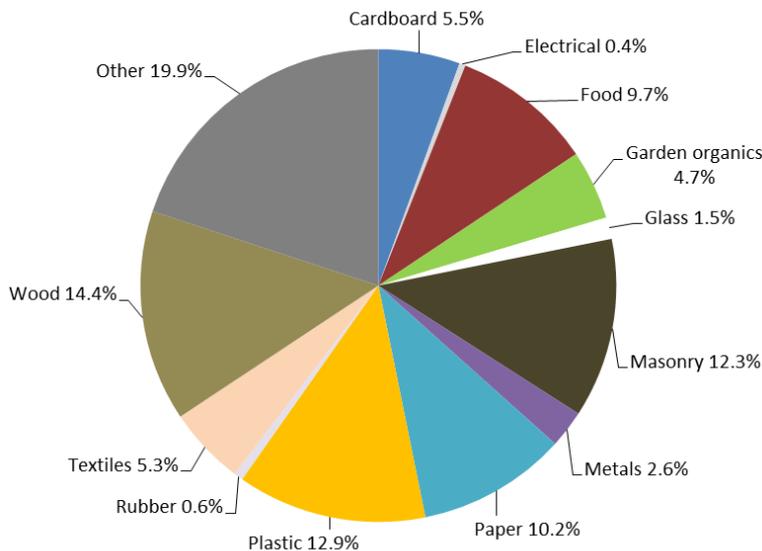
Refer to Tables AF1, AF162 and AF163 in Appendix F for detailed material category tonnages.

**Table 6: Overall C&I waste composition - garbage bags distributed**

When the contents of the garbage bags are distributed, the largest components of C&I waste are other materials (19.9 per cent, mostly fines and shredder floc), wood (14.4 per cent), plastic (12.9 per cent), masonry materials (12.3 per cent), paper (10.2 per cent) and food (9.7 per cent).

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	80,420	5.7%	10,710	4.2%	7170	6.7%	98,300	5.5%
Electrical	6620	0.5%	430	0.2%	330	0.3%	7380	0.4%
Food	127,590	9%	28,250	11.2%	15,480	14.5%	171,320	9.7%
Garden organics	74,160	5.2%	6900	2.7%	3110	2.9%	84,170	4.7%
Glass	19,510	1.4%	4210	1.7%	2540	2.4%	26,250	1.5%
Masonry	123,990	8.8%	82,360	32.6%	11,600	10.9%	217,960	12.3%
Metals	36,180	2.6%	6480	2.6%	2820	2.7%	45,480	2.6%
Paper	147,810	10.4%	19,840	7.9%	12,600	11.8%	180,250	10.2%
Plastic	181,860	12.8%	29,660	11.7%	17,010	16%	228,530	12.9%
Rubber	8100	0.6%	2190	0.9%	830	0.8%	11,110	0.6%
Textiles	79,120	5.6%	9630	3.8%	5620	5.3%	94,360	5.3%
Wood	205,790	14.5%	34,330	13.6%	16,100	15.1%	256,210	14.4%
Other	324,420	22.9%	17,570	7%	11,340	10.6%	353,340	19.9%
<b>Total</b>	<b>1,415,560</b>	<b>100%</b>	<b>252,550</b>	<b>100%</b>	<b>106,540</b>	<b>100%</b>	<b>1,774,650</b>	<b>100%</b>

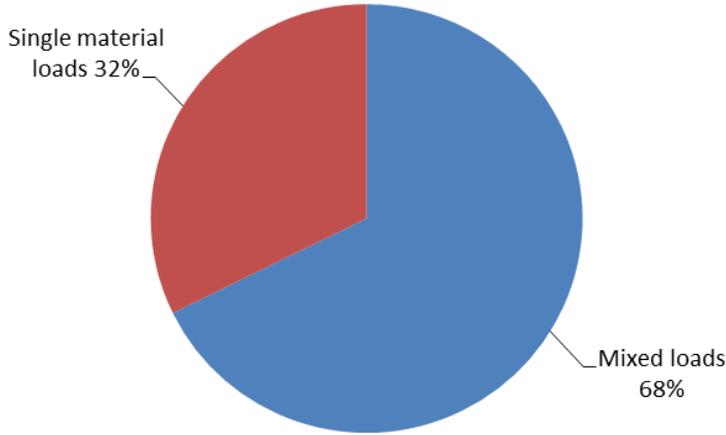
**Chart 4: Overall C&I waste composition - garbage bags distributed**



Refer to Table AF1 in Appendix F for detailed material category tonnages.

**Chart 5: Overall mixed vs single material loads, by weight**

Most C&I waste (68 per cent) arrives at the disposal point in mixed loads. Thirty-two per cent arrives as single material loads (where one material makes up 90 per cent or more of the whole load).



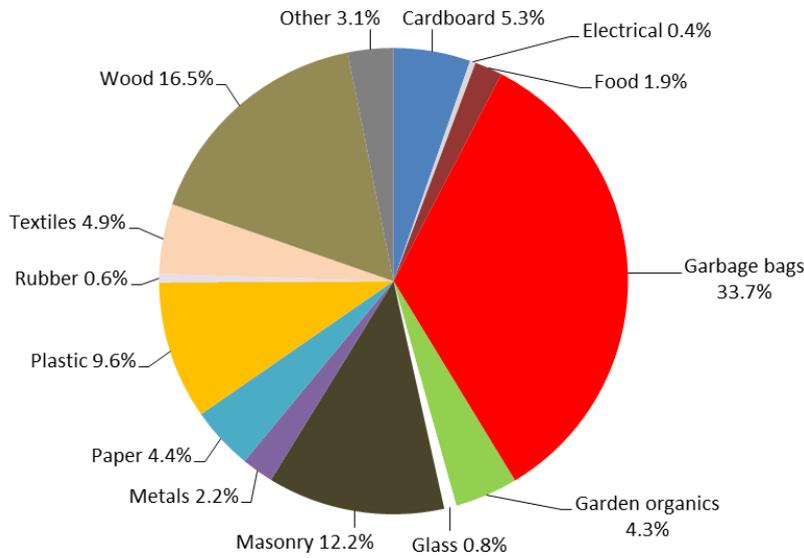
**2.2.2 Composition of overall mixed loads**

Mixed loads of C&I waste comprise mainly garbage bags (33.7 per cent), wood (16.5 per cent), masonry (12.2 per cent) and plastic (9.6 per cent).

**Table 7: Composition of mixed loads, garbage bags as a category**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Garbage bags	311,830	33.8%	59,410	32.1%	33,990	36.4%	405,240	33.7%
Wood	154,820	16.8%	28,760	15.5%	14,780	15.8%	198,360	16.5%
Masonry	99,600	10.8%	37,450	20.3%	10,030	10.7%	147,080	12.2%
Plastic	90,100	9.8%	15,960	8.6%	9160	9.8%	115,220	9.6%
Cardboard	51,920	5.6%	6910	3.7%	4870	5.2%	63,700	5.3%
Textiles	47,700	5.2%	6940	3.8%	3820	4.1%	58,460	4.9%
Paper	41,150	4.5%	6770	3.7%	4520	4.8%	52,440	4.4%
Garden organics	45,320	4.9%	4840	2.6%	2100	2.2%	52,260	4.3%
Other	27,280	3%	7550	4.1%	2910	3.1%	37,740	3.1%
Metals	19,820	2.1%	4880	2.6%	1820	2%	26,530	2.2%
Food	17,270	1.9%	2200	1.2%	3560	3.8%	23,030	1.9%
Glass	7750	0.8%	1450	0.8%	890	1%	10,080	0.8%
Rubber	4810	0.5%	1550	0.8%	630	0.7%	6990	0.6%
Electrical	4270	0.5%	260	0.1%	280	0.3%	4810	0.4%
<b>Total</b>	<b>923,620</b>	<b>100%</b>	<b>184,940</b>	<b>100%</b>	<b>93,370</b>	<b>100%</b>	<b>1,201,930</b>	<b>100%</b>

**Chart 6: Composition of overall mixed loads, garbage bags as a category**



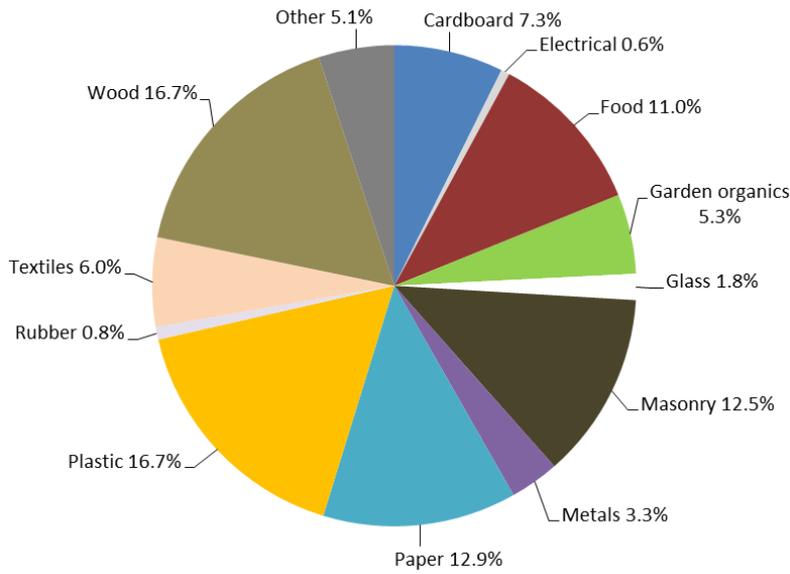
Refer to Table AF2 in Appendix F for detailed material category tonnages.

**Table 8: Composition of overall mixed loads, garbage bags distributed**

When the contents of the garbage bags are distributed, the mixed C&I waste is shown to comprise mainly wood and plastic (both 16.7 per cent), paper (12.9 per cent), masonry materials (12.5 per cent) and food (11 per cent).

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Wood	157,040	17%	28,910	15.6%	14,790	15.8%	200,750	16.7%
Plastic	156,300	16.9%	27,610	14.9%	16,440	17.6%	200,350	16.7%
Paper	124,940	13.5%	18,590	10.1%	12,040	12.9%	155,570	12.9%
Masonry	102,930	11.1%	37,610	20.3%	10,240	11%	150,790	12.5%
Food	92,640	10%	24,610	13.3%	14,650	15.7%	131,900	11%
Cardboard	71,310	7.7%	10,220	5.5%	6280	6.7%	87,810	7.3%
Textiles	58,570	6.3%	8370	4.5%	5090	5.5%	72,030	6%
Garden organics	55,810	6%	6300	3.4%	2190	2.3%	64,300	5.3%
Other	45,150	4.9%	10,210	5.5%	5350	5.7%	60,710	5.1%
Metals	30,520	3.3%	6290	3.4%	2740	2.9%	39,540	3.3%
Glass	15,030	1.6%	3700	2%	2420	2.6%	21,150	1.8%
Rubber	7260	0.8%	2120	1.1%	810	0.9%	10,190	0.8%
Electrical	6120	0.7%	400	0.2%	320	0.3%	6840	0.6%
<b>Total</b>	<b>923,620</b>	<b>100%</b>	<b>184,940</b>	<b>100%</b>	<b>93,370</b>	<b>100%</b>	<b>1,201,930</b>	<b>100%</b>

**Chart 7: Composition of overall mixed loads, garbage bags distributed**



Refer to Table AF2 in Appendix F for detailed material category tonnages.

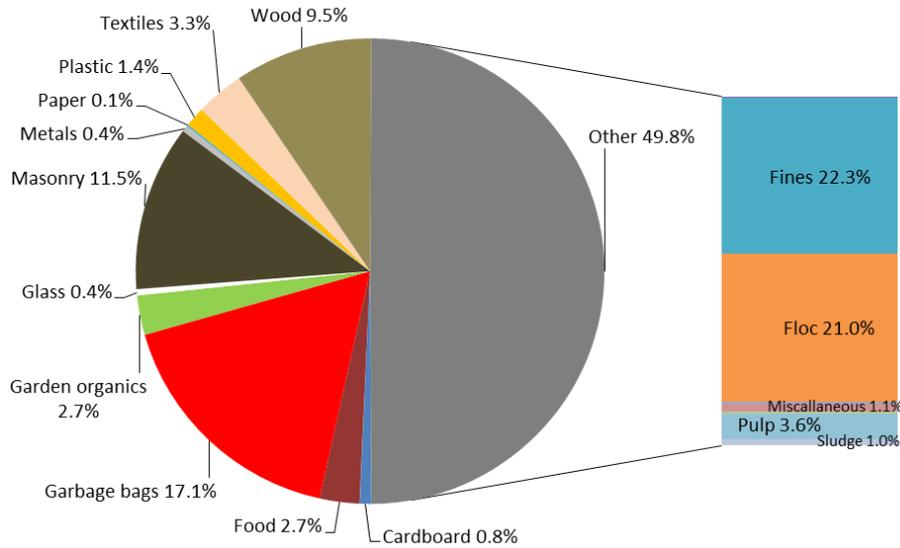
### 2.2.3 Composition of overall single-material loads

The most common materials found in single-material loads delivered are loads of ‘other’ material (49.8 per cent – mainly fines and shredder floc), garbage bags (17.1 per cent), masonry (11.5 per cent) and wood (9.5 per cent).

**Table 9: Overall composition of single-material loads, garbage bags as a category**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Other	272,460	55.4%	7040	10.4%	5810	44.1%	285,310	49.8%
Garbage bags	89,350	18.2%	6200	9.2%	2530	19.2%	98,080	17.1%
Masonry	19,880	4%	44,730	66.2%	1340	10.2%	65,950	11.5%
Wood	47,970	9.8%	5410	8%	1300	9.9%	54,680	9.5%
Textiles	17,410	3.5%	1090	1.6%	430	3.2%	18,930	3.3%
Garden organics	14,260	2.9%	540	0.8%	910	6.9%	15,700	2.7%
Food	14,350	2.9%	1340	2%	0	0%	15,680	2.7%
Plastic	7060	1.4%	790	1.2%	30	0.2%	7880	1.4%
Cardboard	3680	0.7%	120	0.2%	790	6%	4590	0.8%
Metals	2430	0.5%	60	0.1%	20	0.2%	2510	0.4%
Glass	2250	0.5%	250	0.4%	1	0%	2500	0.4%
Paper	680	0.1%	50	0.1%	0	0%	730	0.1%
Rubber	110	0%	1	0%	0	0%	110	0%
Electrical	70	0%	10	0%	0	0%	80	0%
<b>Total</b>	<b>491,950</b>	<b>100%</b>	<b>67,610</b>	<b>100%</b>	<b>13,170</b>	<b>100%</b>	<b>572,720</b>	<b>100%</b>

**Chart 8: Overall composition of single-material loads, garbage bags as a category**



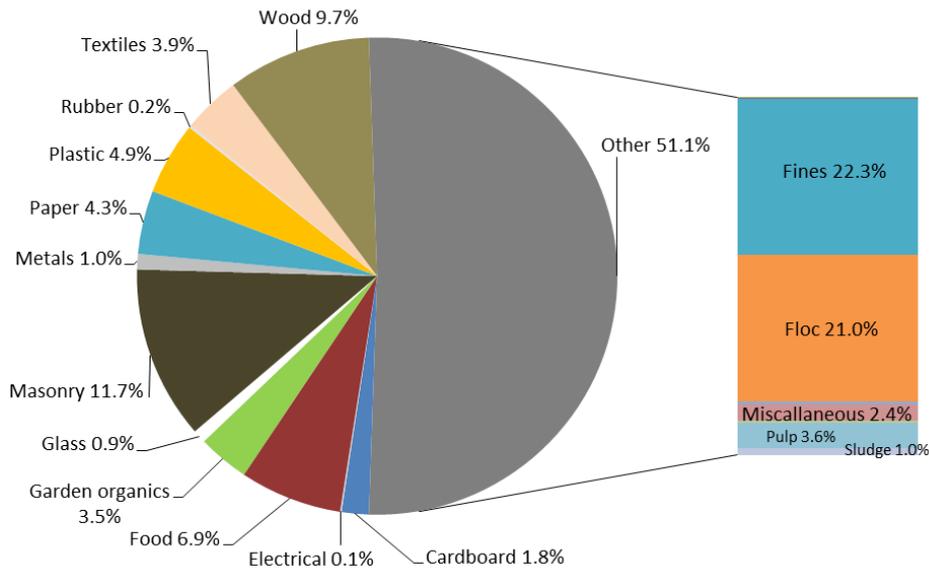
Refer to Table AF3 in Appendix F for detailed material category tonnages.

**Table 10: Overall composition of single-material loads, garbage bags distributed**

When the contents of garbage bags are distributed, single-material loads comprise mainly other material (51.1 per cent), masonry (11.7 per cent), wood (9.7 per cent) and food (6.9 per cent).

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	9110	1.9%	490	0.7%	900	6.8%	10,500	1.8%
Electrical	500	0.1%	30	0%	4	0%	540	0.1%
Food	34,950	7.1%	3640	5.4%	830	6.3%	39,420	6.9%
Garden organics	18,350	3.7%	600	0.9%	920	7%	19,860	3.5%
Glass	4490	0.9%	500	0.7%	120	0.9%	5100	0.9%
Masonry	21,060	4.3%	44,750	66.2%	1360	10.3%	67,170	11.7%
Metals	5650	1.1%	200	0.3%	90	0.7%	5940	1%
Paper	22,870	4.6%	1250	1.8%	560	4.3%	24,680	4.3%
Plastic	25,560	5.2%	2050	3%	570	4.4%	28,180	4.9%
Rubber	840	0.2%	70	0.1%	10	0.1%	920	0.2%
Textiles	20,550	4.2%	1260	1.9%	520	4%	22,330	3.9%
Wood	48,750	9.9%	5410	8%	1300	9.9%	55,460	9.7%
Other	279,270	56.8%	7370	10.9%	5990	45.5%	292,630	51.1%
<b>Total</b>	<b>491,950</b>	<b>100%</b>	<b>67,610</b>	<b>100%</b>	<b>13,170</b>	<b>100%</b>	<b>572,720</b>	<b>100%</b>

**Chart 9: Composition of overall single-material loads, garbage bags distributed**



Refer to Table AF3 in Appendix F for detailed material category tonnages.



**Photo 8: Load of AWT residual**



**Photo 9: Load of MRF residual**



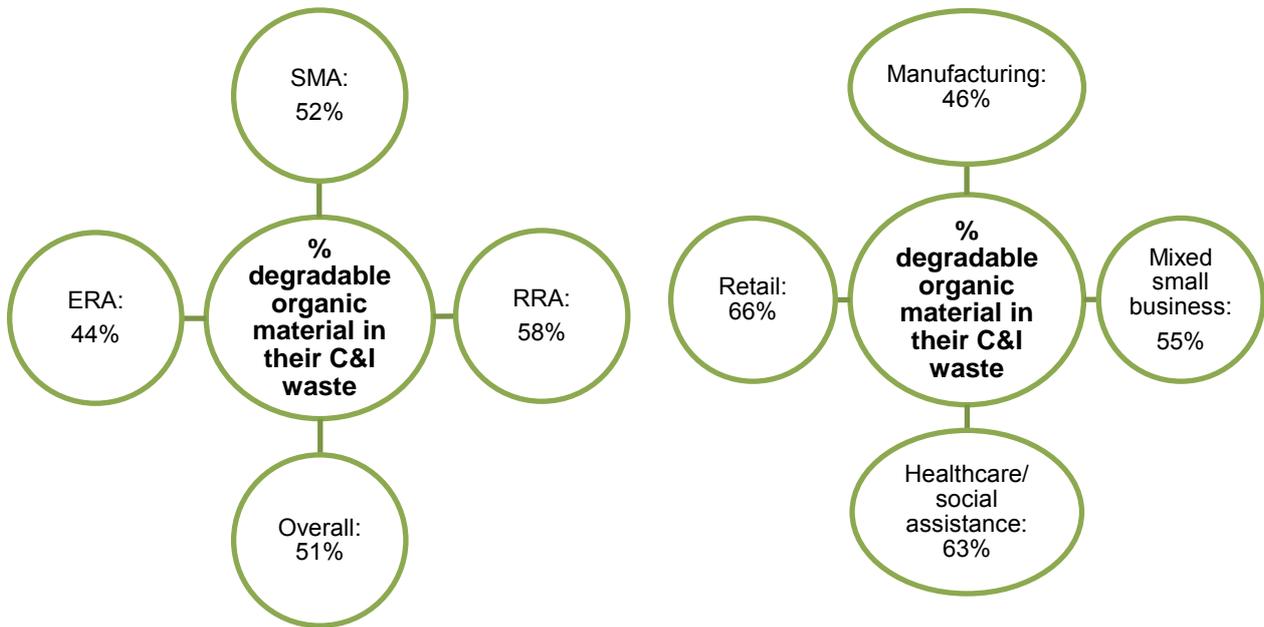
**Photo 10: Load of timber**

### 2.3 Focus category: degradable organic material

The overall C&I waste stream in the regulated areas of NSW comprises 51% degradable organic material, such as wood, paper, cardboard, food, textiles, vegetation, and other organic material such as nappies. Degradable organic material is of interest because it produces greenhouse gases when disposed in landfill, and can be recycled and processed into quality compost and related products if it is separately collected.

Manufacturing, retail, mixed small businesses and healthcare/social assistance are the biggest contributors of organic material to the C&I waste stream.

**Figure 5: Degradable organic material in the overall C&I waste stream, by region and industry**



Degradable organic material in the overall C&I waste with garbage bag contents distributed by region is derived from Table 6.

Degradable organic carbon the overall C&I waste with garbage bag contents distributed by key industry division is derived from tables AF72 (Manufacturing), AF96 (Retail), AF108 (Healthcare/social assistance) and AF84 (Mixed small business)

However in mixed C&I loads with garbage bag contents distributed, degradable organic materials make up 61% of the total – mainly wood, paper and food (refer Table 11).

**Table 11: Organic material in mixed C&I waste, garbage bags distributed**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of organic component	Tonnes per year	% of organic component	Tonnes per year	% of organic component	Tonnes per year	% of organic component
Wood	157,040	27.5%	28,910	29.2%	14,790	26.1%	200,750	27.6%
Paper	124,940	21.8%	18,590	18.8%	12,040	21.2%	155,570	21.4%
Food	92,640	16.2%	24,610	24.8%	14,650	25.8%	131,900	18.1%
Cardboard	71,310	12.5%	10,220	10.3%	6,280	11.1%	87,810	12.1%
Textiles	58,570	10.2%	8,370	8.4%	5,090	9%	72,030	9.9%
Vegetation	55,810	9.8%	6,300	6.4%	2,190	3.9%	64,300	8.8%
Other organic (nappies)	11,740	2.1%	2,110	2.1%	1,650	2.9%	15,500	2.1%
<b>Total</b>	<b>572,040</b>	<b>100%</b>	<b>99,110</b>	<b>100%</b>	<b>56,700</b>	<b>100%</b>	<b>727,850</b>	<b>100%</b>

In single-material loads with garbage bag contents distributed, degradable organic material makes up 31% of the overall C&I stream – again mainly wood, food and paper (refer Table 12).

**Table 12: Organic material in single loads of C&I waste, garbage bags distributed**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of organic component	Tonnes per year	% of organic component	Tonnes per year	% of organic component	Tonnes per year	% of organic component
Wood	48,750	30.6%	5,410	41.9%	1,300	25.3%	55,460	31.3%
Food	34,950	21.9%	3,640	28.2%	830	16%	39,420	22.2%
Paper	22,870	14.4%	1,250	9.7%	560	10.9%	24,680	13.9%
Textiles	20,550	12.9%	1,260	9.7%	520	10.2%	22,330	12.6%
Vegetation	18,350	11.5%	600	4.6%	920	17.8%	19,860	11.2%
Cardboard	9,110	5.7%	490	3.8%	890	17.4%	10,500	5.9%
Other organic (nappies)	4,680	2.9%	260	2%	120	2.4%	5,060	2.9%
<b>Total</b>	<b>159,260</b>	<b>100%</b>	<b>12,900</b>	<b>100%</b>	<b>5,140</b>	<b>100%</b>	<b>177,310</b>	<b>100%</b>



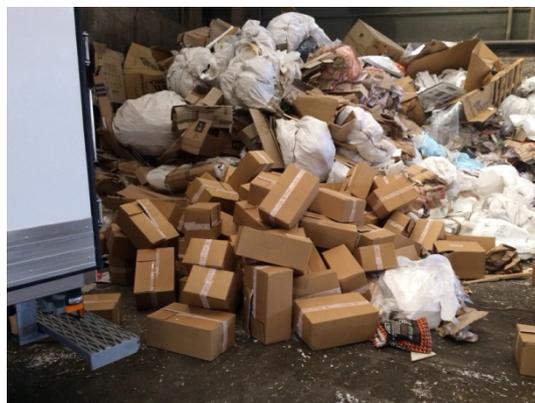
**Photo 11: Vegetation**



**Photo 12: Mattresses**



**Photo 13: Shredded paper**



**Photo 14: Cardboard**

## 2.4 Focus category: packaging waste

C&I waste comprises 19% packaging material, including packaging made from plastic, paper, cardboard, glass and metal.

Accommodation/food services, retail, manufacturing and mixed small businesses are the biggest contributors of packaging material to the C&I waste stream.

**Figure 6: Packaging in C&I waste, by region and industry, bags distributed**



Packaging in the overall C&I waste with garbage bag contents distributed by region is derived from Table 6.

Packaging in the overall C&I waste with garbage bag contents distributed by key industry division is derived from tables AF72 (manufacturing), AF96 (retail), AF120 (accommodation and food services) and AF84 (mixed small business)

In the overall mixed C&I loads, packaging materials make up 24% of the total – mainly plastic film and dry cardboard packaging (refer Table 13).

**Table 13: Composition of packaging material in mixed C&I waste, bags distributed**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of packaging waste	Tonnes per year	% of packaging waste	Tonnes per year	% of packaging waste	Tonnes per year	% of packaging waste
Plastic – film packaging	71,950	32%	14,100	34.7%	6,430	28.3%	92,490	32.1%
Cardboard – dry	55,530	24.7%	7,050	17.4%	4,400	19.3%	66,990	23.2%
Paper – packaging	34,190	15.2%	5,350	13.2%	3,190	14%	42,730	14.8%
Plastic – rigid packaging	21,390	9.5%	3,950	9.7%	2,590	11.4%	27,930	9.7%
Cardboard – wet/wax	15,770	7%	3,170	7.8%	1,870	8.2%	20,820	7.2%
Glass – packaging	9,460	4.2%	3,100	7.6%	2,220	9.7%	14,790	5.1%
Metal (ferrous) – packaging	8,150	3.6%	2,500	6.2%	1,160	5.1%%	11,810	4.1%
Metal (non-ferrous) – packaging	4,520	2%	900	2.2%	410	1.8%	5,820	2%
Polystyrene	4,080	1.8%	460	1.1%	500	2.2%	5,040	1.7%
<b>Total</b>	<b>225,060</b>	<b>100%</b>	<b>40,570</b>	<b>100%</b>	<b>22,770</b>	<b>100%</b>	<b>288,400</b>	<b>100%</b>

In the overall single-material loads, packaging materials make up seven per cent of total – again, mainly plastic film and dry cardboard packaging (refer Table 14).

**Table 14: Composition of packaging material in single-material C&I loads, bags distributed**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of packaging waste	Tonnes per year	% of packaging waste	Tonnes per year	% of packaging waste	Tonnes per year	% of packaging waste
Plastic – film packaging	11,800	31.2%	840	38.2%	300	19.1%	12,950	31.1%
Cardboard – dry	6040	16%	250	11.4%	870	54.5%	7160	17.2%
Plastic – rigid packaging	5300	14%	350	16%	160	10.2%	5820	14%
Paper – packaging	4250	11.2%	130	6%	50	3%	4420	10.6%
Cardboard – wet/wax	3070	8.1%	240	10.7%	30	1.7%	3340	8%
Glass – packaging	2400	6.3%	250	11.4%	110	7.1%	2760	6.6%
Metal (ferrous) – packaging	1500	4 %	70	3.2%	50	3.4%	1630	3.9%
Metal (non-ferrous) – packaging	780	2.1%	50	2.3%	10	0.6%	840	2%
Polystyrene	2700	7.1%	15	0.7%	6	0.4%	2720	6.5%
<b>Total</b>	<b>37,850</b>	<b>100%</b>	<b>2210</b>	<b>100%</b>	<b>1590</b>	<b>100%</b>	<b>41,640</b>	<b>100%</b>



**Photo 15: Waxed cardboard packaging**



**Photo 16: Plastic film**



**Photo 17: Plastic packaging**



**Photo 18: Plastic packaging**

## 2.5 Focus category: food waste

Food waste releases greenhouse gases in landfill, and is a priority in the NSW EPA's Draft *Waste Avoidance and Resource Recovery Strategy 2013-2021*. C&I waste comprises 10 per cent food: shopping centres, accommodation/food services, retail and manufacturing are the largest contributors.

**Figure 7: Food waste in C&I waste, by region and industry, bags distributed**



The regional breakdown is derived from Table 6: 'Overall C&I waste composition – garbage bag contents distributed'. For breakdown by industry-sector, refer to tables AF96 (retail), AF72 (manufacturing), AF120 (accommodation/food services) and AF156 (shopping centres)

**Table 15: Composition of food waste in mixed C&I waste, garbage bags distributed**

In mixed C&I loads, food waste make up 11 per cent of the total (refer Table 8). Most of this is unpackaged food, almost all of which is contained in garbage bags.

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of food waste	Tonnes per year	% of food waste	Tonnes per year	% of food waste	Tonnes per year	% of food waste
Food organics – unpackaged	80,900	87.3%	22,740	92.4%	13,670	93.3%	117,310	88.9%
Food organics – packaged	11,740	12.7%	1870	7.6%	990	6.7%	14,590	11.1%
<b>Total</b>	<b>92,640</b>	<b>100%</b>	<b>24,610</b>	<b>100%</b>	<b>14,650</b>	<b>100%</b>	<b>131,900</b>	<b>100%</b>

**Table 16: Composition of food waste in single material C&I loads, garbage bags distributed**

Seven per cent of single material loads is food (refer Table 10), of which 58.9 per cent is unpackaged (mostly in garbage bags), and the rest packaged, such as manufacturing rejects or out-of-date food.

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of food waste	Tonnes per year	% of food waste	Tonnes per year	% of food waste	Tonnes per year	% of food waste
Food organics – unpackaged	20,250	57.9%	2190	60%	790	96%	23,220	58.9%
Food organics – packaged	14,710	42.1%	1460	40%	30	4%	16,200	41.1%
<b>Total</b>	<b>34,950</b>	<b>100%</b>	<b>3640</b>	<b>100%</b>	<b>830</b>	<b>100%</b>	<b>39,400</b>	<b>100%</b>

## 2.6 Focus category: wood

Wood/timber is a priority material in the NSW EPA’s Draft *Waste Avoidance and Resource Recovery Strategy 2013-2021*.

Wood makes up 14 per cent of C&I waste. Mixed small businesses, healthcare/social assistance, manufacturing and retail are the biggest contributors of wood to the C&I waste stream.

**Figure 8: Timber/wood in C&I waste, by region and industry, bags distributed**



The wood in the C&I waste with garbage bag contents distributed by key industry division is derived from tables AF72 (manufacturing), AF96 (retail), AF108 (healthcare/social assistance) and AF84 (mixed small business)

In mixed C&I loads, wood makes up 17 per cent of the total (refer Table 8). Most of it is treated/painted wood – this includes engineered timber products such as MDF.

**Table 17: Composition of wood/timber in mixed C&I waste, bags distributed**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of wood waste	Tonnes per year	% of wood waste	Tonnes per year	% of wood waste	Tonnes per year	% of wood waste
Wood – treated/painted	114,170	72.7%	21,980	76%	10,100	68.3%	146,250	72.9%
Wood – untreated	17,850	11.4%	3920	13.6%	680	4.6%	22,460	11.2%
Wood – treated, pallets	17,880	11.4%	1960	6.8%	2020	13.6%	21,860	10.9%
Wood – untreated, pallets	7140	4.5%	1050	3.6%	1990	13.4%	10,180	5.1%
<b>Total</b>	<b>157,040</b>	<b>100%</b>	<b>28,910</b>	<b>100%</b>	<b>14,790</b>	<b>100%</b>	<b>200,750</b>	<b>100%</b>

Ten per cent of the waste arriving in single material loads is wood (refer Table 10). Again, most of this is treated/painted wood.

**Table 18: Composition of wood/timber in single-material C&I loads, bags distributed**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of wood waste	Tonnes per year	% of wood waste	Tonnes per year	% of wood waste	Tonnes per year	% of wood waste
Wood – treated/painted	40,730	83.6%	4810	88.8%	120	9%	45,660	82.3%
Wood – treated, pallets	4200	8.6%	500	9.2%	40	3%	4740	8.5%
Wood – untreated	2730	5.6%	110	2%	150	11.4%	2990	5.4%
Wood – untreated, pallets	1090	2.2%	0	0%	1000	76.5%	2090	3.8%
<b>Total</b>	<b>48,750</b>	<b>100%</b>	<b>5410</b>	<b>100%</b>	<b>1300</b>	<b>100%</b>	<b>55,460</b>	<b>100%</b>



**Photo 19: Pallets**



**Photo 20: Painted timber**



**Photo 21: Timber offcuts**



**Photo 22: Pallets**

## 2.7 Focus category: plastic

Plastic is a priority material in the NSW EPA’s Draft *Waste Avoidance and Resource Recovery Strategy 2013-2021*.

Plastic makes up 13 per cent of C&I waste. Retail, healthcare/social assistance, manufacturing and mixed small businesses are the largest contributors of plastic to the C&I waste stream.

**Figure 9: Plastic material in C&I waste, by region and industry, bags distributed**



Plastics in the C&I waste with garbage bag contents distributed by region is derived from Table 6.

Plastics in the C&I waste with garbage bag contents distributed by key industry division is derived from tables AF72 (Manufacturing), AF96 (Retail), AF108 (Healthcare/social assistance) and AF84 (Mixed small business).

In mixed C&I loads, plastic materials make up 17 per cent of the total (refer Table 8), much of which is contained in garbage bags. The most common plastic material is plastic film.

**Table 19: Composition of plastics in mixed C&I waste, bags distributed**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of plastic waste	Tonnes per year	% of plastic waste	Tonnes per year	% of plastic waste	Tonnes per year	% of plastic waste
Plastic – film packaging	71,950	46%	14,100	51.1%	6430	39.1%	92,490	46.2%
Plastic – other	58,870	37.7%	9100	33%	6920	42.1%	74,890	37.4%
Plastic – rigid packaging	21,390	13.7%	3950	14.3%	2590	15.7%	27,930	13.9%
Plastic – EPS foam	4080	2.6%	460	1.7%	500	3%	5040	2.5%
<b>Total</b>	<b>156,300</b>	<b>100%</b>	<b>27,610</b>	<b>100%</b>	<b>16,440</b>	<b>100%</b>	<b>200,350</b>	<b>100%</b>

In single-material loads, plastics make up five per cent of the total (refer Table 10). Most of the plastics in single-material loads are in garbage bags, and the most common plastic material is plastic film.

**Table 20: Composition of plastics in single-material C&I loads, bags distributed**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of plastic waste	Tonnes per year	% of plastic waste	Tonnes per year	% of plastic waste	Tonnes per year	% of plastic waste
Plastic – film packaging	11,800	46.2%	840	41.2%	300	52.8%	12,950	45.9%
Plastic – other	5760	22.5%	840	40.9%	100	17.8%	6700	23.8%
Plastic – rigid packaging	5300	20.7%	350	17.3%	160	28.3%	5820	20.6%
Plastic – EPS foam	2700	10.6%	20	0.7%	10	1.1%	2720	9.7%
<b>Total</b>	<b>25,560</b>	<b>100%</b>	<b>2050</b>	<b>100%</b>	<b>580</b>	<b>100%</b>	<b>28,180</b>	<b>100%</b>



**Photo 23: Plastic film**



**Photo 24: Rigid plastic packaging**



**Photo 25: Load containing mainly plastic**



**Photo 26: Expanded polystyrene**

## 2.8 Focus category: paper/cardboard

Paper/cardboard is a priority material in the NSW EPA’s Draft *Waste Avoidance and Resource Recovery Strategy 2013-2021*. It makes up 16 per cent of C&I waste, with accommodation/food services, retail, manufacturing and mixed small businesses being the largest contributors.

Figure 10: Paper/cardboard in C&I waste, by region and industry, bags distributed



Paper/cardboard in the C&I waste with garbage bag contents distributed by region is derived from Table 6.  
 For distribution by key industry division, refer to tables AF72 (manufacturing), AF96 (retail), AF120 (accommodation and food services) and AF84 (mixed small business)

In mixed C&I loads, paper/cardboard makes up 20 per cent of the total (refer Table 8), much of which is contained in garbage bags. Most of it is paper and dry cardboard.

Table 21: Composition of paper/cardboard in mixed C&I waste, bags distributed

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of paper/ cardboard waste	Tonnes per year	% of paper/ cardboard waste	Tonnes per year	% of paper/ cardboard waste	Tonnes per year	% of paper/ cardboard waste
Paper – other	56,230	28.7%	10,060	34.9%	6980	38.1%	73,270	30.1%
Dry cardboard	55,530	28.3%	7050	24.5%	4400	24%	66,990	27.5%
Paper – packaging	34,190	17.4%	5350	18.6%	3190	17.4%	42,730	17.6%
Office paper	34,520	17.6%	3190	11.1%	1870	10.2%	39,570	16.3%
Wet/waxed cardboard	15,770	8%	3170	11%	1870	10.2%	20,820	8.6%
<b>Total</b>	<b>196,240</b>	<b>100%</b>	<b>28,810</b>	<b>100%</b>	<b>18,320</b>	<b>100%</b>	<b>243,380</b>	<b>100%</b>

In single-material loads, paper/cardboard makes up six per cent (refer Table 10) – almost all of this is in garbage bags including office paper and dry cardboard. Most loads of purely cardboard/paper are most commonly recycled rather than disposed.

**Table 22: Composition of paper/cardboard in single-material C&I loads, bags distributed**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of paper/ cardboard waste	Tonnes per year	% of paper/ cardboard waste	Tonnes per year	% of paper/ cardboard waste	Tonnes per year	% of paper/ cardboard waste
Paper – other	11,400	35.6%	850	49%	430	29.3%	12,670	36%
Office paper	7230	22.6%	260	15.2%	90	5.9%	7580	21.5%
Dry cardboard	6040	18.9%	250	14.6%	870	59.6%	7160	20.4%
Paper – packaging	4250	13.3%	130	7.6%	50	3.3%	4420	12.6%
Wet/waxed cardboard	3070	9.6%	240	13.6%	30	1.9%	3340	9.5%
<b>Total</b>	<b>31,980</b>	<b>100%</b>	<b>1740</b>	<b>100%</b>	<b>1450</b>	<b>100%</b>	<b>35,170</b>	<b>100%</b>



**Photo 27: Cardboard boxes**



**Photo 28: Paper**



**Photo 29: Cardboard boxes**



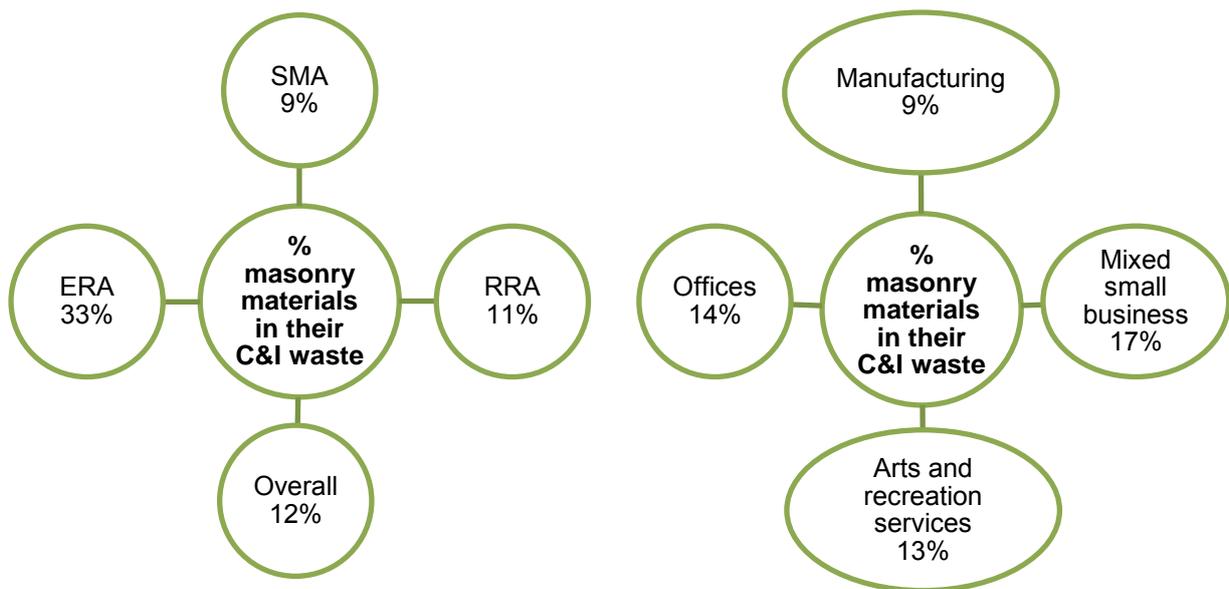
**Photo 30: Cardboard boxes**

## 2.9 Focus category: masonry materials

Masonry materials, including concrete, bricks and dirt, make up 12 per cent of overall C&I waste. Mixed small businesses, arts/recreation, offices and manufacturing are the largest contributors of masonry materials to the C&I waste stream.

The percentage of masonry materials in C&I waste in the ERA are much higher than the other regions. This is due to the receipt of 13 loads from the Arts & Recreation sector during the audit period, of which nine contained over 99 per cent masonry. Six of these nine loads were from one project – this one project may not be representative of the usual masonry generation from this sector.

**Figure 11: Masonry materials in C&I waste, by region and industry, bags distributed**



Masonry material in the C&I waste with garbage bag contents distributed by region is derived from Table 6.

For distribution by key industry division, refer to tables AF72 (manufacturing), AF150 (offices), AF144 (arts and recreation services) and AF84 (mixed small business)



**Photo 31: Load containing masonry materials**

Masonry materials are typically generated from construction and demolition activity, and present in the C&D waste stream. Table 23 shows the breakdown of the masonry materials in the overall C&I stream.

**Table 23: Breakdown of masonry materials in overall C&I waste**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of masonry waste	Tonnes per year	% of masonry waste	Tonnes per year	% of masonry waste	Tonnes per year	% of masonry waste
Masonry materials – concrete, bricks, soil, dirt, sand, bitumen, rubble, plaster, hardener	73,030	58.9%	66,730	81%	5470	47.1%	145,230	66.6%
Masonry materials – other	50,960	41.1%	15,640	19%	6130	52.9%	72,730	33.4%
<b>Total</b>	<b>123,990</b>	<b>100%</b>	<b>82,360</b>	<b>100%</b>	<b>11,600</b>	<b>100%</b>	<b>217,960</b>	<b>100%</b>

“Masonry materials – other” is almost exclusively plasterboard, with smaller amounts of cement powder and fibro.

In mixed C&I loads, masonry materials make up 13 per cent of the total (refer Table 8). The masonry is generally not contained in garbage bags.

**Table 24: Contents of masonry materials in mixed C&I loads**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of masonry waste	Tonnes per year	% of masonry waste	Tonnes per year	% of masonry waste	Tonnes per year	% of masonry waste
Masonry materials – concrete, bricks, soil, dirt, sand, bitumen, rubble, plaster, hardener	58,540	56.9%	23,970	63.7%	4130	40.3%	86,640	57.5%
Masonry materials – other	44,390	43.1%	13,640	36.3%	6120	59.7%	64,150	42.5%
<b>Total</b>	<b>102,930</b>	<b>100%</b>	<b>37,610</b>	<b>100%</b>	<b>10,240</b>	<b>100%</b>	<b>150,790</b>	<b>100%</b>

In single-material loads, masonry materials make up 12 per cent of the total (refer Table 10). These are mainly delivered loose rather than in garbage bags.

**Table 25: Contents of masonry materials in single material C&I loads**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of masonry waste	Tonnes per year	% of masonry waste	Tonnes per year	% of masonry waste	Tonnes per year	% of masonry waste
Masonry materials – concrete, bricks, soil, dirt, sand, bitumen, rubble, plaster, hardener	14,500	68.8%	42,750	95.5%	1340	98.8%	58,590	87.2%
Masonry materials – other	6570	31.2%	2000	4.5%	20	1.2%	8580	12.8%
<b>Total</b>	<b>21,060</b>	<b>100%</b>	<b>44,750</b>	<b>100%</b>	<b>1359</b>	<b>100%</b>	<b>67,170</b>	<b>100%</b>

### 2.10 Focus category: garbage bags

Accommodation/food services, retail, manufacturing and mixed small businesses are the largest contributors of garbage bags, which make up 28 per cent of total C&I waste. This is much higher than the 15 per cent in the 2008 audit, possibly due to more paper and cardboard presenting in garbage bags rather than as loose waste.

**Figure 12: Garbage bags in C&I waste, by region and industry**



Garbage bags in the overall C&I waste is derived from Table 3.  
 Garbage bags in the overall C&I waste by key industry division is derived from tables AF71 (manufacturing), AF95 (retail), AF119 (accommodation and food services) and AF83 (mixed small business)

In mixed C&I loads, garbage bags make up 34 per cent of the total (refer Table 7).

**Table 26: Contents of garbage bags in mixed C&I loads**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of garbage bag contents	Tonnes per year	% of garbage bag contents	Tonnes per year	% of garbage bag contents	Tonnes per year	% of garbage bag contents
Food	75,370	24.2%	22,410	37.7%	11,090	32.6%	108,870	26.9%
Paper	83,790	26.9%	11,820	19.9%	7520	22.1%	103,130	25.4%
Plastic	66,200	21.2%	11,650	19.6%	7280	21.4%	85,120	21%
Cardboard	19,390	6.2%	3310	5.6%	1410	4.1%	24,110	5.9%
Other	17,880	5.7%	2650	4.5%	2440	7.2%	22,970	5.7%
Textiles	10,870	3.5%	1430	2.4%	1270	3.7%	13,570	3.3%
Metals	10,700	3.4%	1400	2.4%	910	2.7%	13,020	3.2%
Garden organics	10,490	3.4%	1460	2.5%	90	0.3%	12,040	3%
Glass	7280	2.3%	2260	3.8%	1530	4.5%	11,070	2.7%
Masonry	3330	1.1%	160	0.3%	220	0.6%	3710	0.9%
Rubber	2450	0.8%	580	1%	180	0.5%	3210	0.8%
Wood	2230	0.7%	160	0.3%	10	0%	2390	0.6%
Electrical	1850	0.6%	140	0.2%	40	0.1%	2040	0.5%
<b>Total</b>	<b>311,830</b>	<b>100%</b>	<b>59,410</b>	<b>100%</b>	<b>33,990</b>	<b>100%</b>	<b>405,240</b>	<b>100%</b>

In single-material loads, garbage bags make up 17 per cent of the total (refer Table 9).

**Table 27: Contents of garbage bags in single material C&I loads**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of garbage bag contents	Tonnes per year	% of garbage bag contents	Tonnes per year	% of garbage bag contents	Tonnes per year	% of garbage bag contents
Paper	22,200	24.8%	1200	19.3%	560	22.1%	23,950	24.4%
Food	20,610	23.1%	2310	37.2%	830	32.6%	23,740	24.2%
Plastic	18,500	20.7%	1260	20.4%	540	21.4%	20,300	20.7%
Other	6810	7.6%	330	5.3%	180	7.2%	7320	7.5%
Cardboard	5430	6.1%	370	5.9%	110	4.1%	5900	6%
Garden organics	4090	4.6%	70	1%	10	0.3%	4160	4.2%
Metals	3230	3.6%	140	2.3%	70	2.7%	3440	3.5%
Textiles	3140	3.5%	160	2.6%	90	3.7%	3400	3.5%
Glass	2230	2.5%	250	4.1%	110	4.5%	2600	2.7%
Masonry	1180	1.3%	20	0.3%	20	0.6%	1220	1.2%
Rubber	730	0.8%	70	1.1%	10	0.5%	810	0.8%
Wood	780	0.9%	10	0.1%	1	0%	790	0.8%
Electrical	440	0.5%	20	0.3%	3	0.1%	460	0.5%
<b>Total</b>	<b>89,350</b>	<b>100%</b>	<b>6200</b>	<b>100%</b>	<b>2530</b>	<b>100%</b>	<b>98,080</b>	<b>100%</b>



**Photo 32: Load of garbage bags**

## 2.11 Focus category: e-waste

The e-waste category in this audit includes electrical, electronic and equipment received from the C&I sector for disposal at landfills. It can release hazardous substances when placed in landfill, and makes up 0.4 per cent of overall C&I waste with garbage bag contents distributed. Healthcare/social assistance, mixed small businesses, manufacturing and retail are the largest contributors.

Figure 13: E-waste in C&I waste, by region and industry



E-waste in the C&I waste with garbage bag contents distributed by region is derived from Table 6. For distribution by key industry division, refer to tables AF72 (manufacturing), AF96 (retail), AF108 (healthcare/social assistance) and AF84 (mixed small business)



Photo 33: Photocopier disposed to landfill

**Table 28: Composition of e-waste in mixed C&I waste, bags distributed**

In mixed C&I loads with garbage bag contents distributed, e-waste makes up 0.6 per cent of the total (refer Table 8).

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of e-waste						
Electrical – other (including office-based electronics and small household appliances)	4130	67.4%	300	74.5%	160	50.9%	4590	67%
Electrical – computers and peripherals	990	16.2%	40	8.8%	60	17.4%	1080	15.8%
Electrical – TVs	770	12.6%	50	13.2%	50	14.8%	870	12.8%
Electrical – whitegoods	230	3.8%	10	3.5%	50	16.9%	300	4.4%
<b>Total</b>	<b>6122</b>	<b>100%</b>	<b>400</b>	<b>100%</b>	<b>320</b>	<b>100%</b>	<b>6840</b>	<b>100%</b>

In single-material loads, e-waste is 0.1 per cent of the total (refer Table 10), contained in garbage bags rather than whole loads.

**Table 29: Composition of e-waste in single material C&I loads, bags distributed**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% of e-waste						
Electrical – other	450	89.7%	30	90.5%	2	42.6%	480	89.5%
Electrical – TVs	40	8.8%	3	9.5%	0	0%	50	8.8%
Electrical – computers and peripherals	7	1.4%	0	0%	2	53.5%	10	1.7%
Electrical – whitegoods	0	0%	0	0%	0	3.8%	0	0%
<b>Total</b>	<b>500</b>	<b>100%</b>	<b>30</b>	<b>100%</b>	<b>4</b>	<b>100%</b>	<b>540</b>	<b>100%</b>

Table 161 in Appendix F shows the amount of each type of e-waste item in the audit.

## 2.12 Who generates C&I waste?

In the C&I audit, each waste delivery was recorded in accordance with the ANZSIC industry division codes and definitions as provided in Appendix B, where the code was known and/or as advised by delivery vehicle drivers.

### 2.12.1 C&I generation by industry sector

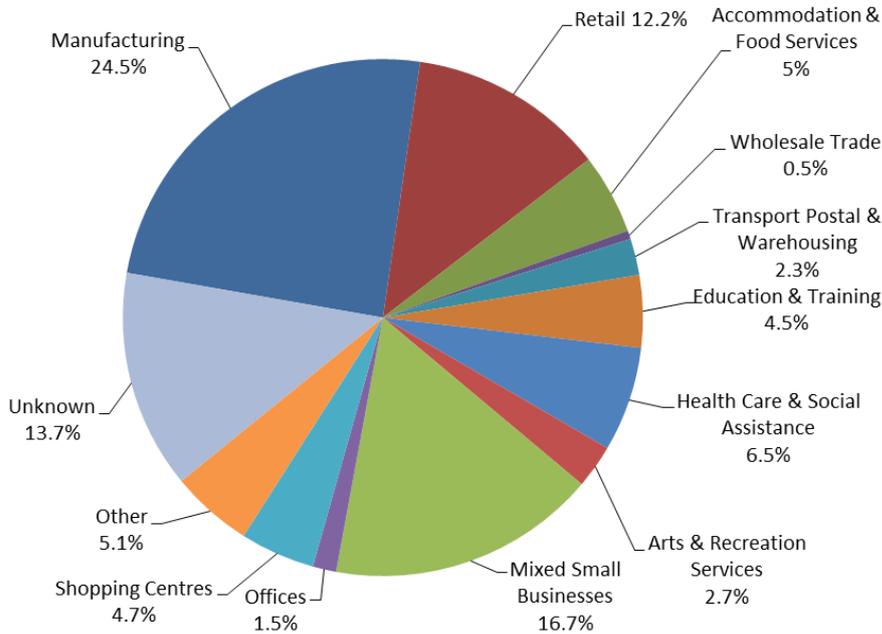
The identified industry divisions (also referred to as sectors) that dispose of the most C&I waste are manufacturing (24.5 per cent of all C&I waste disposed), mixed small businesses (16.7 per cent), retail (12.2 per cent) and healthcare/social assistance (seven per cent). Almost fourteen per cent was disposed by unknown industry sectors, including loads collected from multiple premises from different industry sectors.

When compared to the 2008 audit results, the 2014 audit shows a large reduction in the proportion of C&I waste from mixed small businesses (from 45 per cent in 2008 to 16.7 per cent in 2014). This may be due to changes to the definitions of ANZSIC sectors between 2008 and 2014, resulting in many small businesses being captured under other categories; the highly heterogeneous nature of the C&I waste stream, and the inherent difficulty in assessing the source of material over a short time frame at the point of disposal.

**Table 30: Overall C&I waste disposal by industry sector**

Industry	SMA		ERA		RRA		Overall	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Manufacturing	373,480	26.4%	40,570	16.1%	20,980	19.7%	435,040	24.5%
Mixed small businesses	243,440	17.2%	49,690	19.7%	4000	3.8%	297,130	16.7%
Unknown	223,740	15.8%	7970	3.2%	10,910	10.2%	242,610	13.7%
Retail	172,730	12.2%	34,500	13.7%	9840	9.2%	217,070	12.2%
Healthcare and social assistance	95,750	6.8%	13,450	5.3%	7020	6.6%	116,220	6.5%
Other	53,130	3.8%	18,030	7.1%	19,550	18.4%	90,710	5.1%
Accommodation and food services	56,680	4%	4720	1.9%	27,730	26%	89,120	5%
Shopping centres	53,790	3.8%	24,040	9.5%	4710	4.4%	82,540	4.7%
Education and training	64,060	4.5%	16,210	6.4%	0	0%	80,280	4.5%
Arts and recreation services	20,080	1.4%	26,350	10.4%	1810	1.7%	48,240	2.7%
Transport postal and warehousing	27,550	1.9%	12,840	5.1%	0	0%	40,400	2.3%
Offices	23,210	1.6%	2730	1.1%	0	0%	25,930	1.5%
Wholesale trade	7930	0.6%	1450	0.6%	0	0%	9380	0.5%
<b>Total</b>	<b>1,415,560</b>	<b>100%</b>	<b>252,550</b>	<b>100%</b>	<b>106,540</b>	<b>100%</b>	<b>1,774,650</b>	<b>100%</b>

**Chart 10: Overall C&I waste disposal by industry sector**

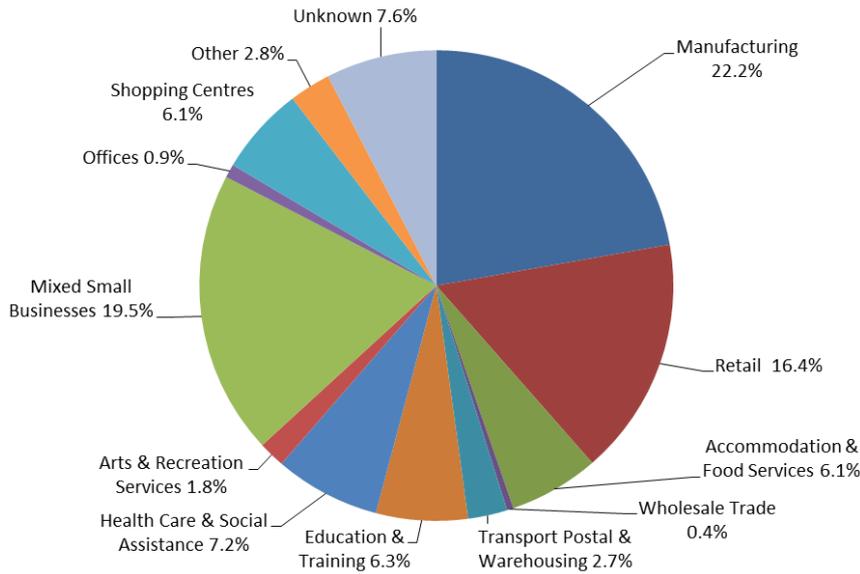


**Table 31: C&I mixed loads disposal by industry sector**

Mixed C&I loads were delivered mainly by the manufacturing, mixed small business and retail sectors.

Industry	SMA		RRA		ERA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Manufacturing	211,150	22.9%	20,310	21.7%	35,440	19.2%	266,900	22.2%
Mixed small businesses	191,200	20.7%	2490	2.7%	40,660	22%	234,350	19.5%
Retail	155,770	16.9%	9800	10.5%	31,190	16.9%	196,770	16.4%
Unknown	79,980	8.7%	6340	6.8%	4480	2.4%	90,800	7.6%
Health care and social assistance	66,820	7.2%	6630	7.1%	13,250	7.2%	86,700	7.2%
Education and training	62,480	6.8%	0	0%	12,740	6.9%	75,220	6.3%
Accommodation and food services	41,800	4.5%	27,420	29.4%	4700	2.5%	73,920	6.1%
Shopping centres	45,260	4.9%	4710	5%	22,850	12.4%	72,820	6.1%
Other	15,990	1.7%	13,870	14.9%	4090	2.2%	33,940	2.8%
Transport postal and warehousing	19,400	2.1%	0	0%	12,840	6.9%	32,240	2.7%
Arts and recreation services	17,340	1.9%	1810	1.9%	2580	1.4%	21,730	1.8%
Offices	11,160	1.2%	0	0%	0	0%	11,160	0.9%
Wholesale trade	5270	0.6%	0	0%	130	0.1%	5390	0.4%
<b>Total</b>	<b>923,620</b>	<b>100%</b>	<b>93,370</b>	<b>100%</b>	<b>184,940</b>	<b>100%</b>	<b>1,201,930</b>	<b>100%</b>

**Chart 11: C&I mixed loads disposal by industry sector**

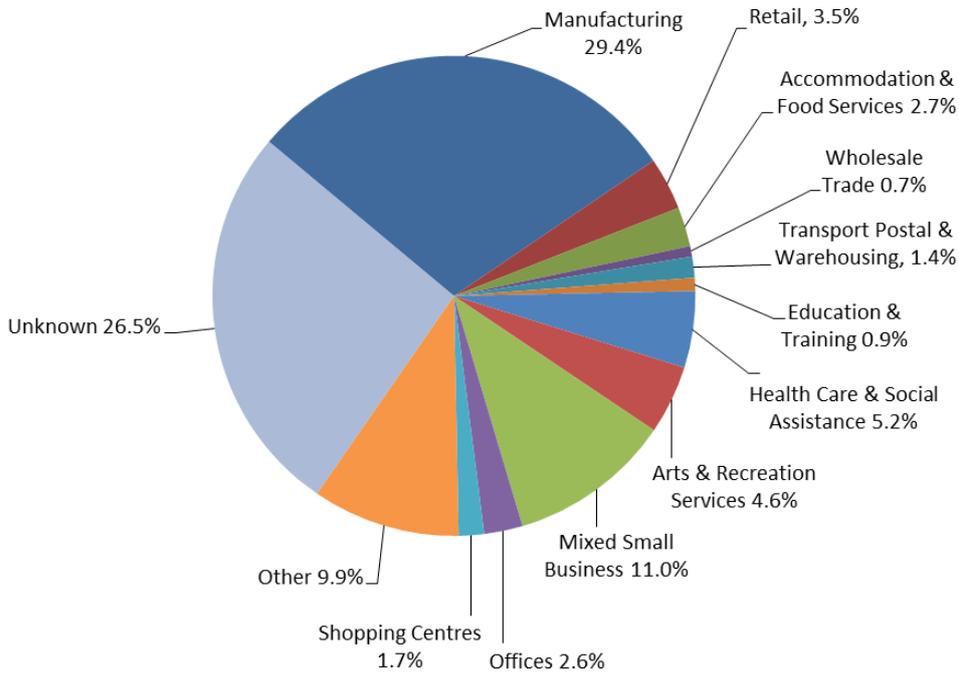


**Table 32: C&I single loads disposal by industry sector**

Single material C&I loads were delivered mainly by manufacturers, followed by unknown sectors and mixed small businesses.

Industry	SMA		RRA		ERA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Manufacturing	162,330	33%	680	5.1%	5130	7.6%	168,140	29.4%
Unknown	143,760	29.2%	4560	34.7%	3490	5.2%	151,810	26.5%
Mixed small businesses	52,240	10.6%	1510	11.5%	9020	13.3%	62,780	11%
Other	37,140	7.5%	5690	43.2%	13,940	20.6%	56,770	9.9%
Health care and social assistance	28,930	5.9%	390	3%	200	0.3%	29,510	5.2%
Arts and recreation services	2740	0.6%	0	0%	23,770	35.2%	26,510	4.6%
Retail	16,960	3.4%	40	0.3%	3310	4.9%	20,310	3.5%
Accommodation and food services	14,880	3%	300	2.3%	30	0%	15,210	2.7%
Offices	12,040	2.4%	0	0%	2730	4%	14,770	2.6%
Shopping centres	8530	1.7%	0	0%	1190	1.8%	9720	1.7%
Transport postal and warehousing	8160	1.7%	0	0%	0	0%	8160	1.4%
Education and training	1580	0.3%	0	0%	3480	5.1%	5060	0.9%
Wholesale trade	2670	0.5%	0	0%	1320	2%	3990	0.7%
<b>Total</b>	<b>491,950</b>	<b>100%</b>	<b>13,170</b>	<b>100%</b>	<b>67,610</b>	<b>100%</b>	<b>572,720</b>	<b>100%</b>

**Chart 12: C&I single material loads disposal by industry sector**



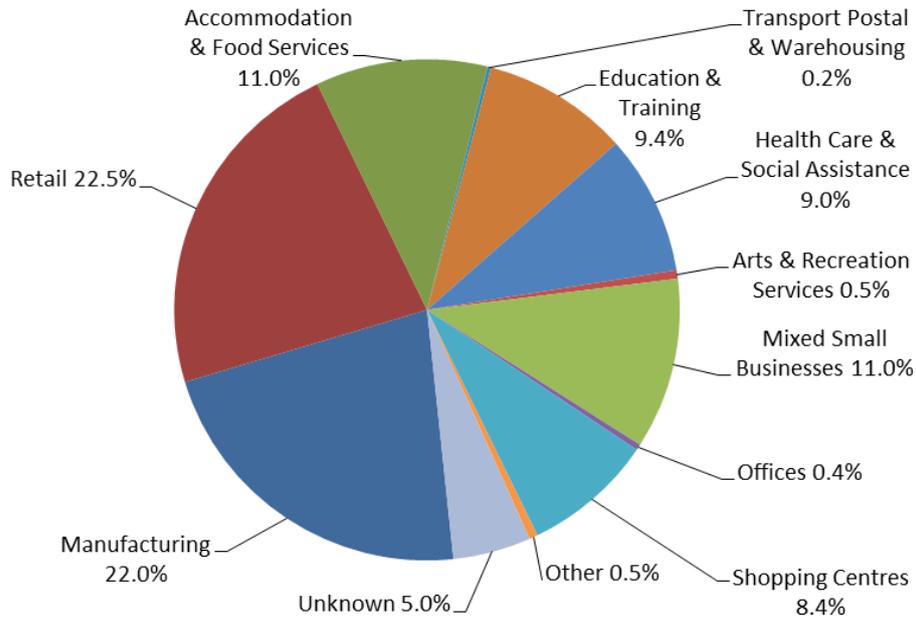
**2.12.2 Garbage bag generation by industry sector**

Garbage bags were disposed of mainly by the retail sector (22.5 per cent of all garbage bags disposed), the manufacturing sector (22 per cent), mixed small businesses (11 per cent) and accommodation/food services (11 per cent). Healthcare/social assistance, education/training and shopping centres also contributed large amounts of garbage bags.

**Table 33: Garbage bag disposal by industry sector**

Industry sector	Tonnes garbage bags disposed per year	% of all garbage bags disposed
Retail	113,260	22.5%
Manufacturing	110,816	22%
Mixed small businesses	55,585	11%
Accommodation and food services	55,227	11%
Education and training	47,129	9.4%
Health care and social assistance	45,341	9%
Shopping centres	42,144	8.4%
Unknown	25,093	5%
Arts and recreation services	2752	0.5%
Offices	1904	0.4%
Other	2733	0.5%
Transport postal and warehousing	1192	0.2%
Wholesale trade	135	0%
<b>Total</b>	<b>503,310</b>	<b>100%</b>

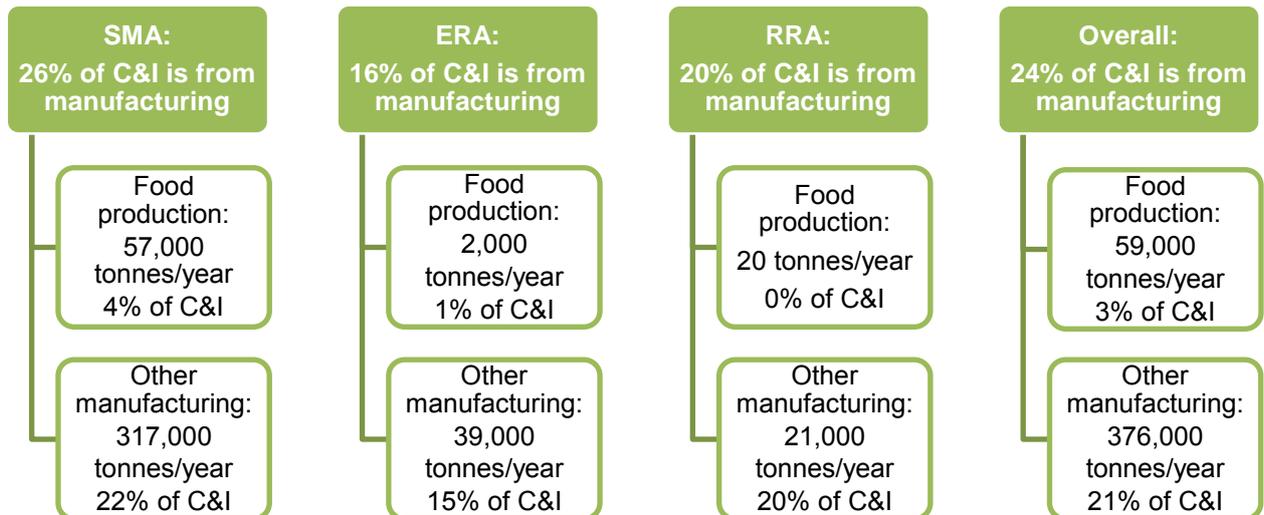
**Chart 13: Garbage bag disposal by industry sector**



Tables AF162 and AF163 in Appendix F show detailed garbage bag composition data for all industry sectors.

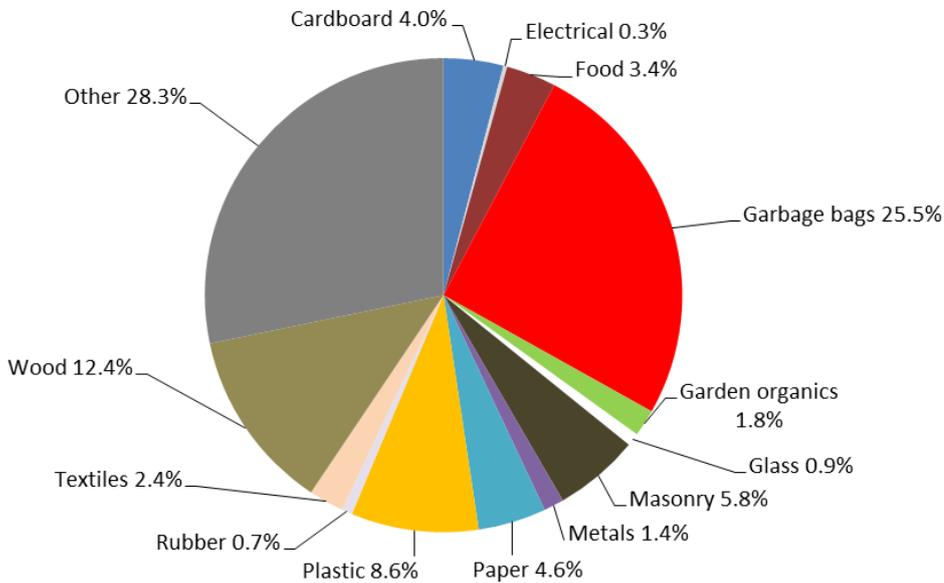
**2.12.3 Focus sector: manufacturing**

The four major industry sectors contributing C&I waste for disposal are discussed in more detail below. Detailed composition and tonnage data for all industry sectors audited is contained in Appendix F.



**Chart 14: Composition of C&I loads from the manufacturing sector – garbage bags separate**

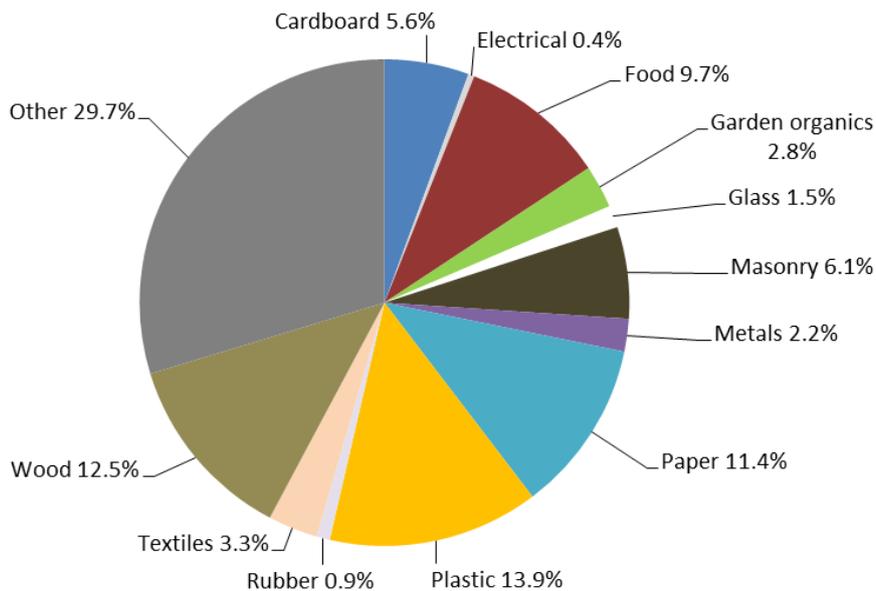
The manufacturing sector disposes mainly other material (28.3 per cent – mostly fines and floc), garbage bags (25.5 per cent), wood (12.4 per cent) and plastic (8.6 per cent).



Refer to Table AF71 in Appendix F for tonnage details.

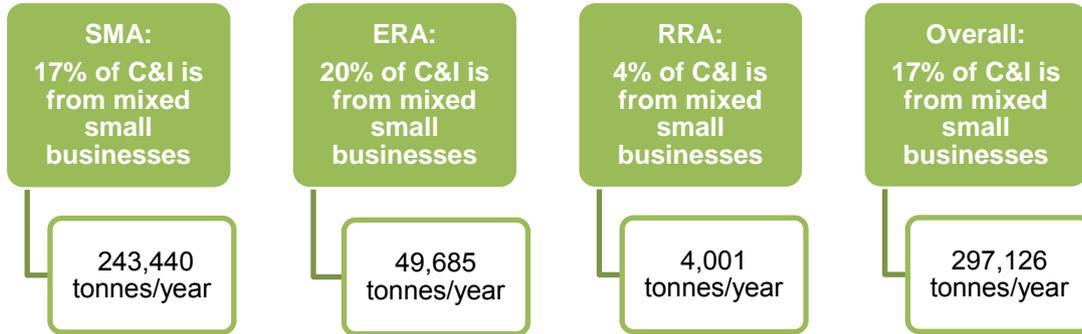
**Chart 15: Composition of C&I loads from the manufacturing sector – garbage bags distributed**

When the contents of the garbage bags are distributed, the main materials from the manufacturing sector are other materials (29.7 per cent – fines/floc), plastic (13.9 per cent), wood (12.5 per cent), paper (11.4 per cent) and food (9.7 per cent).



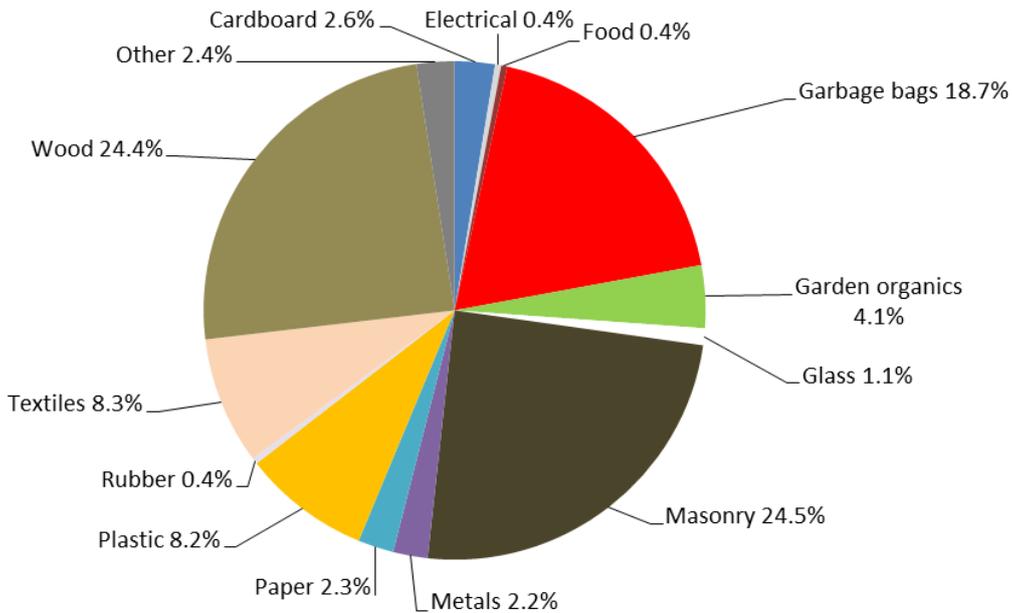
Refer to Table AF72 in Appendix F for tonnage details.

2.12.4 Focus sector: mixed small businesses



**Chart 16: Composition C&I loads from mixed small businesses – garbage bags separate**

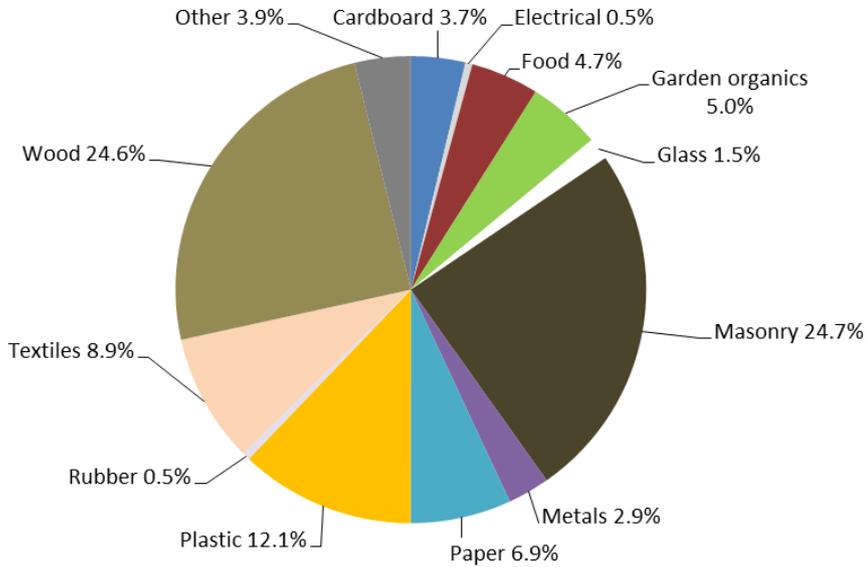
Mixed small businesses dispose mainly masonry (24.5 per cent), wood (24.4 per cent), garbage bags (18.7 per cent), textiles (8.3 per cent) and plastic (8.2 per cent).



Refer to Table AF83 in Appendix F for tonnage details.

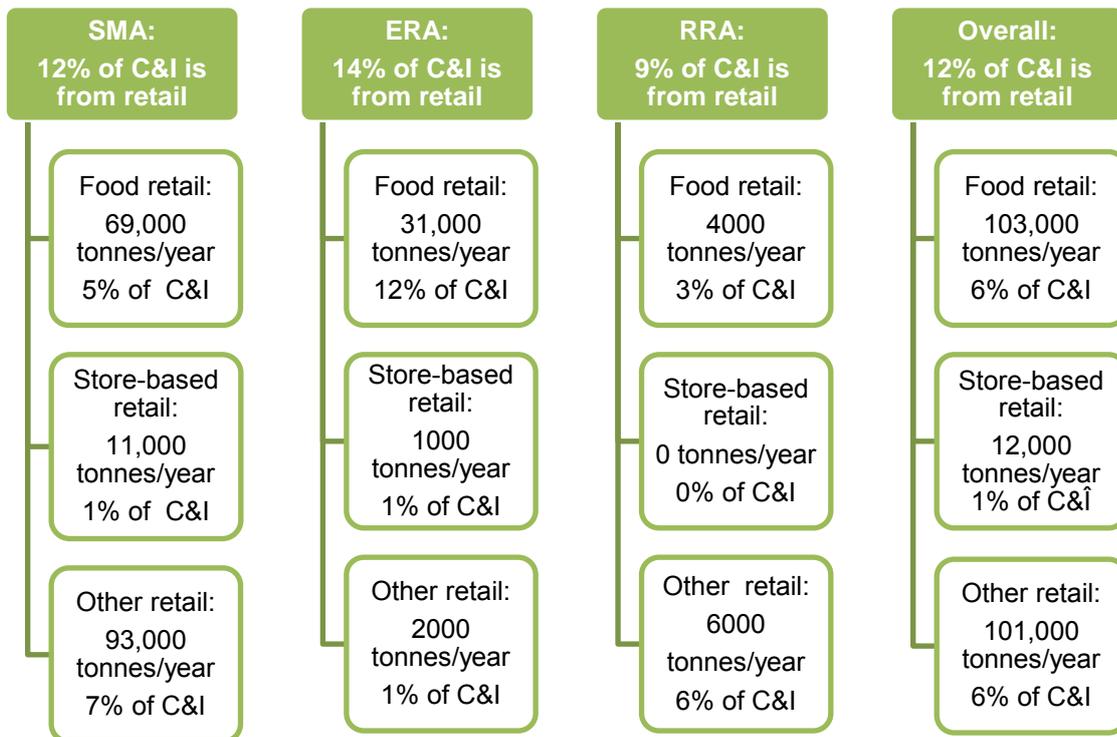
**Chart 17: Composition of C&I loads from mixed small businesses – garbage bags distributed**

When the contents of the garbage bags are distributed, the main materials from mixed small businesses are masonry (24.7 per cent), wood (24.6 per cent), plastic (12.1 per cent) and textiles (8.9 per cent).



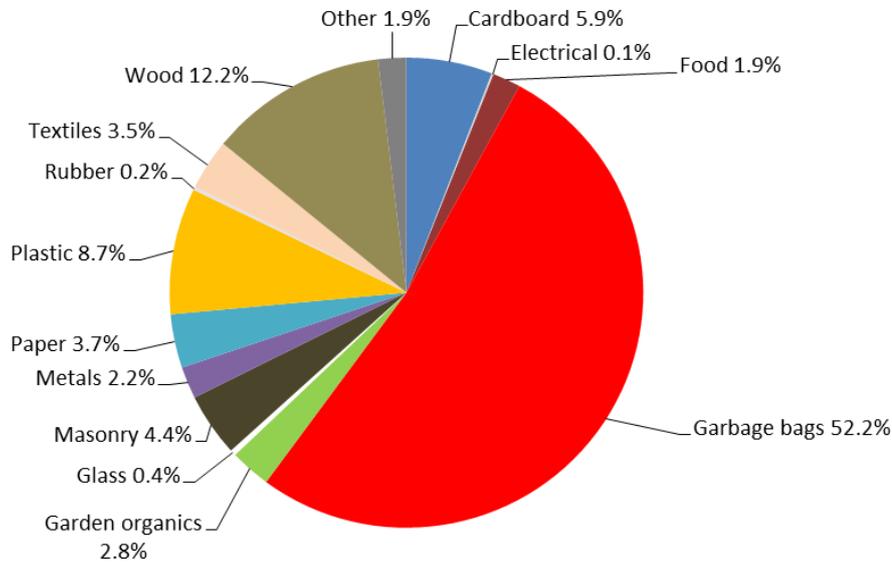
Refer to Table AF84 in Appendix F for tonnage details.

**2.12.5 Focus sector: retail**



**Chart 18: Composition C&I loads from the retail sector – garbage bags separate**

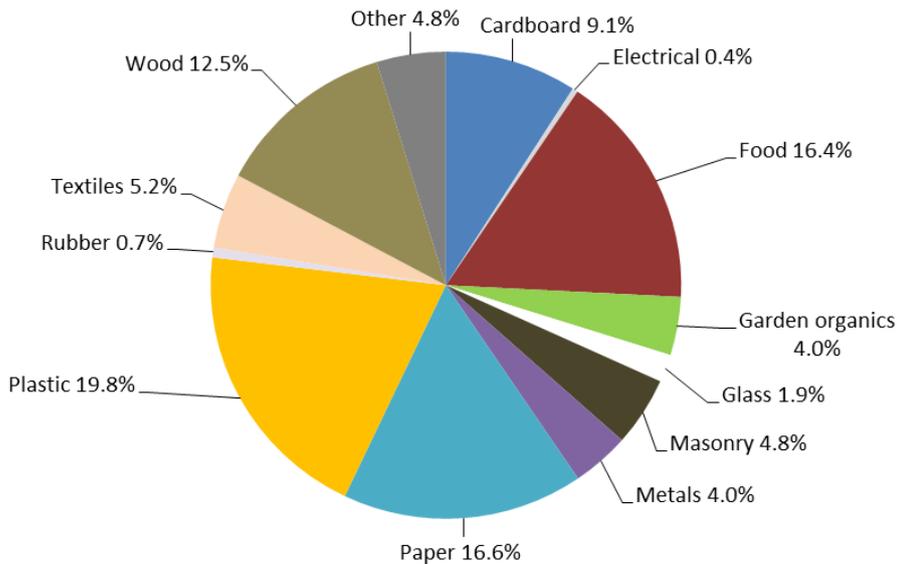
The retail sector disposes mainly garbage bags (52.2 per cent), wood (12.2 per cent), plastic (8.7 per cent) and cardboard (5.9 per cent).



Refer to Table AF95 in Appendix F for tonnage details.

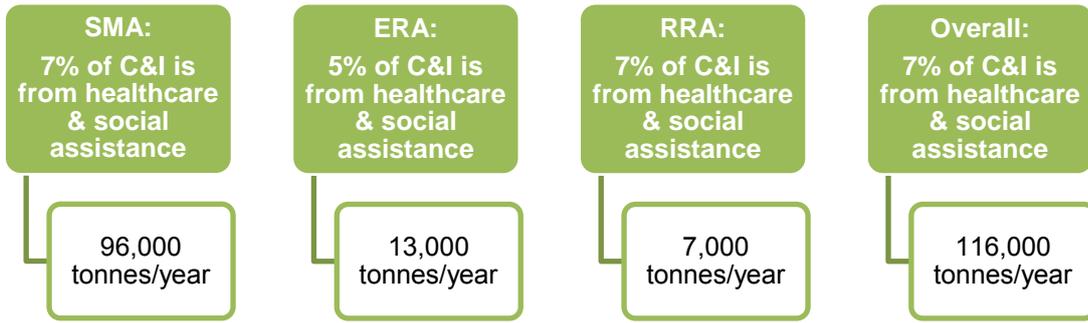
**Chart 19: Composition of C&I loads from the retail sector – garbage bags distributed**

When the contents of the garbage bags are distributed, the main materials from the retail sector are plastic (19.8 per cent), paper (16.6 per cent), food (16.4 per cent), wood (12.5 per cent) and cardboard (9.1 per cent).



Refer to Table AF96 in Appendix F for tonnage details.

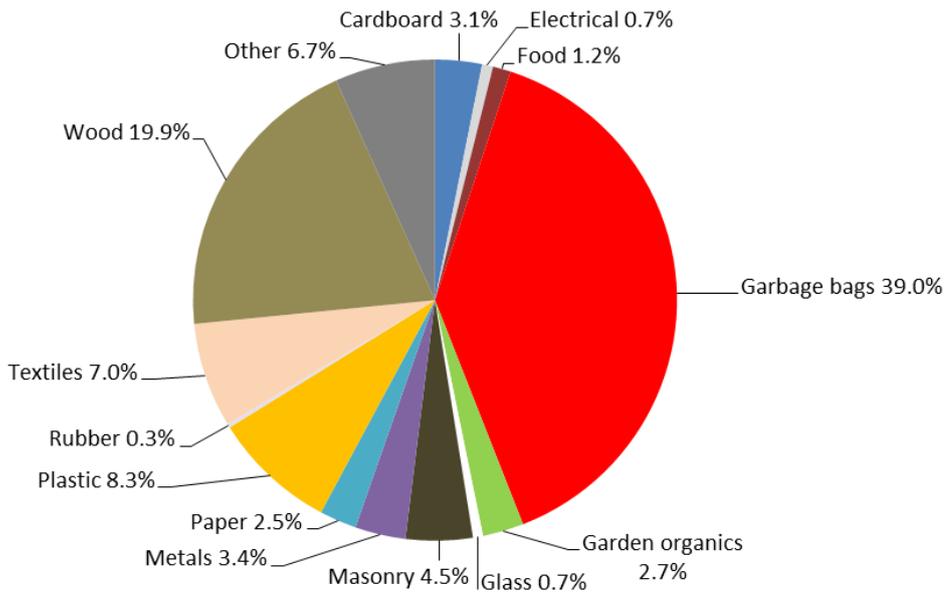
2.12.6 Focus sector: healthcare and social assistance



There were 149 observations in the healthcare and social assistance (charity) sector. Of these, 23 were recorded as coming in from charities.

**Chart 20: Composition of C&I waste from the healthcare and social assistance sector**

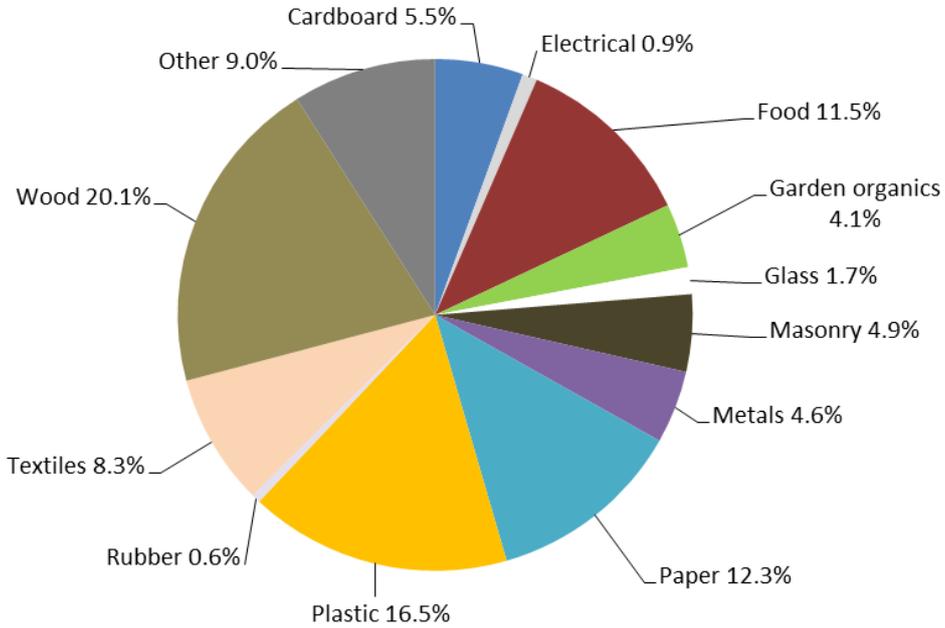
The healthcare and social assistance sector disposes mainly garbage bags (39 per cent), wood (19.9 per cent), plastic (8.3 per cent) and textiles (seven per cent).



Refer to Table AF107 in Appendix F for tonnage details.

**Chart 21: Composition of C&I waste from the healthcare and social assistance sector – bags distributed**

When the contents of the garbage bags are distributed, the main materials from the healthcare and social assistance sector are wood (20.1 per cent), plastic (16.5 per cent), paper (12.3 per cent), food (11.5 per cent) and textiles (8.3 per cent).



Refer to Table AF108 in Appendix F for tonnage details. Detailed composition data for each industry sector audited is contained in Appendix F.

### 2.12.7 Waste facility customers by industry sector

Table 34 shows each industry sector and how they split disposal of their C&I waste between landfills and transfer stations. The main findings are:

- almost one-third of all landfill deliveries are from the manufacturing sector
- almost one-third of transfer station deliveries are from mixed small businesses.

**Table 34: C&I waste facility customers by industry sector**

Industry	Landfill		Transfer station		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Manufacturing	307,190	27.7%	127,850	19.2%	435,040	24.5%
Mixed small businesses	105,420	9.5%	191,700	28.8%	297,130	16.7%
Unknown	142,840	12.9%	99,770	15%	242,610	13.7%
Retail	139,450	12.6%	77,620	11.7%	217,070	12.2%
Healthcare and social assistance	80,580	7.3%	35,640	5.4%	116,220	6.5%
Other	88,630	8%	2080	0.3%	90,710	5.1%
Accommodation and food services	73,920	6.7%	15,200	2.3%	89,120	5%
Shopping centres	53,230	4.8%	29,310	4.4%	82,540	4.7%
Education and training	39,890	3.6%	40,380	6.1%	80,280	4.5%
Arts and recreation services	44,570	4%	3670	0.6%	48,240	2.7%
Transport postal and warehousing	19,880	1.8%	20,510	3.1%	40,400	2.3%
Offices	5900	0.5%	20,040	3%	25,930	1.5%
Wholesale trade	7250	0.7%	2130	0.3%	9380	0.5%
<b>Total</b>	<b>1,108,750</b>	<b>100%</b>	<b>665,900</b>	<b>100%</b>	<b>1,774,650</b>	<b>100%</b>

## 2.13 Vehicle types

### 2.13.1 Vehicle types by facility type

Table 35 provides a model of the annual state-wide distribution of waste being delivered by different vehicle types, based in proportion on the results observed in the audit.

Overall, front-lift trucks deliver the most C&I waste (28 per cent), followed by roll-on roll-off trucks (16 per cent), rear-lift trucks (15 per cent) and trailers (14 per cent).

**Table 35: Vehicle type by facility type**

Vehicle type	Landfill		Transfer station		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Front lift truck	322,160	29%	178,390	27%	500,550	28%
Roll-on roll-off	149,940	14%	140,050	21%	289,990	16%
Rear-lift truck	161,010	15%	95,840	14%	256,850	15%
Trailer	182,370	16%	67,600	10%	249,960	14%
Stationary compactor	61,900	6%	34,620	5%	96,520	5%
B-double	80,170	7%	0	0%	80,170	5%
Semi-trailer	60,510	6%	0	0%	60,510	3%
Ute	16,670	2%	33,300	5%	49,970	3%
Pantech	6900	1%	35,820	5%	42,720	2%
Skip	30,590	3%	6750	1%	37,340	2%
Van	6840	1%	26,270	4%	33,120	2%
Flat bed	9380	1%	21,710	3%	31,090	2%
Ute with trailer	11,220	1%	12,770	2%	23,980	1%
Van with trailer	2480	<1%	7510	1%	9990	<1%
4WD with trailer	2640	<1%	1420	<1%	4050	<1%
Side-lift truck	2510	<1%	850	<1%	3360	<1%
Station wagon with trailer	650	<1%	2490	<1%	3140	<1%
Car with trailer	810	<1%	170	0%	980	<1%
Station wagon	0	0%	250	0%	250	0%
Car	0	0%	80	0%	80	0%
4WD	0	0%	30	0%	30	0%
<b>Total</b>	<b>1,108,750</b>	<b>100%</b>	<b>665,900</b>	<b>100%</b>	<b>1,774,650</b>	<b>100%</b>

### 2.13.2 Vehicle types by industry sector

Table 36 shows the waste delivered by type of vehicle in each major industry sector, if the observations of the audit are extrapolated to annual levels of across the state. The main findings are:

- manufacturing uses mainly front-lift trucks, followed by roll-on roll-off
- mixed small businesses use mainly trailers, front-lift and rear-lift
- retail uses mainly front-lift and rear-lift
- healthcare and social assistance uses rear-lift and stationary compactors.

**Table 36: Vehicle type by industry sector**

Vehicle type	Manufacturing		Mixed small businesses		Retail		Healthcare and social assistance	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Car	0	0%	40	0%	0	0%	0	0%
Car with trailer	0	0%	980	<1%	0	0%	0	0%
Station wagon	0	0%	60	0%	0	0%	0	0%
Station wagon with trailer	790	<1%	2080	<1%	0	0%	0	0%
4WD	0	0%	0	0%	0	0%	0	0%
4WD with trailer	0	0%	3510	1%	0	0%	230	<1%
Trailer	19,720	5%	86,320	29%	4020	2%	12,670	11%
Ute	3580	<1%	30,210	10%	1100	<1%	1870	2%
Ute with trailer	110	0%	18,970	6%	0	0%	900	<1%
Van	3290	<1%	21,370	7%	1420	<1%	980	<1%
Van with trailer	590	<1%	6370	2%	0	0%	630	<1%
Pantech	2700	<1%	9820	3%	4820	2%	13,480	12%
Front-lift truck	180,480	42%	48,420	16%	99,260	46%	10,480	9%
Rear-lift truck	13,700	3%	39,270	13%	86,350	40%	27,600	24%
Skip	3820	<1%	8160	3%	2350	1%	720	<1%
Side-lift truck	0	0%	0	0%	300	<1%	1510	1%
Tipper	0	0%	0	0%	0	0%	0	0%
Flat bed	3460	<1%	10,540	4%	4460	2%	1590	1%
Semi-trailer	18,850	4%	0	0%	0	0%	9260	8%
Roll-on roll-off	110,740	26%	7990	3%	11,360	5%	8880	8%
Stationary compactor	11,550	3%	3050	1%	1620	<1%	25,420	21%
B-double	61,670	14%	0	0%	0	0%	0	0%
<b>Total</b>	<b>435,040</b>	<b>100%</b>	<b>297,130</b>	<b>100%</b>	<b>217,070</b>	<b>100%</b>	<b>116,220</b>	<b>100%</b>

## 2.14 Recoverable materials

### 2.14.1 Potential recovery of C&I waste currently disposed

Each material in the C&I waste has been classified as either:

- **recyclable now** – using available technology
- **recyclable in the future** – through better source separation and/or emerging technologies
- **not recyclable** – no current or emerging technologies that can feasibly recycle this material.

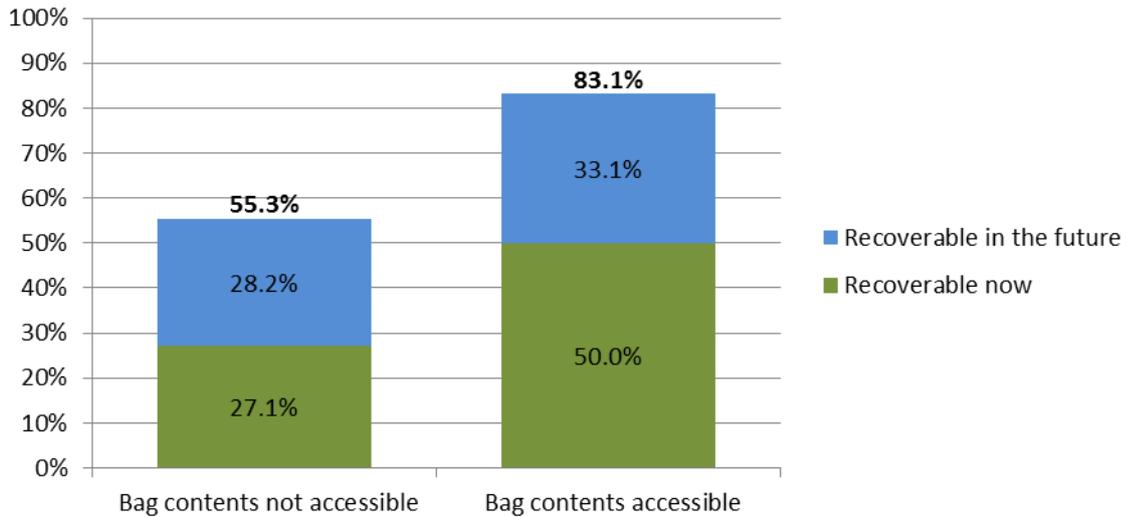
Figure 14: Material recyclability

Recyclable now	Recyclable in the future	Not recyclable
<ul style="list-style-type: none"> <li>• cardboard – dry, loose</li> <li>• cardboard – dry, compacted</li> <li>• electrical – computers and peripherals</li> <li>• electrical – TVs</li> <li>• electrical – white goods</li> <li>• food organics – unpackaged</li> <li>• garden organics</li> <li>• glass – packaging</li> <li>• masonry materials – concrete/bricks</li> <li>• metal (ferrous) – packaging</li> <li>• metal (ferrous) – non-packaging, LD and HD</li> <li>• metal (non-ferrous) – packaging</li> <li>• metal (non-ferrous) – non-packaging, LD and HD</li> <li>• paper – office</li> <li>• paper – other</li> <li>• paper – packaging</li> <li>• plastic – EPS foam</li> <li>• plastic – film packaging</li> <li>• plastic – rigid packaging</li> <li>• textiles – mattresses</li> <li>• wood – untreated</li> <li>• wood – untreated, pallets</li> <li>• sawdust</li> </ul>	<ul style="list-style-type: none"> <li>• cardboard – wet strength/wax, loose</li> <li>• cardboard – wet/wax, compacted</li> <li>• electrical – other</li> <li>• food organics – packaged</li> <li>• glass – non-packaging</li> <li>• masonry materials – other</li> <li>• plastic – other</li> <li>• rubber</li> <li>• textiles and leather</li> <li>• textiles – carpet</li> <li>• textiles – covered furniture</li> <li>• wood – treated/painted</li> <li>• wood – treated – pallets</li> <li>• pulp</li> <li>• insulation</li> <li>• sludge</li> </ul>	<ul style="list-style-type: none"> <li>• fines</li> <li>• floc (plastic and metal residue from shredding)</li> <li>• building waste (composites)</li> <li>• pharmaceutical</li> <li>• asbestos</li> <li>• clinical</li> <li>• miscellaneous (this included mixed boxes of items, luggage, bric-a-brac, brake residue, drums of charcoal, air filters, glue, lino, synthetic grass, ducting)</li> </ul>

If garbage bags and their contents are considered to be not recyclable, then 27.1 per cent of C&I waste (481,000 tonnes/year) is recoverable now, and 28.2 per cent (500,400 tonnes/year) is recoverable in the future, making a total of 55 per cent of C&I (981,400 tonnes/year) potentially recoverable.

If we assume that the contents of garbage bags can be accessed, then 50 per cent of C&I waste (886,700 tonnes/year) is recoverable now, and 33.1 per cent (588,300 tonnes/year) is recoverable in the future, making a total of 83.1 per cent of C&I waste (1,475,000 tonnes/year) potentially recoverable.

**Chart 22: C&I currently disposed that could be recycled**

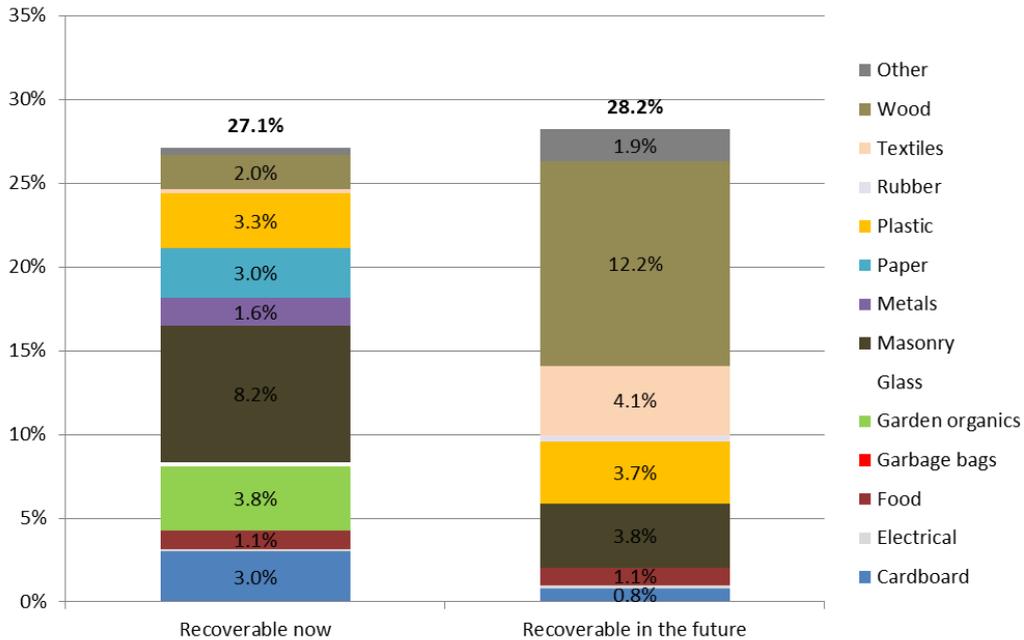


Refer to Tables AF4 and AF6 in Appendix F for tonnage details.

Chart 23 shows more detail of the potential recovery of C&I waste, assuming that garbage bag contents are not available for recycling. The largest current opportunities are recovery of masonry materials (bricks, concrete, tiles, soil), garden organics, plastic, paper and cardboard, with smaller amounts of wood, metals and food also available for recycling.

In the future, the largest opportunities for increased recycling of C&I is treated wood, followed by textiles, extra masonry, extra plastics, and smaller amounts of wet/waxed cardboard and packaged food and other materials (insulation, pulp and sludge).

**Chart 23: Detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible**

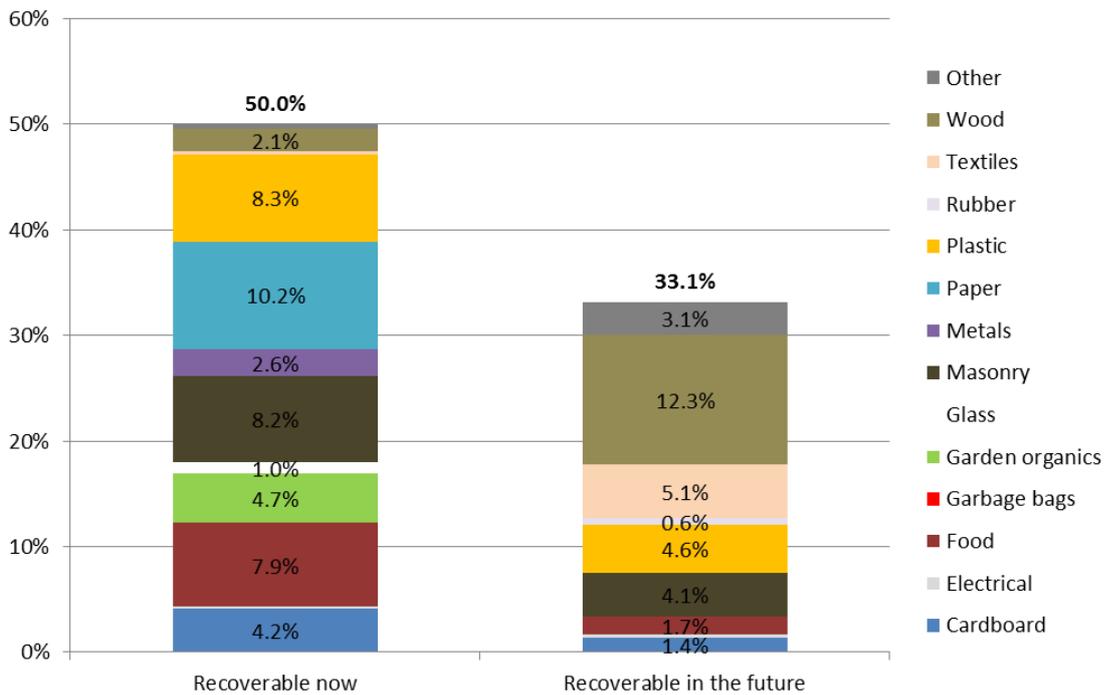


Refer to Tables AF8 and AF10 in Appendix F for tonnage details.

Chart 24 shows more detail of the potential recovery of C&I waste, assuming that garbage bag contents can be made available, which releases food, plastic and paper for recycling. The largest current opportunities for recovery if garbage bag contents can be accessed are paper, plastic, masonry (bricks, concrete, tiles, soil) and food, with smaller amounts of garden organics, cardboard, metals and wood.

In the future, the largest opportunities are treated wood, followed by textiles, extra masonry, extra plastics, and smaller amounts of wet/waxed cardboard and packaged food and other materials (insulation, pulp and sludge).

**Chart 24: Detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible**



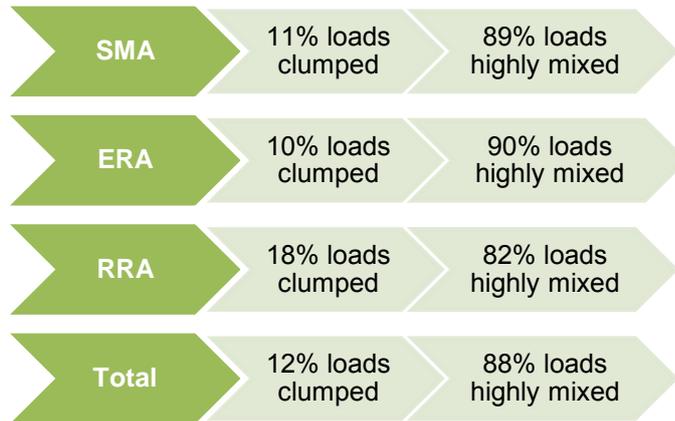
Refer to Tables AF12 and AF14 in Appendix F for tonnage details.

## 2.15 Level of mixing in mixed C&I loads

The level of load mixing will affect the ability to recover materials from the load for recycling.

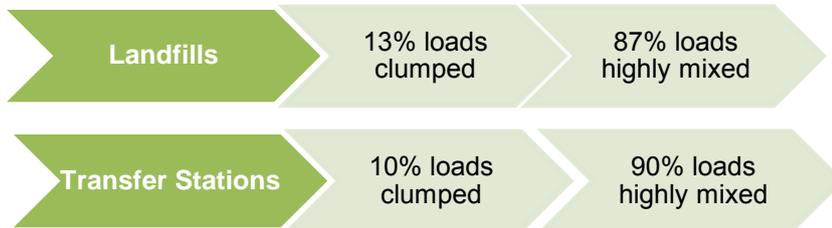
Overall, only 12 per cent of mixed C&I loads contain materials that are ‘clumped’ (i.e. concentrated together within the load, making them easy to retrieve for recycling) and could be potentially separated for recycling. The other 88 per cent of mixed loads are highly mixed, making recovery difficult without the aid of more complex machinery to separate materials.

**Figure 15: C&I waste mixed loads: clumped vs highly mixed, by region**



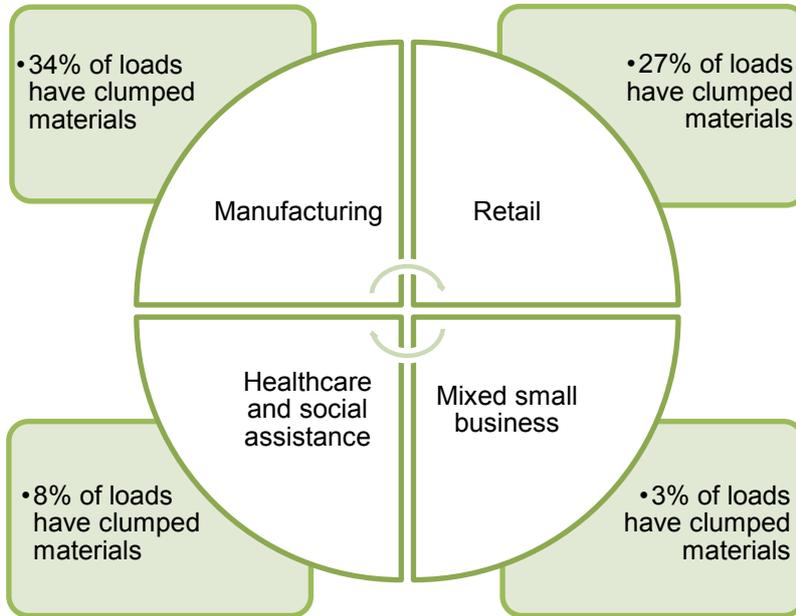
At landfills, 13 per cent of mixed loads contain clumped materials, compared to 10 per cent at transfer stations.

**Figure 16: C&I waste mixed loads: clumped vs highly mixed, by facility type**



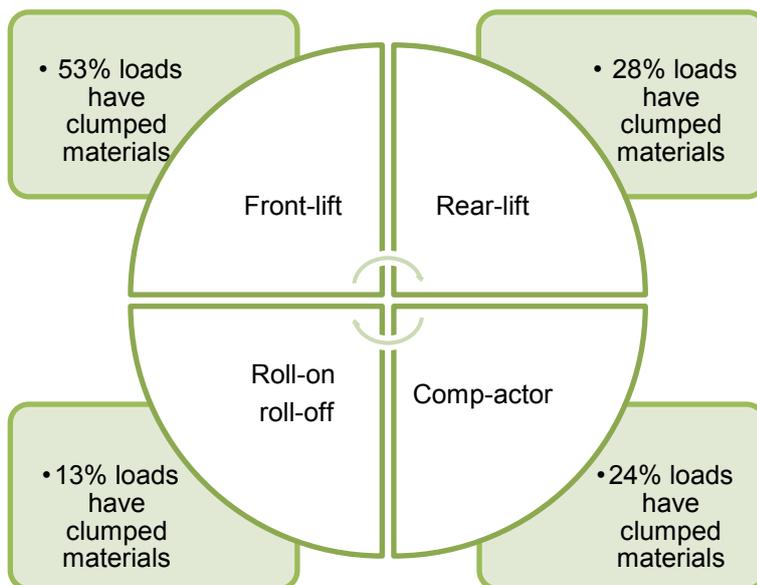
Of the top four C&I-disposing industry sectors, manufacturing and retail had the highest proportion of clumped mixed loads. Healthcare/social assistance and mixed small businesses had highly mixed loads.

**Figure 17: Clumping of mixed loads in highest C&I-generating industry sectors**



Of the top four vehicle types delivering C&I for disposal, front-lift trucks has the highest proportion of clumped loads (53 per cent), followed by rear-lift trucks and compactors. Roll-on roll-off trucks had more highly mixed loads.

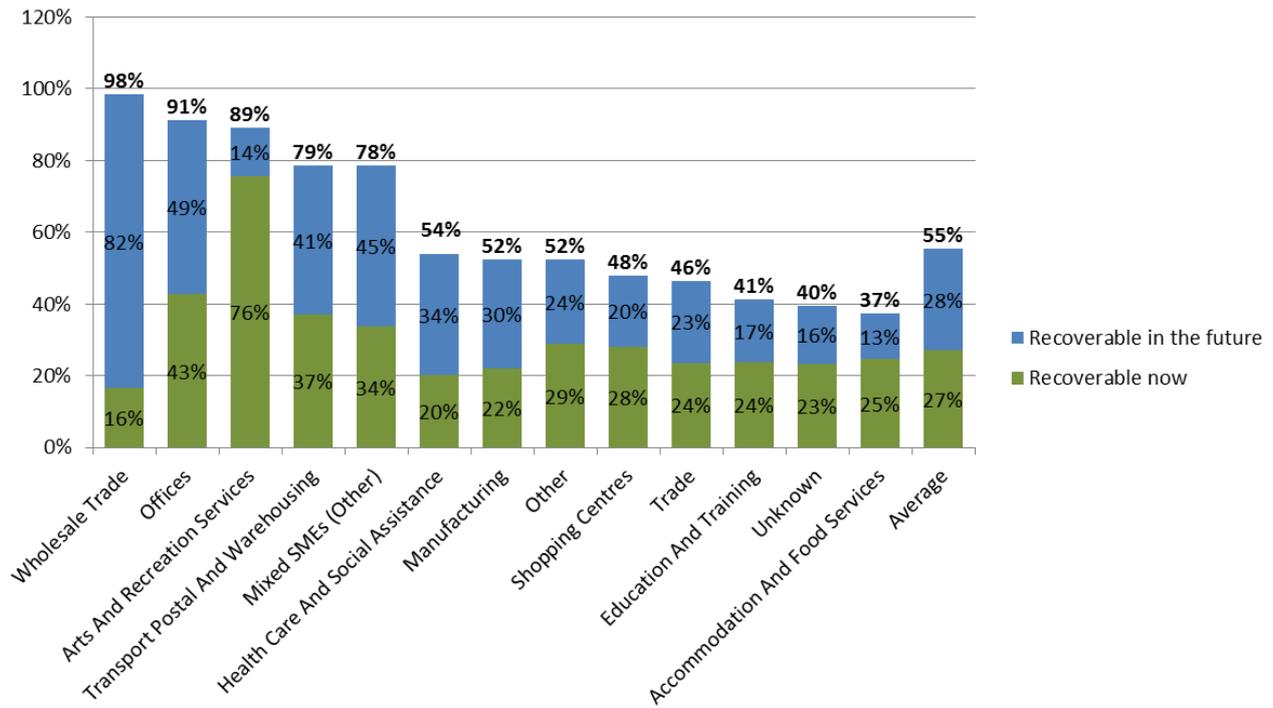
**Figure 18: Clumping of mixed loads, by vehicle type**



## 2.16 C&I potentially recovered/recycled – by industry sector

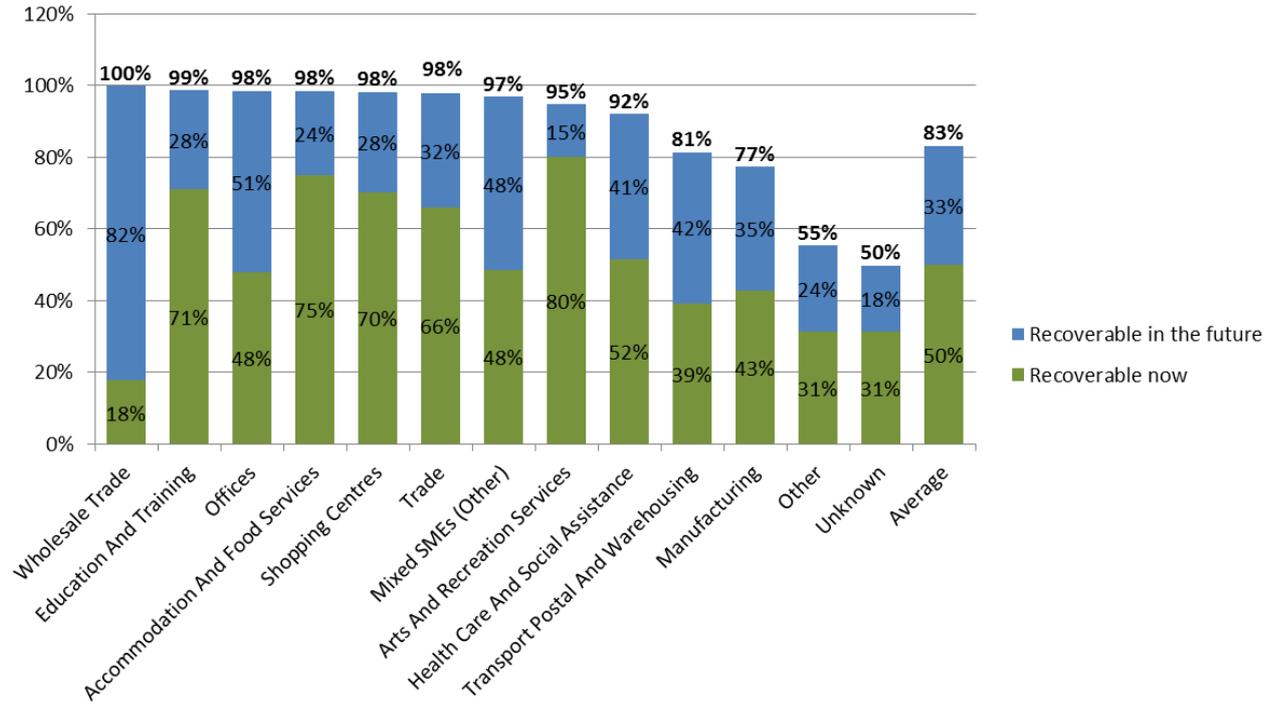
Chart 25 shows the sectors with highest percentage of recoverable from C&I waste (excluding garbage bag contents) as being arts/recreation, offices, transport/postal/warehousing and mixed small businesses. When future recoverable materials are added, the highest proportions are in wholesale trade, offices, arts/recreation, mixed small businesses and healthcare/social assistance. With garbage bag contents not recycled, the average future recyclable rate rises to 55 per cent.

**Chart 25: C&I potentially recyclable, by industry sector – garbage bag contents not accessible.**



If the contents of garbage bags are accessible, more paper, food and plastics can be recycled. The sectors with highest percentage of recyclable materials would then be arts/recreation, accommodation/food services, education/training and shopping centres. In future, most industries will have a recovery potential of more than 90 per cent. With garbage bag contents added, the average recyclable rate will be 83 per cent.

**Chart 26: C&I potentially recyclable, by industry sector – garbage bag contents accessible**

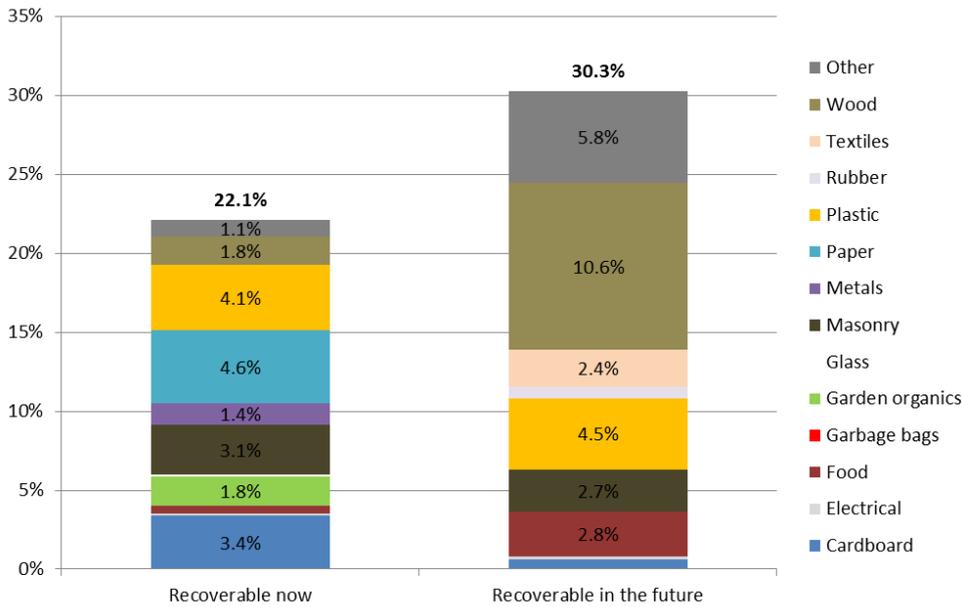


Detailed composition data for all sectors is contained in Appendix F.

### 2.16.1 Potential recovery: manufacturing

If the contents of garbage bags are not accessible for recycling, the largest current diversion opportunities for the C&I waste disposed of by the manufacturing sector are paper, plastic, cardboard and masonry – a total of 22.1 per cent. In the future, another 30.3 per cent could be recovered, with the main opportunities for recovery being treated wood, other materials (sludge, insulation, pulp) and other plastics.

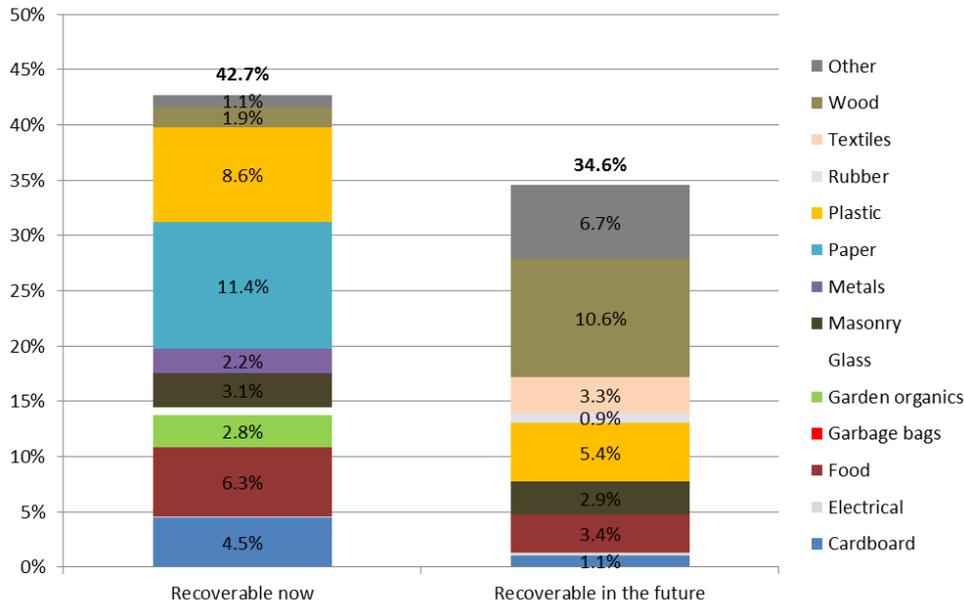
**Chart 27: Manufacturing: detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible**



Refer to Tables AF77 to AF82 in Appendix F for tonnage details.

If the contents of garbage bags are accessible for recycling now, the recycling potential rises to 42.7 per cent, with the biggest diversion being in paper, plastic and food waste, with garbage bag contents providing an extra five per cent recovery potential. The future potential for recovery rises by an extra 4.3 per cent with the main opportunities remain for recovery of treated wood, other materials (sludge, insulation, pulp) and other plastics.

**Chart 28: Manufacturing: detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible**

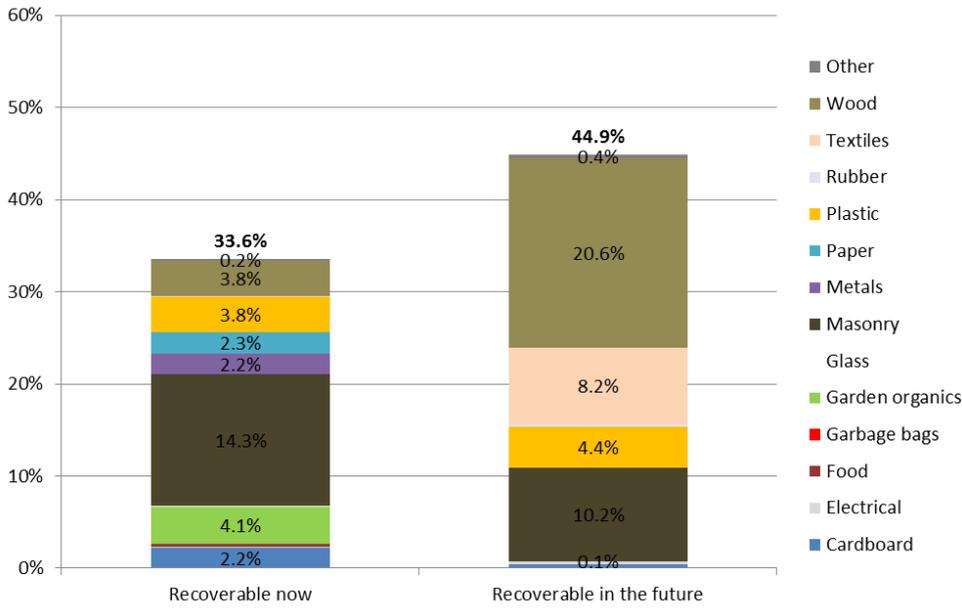


Refer to Tables AF77 to AF82 in Appendix F for tonnage details.

### 2.16.2 Potential recovery: mixed small businesses

Excluding the contents of garbage bags for recycling now, the largest diversion opportunities for the C&I waste from mixed small businesses are in masonry, garden organics and plastic – a total of 33.6 per cent. In the future, another 44.9 per cent could be recovered, mainly from treated wood, other masonry materials, textiles and other plastics.

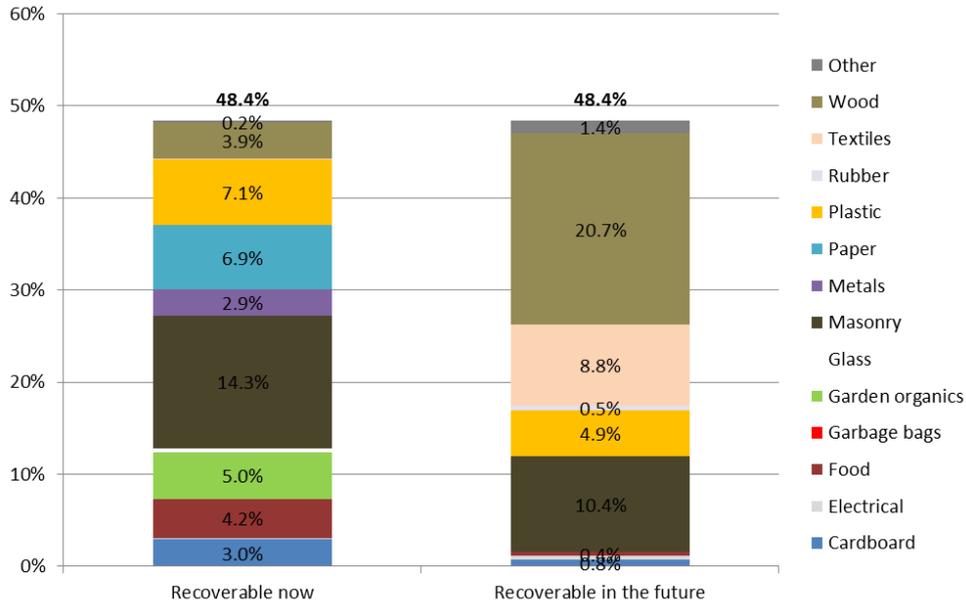
**Chart 29: Mixed small businesses: detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible**



Refer to tables AF89 to AF94 in Appendix F for tonnage details.

The recycling potential rises to 48.4 per cent if the contents of garbage bags are accessible for recycling, with the largest diversion opportunities in masonry, plastic, paper and garden organics. The future potential for recovery rises by an extra 3.5 per cent.

**Chart 30: Mixed small businesses: detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible**

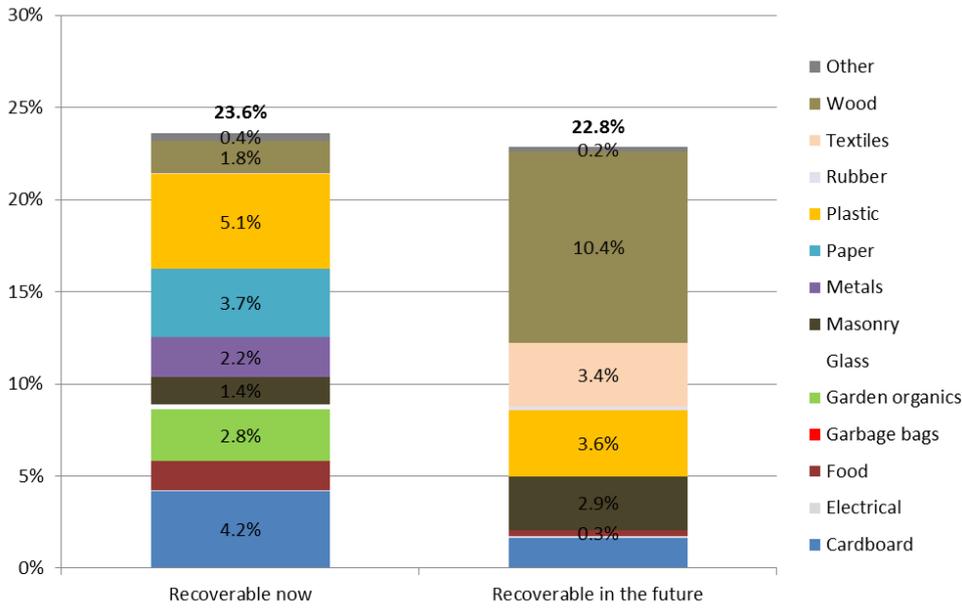


Refer to tables AF89 to AF94 in Appendix F for tonnage details.

### 2.16.3 Potential recovery: retail

Excluding the contents of garbage bags for recycling now, the largest diversion opportunities for C&I waste from the retail sector are in plastic, cardboard, paper and garden organics (23.6 per cent in total). In the future, another 22.8 per cent could be recovered, mainly from treated wood, plastics, textiles and masonry.

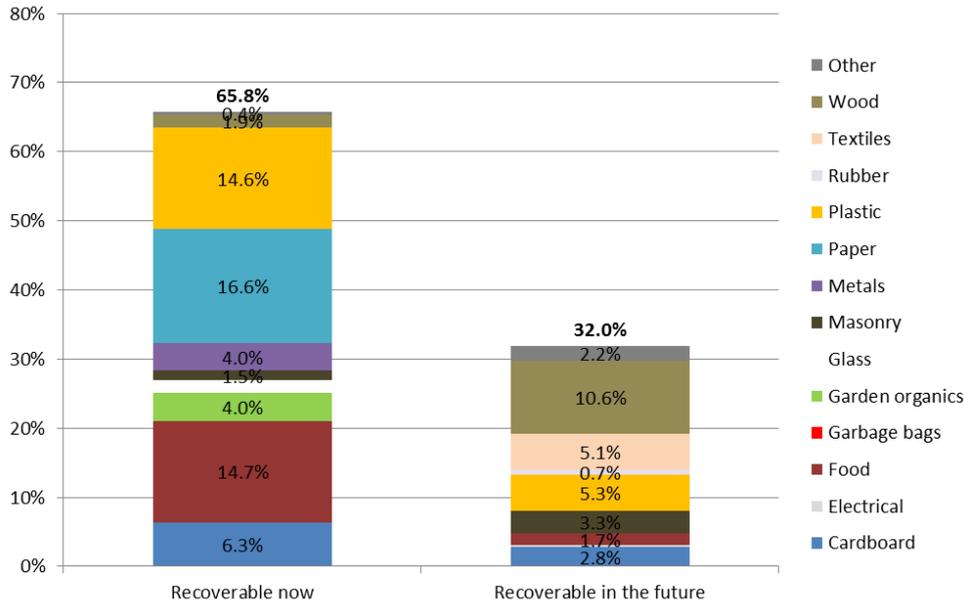
**Chart 31: Retail: disposed C&I waste that could be recycled – garbage bag contents not accessible**



Refer to tables AF101 to AF106 in Appendix F for tonnage details.

If the contents of garbage bags are accessible for recycling now, the potential for the diversion of C&I waste rises to 65.8 per cent, with the biggest opportunities in paper, food and plastics. The future potential for recovery rises by an extra 7.2 per cent mainly from treated wood, plastics, textiles and masonry.

**Chart 32: Retail: disposed C&I waste that could be recycled – garbage bag contents accessible**

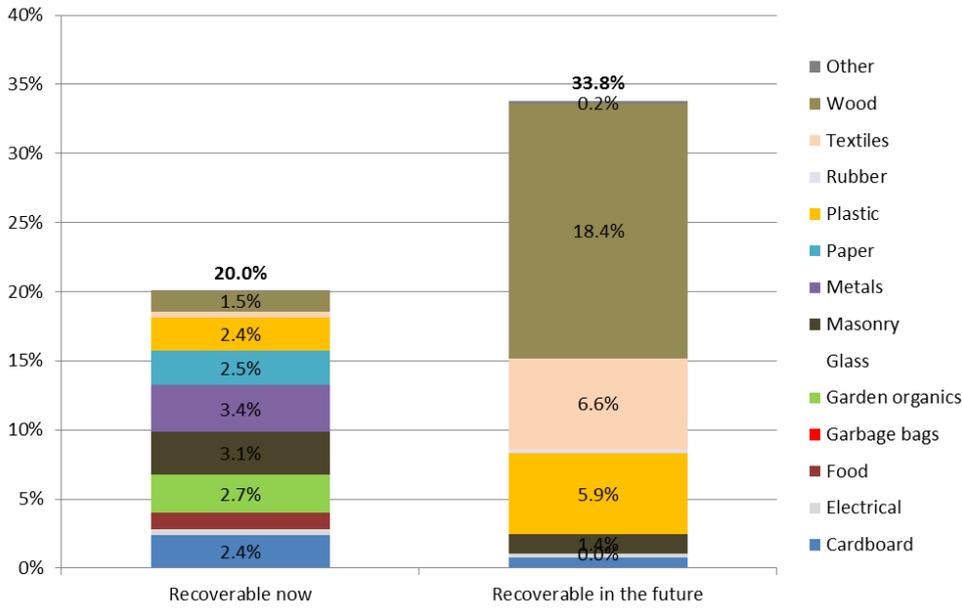


Refer to tables AF101 to AF106 in Appendix F for tonnage details.

### 2.16.4 Potential recovery: healthcare and social assistance

Excluding the contents of garbage bags for recycling, the largest diversion opportunities for C&I waste disposed of by this sector are in metal, masonry, garden organics and paper (20 per cent in total). In the future, another 33.8 per cent could be recovered mainly from treated wood, textiles and extra plastics.

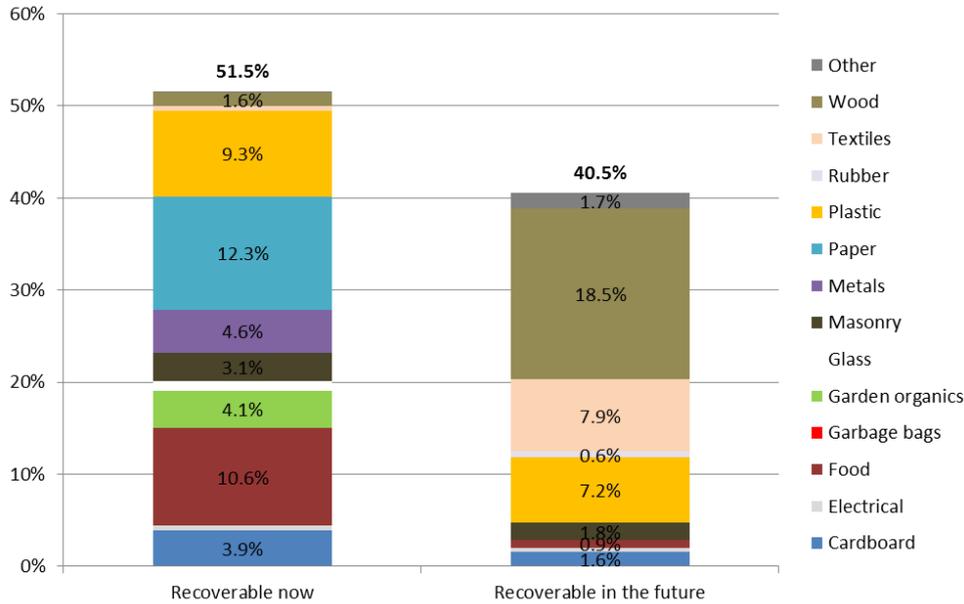
**Chart 33: Healthcare/social assistance – disposed C&I waste that could be recycled – garbage bag contents not accessible**



Refer to tables AF113 to AF18 in Appendix F for tonnage details.

If the contents of garbage bags are available now for recycling, the recycling potential rises to 51.5 per cent, with the biggest opportunities being in paper, food and plastics. The future potential for recovery rises by an extra 6.7%, mainly through treated wood, plastics, textiles and extra plastics.

**Chart 34: Healthcare/social assistance – disposed C&I waste that could be recycled – garbage bag contents accessible**



Refer to tables AF113 to AF18 in Appendix F for tonnage details.

### 3. Key findings: Sydney Metropolitan Area (SMA)

Figure 19: Local government areas in the Sydney Metropolitan regulated area

Ashfield	Auburn	Bankstown	Baulkham Hills	Blacktown
Botany Bay	Burwood	Camden	Campbelltown	Canada Bay
Canterbury	Fairfield	Holroyd	Hornsby	Hunters Hill
Hurstville	Kogarah	Ku-ring-gai	Lane Cove	Leichhardt
Liverpool	Manly	Marrickville	Mosman	North Sydney
Parramatta	Penrith	Pittwater	Randwick	Rockdale
Ryde	Strathfield	Sutherland	Sydney	Warringah
	Waverley	Willoughby	Woollahra	

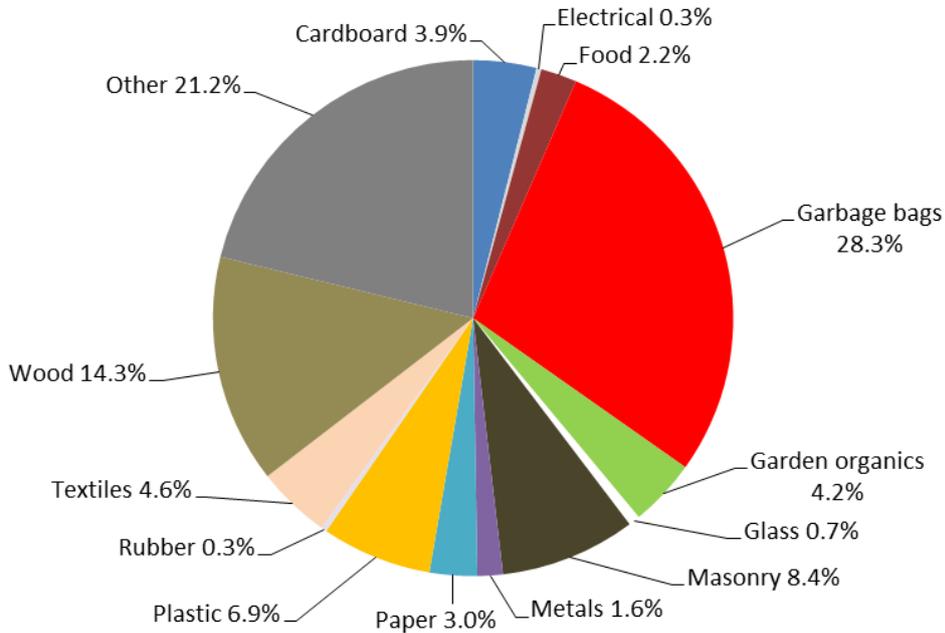
#### 3.1 Composition of C&I waste in the SMA

The main components of C&I waste disposed in the SMA are garbage bags (28.3 per cent), other materials (21.2 per cent – mainly floc and fines), wood (14.3 per cent), masonry (8.4 per cent) and plastic (6.9 per cent).

Table 37: SMA C&I waste composition – garbage bags as a category

Material	Tonnes per year	% of waste stream
Garbage bags	401,180	28.3%
Other	299,740	21.2%
Wood	202,780	14.3%
Masonry	119,480	8.4%
Plastic	97,160	6.9%
Textiles	65,110	4.6%
Garden organics	59,580	4.2%
Cardboard	55,600	3.9%
Paper	41,820	3%
Food	31,620	2.2%
Metals	22,250	1.6%
Glass	10,000	0.7%
Rubber	4,920	0.3%
Electrical	4,330	0.3%
<b>Total</b>	<b>1,415,560</b>	<b>100%</b>

**Chart 35: SMA C&I composition – garbage bags as a category**



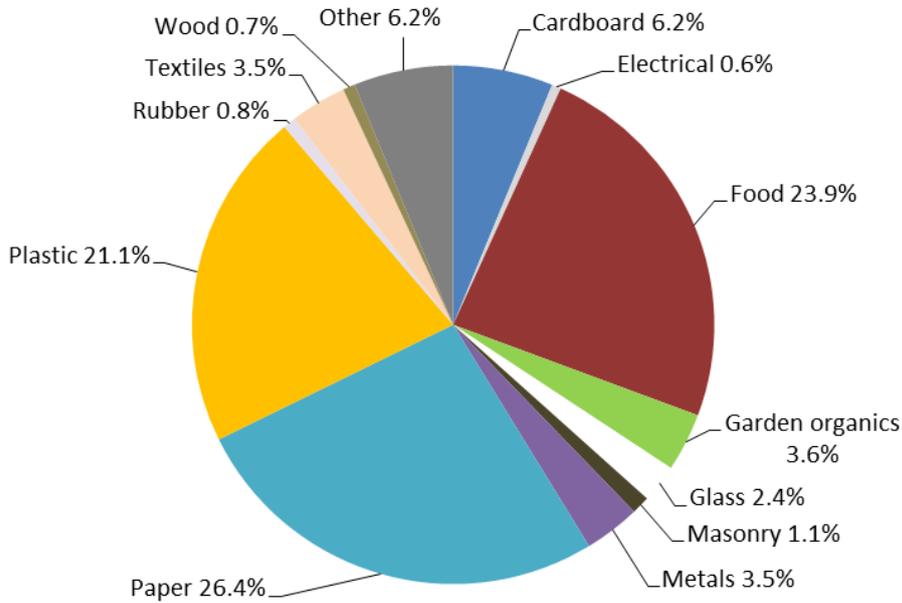
Refer to table AF19 in Appendix F for detailed material categories and tonnage details.

The garbage bags in C&I waste in the SMA contain mainly paper (26.4 per cent), food (23.9 per cent) and plastic (21.1 per cent).

**Table 38: SMA - contents of garbage bags in C&I waste**

Material	Tonnes per year	% of waste stream
Paper	105,980	26.4%
Food	95,970	23.9%
Plastic	84,690	21.1%
Cardboard	24,830	6.2%
Other	24,680	6.2%
Garden organics	14,580	3.6%
Textiles	14,020	3.5%
Metals	13,930	3.5%
Glass	9,510	2.4%
Masonry	4,520	1.1%
Rubber	3,180	0.8%
Wood	3,000	0.7%
Electrical	2,290	0.6%
<b>Total</b>	<b>401,180</b>	<b>100%</b>

**Chart 36: SMA – contents of garbage bags in C&I waste**



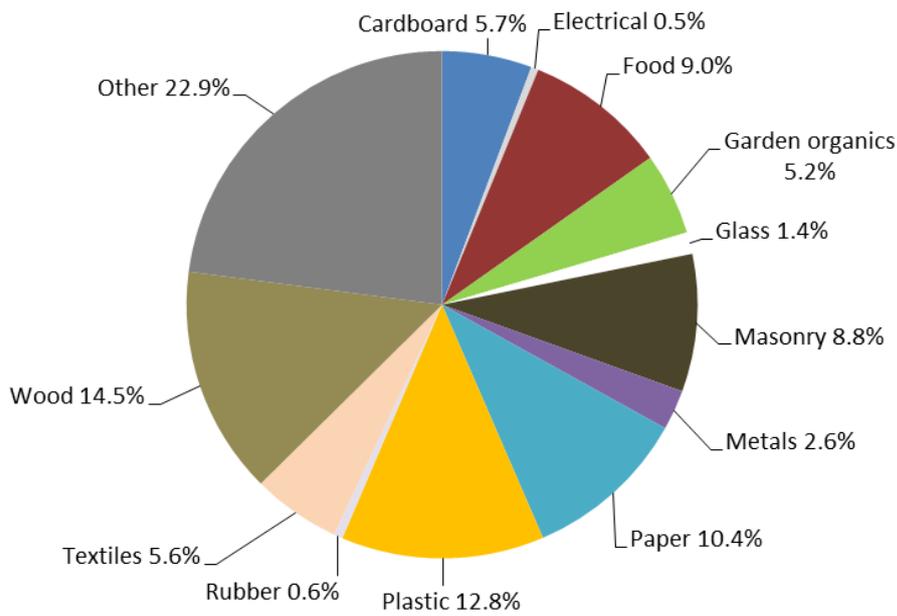
Refer to tables AF19, AF162 and AF163 in Appendix F for details on material categories and tonnage.

When the contents of garbage bags are distributed, the main materials in C&I waste in the SMA are other material (22.9 per cent – mainly fines and floc), wood (14.5 per cent), plastic (12.8 per cent), paper (10.4 per cent) and food (nine per cent).

**Table 39: SMA C&I waste composition - garbage bag contents distributed**

Material	Tonnes per year	% of waste stream
Other	324,420	22.9%
Wood	205,790	14.5%
Plastic	181,860	12.8%
Paper	147,810	10.4%
Food	127,590	9%
Masonry	123,990	8.8%
Cardboard	80,420	5.7%
Textiles	79,120	5.6%
Garden organics	74,160	5.2%
Metals	36,180	2.6%
Glass	19,510	1.4%
Rubber	8100	0.6%
Electrical	6620	0.5%
<b>Total</b>	<b>1,415,560</b>	<b>100%</b>

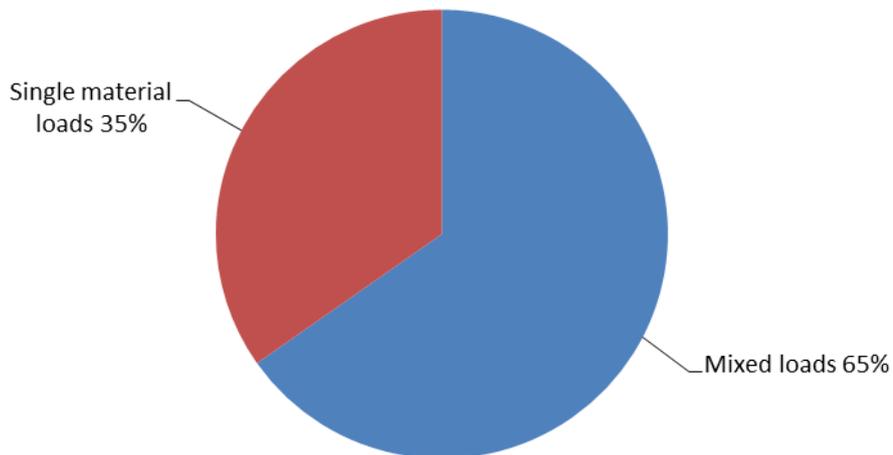
**Chart 37: SMA – C&I composition – garbage bag contents distributed**



Refer to table AF19 in Appendix F for details on material categories and tonnage.

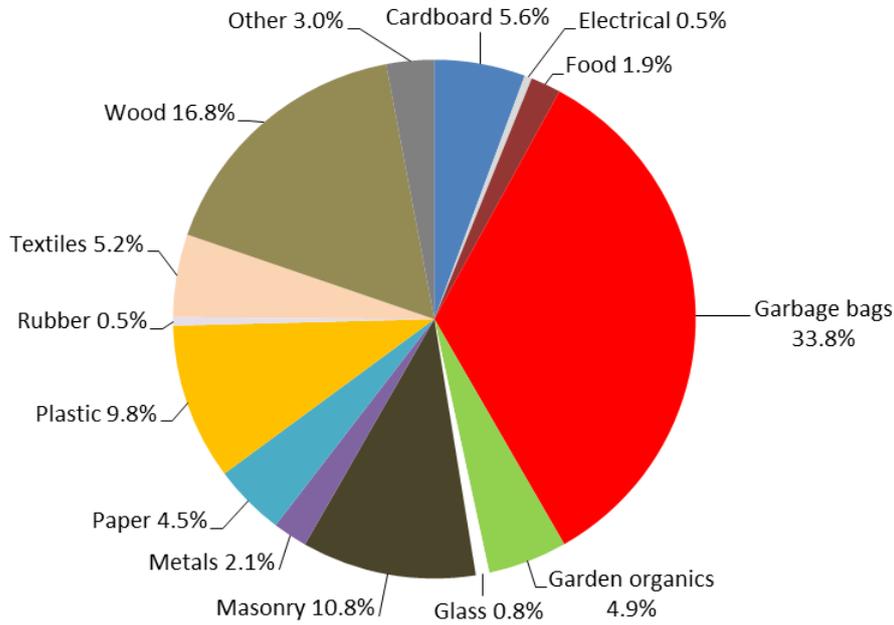
**Chart 38: SMA – mixed vs single material loads**

Most C&I waste (65 per cent) arrives at the disposal point in mixed loads. Thirty-five per cent arrives as single-material loads (where one material makes up 90 per cent or more of the whole load).



**Chart 39: SMA – composition of mixed C&I waste, garbage bags as a category**

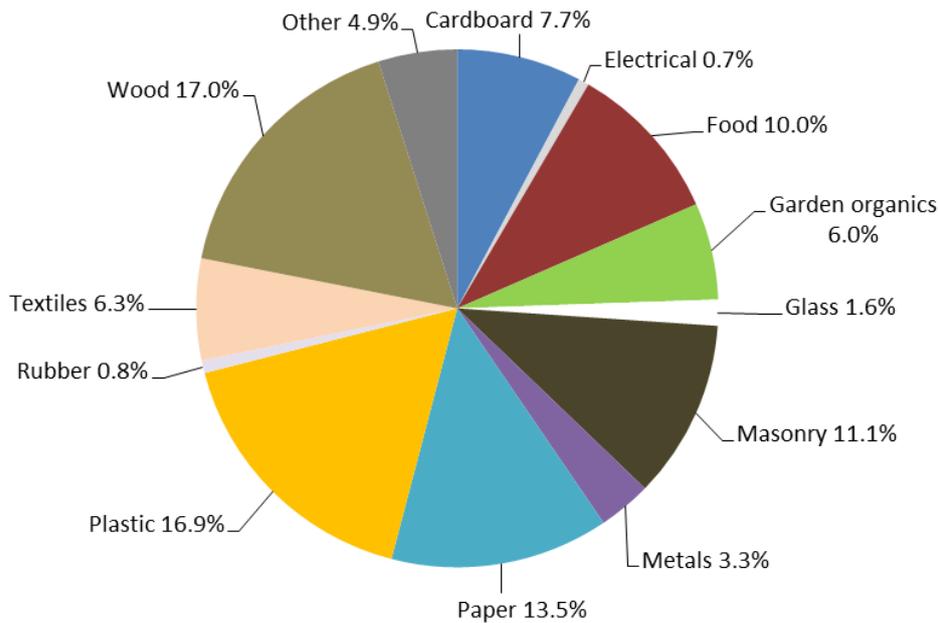
Mixed loads of C&I waste in the SMA comprise mainly garbage bags (33.8 per cent), wood (16.8 per cent), masonry (10.8 per cent) and plastic (9.8 per cent).



Refer to Tables AF16 and AF20 in Appendix F for details on tonnage and material categories.

**Chart 40: SMA – composition of mixed C&I waste, garbage bag contents distributed**

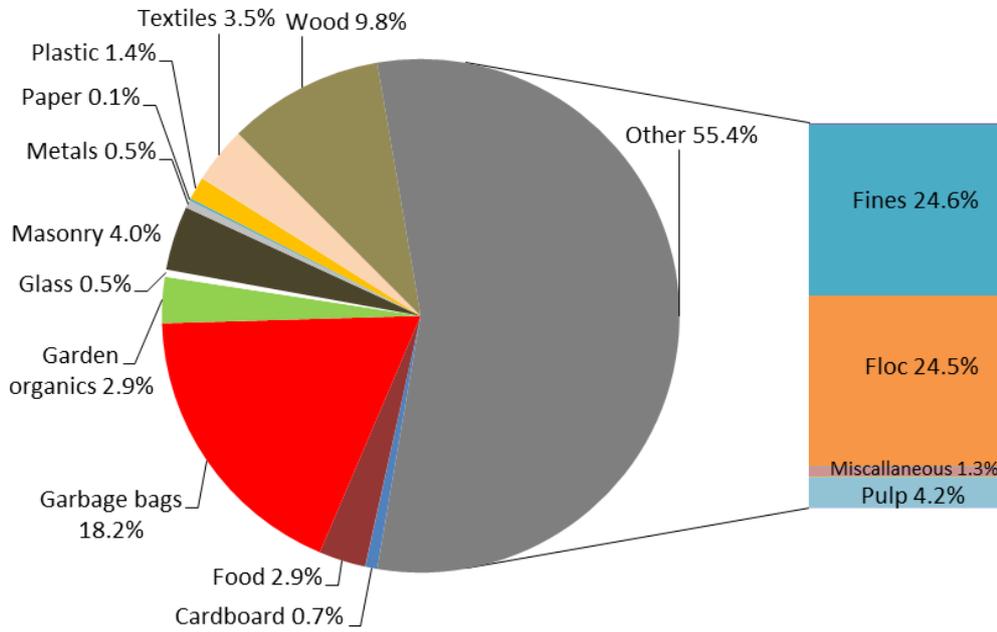
When the contents of the garbage bags are distributed, the main components are wood (17 per cent), plastic (16.9 per cent), paper (13.5 per cent), masonry (11.1 per cent) and food (10 per cent).



Refer to Tables AF17 and AF20 in Appendix F for details on tonnage and material categories.

**Chart 41: SMA – composition of single material C&I loads**

The most common types of single-material loads are other material (55.4 per cent – mainly fines and floc), garbage bags (18.2 per cent), and wood (9.8 per cent).



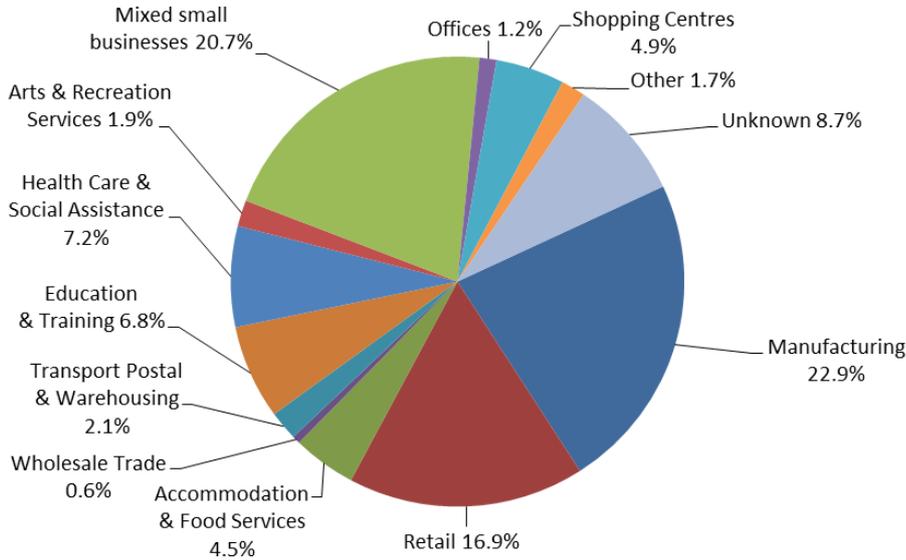
Refer to Tables AF18 and AF21 in Appendix F for details on tonnage and material categories.

### 3.2 SMA C&I waste by industry sector

In the SMA, the industry sectors disposing the most C&I waste overall are manufacturing (26 per cent), mixed small businesses (17 per cent), retail (12 per cent) and healthcare/social assistance (seven per cent) – refer Table 30.

**Chart 42: SMA – C&I disposal by industry sector – mixed loads**

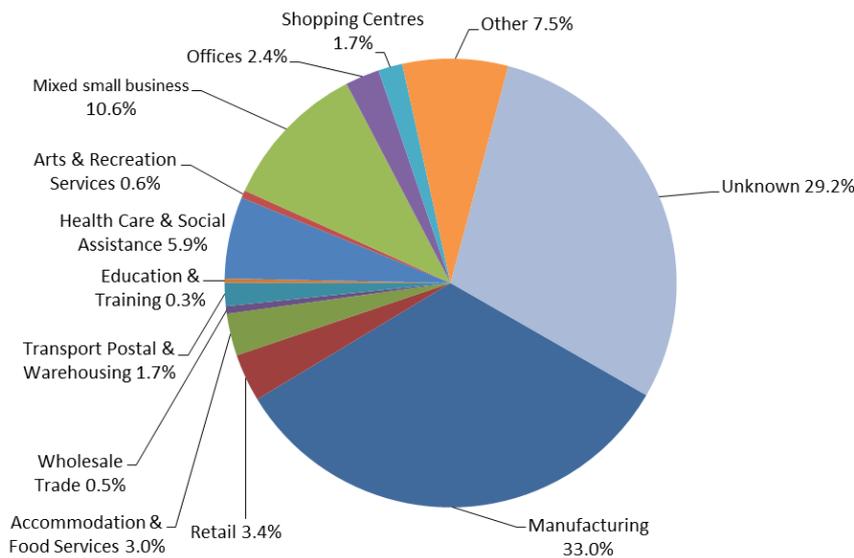
Mixed loads are mainly generated by manufacturing, mixed small business and retail.



Refer to Appendix F for tonnage details (Table AF67) and composition data for all sectors.

**Chart 43: SMA – C&I disposal by industry sector – single material loads**

Single-material loads are mostly generated by manufacturing, unknown industry sectors and mixed small businesses.

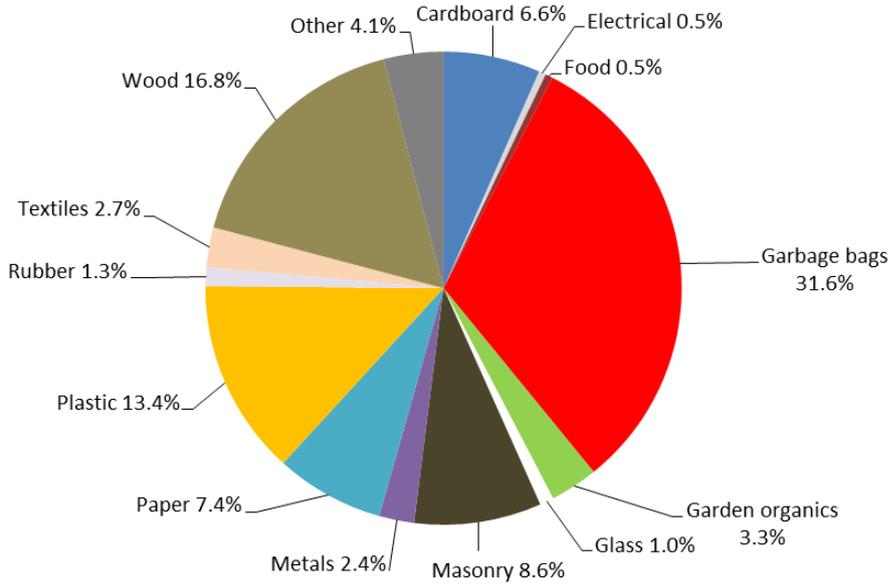


Refer to Appendix F for tonnage details (Table AF69) and composition data for all sectors.

### 3.2.1 Manufacturing

**Chart 44: SMA – composition of mixed C&I loads from manufacturing**

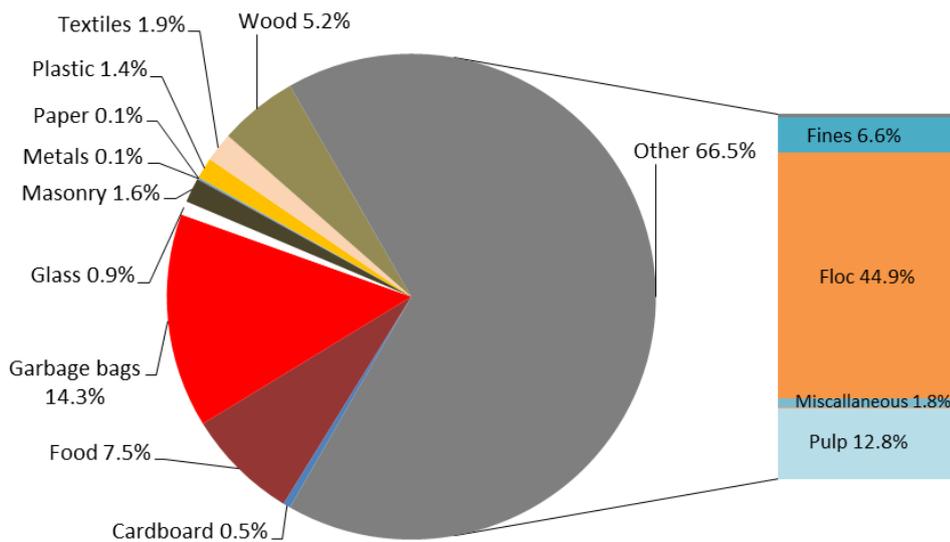
Mixed loads of C&I waste from manufacturing in the SMA contain mainly garbage bags (31.6 per cent), wood (16.8 per cent), plastic (13.4 per cent) and masonry (8.6 per cent).



Refer to Table AF73 in Appendix F for details on tonnage and material categories.

**Chart 45: SMA – composition of single material C&I loads from manufacturing**

Single material loads are mainly loads of Other material (66.5 per cent – mostly fines and shredder floc), garbage bags (14.3 per cent), food (7.5 per cent) and wood (5.2 per cent).

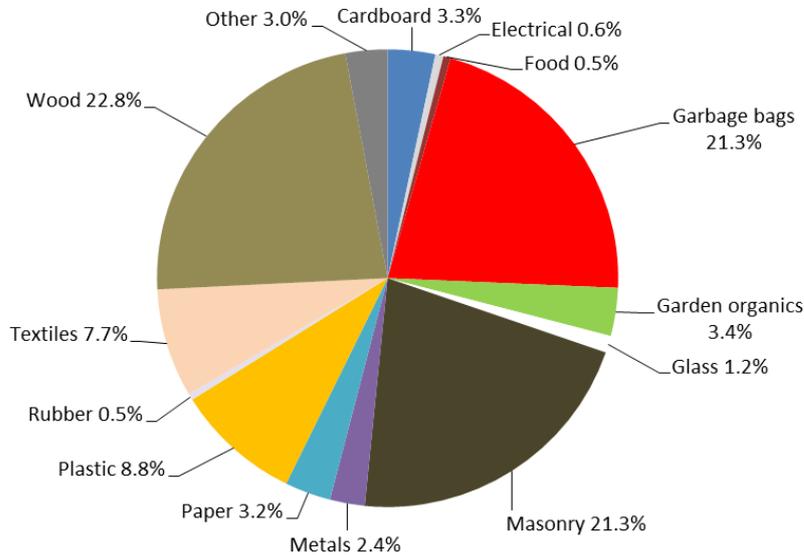


Refer to Table AF74 in Appendix F for details on tonnage and material categories.

### 3.2.2 Mixed small businesses

**Chart 46: SMA – composition of mixed C&I loads from mixed small businesses**

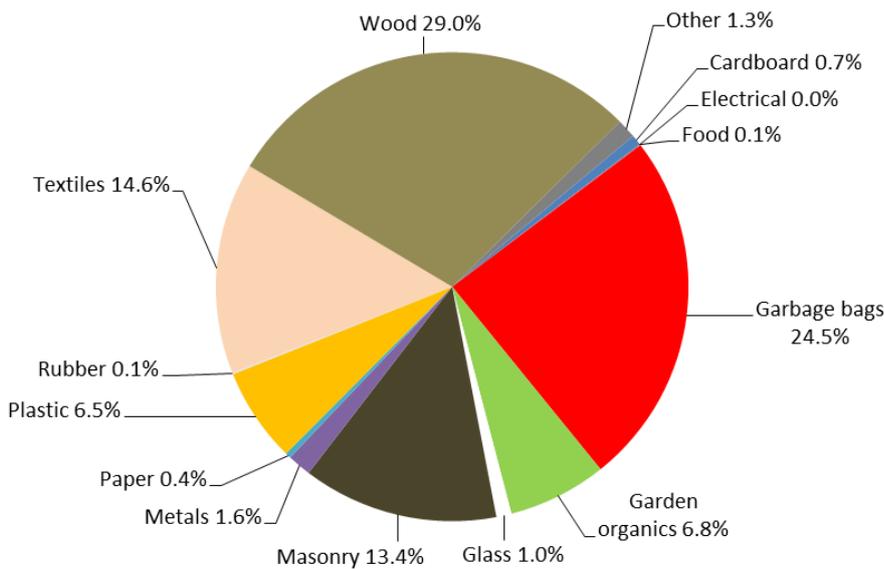
Mixed loads of C&I waste from mixed small businesses in the SMA contain mainly wood (22.8 per cent), masonry (21.3 per cent) and garbage bags (21.3 per cent).



Refer to Table AF87 in Appendix F for details on tonnage and material categories.

**Chart 47: SMA – composition of single-material C&I loads from mixed small businesses**

Single-material loads from mixed small businesses in the SMA are mainly loads of wood (29 per cent), garbage bags (24.5 per cent), textiles (14.6 per cent) and masonry (13.4 per cent).

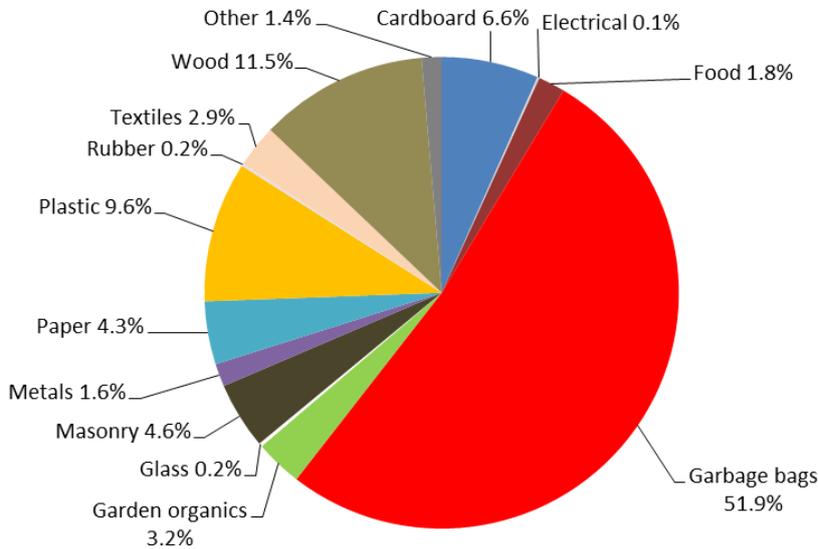


Refer to Table AF88 in Appendix F for details on tonnage and material categories.

### 3.2.3 Retail

**Chart 48: SMA – composition of mixed C&I loads from retail**

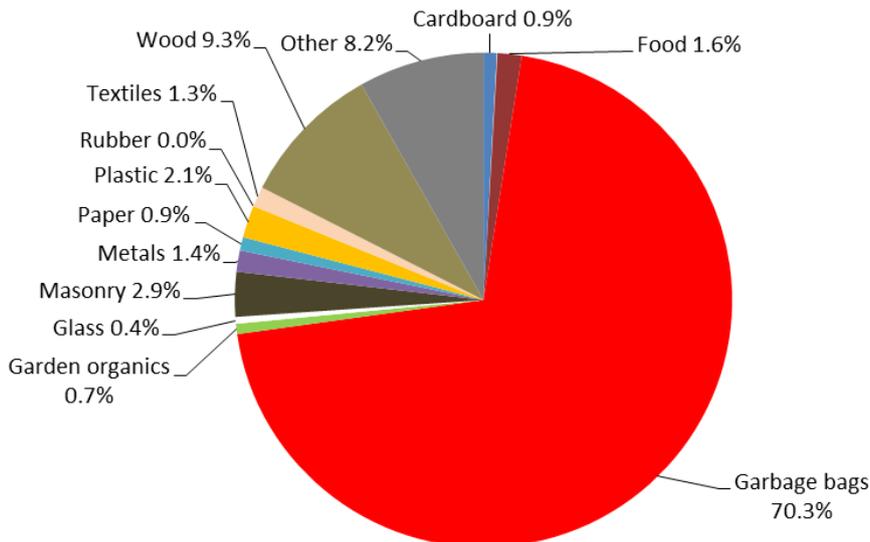
Mixed loads of C&I waste from the retail sector in the SMA contain mainly garbage bags (51.9 per cent), wood (11.5 per cent) and plastic (9.6 per cent).



Refer to Table AF97 in Appendix F for details on tonnage and material categories.

**Chart 49: SMA – composition of single-material C&I loads from retail**

Single-material loads from the retail sector in the SMA are mainly loads of garbage bags (70.3 per cent), wood (9.3 per cent) and Other materials (8.2 per cent).

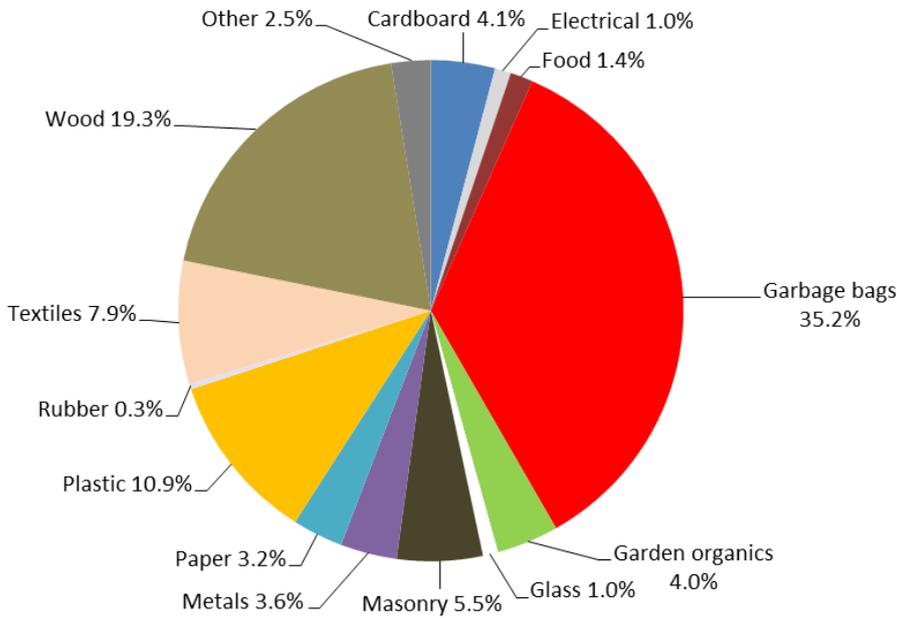


Refer to Table AF98 in Appendix F for details on tonnage and material categories.

### 3.2.4 Healthcare and social assistance

**Chart 50: SMA – composition of mixed C&I loads from healthcare and social assistance**

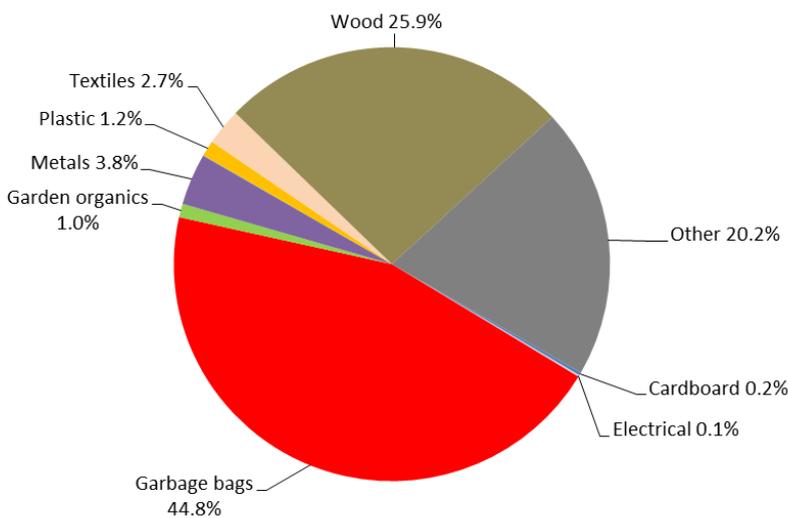
Mixed loads of C&I waste from the healthcare and social assistance sector in the SMA contain mainly garbage bags (35.2 per cent), wood (19.3 per cent), plastic (10.9 per cent) and textiles (7.9 per cent).



Refer to Table AF109 in Appendix F for details on tonnage and material categories.

**Chart 51: SMA – composition of single-material C&I loads from healthcare/ social assistance**

Single-material loads from the healthcare and social assistance sector in the SMA are mainly loads of garbage bags (44.8 per cent), wood (25.9 per cent) and other materials (20.2 per cent).



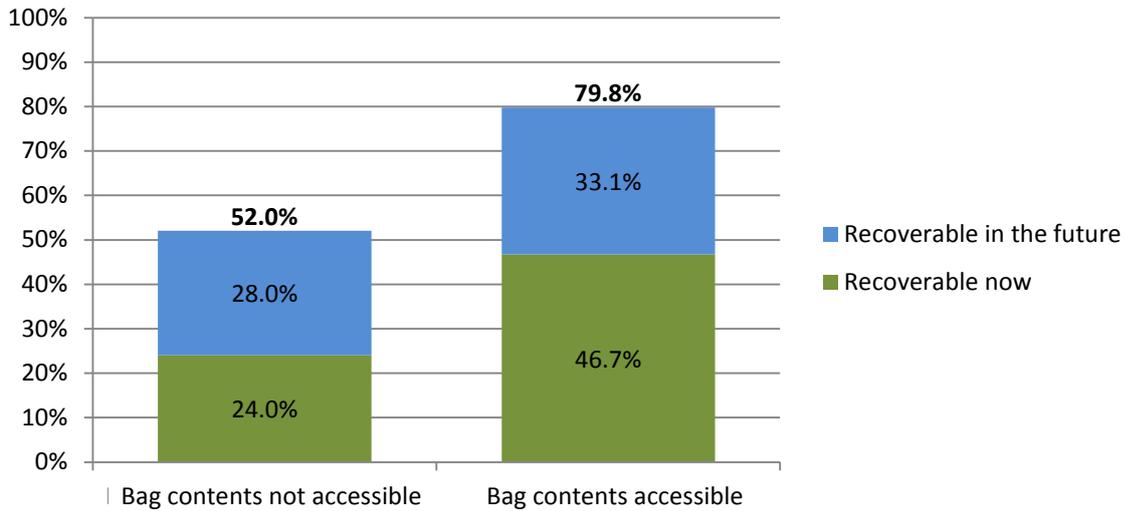
Refer to Table AF110 in Appendix F for details on tonnage and material categories.

### 3.2 Recoverable materials

Materials in the C&I waste stream are classified as either recyclable now, in the future or not at all (see section 2.14).

**Chart 52: C&I waste currently disposed that could be recycled – SMA**

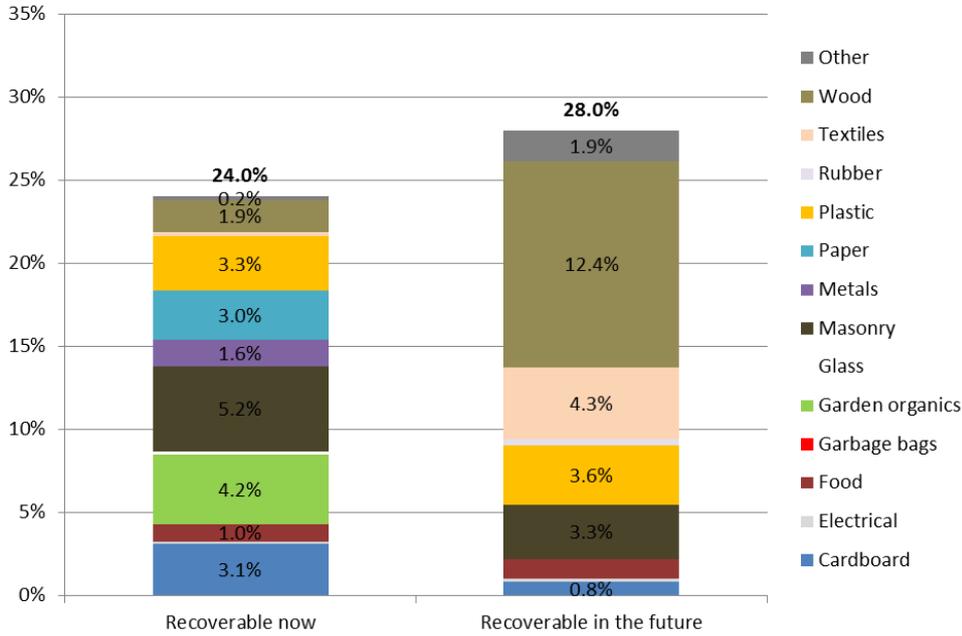
If the contents of garbage bags are excluded, then 24 per cent of C&I waste disposed of in the SMA is recoverable – potentially increasing to 52 per cent. When the contents of garbage bags are included, 46.7 per cent could be recovered, and 79.8 per cent in the future.



Refer to Table AF4 and AF6 in Appendix F for tonnage details.

**Chart 53: SMA – detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible**

The potential for recovery of C&I waste in the SMA (excluding the contents of garbage bags) is highest for masonry materials, garden organics, plastic, paper and cardboard, as well as wood, metals and food. In the future, the most opportunity will be for treated wood, textiles, extra plastics, extra masonry, as well as wet/waxed cardboard, packaged food and other materials (insulation, pulp and sludge).

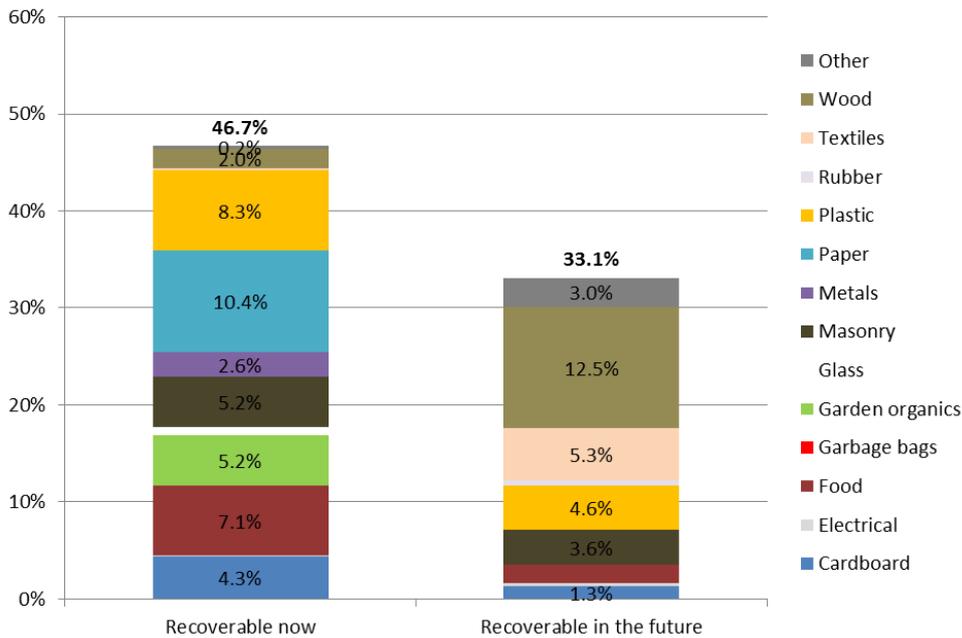


Refer to Tables AF8 and AF10 in Appendix F for tonnage details.

**Chart 54: SMA – detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible**

Chart 54 shows more detail of the potential recovery of C&I waste, assuming that garbage bag contents can be made available, which in turn releases food, plastic and paper for recycling. If garbage bag contents can be accessed, the largest current opportunities are recovery of paper, plastic and food, with masonry, garden organics, cardboard, metals, glass and wood also available for recovery.

In the future, the largest opportunities are treated wood, followed by textiles, extra plastics, extra masonry and smaller amounts of wet/waxed cardboard and packaged food and other materials (insulation, pulp and sludge).

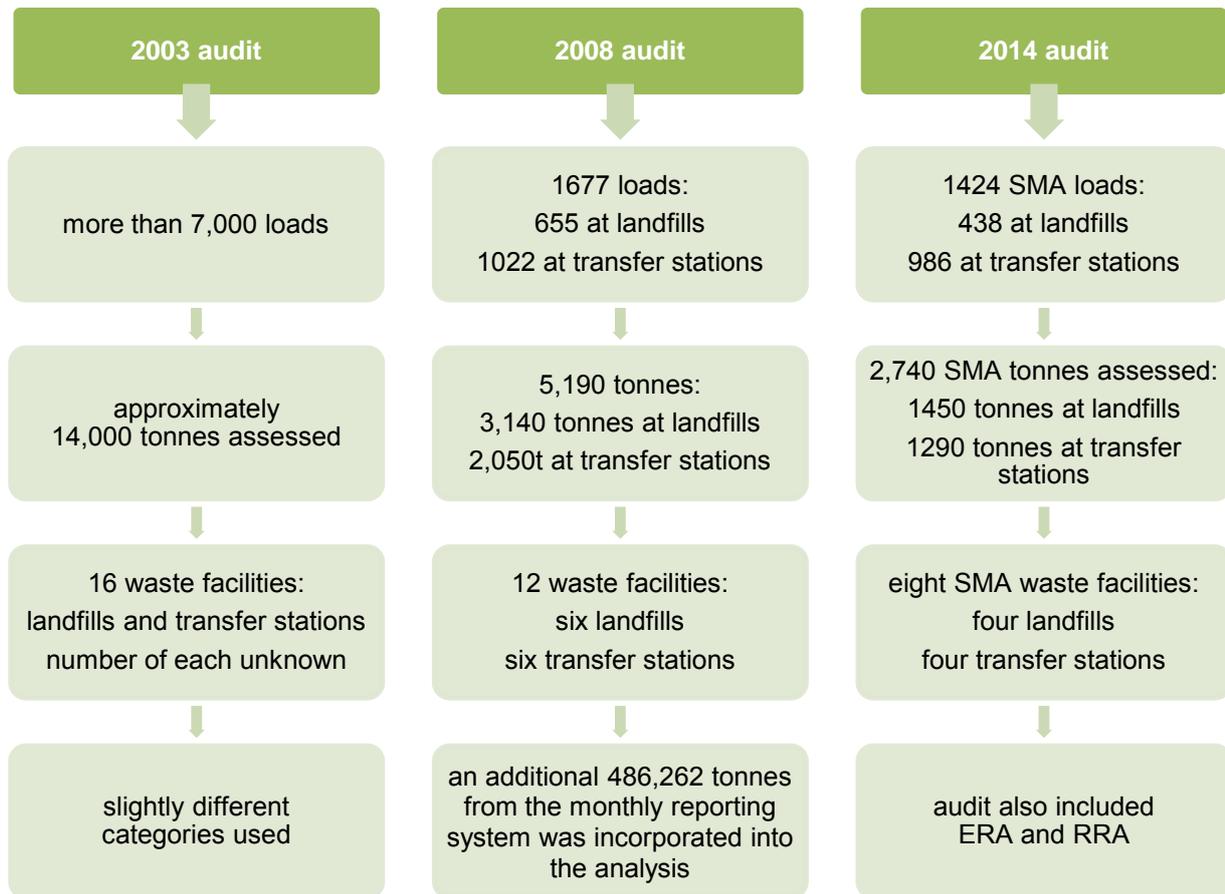


Refer to Tables AF12 and AF14 in Appendix F for tonnage details.

### 3.3 Trends in C&I waste in the SMA

The NSW Government has conducted three disposal-based C&I waste audits: in 2003, in 2008 and this study in 2014. This section presents a high-level comparison of the results from each of these three studies.

It needs to be noted that the three studies were conducted with slightly different methodologies. The main difference is in the scale of the data-collection exercise. In addition, the 2008 and 2014 studies incorporated data from monthly data reports submitted by landfills as part of their regulatory reporting obligations.



For comparison with the 2014 study, the 2003 categories of ‘wood products’ and ‘solid wood’ have been combined as ‘wood’. For the ‘bags distributed’ composition estimate, the 2003 ‘food and garden organics’ category has been included as ‘food’; while ‘paper and cardboard’ has been categorised as ‘cardboard’.

It should also be noted that the highly variable nature of the C&I waste stream means that deriving trends from three ‘point-in-time’ observations can be problematic. However, some observations and limited interpretation of the trend data are given below.

### 3.4.1 Comparison of C&I waste composition

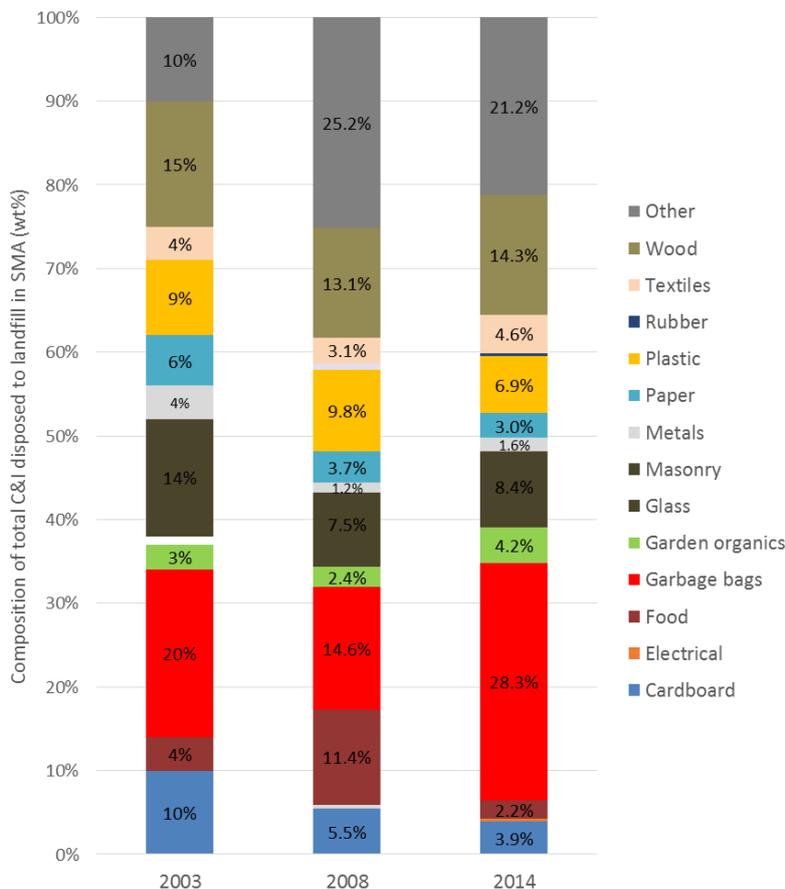
Chart 55 and Chart 56 show a comparison of the overall waste composition estimated for each of the three studies.

Slightly different categories were reported for the 2003 and 2008 studies. For comparison with the 2014 study, the 2003 categories of ‘wood products’ and ‘solid wood’ have been combined into the ‘wood’ category.

Since 2003, the percentage of loose cardboard and paper in the C&I disposal stream has diminished, which indicates that more of this material is being recycled. This is consistent with the promotion of cardboard and paper recycling services to businesses. Similarly, the percentage of ‘masonry’ (or C&D waste) has decreased over time.

The ‘other’ category has increased substantially over time. For 2008, this is partly due to the inclusion of contaminated soil. However, in both 2008 and 2014, this category includes residuals from waste-processing facilities. Therefore, the large percentage of ‘other’ is at least in part the result of the increase in mixed waste processing at AWTs and the increase in the amount of co-mingled recycling, both of which result in an increase in the generation of residuals and fines. Shredder floc and paper pulp are also included the ‘other’ category.

**Chart 55: Composition of NSW mixed C&I waste stream, 2003/14, bags separate**



For the ‘bags distributed’ composition estimate, the 2003 ‘food and garden organics’ category has been categorised as ‘food’ and the ‘paper and cardboard’ category has been categorised as ‘cardboard’. The 2008 ‘vegetation’ category has been categorised as ‘garden organics’ and the ‘residual’ and ‘hazardous’ categories have been included in ‘other’.

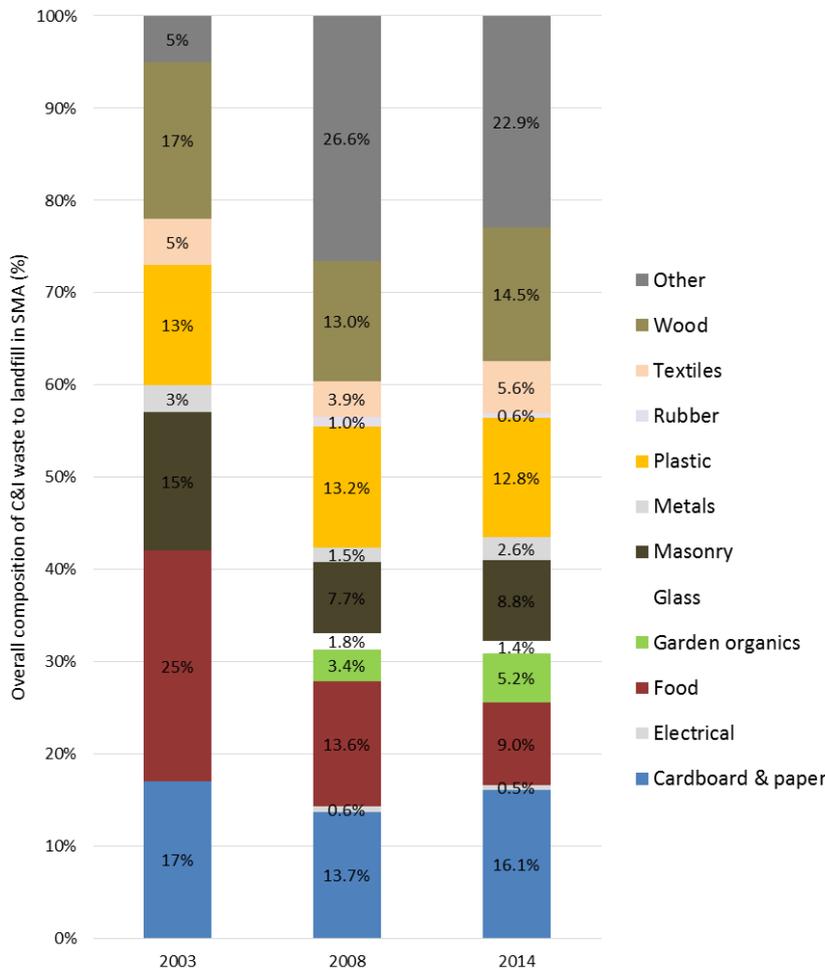
The analysis of the composition with ‘garbage bags distributed’ indicates that the combined paper and cardboard component remains at around 15 per cent, which indicates that more of the paper and cardboard is presenting in the garbage bags rather than as loose cardboard and paper.

The total percentage of cardboard and masonry appears to have reduced since 2003. This may be a result of the increased efforts in cardboard recycling and the increase in the landfill levy driving further recovery of masonry due to the heavy nature of this material.

Food waste has also reduced, possibly due to the introduction of new organic waste processing facilities, the introduction of food waste collections at commercial premises, and wide support for charitable organisations such as Oz Harvest and Foodbank which aim to collect food waste from the commercial sector. A product destruction facility for food waste has also opened since 2008.

Wood, plastic and textiles have remained static.

**Chart 56: Composition of NSW mixed C&I waste stream, 2003 – 2014, garbage bag contents distributed**



### 3.4.2 Industry sources of C&I waste

Information on the industry sector of the waste is reported for both the 2008 and 2014 studies. The categories used were slightly different for each study. Further, the 2008 report only had this information for the mixed loads assessed at the waste facilities, but not for single-material loads where the waste data was incorporated from the monthly facility reports. Therefore, the data presented in the charts below is for mixed loads only.

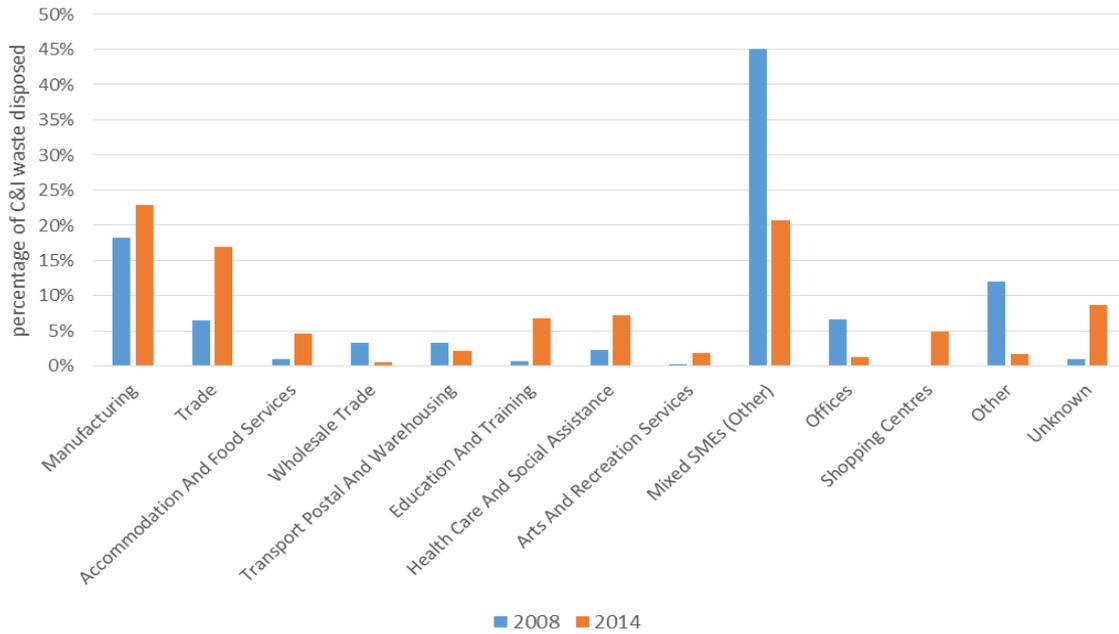
For comparison with the two studies, some 2008 categories were allocated differently in 2014, as shown in Figure 20.

**Figure 20: Industry sector category changes 2008 – 2014**

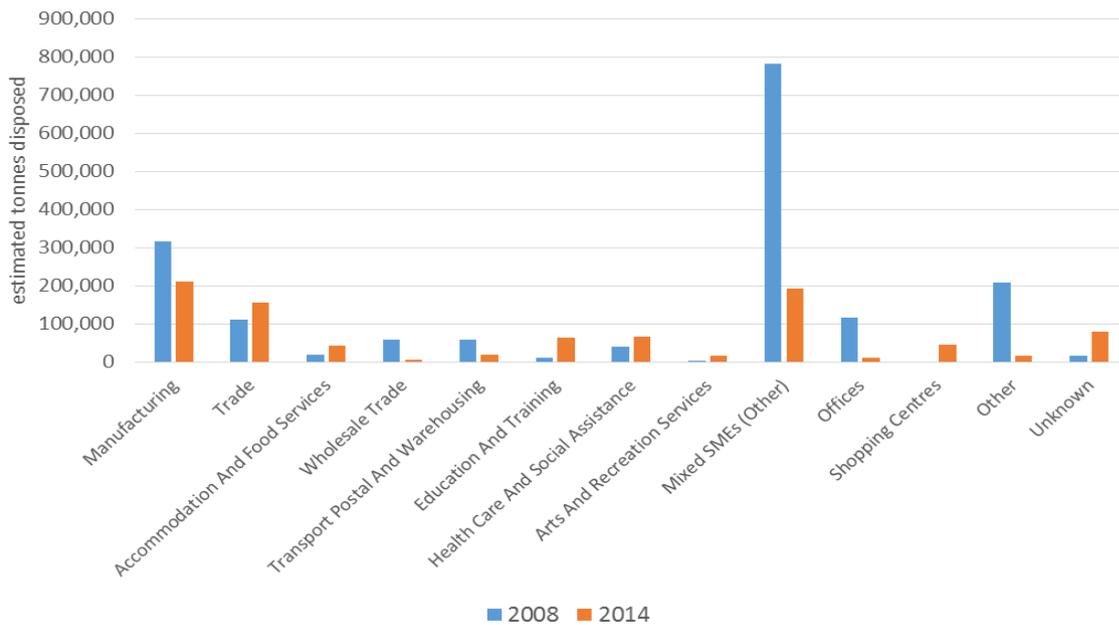


As can be seen from Chart 57 and Chart 58 below, the source of material varies considerably between the two studies. The reason for this is likely to be twofold: the highly heterogeneous nature of the C&I waste stream and the inherent difficulty in assessing the source of material over a short time frame at the point of disposal. Therefore, while this information is interesting, it should be utilised with caution.

**Chart 57: Industry sector contribution to C&I waste disposed, by percentage – 2008 and 2014, mixed loads only**



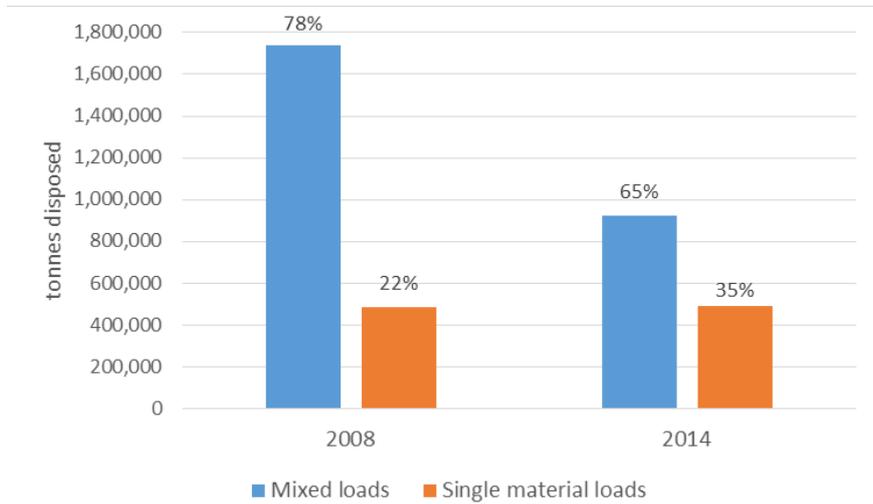
**Chart 58: Industry sector contribution to C&I waste disposed, by tonnes – 2008 and 2014, mixed loads only**



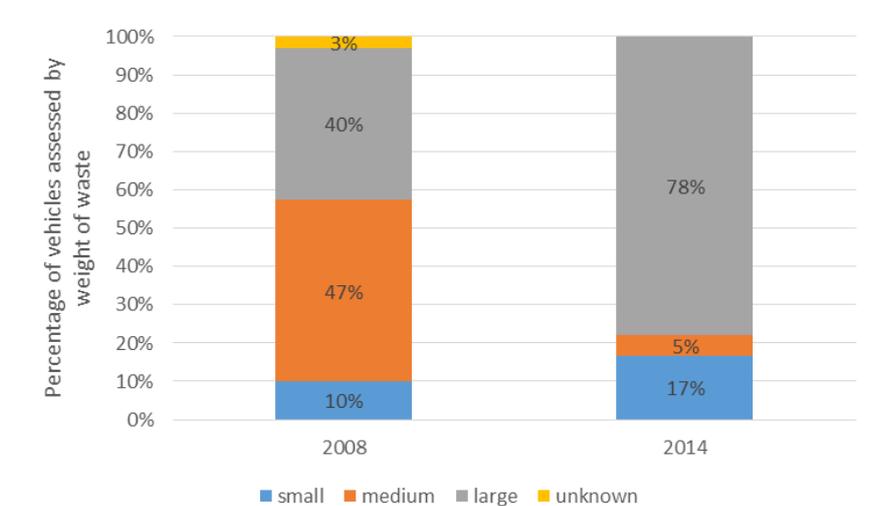
### 3.4.3 Types of loads

As shown in Chart 59, the percentage of material presenting in mixed loads has decreased by 13 per cent however the tonnage from these loads has decreased by 800,000 tonnes while there has been a corresponding increase of 13 per cent in single material loads and virtually no increase in tonnes delivered. All large loads are delivering mixed loads (see Chart 60).

**Chart 59: Mixed vs single-source loads, 2008 and 2014**



**Chart 60: Vehicle type: 2008 and 2014**



## 4. Results: Extended Regulated Area (ERA)

Figure 21: Local government areas in the Extended Regulated Area

Cessnock	Gosford	Hawkesbury	Wollongong
Kiama	Lake Macquarie	Maitland	Wyong
Newcastle	Port Stephens	Shellharbour	Shoalhaven
Wingecarribee			

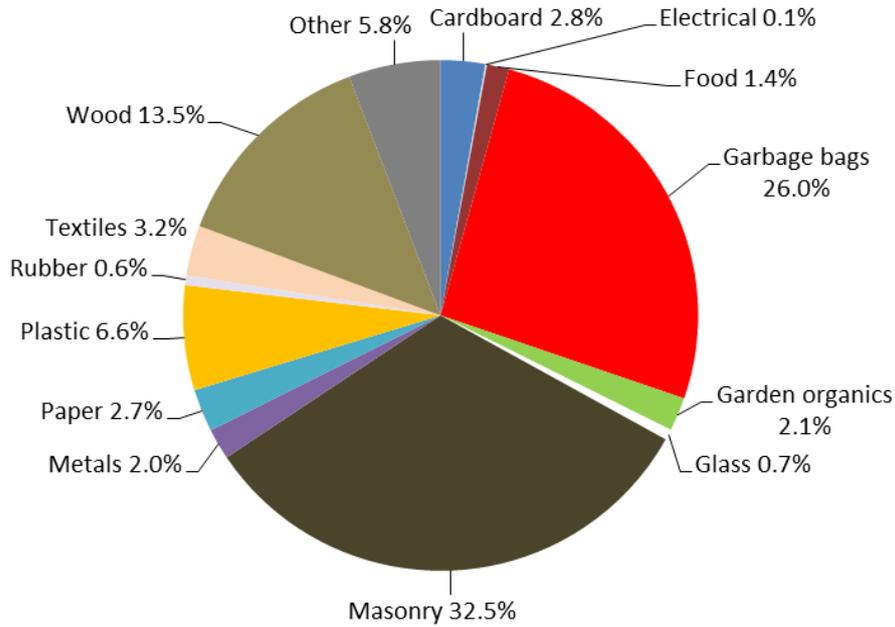
### 4.1 ERA C&I waste composition

The main components of C&I waste disposed in the ERA are masonry (32.5 per cent), garbage bags (26 per cent), wood (13.5 per cent) and plastic (6.6 per cent).

Table 40: ERA C&I waste composition - bags as separate category

Material	Tonnes per year	% of waste stream
Masonry	82,180	32.5%
Garbage bags	65,610	26%
Wood	34,160	13.5%
Plastic	16,750	6.6%
Other	14,590	5.8%
Textiles	8040	3.2%
Cardboard	7040	2.8%
Paper	6820	2.7%
Garden organics	5380	2.1%
Metals	4940	2%
Food	3530	1.4%
Glass	1700	0.7%
Rubber	1550	0.6%
Electrical	270	0.1%
<b>Total</b>	<b>252,550</b>	<b>100%</b>

**Chart 61: ERA – C&I waste composition – garbage bags as a category**



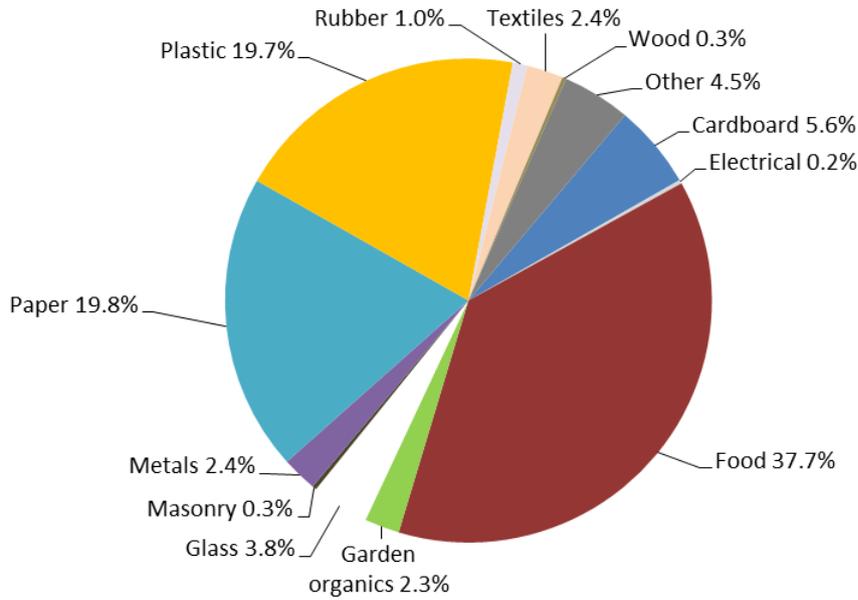
Refer to table AF25 in Appendix F for detailed material categories and tonnage details.

**Table 41: ERA - composition of garbage bags in C&I waste**

The garbage bags in C&I waste in the ERA contain mainly food (37.7 per cent), paper (19.8 per cent) and plastic (19.7 per cent).

Material	Tonnes per year	% of waste stream
Food	24,720	37.7%
Paper	13,020	19.8%
Plastic	12,910	19.7%
Cardboard	3670	5.6%
Other	2980	4.5%
Glass	2510	3.8%
Textiles	1590	2.4%
Metals	1540	2.4%
Garden organics	1520	2.3%
Rubber	640	1%
Masonry	180	0.3%
Wood	160	0.3%
Electrical	160	0.2%
Garbage bags	0	0%
<b>Total</b>	<b>65,610</b>	<b>100%</b>

**Chart 62: ERA - contents of garbage bags in C&I waste**



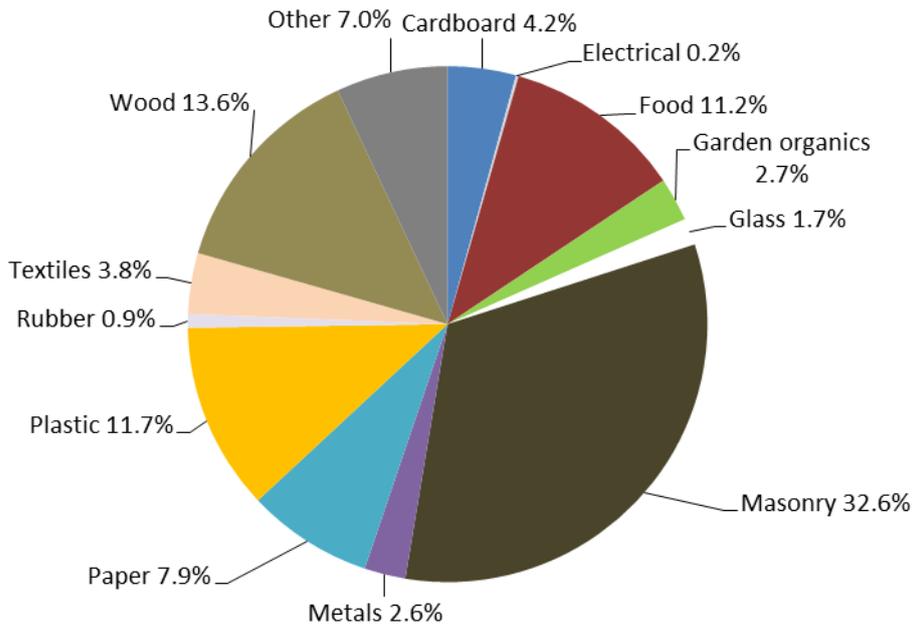
Refer to tables AF25, AF162 and AF163 in Appendix F for details on material categories and tonnage.

**Table 42: ERA C&I waste composition - garbage bags distributed**

When the contents of garbage bags are distributed, the main C&I waste materials are masonry materials (32.6 per cent), wood (13.6 per cent), plastic (11.7 per cent) and food (11.2 per cent).

Material	Tonnes per year	% of waste stream
Masonry	82,360	32.6%
Wood	34,330	13.6%
Plastic	29,660	11.7%
Food	28,250	11.2%
Paper	19,840	7.9%
Other	17,570	7%
Cardboard	10,710	4.2%
Textiles	9630	3.8%
Garden organics	6900	2.7%
Metals	6480	2.6%
Glass	4210	1.7%
Rubber	2190	0.9%
Electrical	430	0.2%
Garbage bags	0	0%
<b>Total</b>	<b>252,550</b>	<b>100%</b>

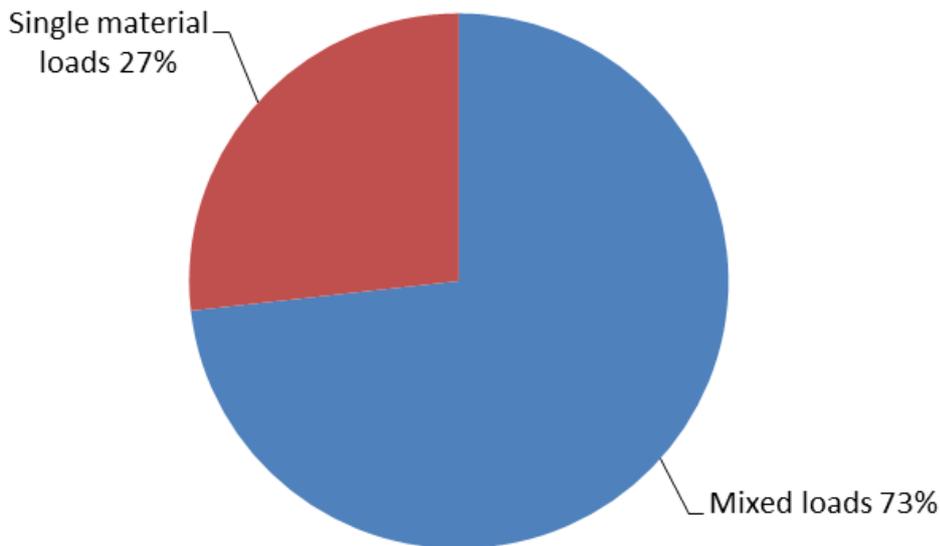
**Chart 63: ERA – C&I waste composition – bags distributed**



Refer to table AF25 in Appendix F for detailed material categories and tonnage details.

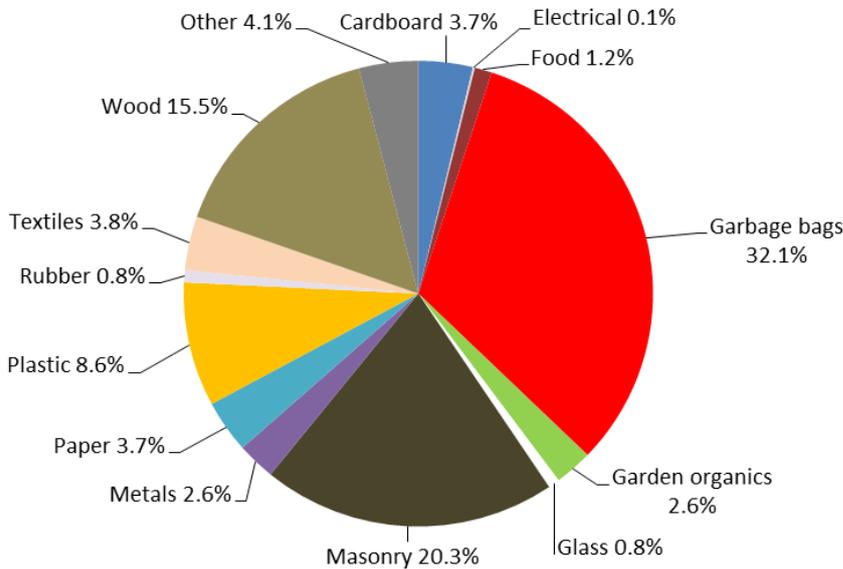
**Chart 64: ERA - mixed vs single material loads**

Seventy-three per cent of C&I waste disposed in the ERA arrives at the disposal point in mixed loads; 27 per cent arrives as single-material loads (where one material makes up 90 per cent or more of the whole load).



**Chart 65: ERA - composition of mixed C&I waste, garbage bags as a separate category**

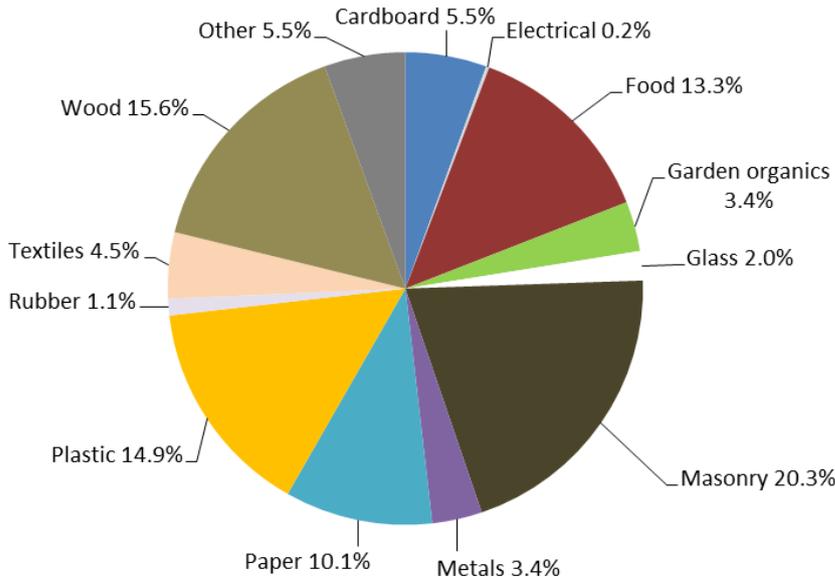
Mixed loads of C&I waste in the ERA comprise mainly garbage bags (32.1 per cent), masonry (20.3 per cent), wood (15.5 per cent) and plastic (8.6 per cent).



Refer to Tables AF22 and AF26 in Appendix F for tonnage details.

**Chart 66: ERA - composition of mixed C&I waste, garbage bags distributed**

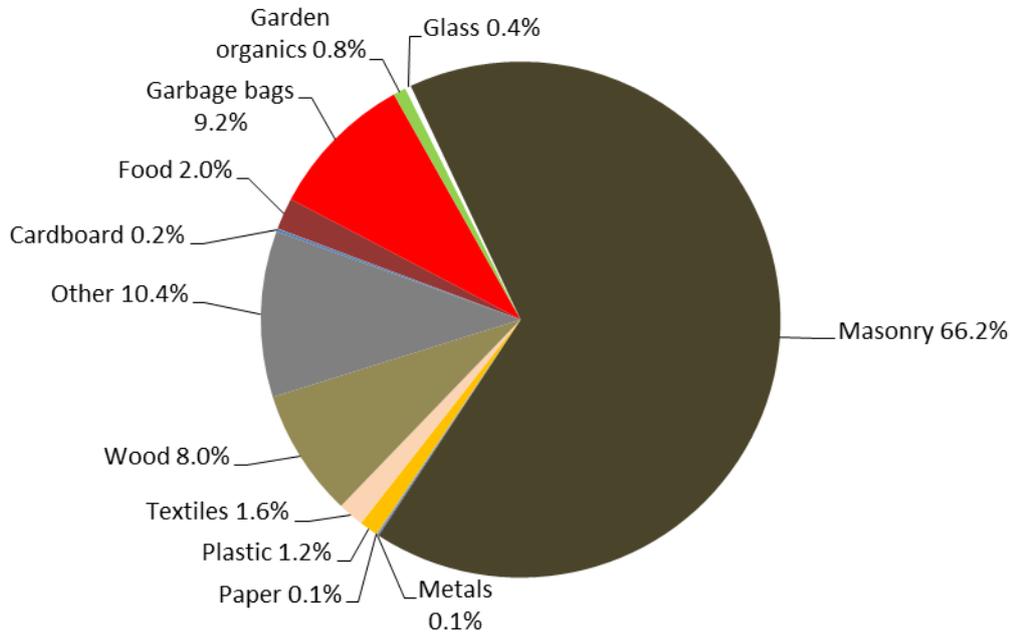
When the contents of the garbage bags are distributed, the main components in the ERA are masonry materials (20.3 per cent), wood (15.6 per cent), plastic (14.9 per cent) and food (13.3 per cent).



Refer to Tables AF23 and AF26 in Appendix F for tonnage details.

**Chart 67: ERA – composition of single material C&I loads**

The most common types of single-material loads are masonry materials (66.2 per cent – note, this includes loads of soil), other materials (10.4 per cent, mainly sludge and fines), garbage bags (9.2 per cent), and wood (eight per cent).

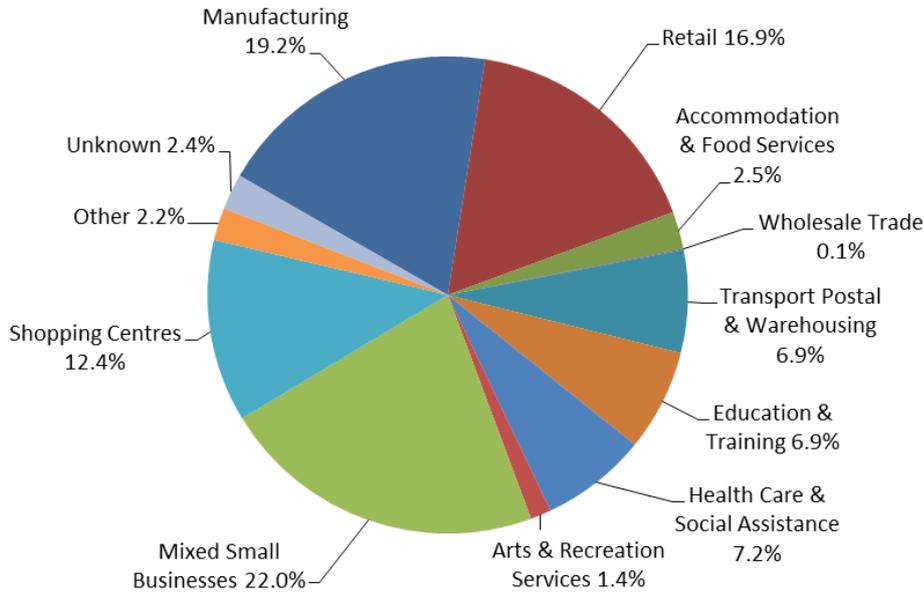


Refer to Tables AF24 and AF27 in Appendix F for tonnage details.

## 4.2 ERA C&I by industry sector

The sectors that dispose of the most C&I waste overall in the ERA are mixed small businesses (20 per cent), manufacturing (16 per cent), retail (14 per cent), and arts/recreation and shopping centres (10 per cent each). All of those sectors, except arts/recreation, also generate the most mixed loads.

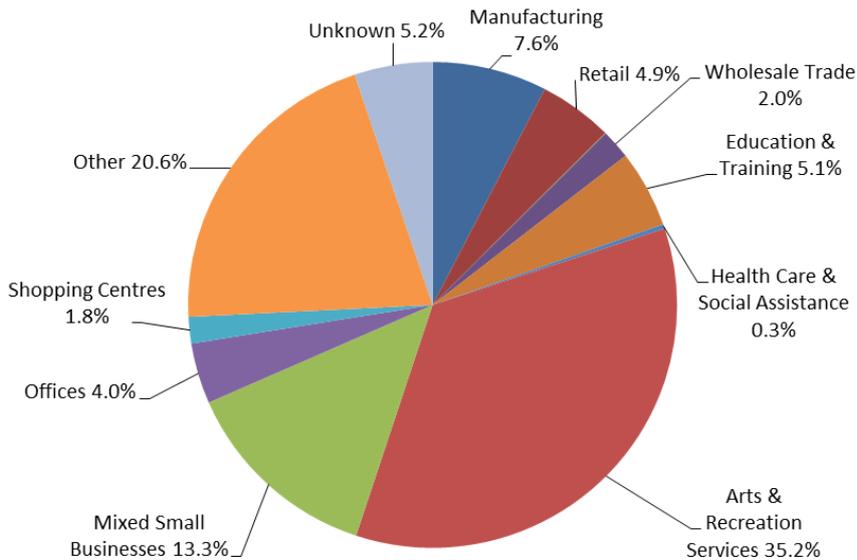
**Chart 68: ERA – mixed loads C&I disposal by industry sector**



Refer to Table AF69 in Appendix F for tonnage details.

**Chart 69: ERA – single material loads C&I disposal by industry sector**

Single-material loads are mainly generated by arts/recreation, others sectors that do not fit any of the recorded categories, mixed small businesses and manufacturing.

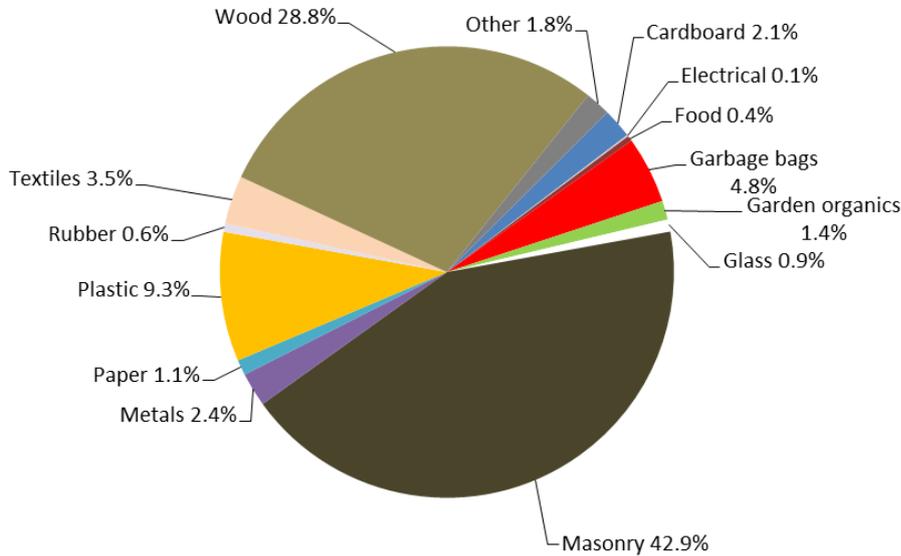


Refer to Appendix F for tonnage details (Table AF69) and composition data for all sectors

#### 4.2.1 Mixed small businesses

**Chart 70: ERA – composition of mixed C&I loads from mixed small businesses**

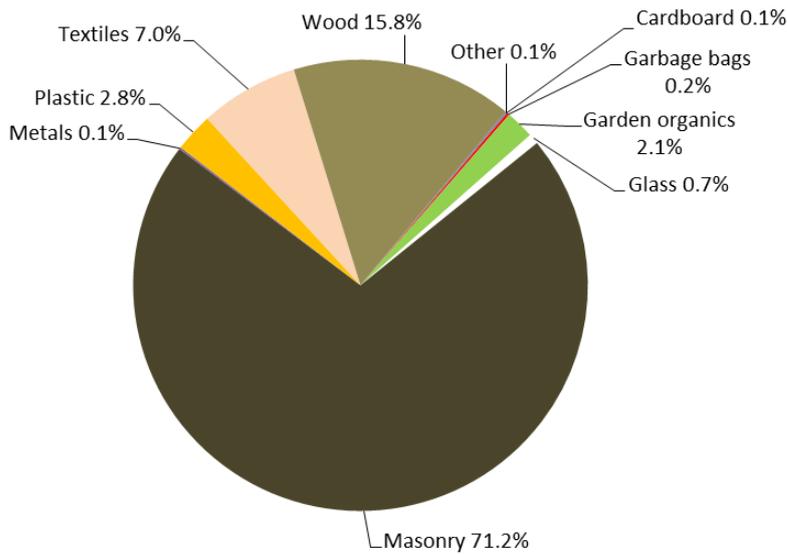
Mixed loads of C&I waste from mixed small businesses in the ERA contain mainly masonry (42.9 per cent), wood (28.8 per cent) and plastic (9.3 per cent).



Refer to Table AF85 in Appendix F for tonnage details.

**Chart 71: ERA – composition of single-material C&I loads from mixed small businesses**

Single-material loads of C&I waste from mixed small businesses in the ERA contain mainly masonry (71.2 per cent), wood (15.8 per cent) and textiles (seven per cent).

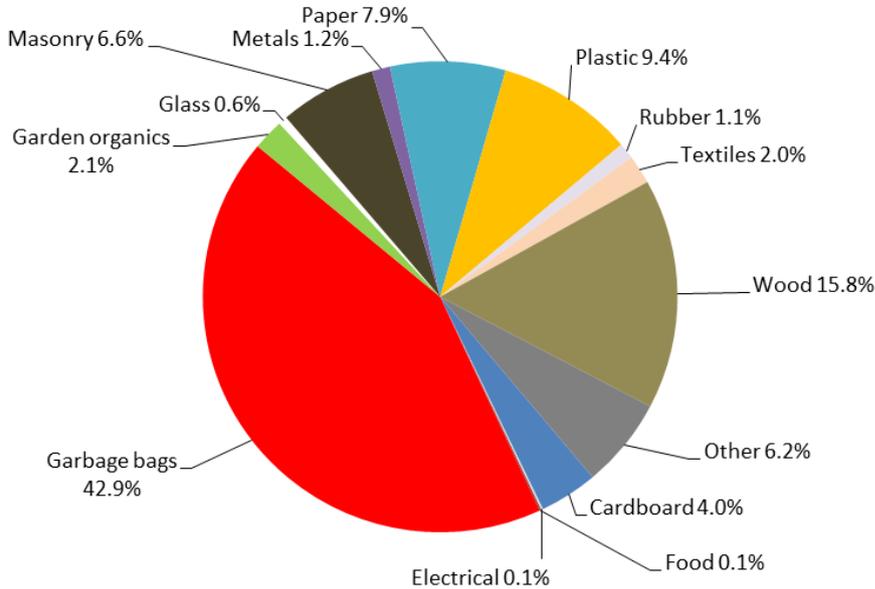


Refer to Table AF86 in Appendix F for tonnage details.

## 4.2.2 Manufacturing

**Chart 72: ERA – composition of mixed C&I loads from manufacturing**

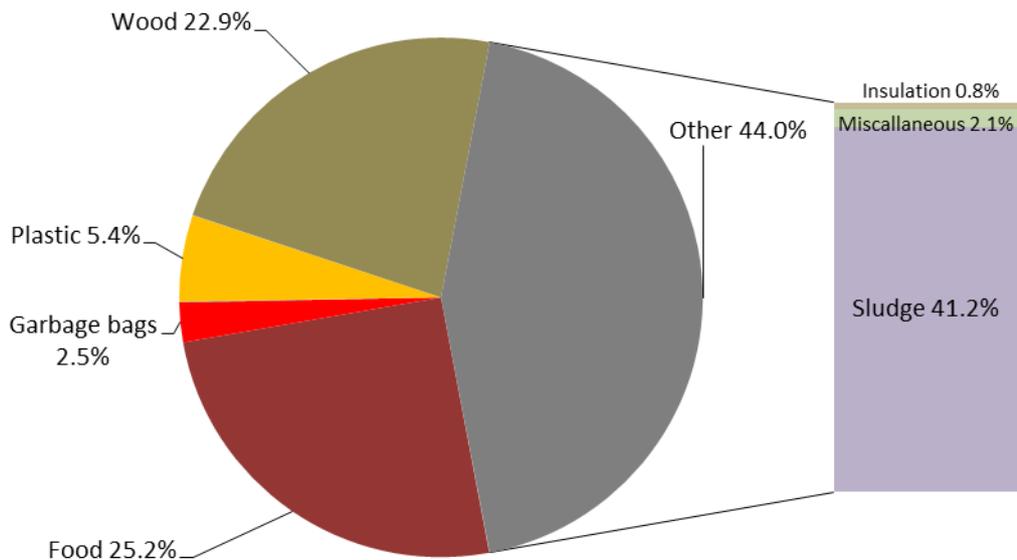
Mixed loads of C&I waste from manufacturing in the ERA contain mainly garbage bags (42.9 per cent), wood (15.8), plastic (9.4 per cent) and paper (7.9 per cent).



Refer to Table AF73 in Appendix F for tonnage details.

**Chart 73: ERA – composition of single material C&I loads from manufacturing**

Single-material loads of C&I waste from manufacturing in the ERA are mainly loads of other material (44 per cent – mainly sludge and fines), food (25.2 per cent) and wood (22.9 per cent).

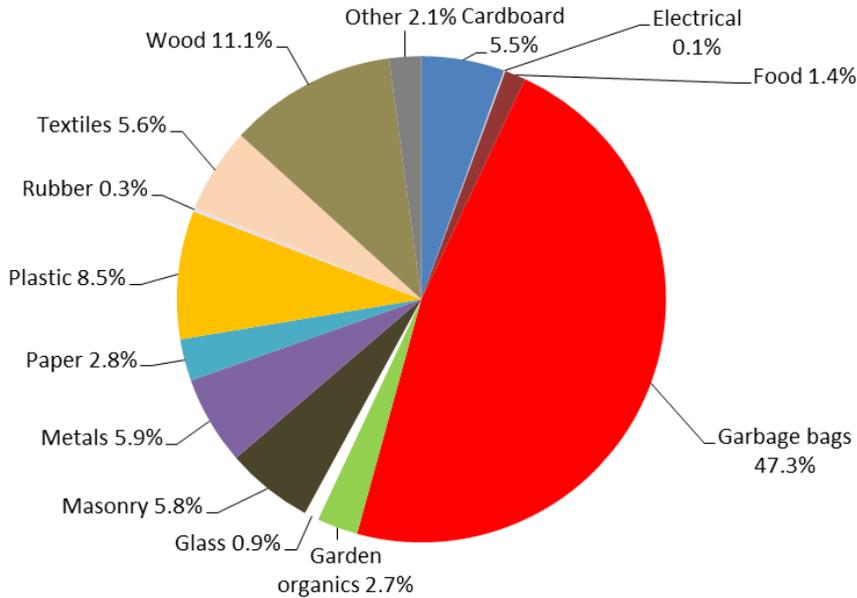


Refer to Table AF74 in Appendix F for tonnage details.

### 4.2.3 Retail

**Chart 74: ERA – composition of mixed C&I loads from the retail sector**

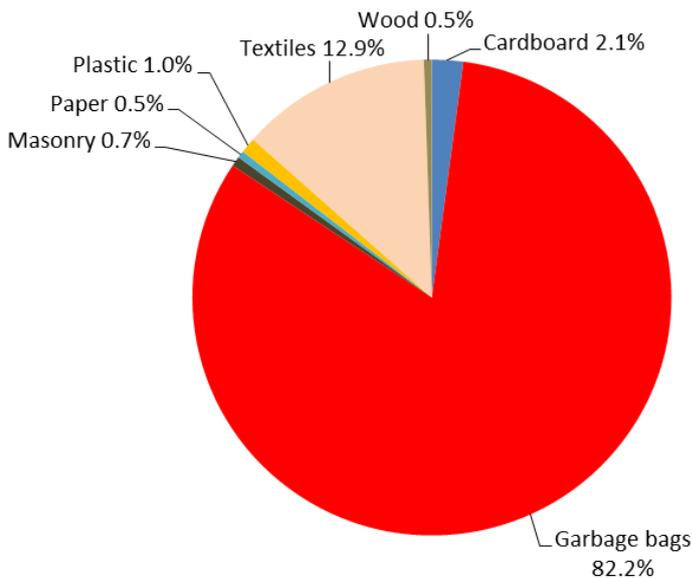
Mixed loads of C&I waste from the retail sector in the ERA contain mainly garbage bags (47.3 per cent), wood (11.1 per cent) and plastic (8.5 per cent).



Refer to Table AF97 in Appendix F for tonnage details.

**Chart 75: ERA – composition of single-material C&I loads from the retail sector**

Most single-material loads from the retail sector in the ERA are loads of garbage bags (82.2 per cent) or textiles (12.9 per cent).

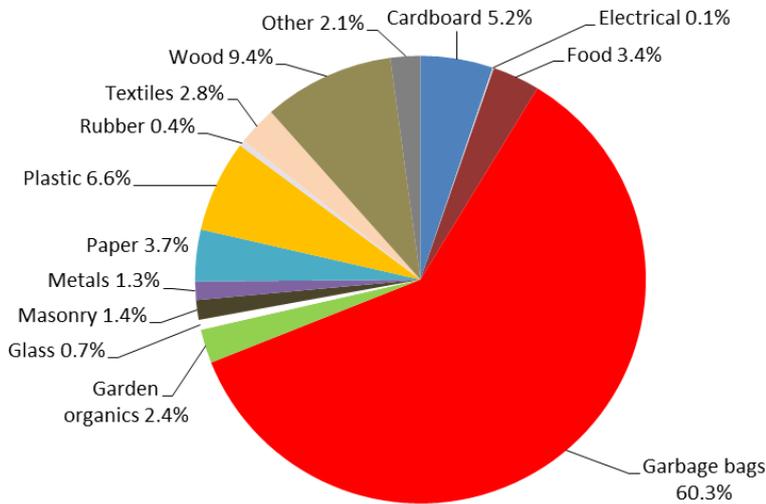


Refer to Table AF98 in Appendix F for tonnage details.

#### 4.2.4 Shopping centres

**Chart 76: ERA – composition of mixed C&I loads from shopping centres**

Mixed loads of C&I waste from shopping centres in the ERA contain mainly garbage bags (60.3 per cent), wood (9.4 per cent) and plastic (6.6 per cent). Shopping centres do not produce a significant number of single-material loads.

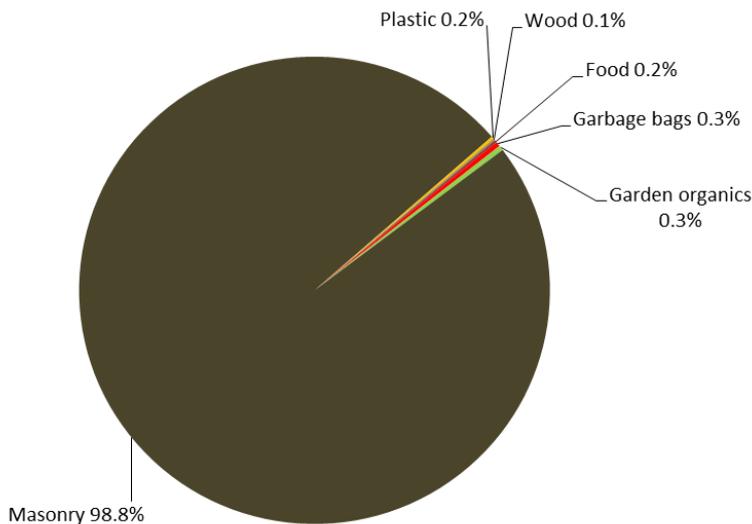


Refer to Table AF159 in Appendix F for tonnage details.

#### 4.2.5 Arts and recreation services

**Chart 77: ERA – composition of single-material C&I loads from the arts and recreation sector**

Mixed loads from this sector are minimal. Of the 16 single-material loads assessed (six from one project), nine were 98.8 per cent masonry. In our opinion, the results are atypical for this sector.



Refer to Table AF148 in Appendix F for tonnage details.

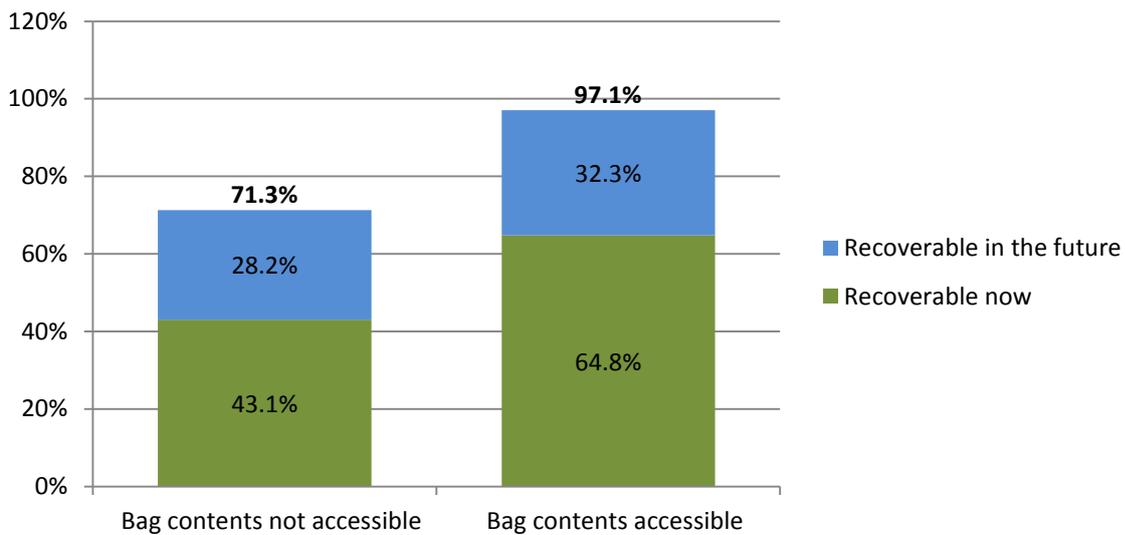
### 4.3 Recoverable materials

Materials in the C&I waste stream have been classified as recyclable now, recyclable in the future, or not recyclable – refer to Section 2.14.

If garbage bags and their contents are considered to be not recyclable, then 43.1 per cent of C&I waste disposed in the ERA is recoverable now, and 28.2 per cent is recoverable in the future, making a total of 71.3 per cent of C&I that is potentially recoverable.

If we assume that the contents of garbage bags can be accessed, then 64.8 per cent of C&I waste is recoverable now and 32.3 per cent is recoverable in the future, making a total of 97.1 per cent of C&I waste that is potentially recoverable.

**Chart 78: ERA – C&I currently disposed that could be recycled**



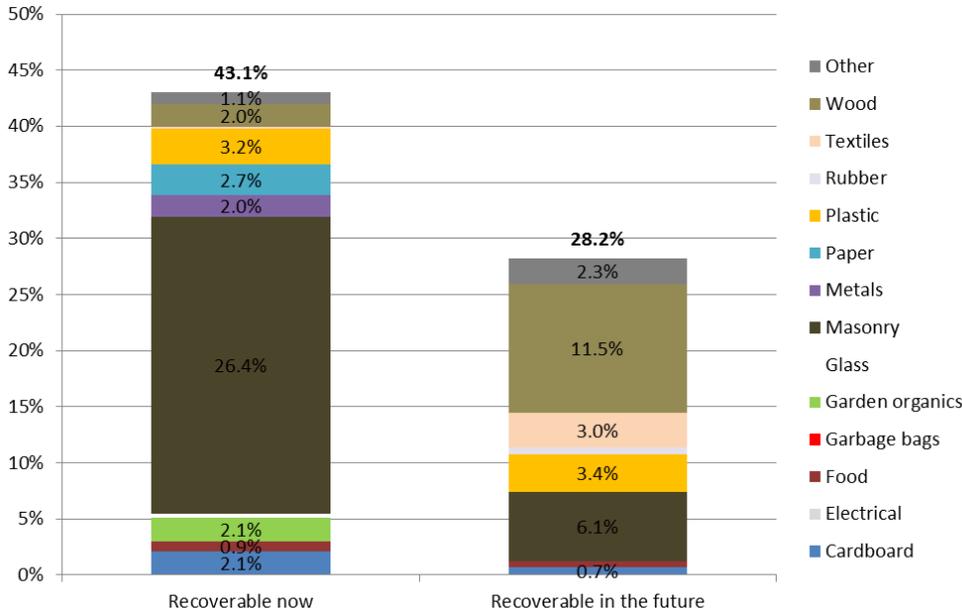
Refer to Tables AF4 and AF6 in Appendix F for tonnage details.

Chart 79 shows more detail of the potential recovery of C&I waste in the ERA, assuming that garbage bag contents are not available for recycling.

The largest current opportunity is the recovery of masonry materials. There are small amounts of garden organics, plastic, paper and cardboard, with smaller amounts of plastic, paper, cardboard, garden organics, metals, wood and food waste also available for recycling.

In the future, the largest opportunities for increased recycling of C&I is treated wood, followed by extra masonry materials, extra plastics, and textiles. Smaller amounts of wet/waxed cardboard and packaged food and other materials (insulation, pulp and sludge) also become available for recovery in the future.

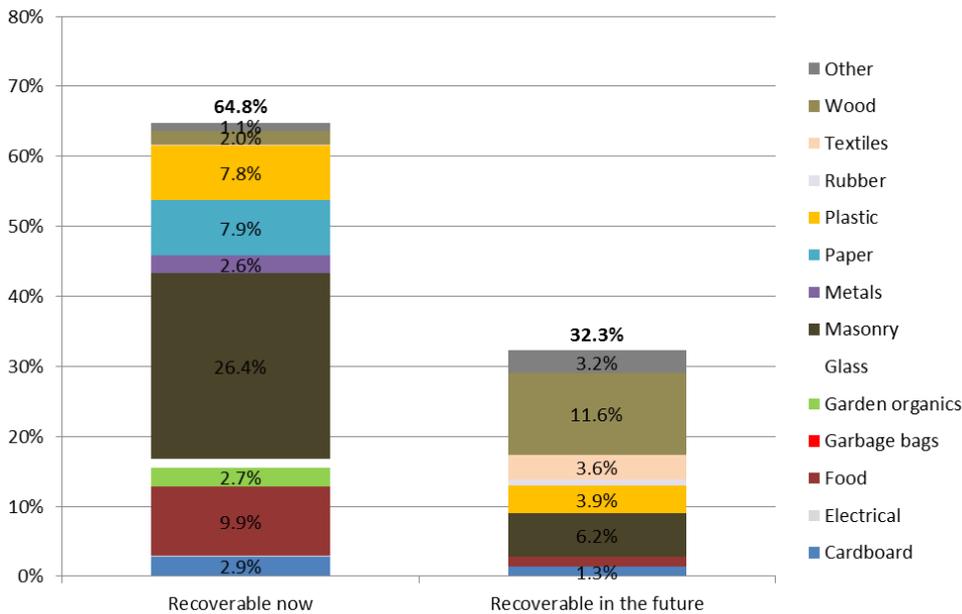
**Chart 79: ERA – detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible**



Refer to Tables AF8 and AF10 in Appendix F for tonnage details.

**Chart 80: ERA – detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible**

If garbage bag contents are included, the biggest potential for recycling is in masonry, along with paper, plastic and food is available. In the future, it will be treated wood, masonry, plastic and textiles, as well as wet/waxed cardboard, packaged food and other materials (insulation, pulp and sludge).



Refer to Tables AF12 and AF14 in Appendix F for tonnage details.

## 5. Results: Regional Regulated Area (RRA)

Figure 22: Local Government Areas in the Regional Regulated Area

Ballina	Gloucester	Nambucca
Bellingen	Great Lakes	Port Macquarie Hastings
Blue Mountains	Greater Taree	Richmond Valley
Byrong	Kempsey	Singleton
Clarence Valley	Kyogle	Tweed
Coffs Harbour	Lismore	Upper Hunter
Dungog	Muswellbrook	Wollondilly

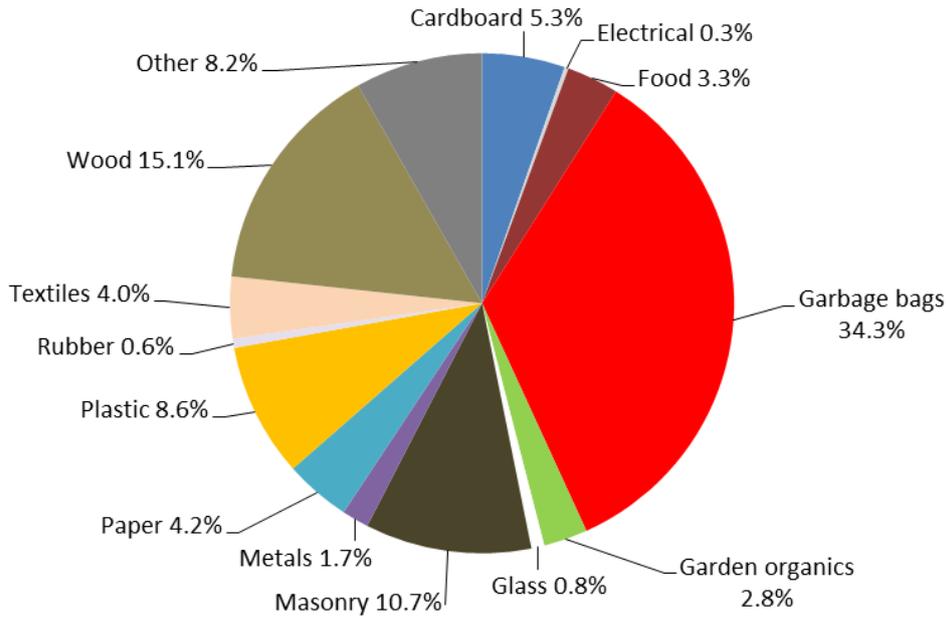
### 5.1 C&I waste composition

The main components of C&I waste disposed in the RRA are garbage bags (34.3 per cent), wood (15.1 per cent), masonry (10.7 per cent) and plastic (8.6 per cent).

Table 43: RRA C&I waste composition – bags as separate category

Material	Tonnes per year	% of waste stream
Garbage bags	36,520	34.3%
Wood	16,090	15.1%
Masonry	11,370	10.7%
Plastic	9190	8.6%
Other	8720	8.2%
Cardboard	5660	5.3%
Paper	4520	4.2%
Textiles	4250	4%
Food	3560	3.3%
Garden organics	3010	2.8%
Metals	1840	1.7%
Glass	890	0.8%
Rubber	630	0.6%
Electrical	280	0.3%
<b>Total</b>	<b>106,540</b>	<b>100%</b>

**Chart 81: RRA – C&I waste composition – garbage bags as a separate category**



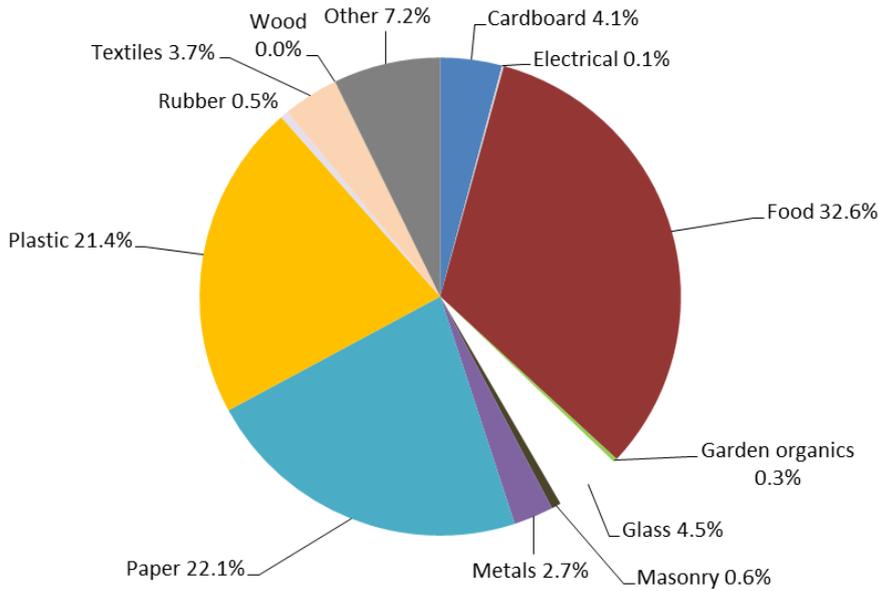
Refer to table AF31 in Appendix F for detailed material categories and tonnage details.

**Table 44: RRA - composition of garbage bags in C&I waste**

The garbage bags in C&I waste in the RRA contain mainly food (32.6 per cent), paper (22.1 per cent) and plastic (21.4 per cent).

Material	Tonnes per year	% of waste stream
Food	11,920	32.6%
Paper	8080	22.1%
Plastic	7820	21.4%
Other	2630	7.2%
Glass	1650	4.5%
Cardboard	1510	4.1%
Textiles	1360	3.7%
Metals	980	2.7%
Masonry	230	0.6%
Rubber	200	0.5%
Garden organics	100	0.3%
Electrical	40	0.1%
Wood	10	0%
<b>Total</b>	<b>36,520</b>	<b>100%</b>

**Chart 82: RRA – contents of garbage bags in C&I waste**



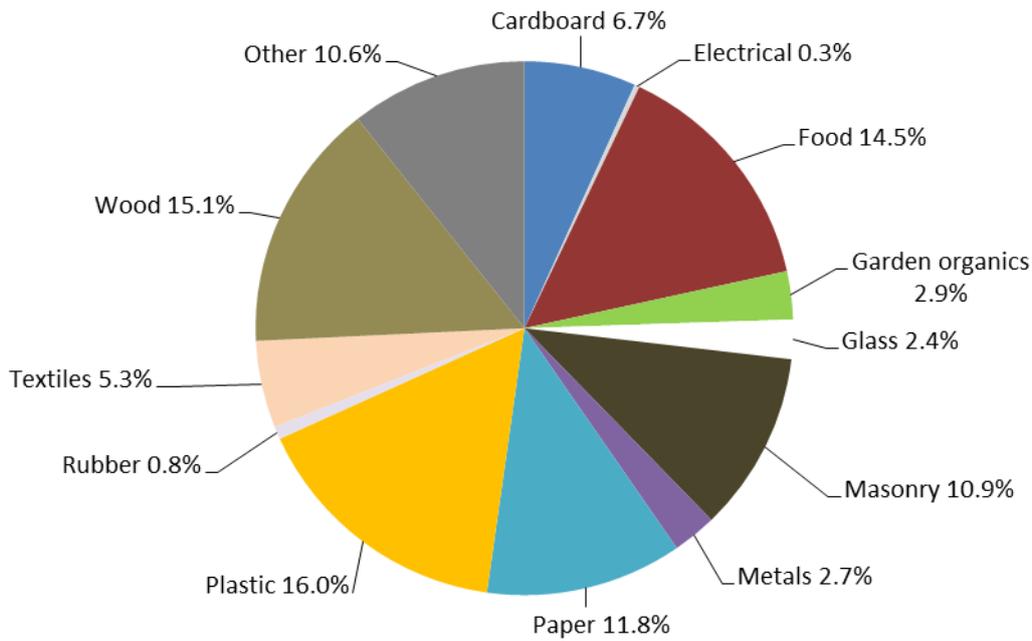
Refer to Tables AF31, AF162 and AF163 in Appendix F for details on material categories and tonnage.

**Table 45: RRA C&I waste composition - garbage bags distributed**

When the contents of garbage bags are distributed, the main materials in C&I waste in the RRA are plastic (16 per cent), wood (15.1 per cent), food (14.5 per cent) and masonry (10.9 per cent).

Material	Tonnes per year	% of waste stream
Plastic	17,010	16%
Wood	16,100	15.1%
Food	15,480	14.5%
Paper	12,600	11.8%
Masonry	11,600	10.9%
Other	11,340	10.6%
Cardboard	7170	6.7%
Textiles	5620	5.3%
Garden organics	3110	2.9%
Metals	2820	2.7%
Glass	2540	2.4%
Rubber	830	0.8%
Electrical	330	0.3%
Garbage bags	0	0%
<b>Total</b>	<b>106,540</b>	<b>100%</b>

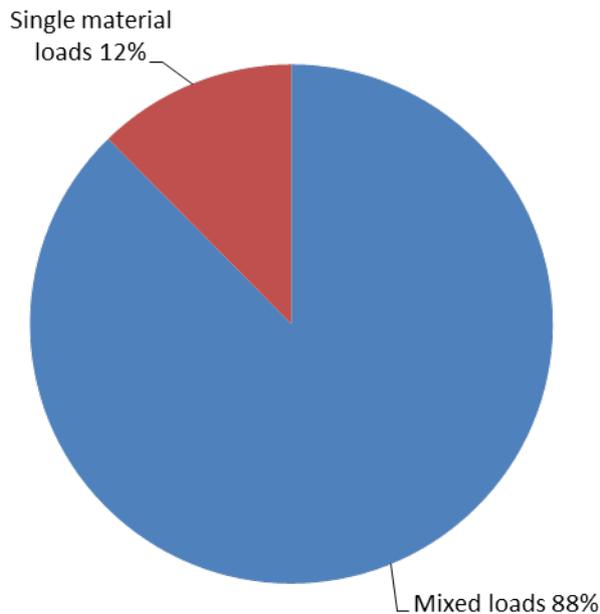
**Chart 83: RRA – overall C&I composition – garbage bags distributed**



Refer to table AF31 in Appendix F for detailed material categories and tonnage details.

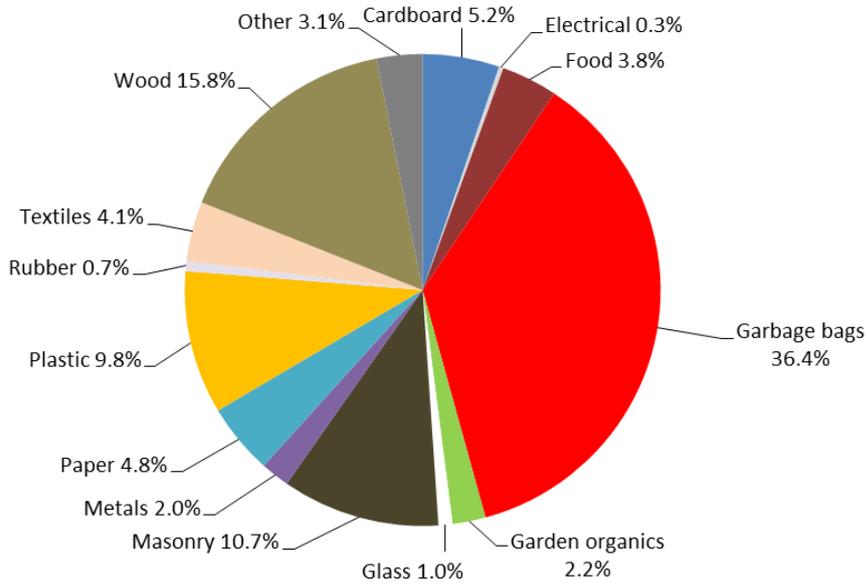
**Chart 84: RRA – mixed vs single material loads**

Eighty-eight per cent (88 per cent) of C&I waste disposed in the ERA arrives at the disposal point in mixed loads; 12 per cent arrives as single-material loads (where one material makes up 90 per cent or more of the whole load).



**Chart 85: RRA – composition of mixed C&I waste, garbage bags as a separate category**

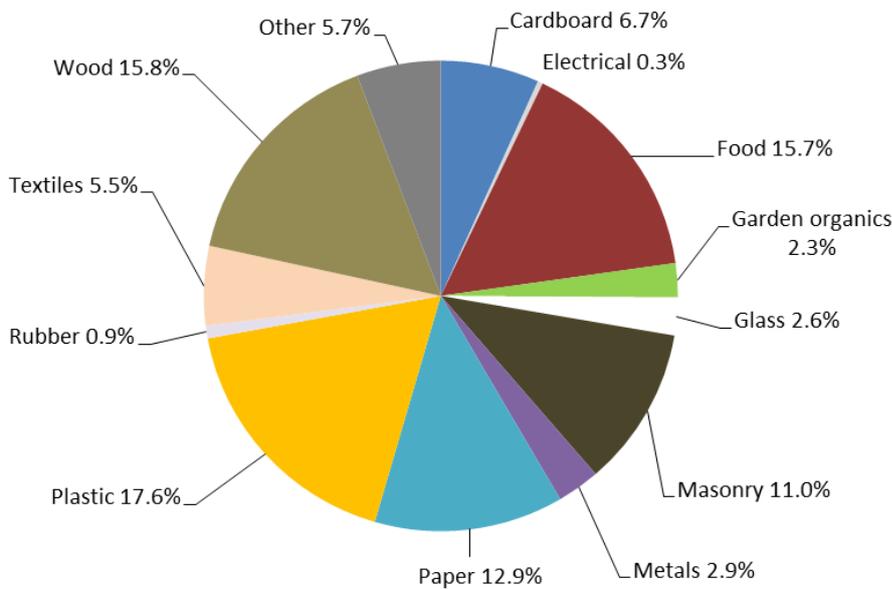
Mixed loads of C&I waste in the RRA comprise mainly garbage bags (36.4 per cent), wood (15.8 per cent), masonry (10.7 per cent) and plastic (9.8 per cent).



Refer to Tables AF28 and AF32 in Appendix F for details on tonnage and material categories.

**Chart 86: RRA – composition of mixed C&I waste, garbage bags distributed**

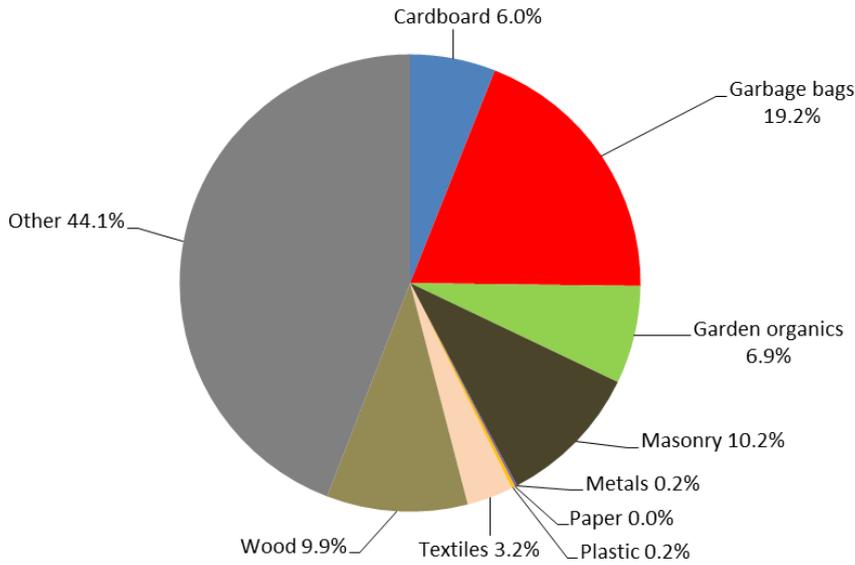
When the contents of the garbage bags are distributed, the main components in the RRA are plastic (17.6 per cent), wood (15.8 per cent), food (15.7 per cent) and masonry materials (11 per cent).



Refer to Tables AF29 and AF31 in Appendix F for details on tonnage and material categories.

**Chart 87: RRA – composition of single material C&I loads**

The most common types of single-material loads are loads of other materials (44.1 per cent – mainly fines and insulation), garbage bags (19.2 per cent), masonry (10.2 per cent) and wood (9.9 per cent).



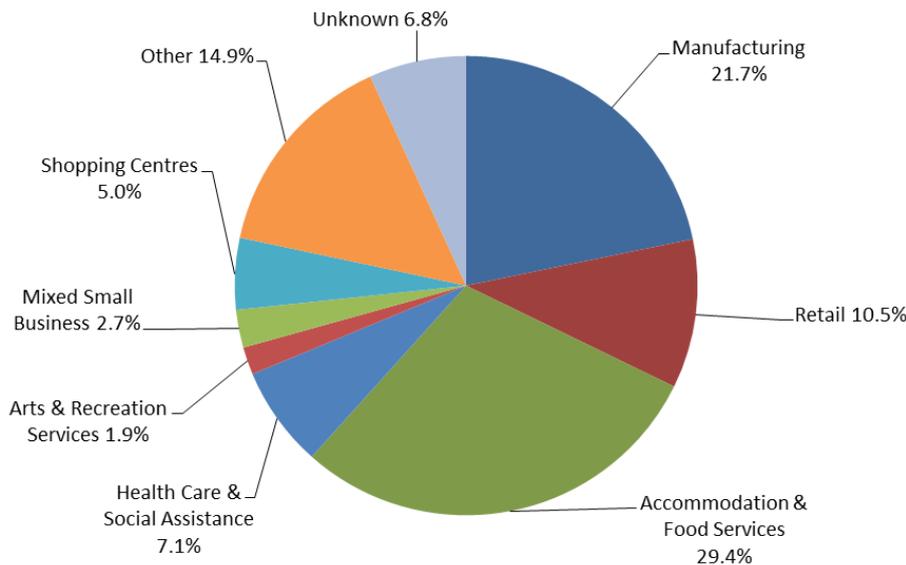
Refer to Tables AF30 and AF33 in Appendix F for details on tonnage and material categories.

**5.2 RRA C&I by industry sector**

The sectors in the RRA disposing of the most waste are accommodation/food services (26 per cent), manufacturing (20 per cent), retail (nine per cent) and healthcare/social assistance (seven per cent).

**Chart 88: RRA – C&I mixed loads disposal by industry sector**

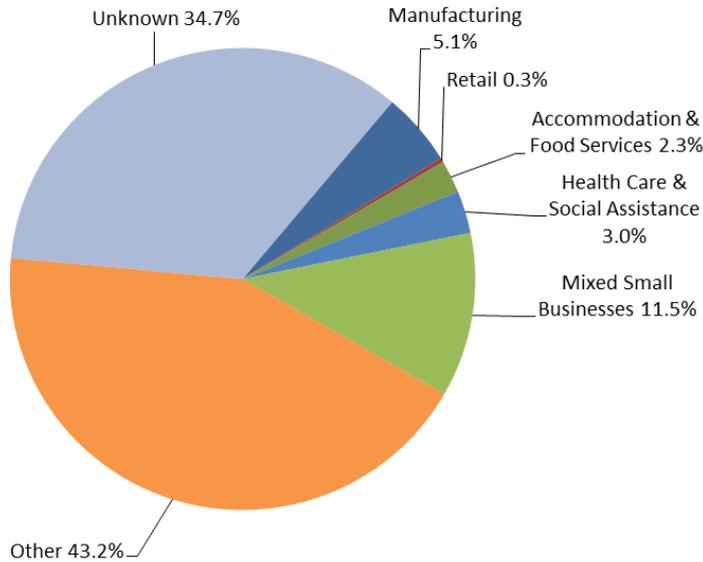
Mixed loads are mainly generated by accommodation/food services and manufacturing.



Refer to Table AF67 in Appendix F for tonnage details.

**Chart 89: RRA – C&I single material loads disposal by industry sector**

Single-material loads are mainly generated by ‘unknown’ or ‘other’ industry sectors that do not fit any of the recorded categories, mixed small businesses and manufacturing.

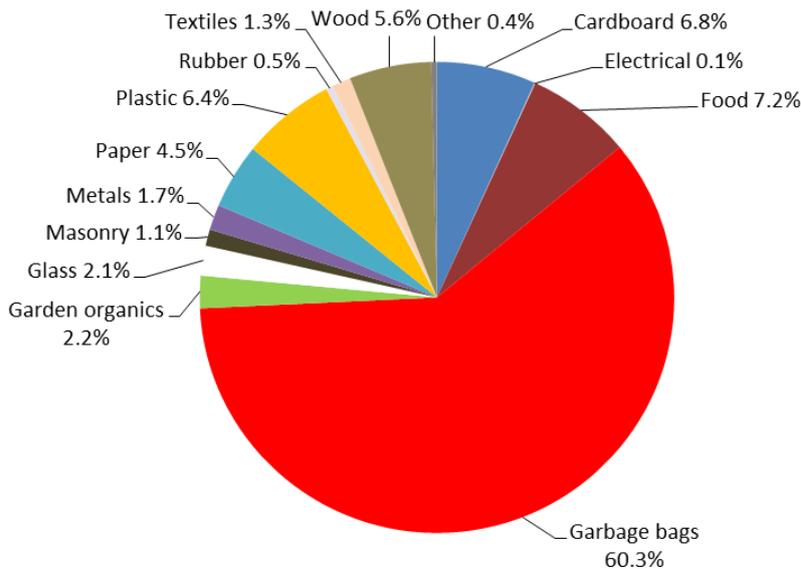


Refer to Appendix F for tonnage details (Table AF69) and composition data for all sectors.

**5.2.1 Accommodation and food services**

**Chart 90: RRA – composition of mixed C&I loads from accommodation and food services**

Mixed loads of C&I waste from the accommodation/food services sector in the RRA contain mainly garbage bags (60.3 per cent), food (7.2 per cent), cardboard (6.8 per cent), plastic (6.4 per cent) and wood (5.6 per cent). This sector does not dispose of a significant number of single-material loads.

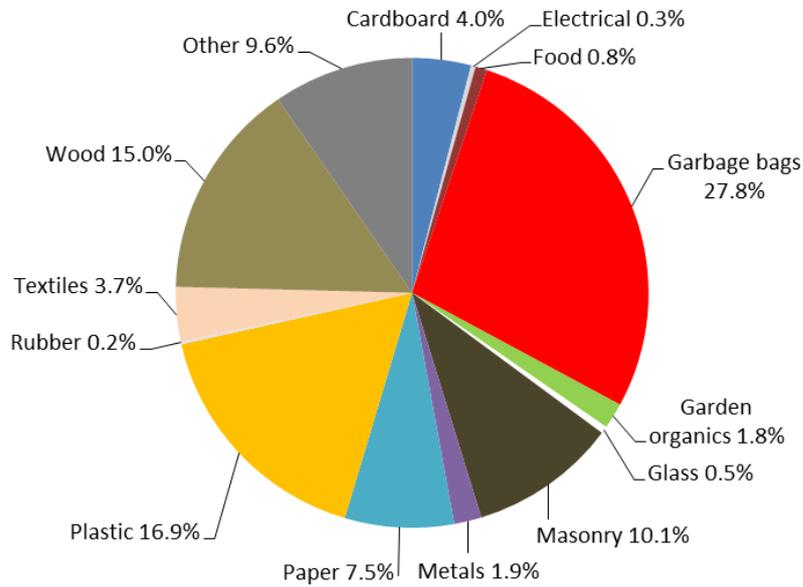


Refer to Table AF121 in Appendix F for tonnage details.

## 5.2.2 Manufacturing

**Chart 91: RRA – composition of mixed C&I loads from the manufacturing sector**

Loads of mixed C&I waste from the manufacturing sector in the RRA contain mainly garbage bags (27.8 per cent), plastic (16.9 per cent), wood (15 per cent) and masonry (10.1 per cent).



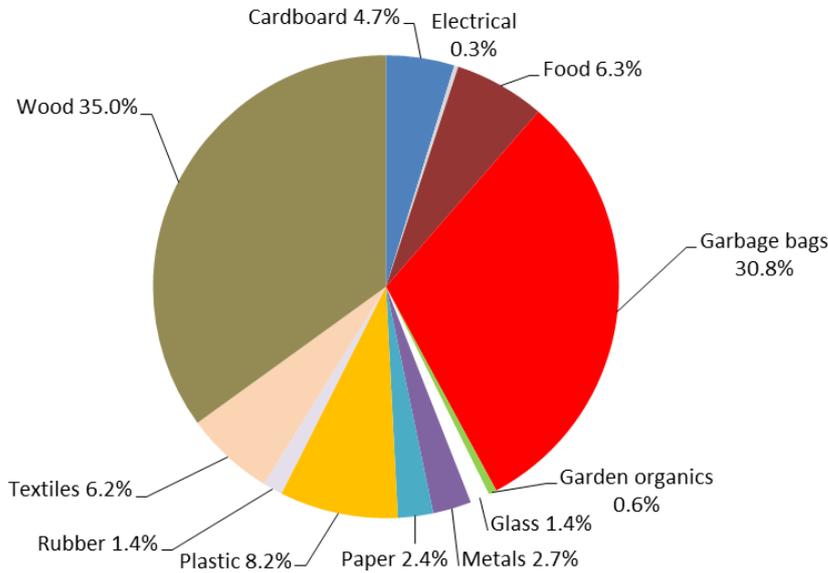
Refer to Table AF73 in Appendix F for tonnage details.

Single-material loads from the manufacturing sector in the RRA contained cardboard only.

### 5.2.3 Retail

**Chart 92: RRA – composition of mixed C&I loads from the retail sector**

Mixed C&I loads from the retail sector in the RRA contain mainly wood (35 per cent) and garbage bags (30.8 per cent). The sector does not dispose of a significant number of single-material loads.

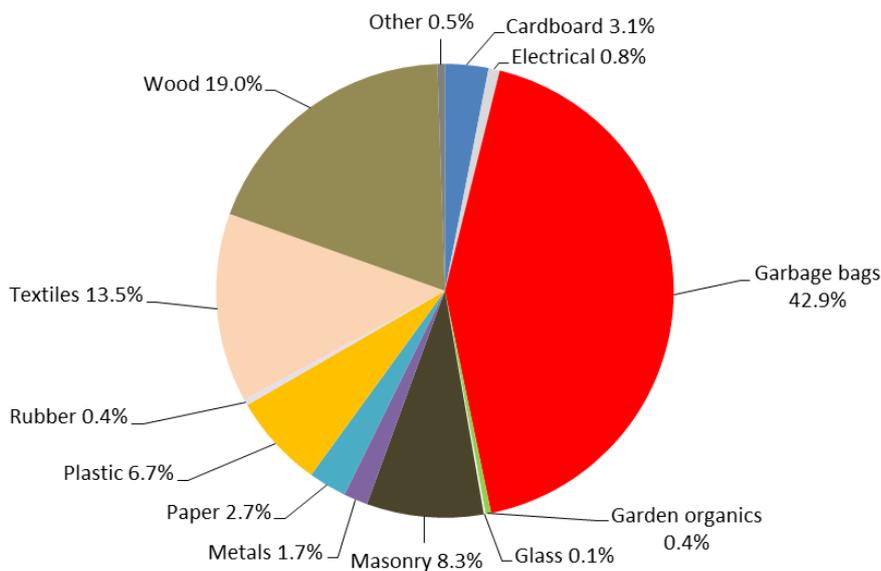


Refer to Table AF97 in Appendix F for tonnage details.

### 5.2.4 Healthcare and social services

**Chart 93: RRA – composition of mixed C&I loads from healthcare and social services sector**

Mixed loads from this sector contain mainly garbage bags (42.9 per cent), wood (19 per cent) and textiles (13.5 per cent). This sector does not contribute a significant number of single-material loads.



Refer to Table AF109 in Appendix F for tonnage details.

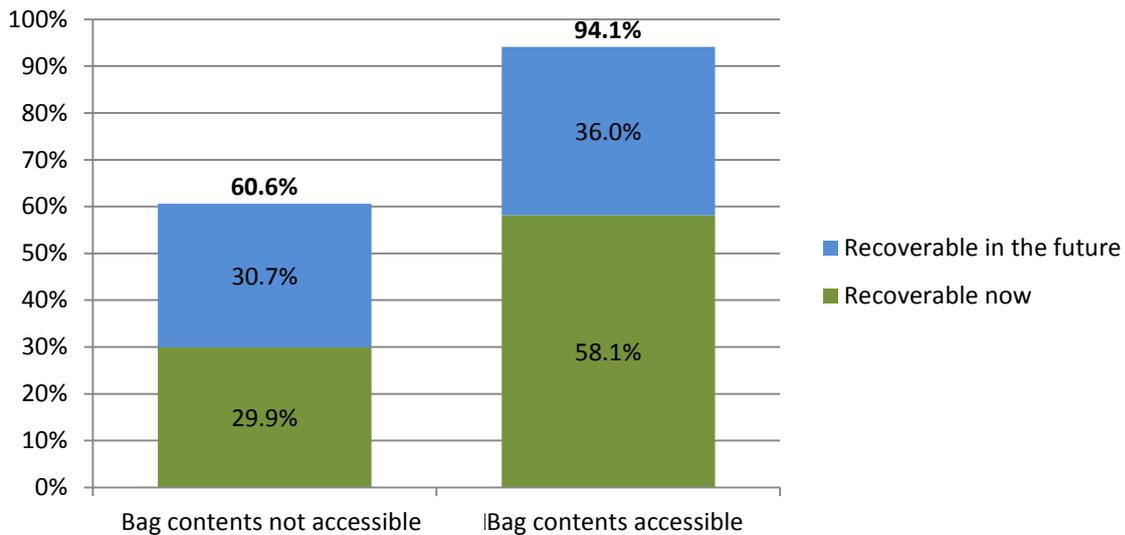
### 5.3 Recoverable materials

Materials in the C&I waste stream have been classified as recyclable now, recyclable in the future, or not recyclable – refer to Section 2.14.

If garbage bags and their contents are considered to be not recyclable, then 30 per cent of C&I waste disposed in the RRA is recoverable now, and 31 per cent is recoverable in the future, making a total of 61 per cent of C&I that is potentially recoverable.

If we assume that the contents of garbage bags can be accessed, then 58 per cent of C&I waste is recoverable now and 36 per cent is recoverable in the future, making a total of 94 per cent of C&I waste that is potentially recoverable.

**Chart 94: RRA – C&I currently disposed that could be recycled**



Refer to Tables AF4 and AF6 in Appendix F for tonnage details.

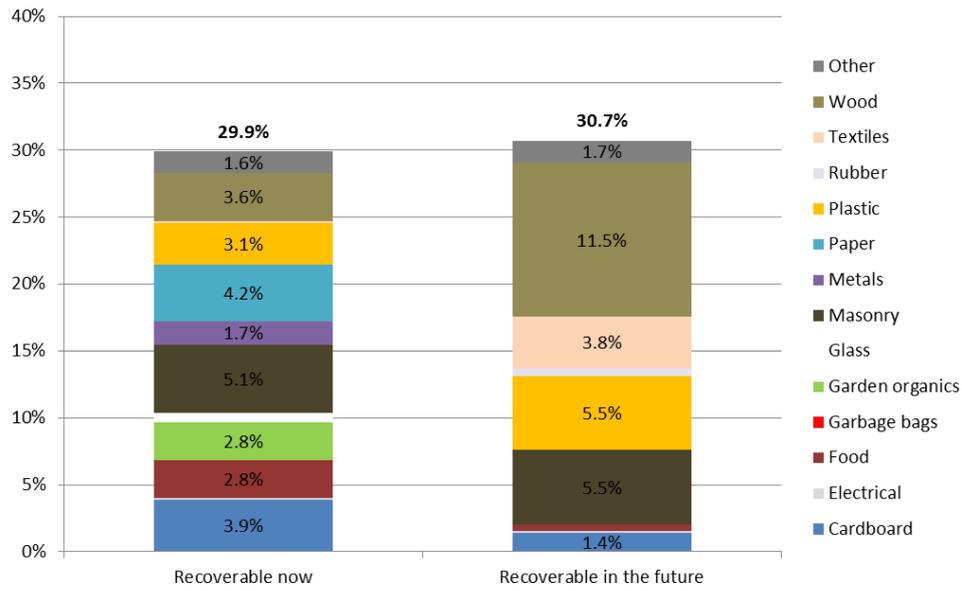
Chart 95 shows more detail of the potential recovery of C&I waste in the RRA, assuming that garbage bag contents are not available for recycling.

The largest current opportunities are the recovery of masonry materials, paper, cardboard and wood. There are small amounts of garden organics, plastic, paper and cardboard, with smaller amounts of plastic, garden organics, metals and food waste also available for recycling.

In the future, the largest opportunities for increased recycling of C&I is treated wood, followed by extra masonry materials, extra plastics, and textiles. Smaller amounts of wet/waxed cardboard and packaged food and other materials (insulation, pulp and sludge) also become available for recovery in the future.

**Chart 95: RRA – detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible**

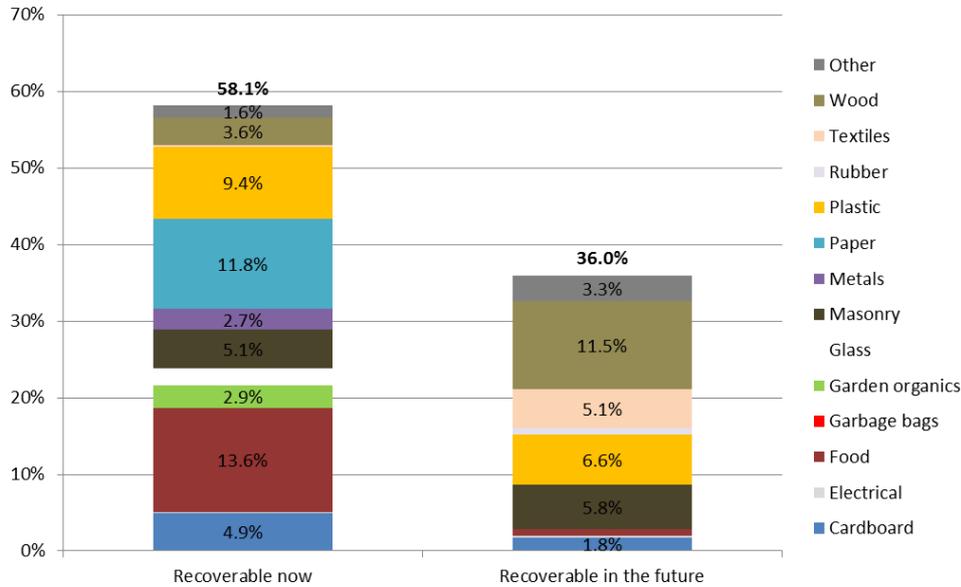
## Disposal-based audit – Main Report



Refer to Tables AF8 and AF10 in Appendix F for tonnage details.

Chart 96 shows more detail of the potential recovery of C&I waste, assuming that garbage bag contents can be made available, which releases food, plastic and paper for recycling. If garbage bag contents can be accessed, the largest current opportunities become the recovery of food, paper and plastic. In the future, garbage bag contents add an extra five per cent recovery potential. The largest opportunity is treated wood, followed by extra plastic, masonry and textiles.

**Chart 96: RRA – detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible**

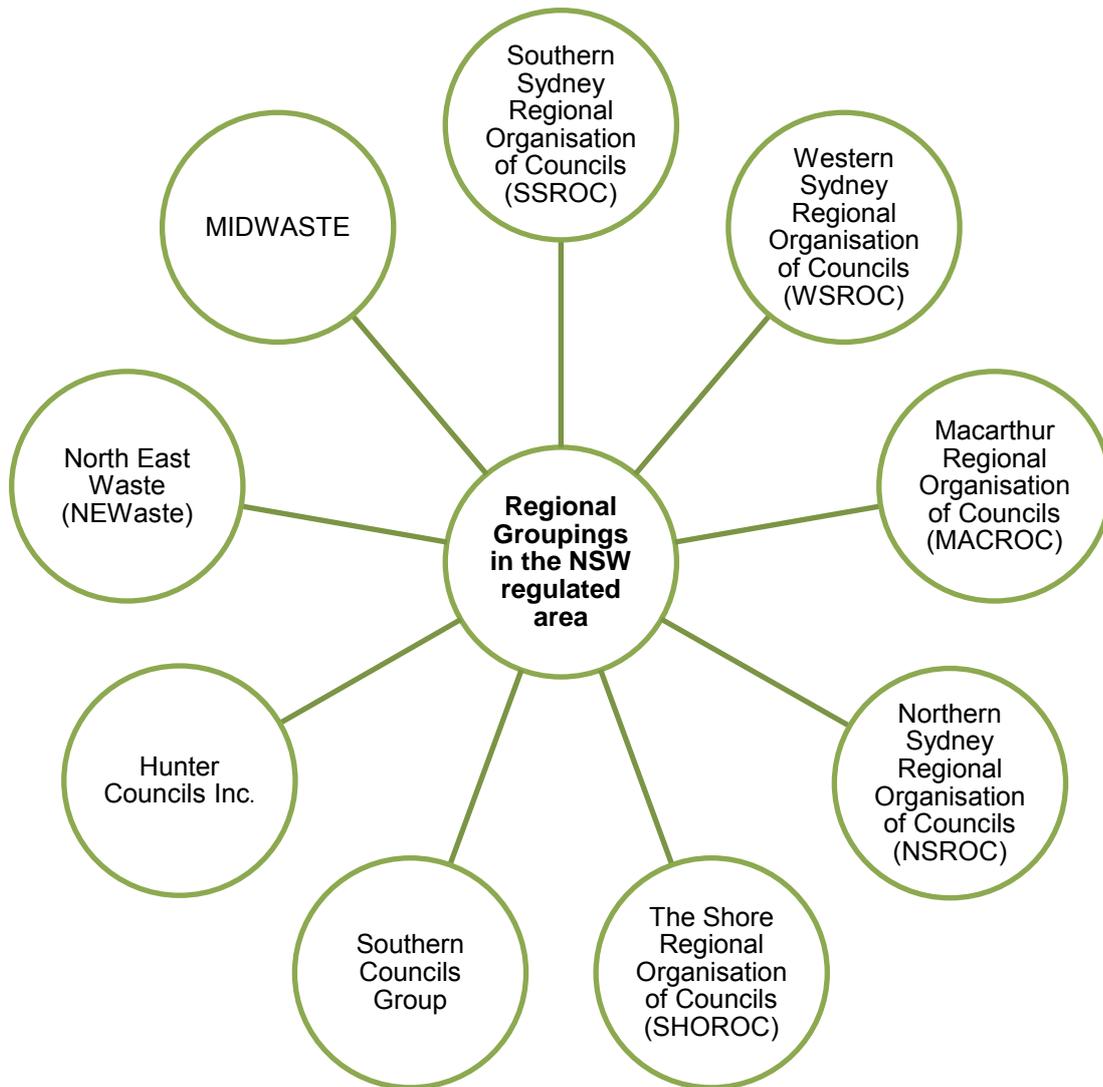


Refer to Tables AF12 and AF14 in Appendix F for tonnage details.

## 6. Results: Regional groupings

NSW EPA has grouped local government areas into a number of regional groups to develop regional waste strategies, as shown below.

**Figure 23: Regional groupings in the NSW regulated area**

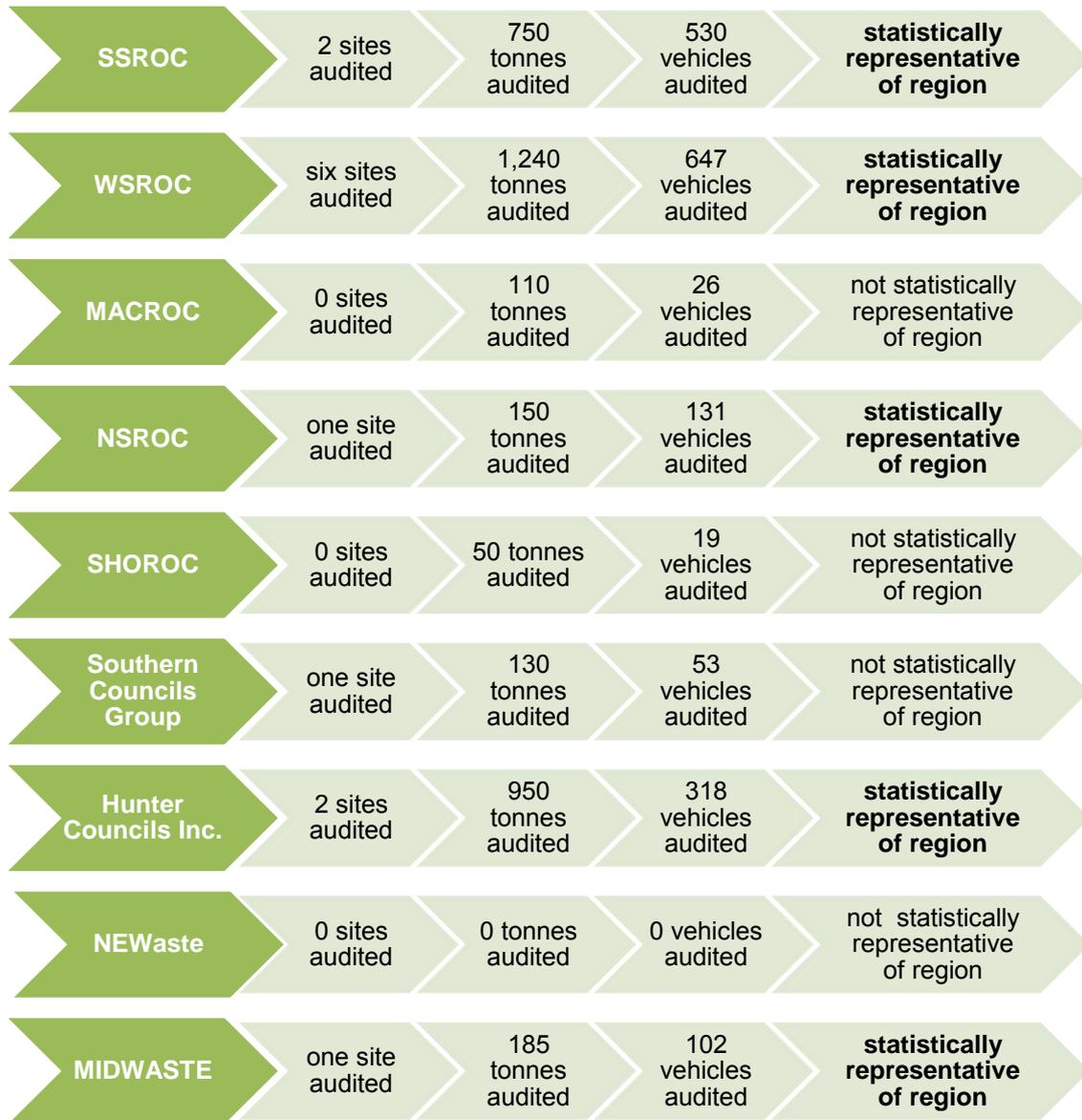


To make conclusions about the waste composition of these regions from this audit, it is necessary to determine whether enough data was gathered from each region to form a statistically valid profile of each region's waste.

Since the audit is strongly representative of the three regulated areas, only the regional groupings of council areas that fall within the regulated areas from where sufficient number of C&I loads were audited should be targeted for data analysis. This meant a regional data analysis should be conducted only for the regions where the number of vehicles audited exceeded 100.

Figure 24 shows each regional grouping, how many sites were audited in the region, how many of the tonnes and vehicles audited were sourced (i.e. originated/generated) from the region, and whether the data obtained from this audit can accurately represent the region (i.e. whether the number of vehicles audited exceeds 100).

**Figure 24: Statistical validity of analysing regional groupings from this audit**



For regions where the audit data is statistically valid, an analysis of results has been provided in this section however caution should be exercised as discussed in the statistical analysis section.

Further information on C&I waste generated in these regions can be found in the Generator Site Assessment Report – a separate report detailing the composition of waste at the point of generation in commercial and industrial premises.

## 6.1 Southern Sydney Regional Organisation of Councils (SSROC)

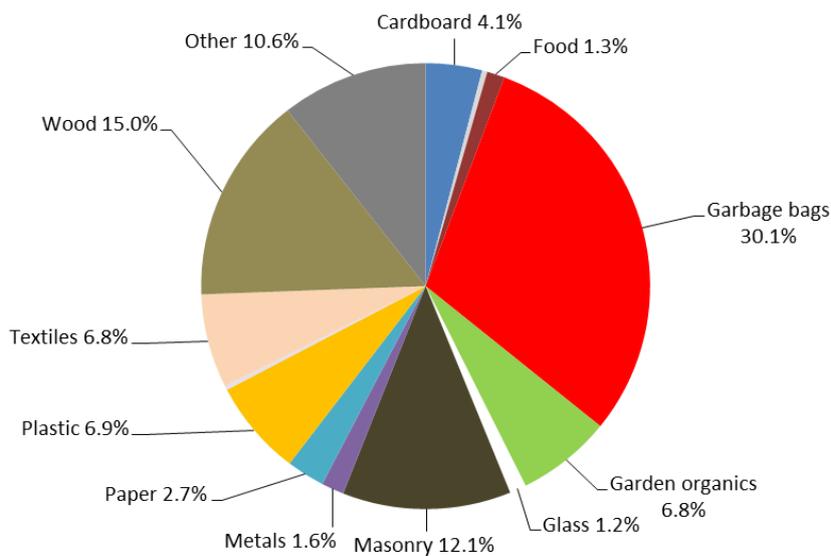
### 6.1.1 SSROC waste composition

The main components of C&I waste generated in SSROC are garbage bags (30.1 per cent), wood (15 per cent), masonry (12.1 per cent) and other materials (10.6 per cent – such as fines, floc and pulp).

**Table 46: Composition of C&I waste - SSROC - garbage bags as a category**

Material	Tonnes audited	% of waste stream
Garbage bags	230	30.1%
Wood	110	15%
Masonry	90	12.1%
Other	80	10.6%
Plastic	52	6.9%
Garden organics	50	6.8%
Textiles	50	6.8%
Cardboard	30	4.1%
Paper	20	2.7%
Metals	10	1.6%
Food	10	1.3%
Glass	10	1.2%
Electrical	3	0.4%
Rubber	2	0.3%
<b>Total</b>	<b>750</b>	<b>100%</b>

**Chart 97: SSROC – overall C&I composition – garbage bags as a category**



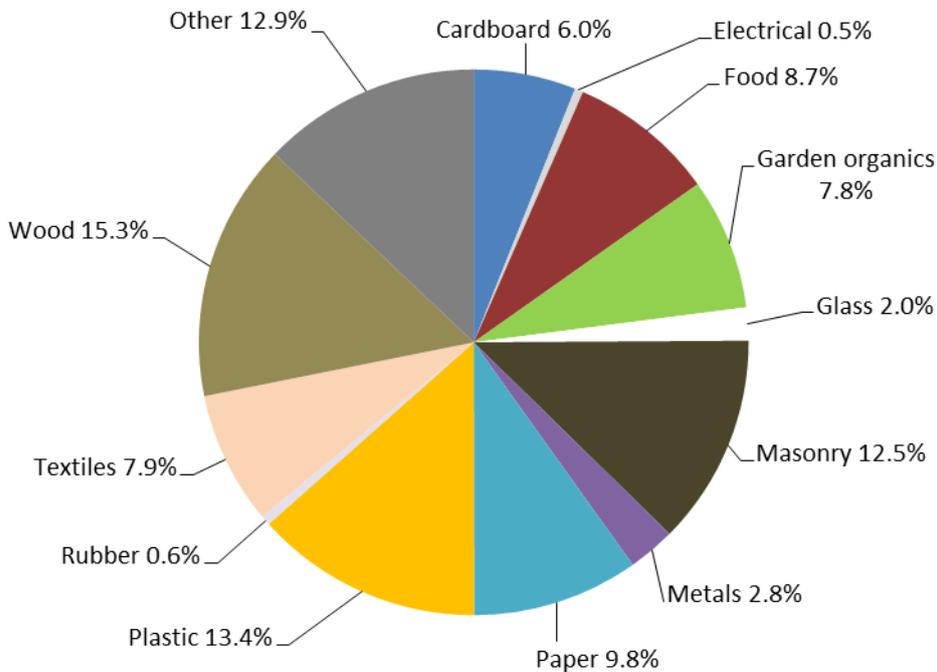
Refer to Table AF37 in Appendix F for detailed material categories and tonnages.

**Table 47: SSROC C&I waste composition – garbage bags distributed**

When the contents of garbage bags are distributed, the main C&I waste materials are wood (15.3 per cent), plastic (13.4 per cent), other materials (12.9 per cent) and masonry (12.5 per cent).

Material	Tonnes audited	% of waste stream
Wood	110	15.3%
Plastic	100	13.4%
Other	100	12.9%
Masonry	90	12.5%
Paper	70	9.8%
Food	70	8.7%
Textiles	60	7.9%
Garden organics	60	7.8%
Cardboard	40	6%
Metals	20	2.8%
Glass	20	2%
Rubber	4	0.6%
Electrical	4	0.5%
<b>Total</b>	<b>750</b>	<b>100%</b>

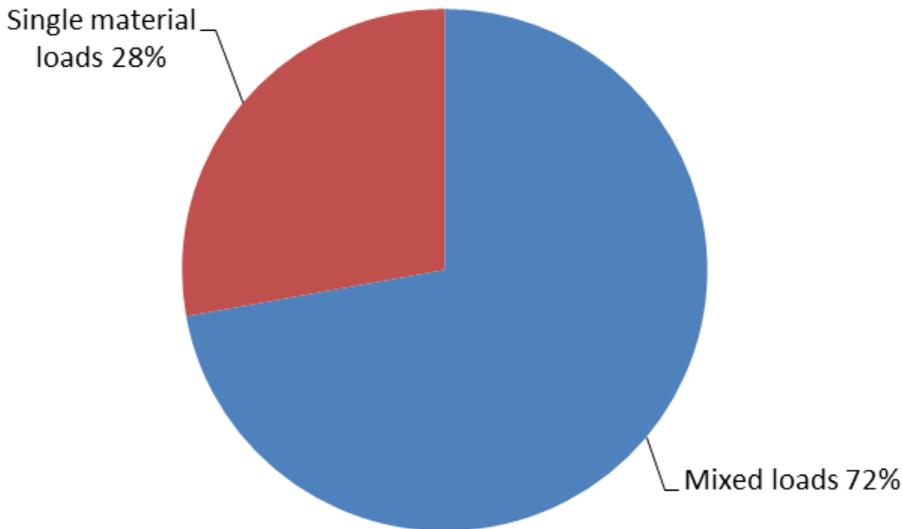
**Chart 98: SSROC - C&I waste composition - garbage bags distributed**



Refer to Table AF37 in Appendix F for detailed material categories and tonnages.

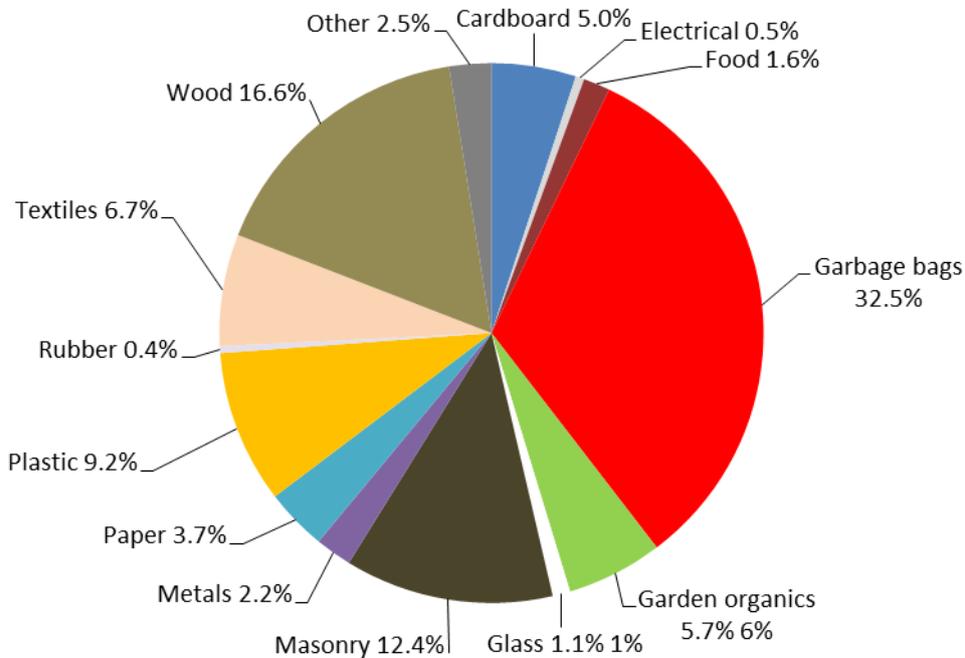
**Chart 99: SSROC – mixed vs single material loads**

Seventy-two per cent of C&I waste generated in SSROC arrives at the disposal point in mixed loads; 28 per cent arrives as single-material loads (where one material makes up 90 per cent or more of the whole load).



**Chart 100: SSROC – composition of mixed C&I waste, garbage bags separate**

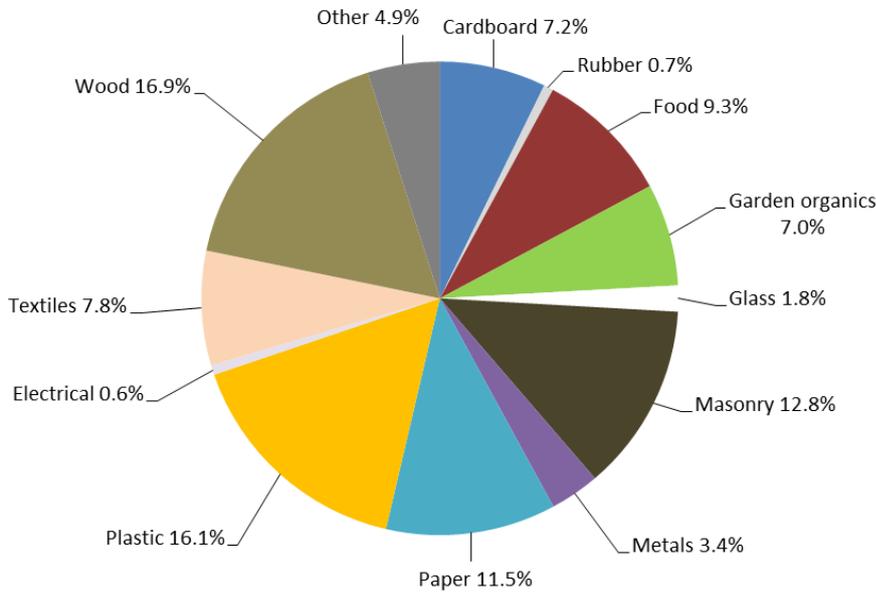
Mixed loads of C&I waste generated in SSROC comprise mainly garbage bags (32.5 per cent), wood (16.6 per cent), masonry (12.4 per cent) and plastic (9.2 per cent).



Refer to Tables AF34 and AF38 in Appendix F for detailed material categories and tonnages.

**Chart 101: SSROC – composition of mixed C&I waste, garbage bags distributed**

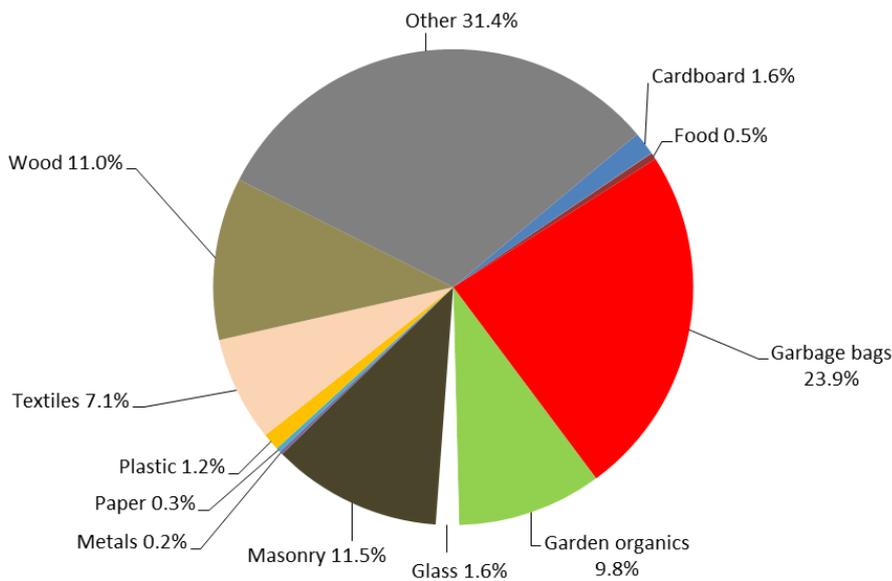
When the contents of the garbage bags are distributed, the main components of C&I waste are wood (16.9 per cent), plastic (16.1 per cent), masonry (12.8 per cent) and paper (11.5 per cent).



Refer to Tables AF35 and AF38 in Appendix F for detailed material categories and tonnages.

**Chart 102: SSROC – composition of single material C&I waste**

The most common types of single-material loads are loads of other materials (31.4 per cent – such as fines and floc), garbage bags (23.9 per cent), masonry (11.5 per cent), and wood (11 per cent).



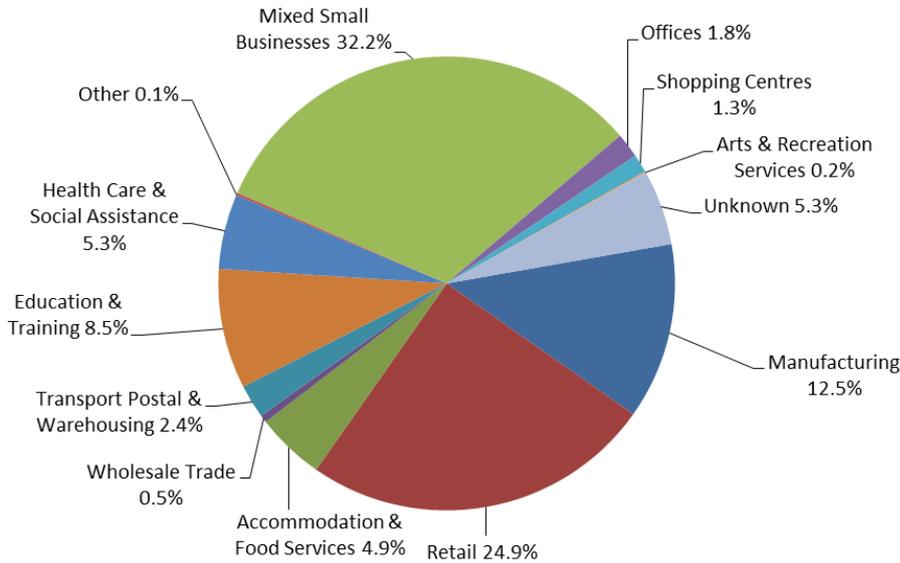
Refer to Tables AF36 and AF39 in Appendix F for detailed material categories and tonnages.

### 6.1.2 SSROC waste generation by industry sector

The industry sectors in the SSROC that dispose of the most C&I waste are mixed small businesses (29 per cent of the C&I disposed by SSROC), retail (20 per cent) and manufacturing (15 per cent).

**Chart 103: SSROC – C&I mixed loads generation by industry sector**

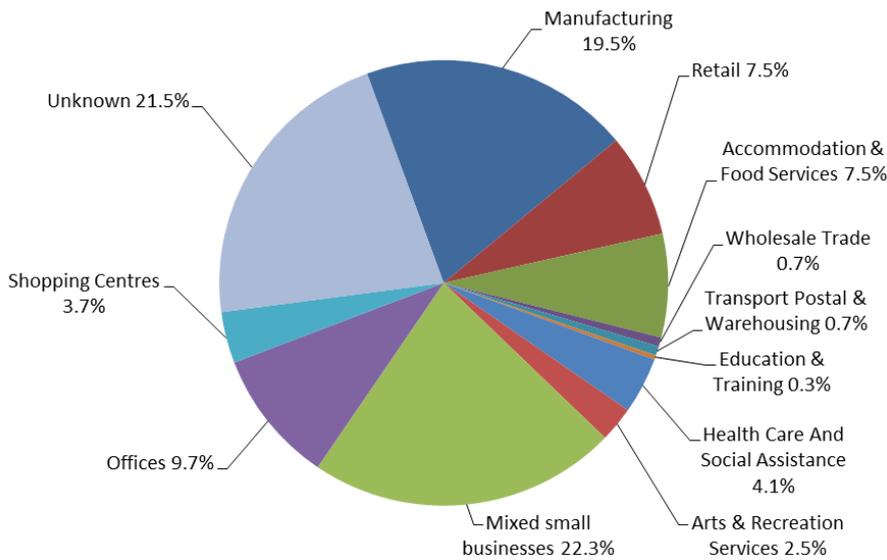
Mixed loads are mainly generated by mixed small businesses, retail and manufacturing.



Refer to Table AF68 in Appendix F for detailed material categories and tonnages.

**Chart 104: SSROC – C&I single material loads generation by industry sector**

Single-material loads are mainly generated by mixed small businesses and manufacturing, with a large percentage coming from unknown sectors.

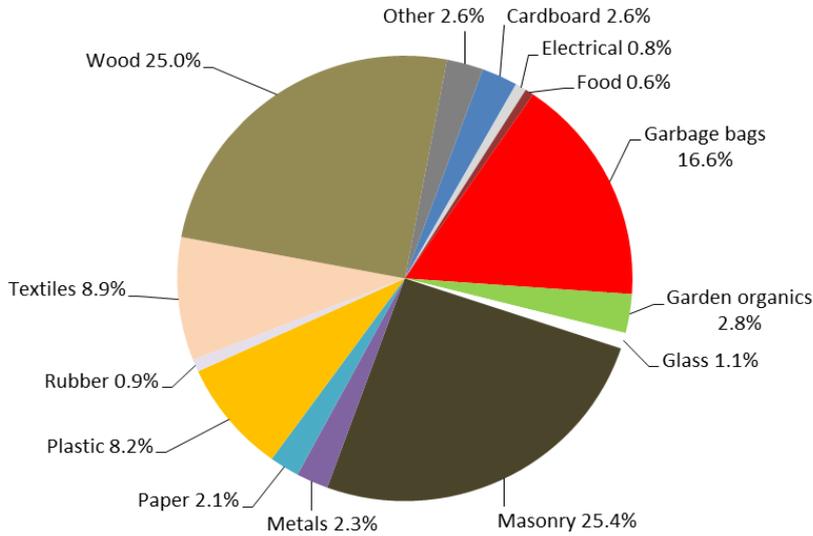


Refer to Table AF70 in Appendix F for detailed material categories and tonnages.

**Mixed small businesses**

**Chart 105: SSROC – composition of mixed C&I loads from mixed small businesses**

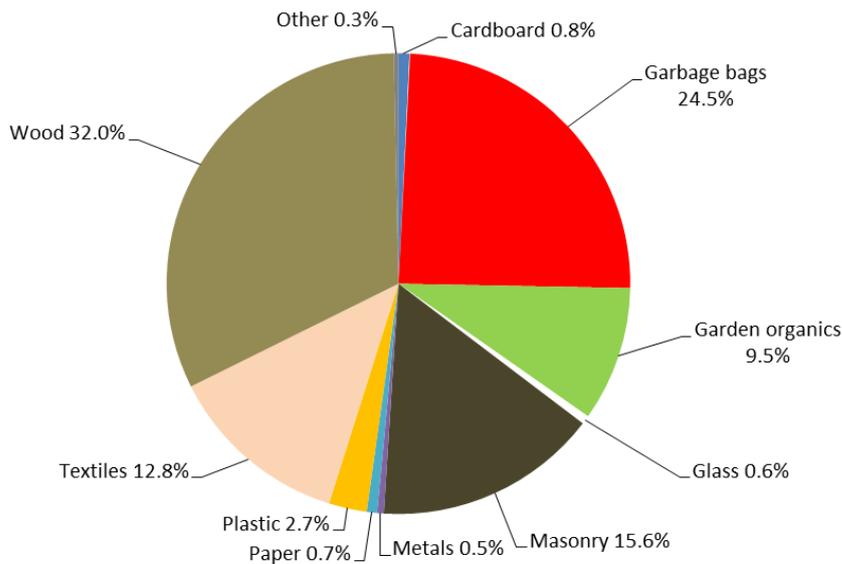
Mixed loads of C&I waste from mixed small businesses in SSROC contain mainly masonry (25.4 per cent), wood (25 per cent), garbage bags (16.6 per cent) and textiles (8.9 per cent).



Refer to Table AF87 in Appendix F for detailed material categories and tonnages.

**Chart 106: SSROC – composition of single-material C&I loads from mixed small businesses**

Single-material loads from mixed small businesses are mainly loads of wood (32 per cent), garbage bags (25 per cent), masonry (16 per cent), textiles (13 per cent) or garden organics (10 per cent).

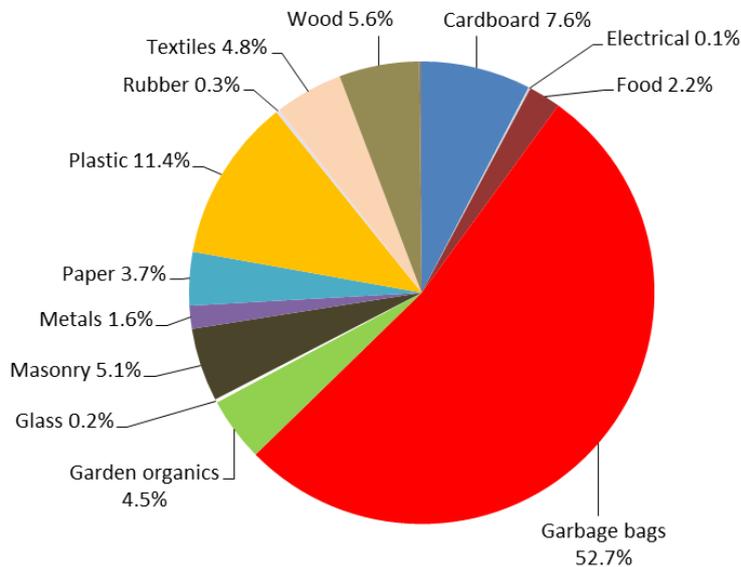


Refer to Table AF88 in Appendix F for detailed material categories and tonnages.

**Retail**

**Chart 107: SSROC – composition of mixed C&I loads from the retail sector**

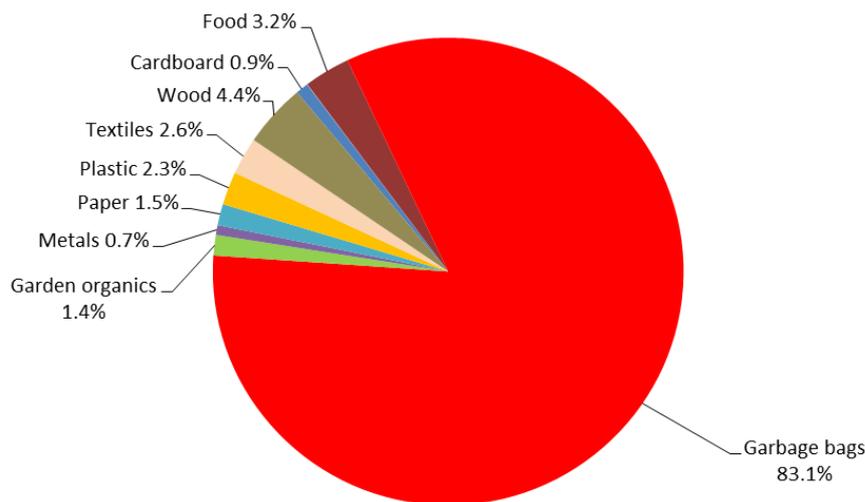
Mixed loads of C&I waste from the retail sector in SSROC contain mainly garbage bags (52.7 per cent), plastic (11.4 per cent), cardboard (7.6 per cent) and wood (5.6 per cent).



Refer to Table AF99 in Appendix F for detailed material categories and tonnages.

**Chart 108: SSROC – composition of single-material C&I loads from the retail sector**

Single-material C&I loads from the retail sector in SSROC are mainly loads of garbage bags (83.1 per cent). There are also loads of wood (4.4 per cent), food (3.2 per cent) and textiles (2.6 per cent).

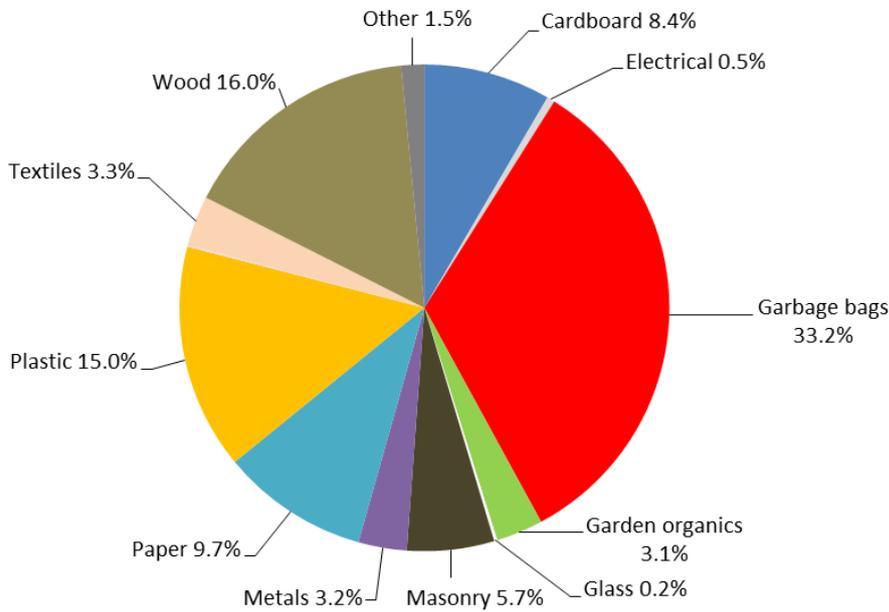


Refer to Table AF100 in Appendix F for detailed material categories and tonnages.

## Manufacturing

**Chart 109: SSROC – composition of mixed C&I loads from manufacturing**

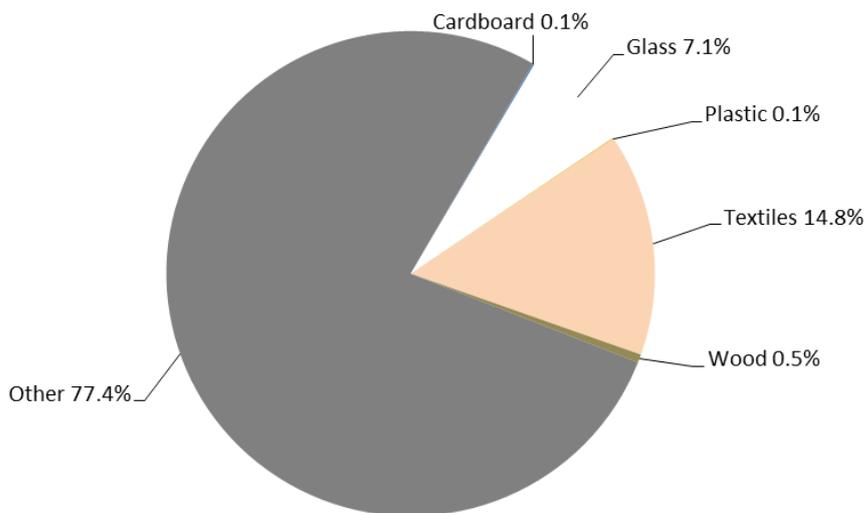
Mixed loads of C&I waste from the manufacturing sector in the SSROC contain mainly garbage bags (33.2 per cent), wood (16 per cent), plastic (15 per cent) and paper (9.7 per cent).



Refer to Table AF75 in Appendix F for detailed material categories and tonnages.

**Chart 110: SSROC – composition of single material C&I loads from manufacturing**

Single-material C&I loads from the manufacturing sector in SSROC mainly consist of other material – such as fines (77.6 per cent), cardboard and plastic – textiles (14.8 per cent) and glass (7.1 per cent).



Refer to Table AF76 in Appendix F for detailed material categories and tonnages. The category 'other' shown in Chart 110 includes cardboard (0.1%) and plastic (0.1%).

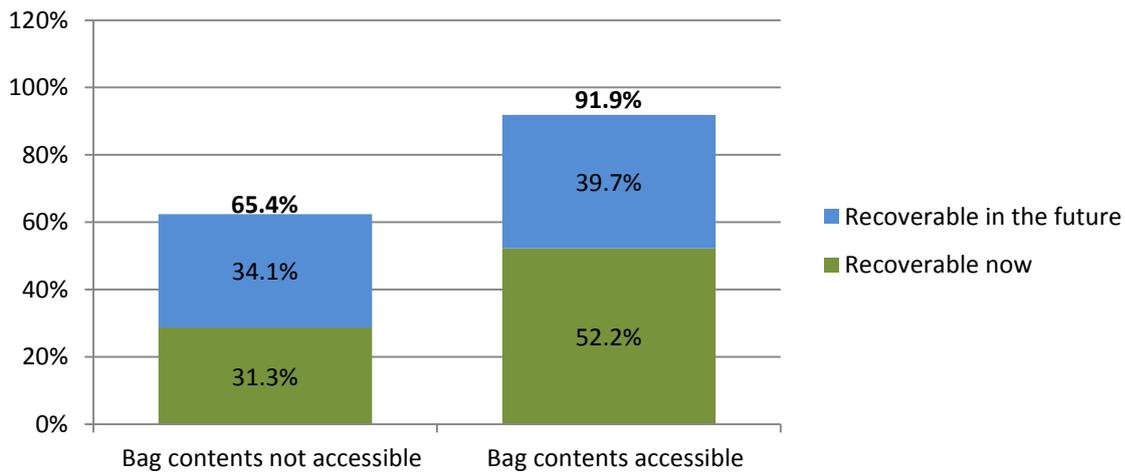
### 6.1.3 SSROC recoverable materials

Materials in the C&I waste stream have been classified as recyclable now, recyclable in the future, or not recyclable – refer to Section 2.14.

If garbage bags and their contents are considered to be not recyclable, then 28.7 per cent of C&I waste disposed from SSROC is recoverable now, and 33.7 per cent is recoverable in the future, making a total of 62.4 per cent of C&I that is potentially recoverable.

If we assume that the contents of garbage bags can be accessed, then 52.2 per cent of C&I waste is recoverable now, and 39.7 per cent is recoverable in the future, making a total of 91.9 per cent of C&I waste that is potentially recoverable.

**Chart 111: SSROC – C&I currently disposed that could be recycled**



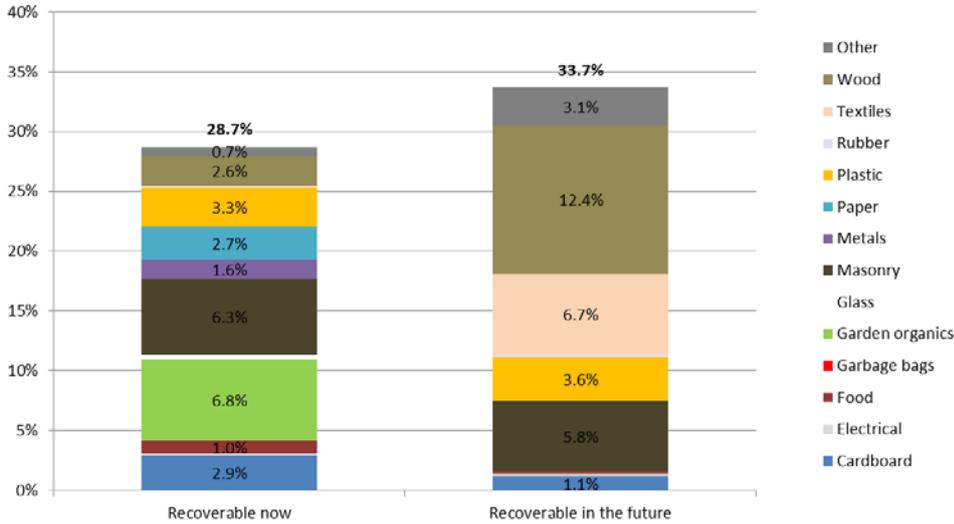
Refer to Tables AF5 and AF7 in Appendix F for tonnage details.

Chart 112 shows more detail of the potential recovery of C&I waste from SSROC, assuming that garbage bag contents are not available for recycling.

The largest current opportunities are the recovery of masonry materials and garden organics. There are small amounts of garden organics, plastic, paper and cardboard, with smaller amounts of plastic, cardboard, paper and wood also available for recycling.

In the future, the largest opportunities for increased recycling of C&I is treated wood, followed by textiles, extra masonry materials and extra plastic. Smaller amounts of other materials (insulation, pulp and sludge) also become available for recovery in the future.

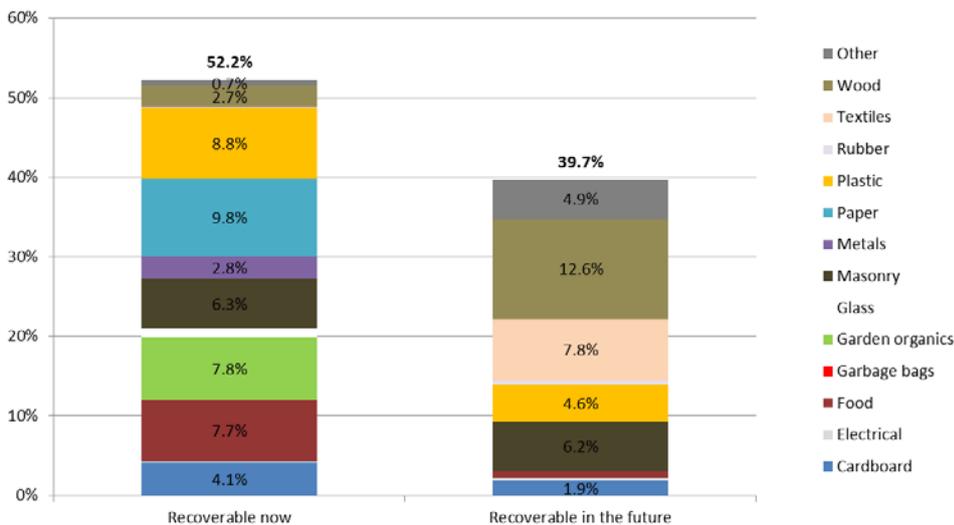
**Chart 112: SSROC – detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible**



Refer to Tables AF9 and AF11 in Appendix F for tonnage details.

Chart 113 shows more detail of the potential recovery of C&I waste, assuming that garbage bag contents can be made available, which releases food, plastic and paper for recycling. If garbage bag contents can be accessed, the largest current opportunities become the recovery of paper, plastic, garden organics and food. In the future, garbage bag contents add an extra six per cent recovery potential. The largest future opportunities remain treated wood, textiles and masonry.

**Chart 113: SSROC - detail of C&I waste currently disposed that could be recycled - garbage bag contents accessible**



Refer to Tables AF13 and AF15 in Appendix F for tonnage details.

## 6.2 Western Sydney Regional Organisation of Councils (WSROC)

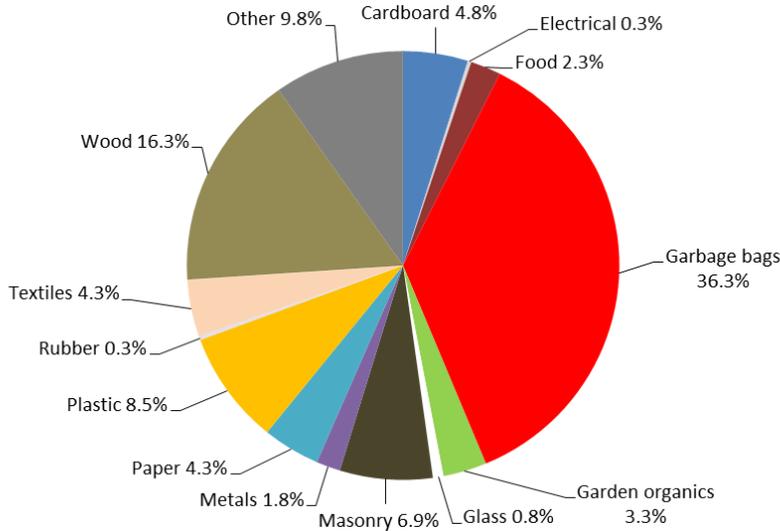
### 6.2.1 WSROC waste composition

The main components of C&I waste generated in WSROC are garbage bags (36.3 per cent), wood (16.3 per cent), other materials (9.8 per cent – such as fines, floc and pulp), and plastic (8.5 per cent).

**Table 48: WSROC - composition of C&I waste - bags as a category**

Material	Tonnes audited	% of waste stream
Garbage bags	450	36.3%
Wood	200	16.3%
Other	120	9.8%
Plastic	110	8.5%
Masonry	90	6.9%
Cardboard	60	4.8%
Textiles	50	4.3%
Paper	50	4.3%
Garden organics	40	3.3%
Food	30	2.3%
Metals	20	1.8%
Glass	10	0.8%
Rubber	3	0.3%
Electrical	3	0.3%
<b>Total</b>	<b>1240</b>	<b>100%</b>

**Chart 114: WSROC – C&I waste composition – garbage bags as a separate category**



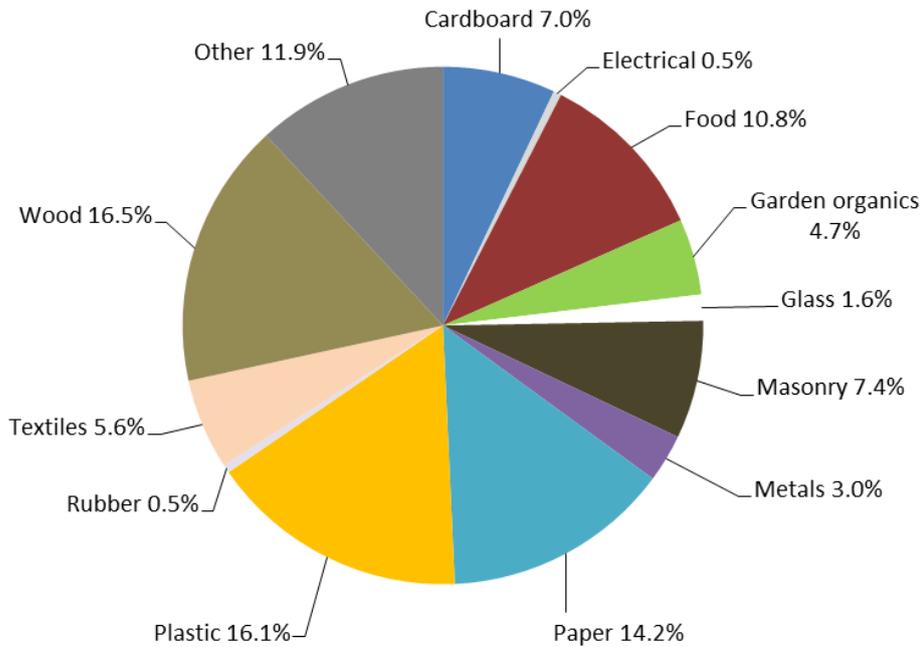
Refer to Table AF43 in Appendix F for information on detailed categories.

When the contents of garbage bags are distributed, the main materials in C&I waste in WSROC are wood (17 per cent), plastic (16 per cent), paper (14 per cent) and other materials (12 per cent).

**Table 49: WSROC - C&I waste composition - garbage bags distributed**

Material	Tonnes audited	% of waste stream
Wood	210	16.5%
Plastic	200	16.1%
Paper	180	14.2%
Other	150	11.9%
Food	130	10.8%
Masonry	90	7.4%
Cardboard	90	7%
Textiles	70	5.6%
Garden organics	60	4.7%
Metals	40	3%
Glass	20	1.6%
Rubber	7	0.5%
Electrical	6	0.5%
<b>Total</b>	<b>1240</b>	<b>100%</b>

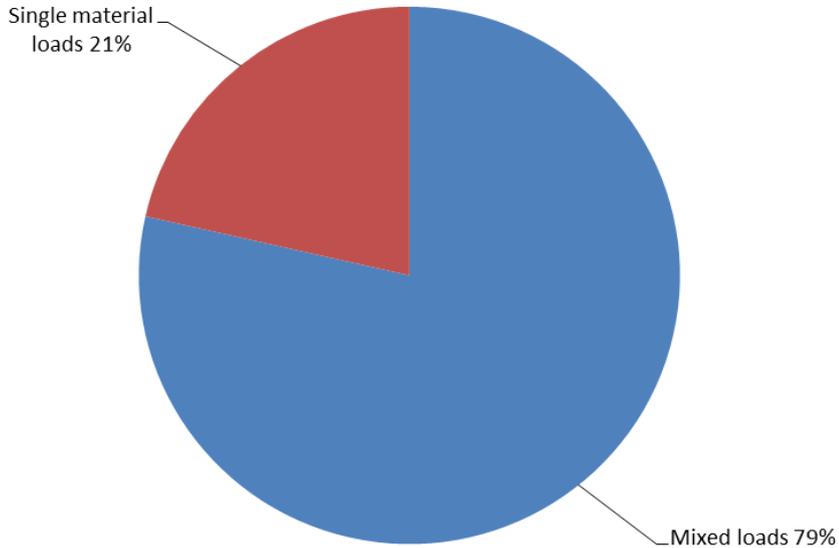
**Chart 115: WSROC - C&I waste composition - garbage bags distributed**



Refer to Table AF43 in Appendix F for information on detailed categories.

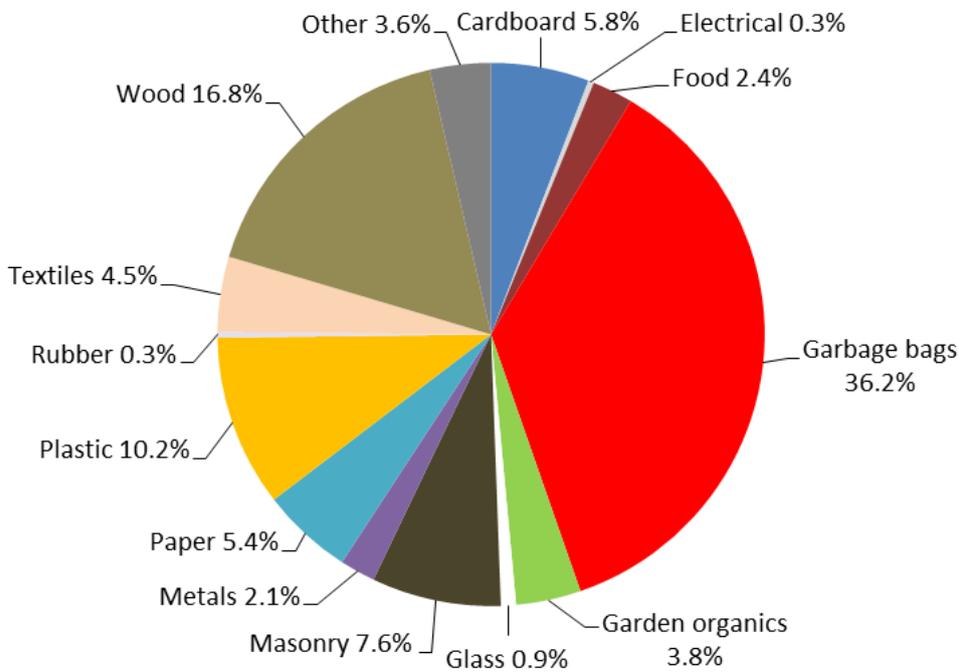
**Chart 116: WSROC – mixed vs single material loads**

Seventy-nine per cent of C&I waste generated in WSROC arrives at the disposal point in mixed loads; 21 per cent arrives as single-material loads (where one material makes up 90 per cent or more of the whole load).



**Chart 117: WSROC – composition of mixed C&I waste, garbage bags as a separate category**

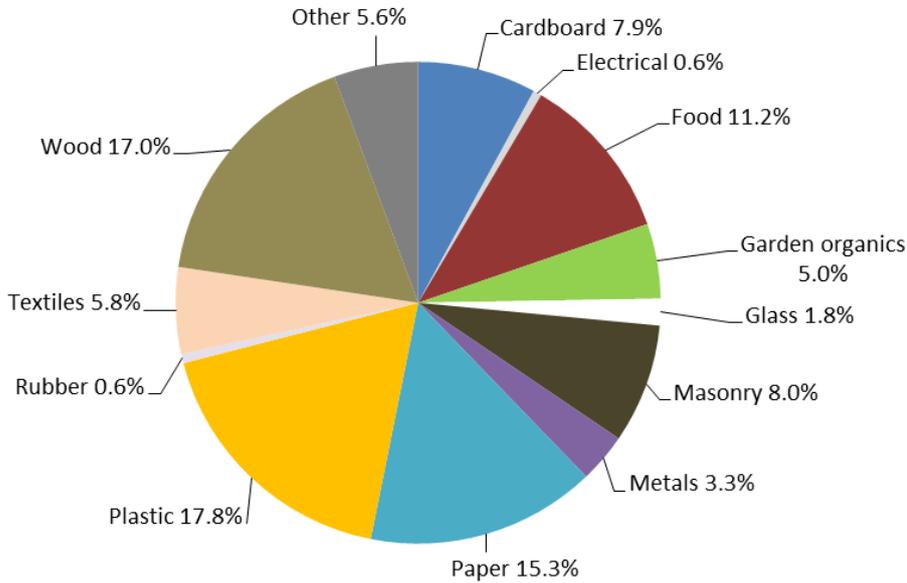
Mixed loads of C&I waste generated in WSROC comprise mainly garbage bags (36.2 per cent), wood (16.8 per cent), plastic (10.2 per cent) and masonry (7.6 per cent).



Refer to Tables AF40 and AF44 in Appendix F for tonnage details and detailed categories.

**Chart 118: WSROC – composition of mixed C&I waste, garbage bags distributed**

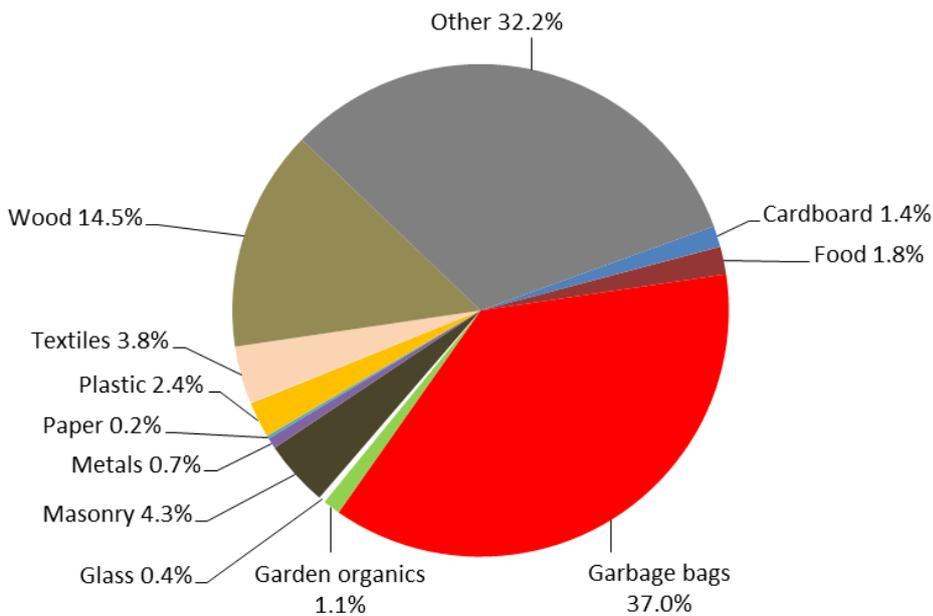
When the contents of the garbage bags are distributed, the main C&I waste components are plastic (17.8 per cent), wood (17 per cent), paper (15.3 per cent) and food (11.2 per cent).



Refer to Tables AF41 and AF44 in Appendix F for tonnage details and detailed categories.

**Chart 119: WSROC – composition of single-material C&I waste**

The most common types of single-material loads are loads of garbage bags (37 per cent), other materials (32 per cent – such as fines and floc) and wood (15 per cent).



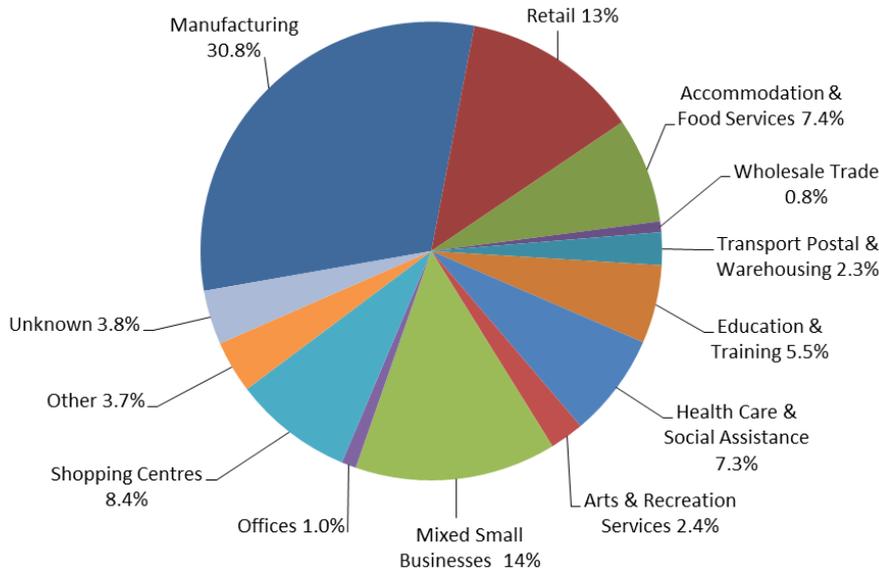
Refer to Tables AF42 and AF45 in Appendix F for tonnage details and detailed categories.

### 6.2.2 WSROC waste generation by industry sector

The sectors that dispose of the most C&I waste are manufacturing (30.8 per cent of the total WSROC waste), mixed small businesses (14.1 per cent) and retail (12.5 per cent).

**Chart 120: WSROC – C&I mixed loads generation by industry sector**

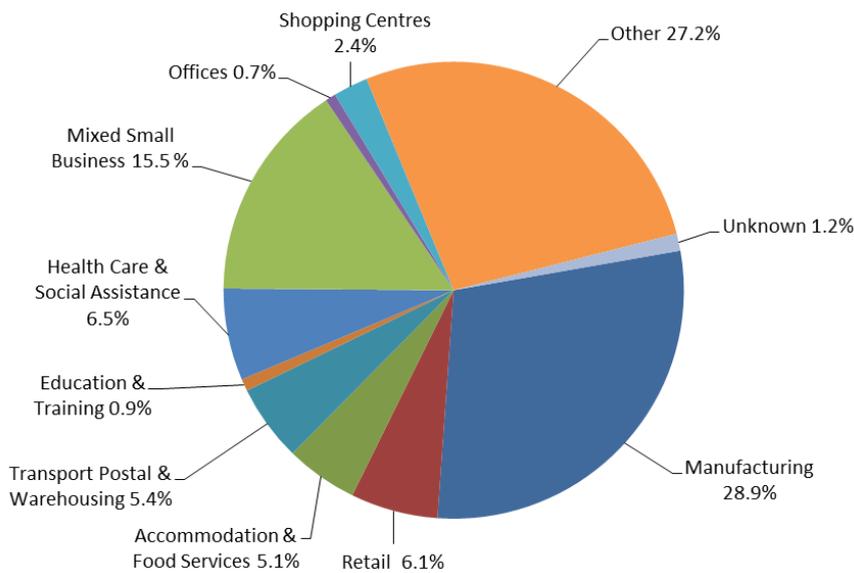
Mixed loads are mainly generated by manufacturing, mixed small businesses and retail.



Refer to Table AF68 in Appendix F for tonnage details.

**Chart 121: WSROC – C&I single material loads generation by industry sector**

Single-material loads are mainly generated by manufacturing, mixed small businesses, and other sectors that do not fit into any of the classifications used.

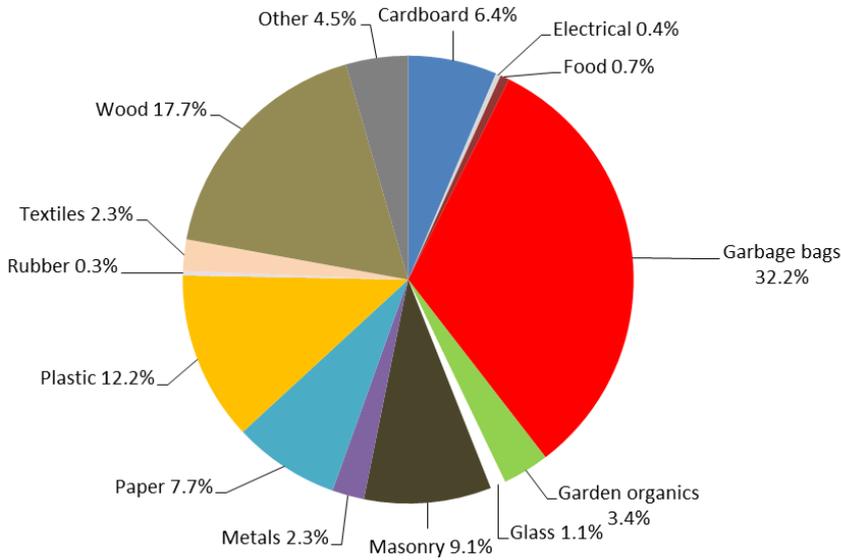


Refer to Table AF70 in Appendix F for tonnage details.

## Manufacturing

**Chart 122: WSROC – composition of mixed C&I loads from manufacturing**

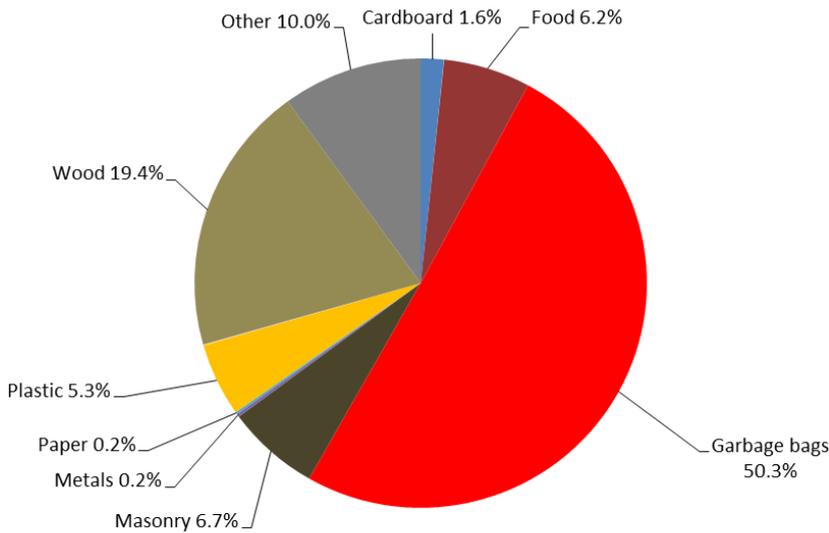
Mixed loads of C&I waste from manufacturing in WSROC contain mainly garbage bags (32.2 per cent), wood (17.7 per cent) and plastics (12.2 per cent).



Refer to Table AF75 in Appendix F for tonnage details.

**Chart 123: WSROC – composition of single material C&I loads from manufacturing**

Single-material loads of C&I waste from the manufacturing sector in WSROC are mainly loads of garbage bags (50.3 per cent) or wood (19.4 per cent).

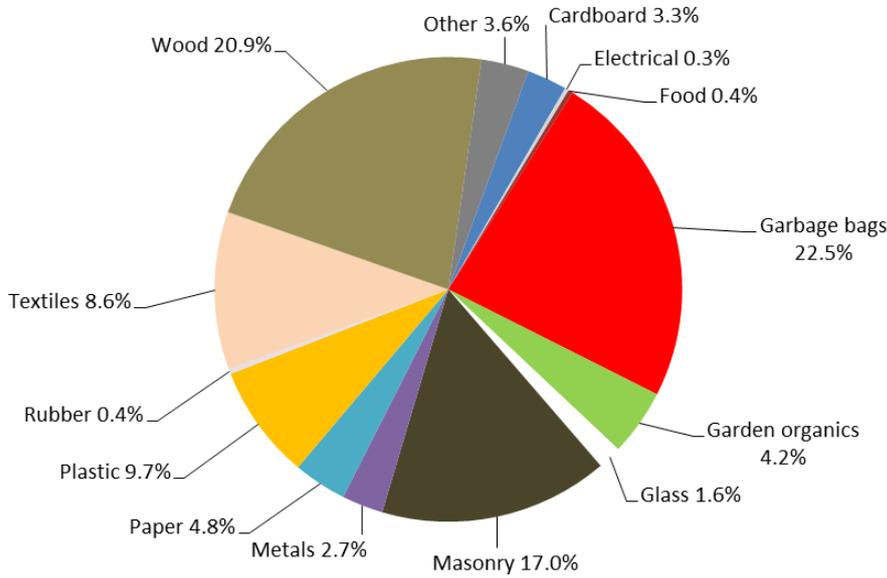


Refer to Table AF76 in Appendix F for tonnage details.

**Mixed small businesses**

**Chart 124: WSROC – composition of mixed C&I loads from mixed small businesses**

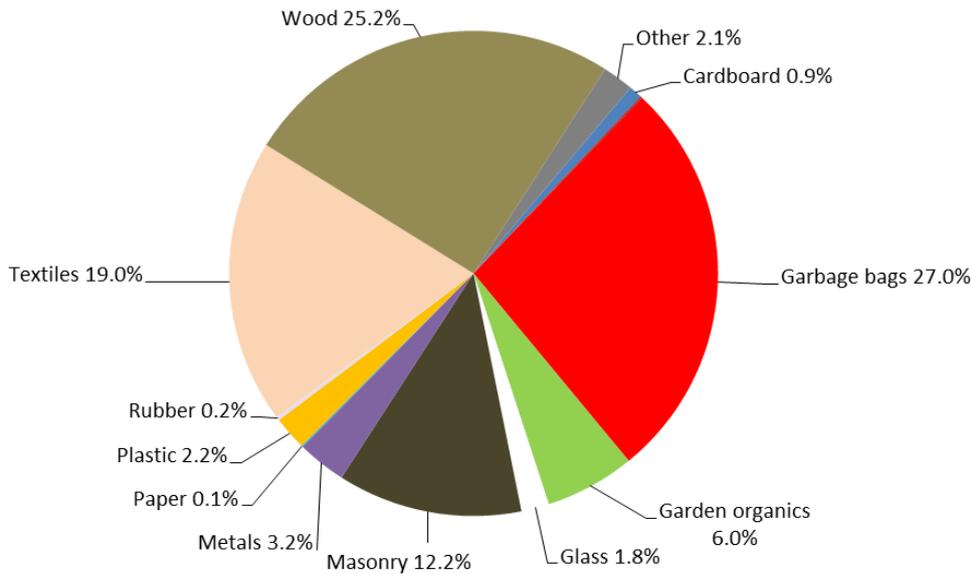
Mixed loads of C&I waste from mixed small businesses in WSROC contain mainly garbage bags (22.5 per cent), wood (20.9 per cent), masonry (17 per cent) and plastic (9.7 per cent).



Refer to Table AF87 in Appendix F for tonnage details.

**Chart 125: WSROC – composition of single-material C&I loads from mixed small businesses**

Single-material loads of C&I waste from mixed small businesses in WSROC are mainly loads of garbage bags (27 per cent), wood (25.2 per cent), textiles (19 per cent) or masonry (12.2 per cent).

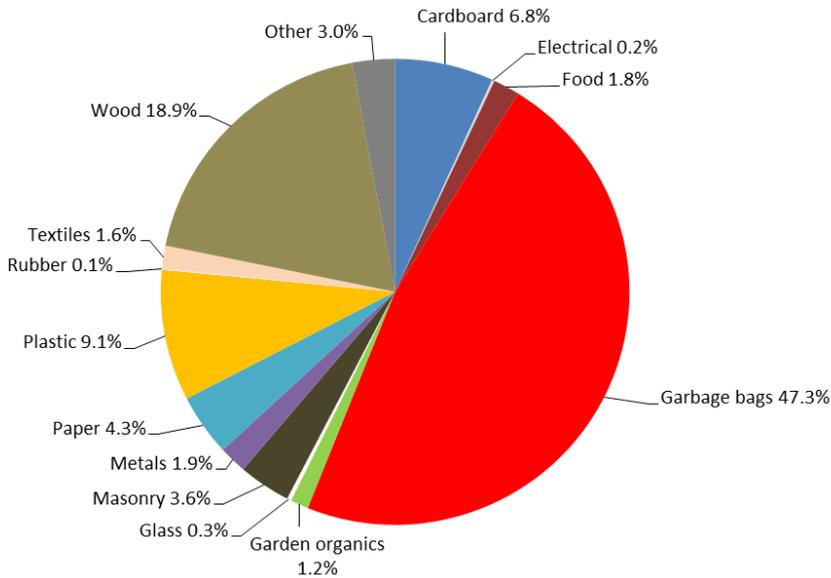


Refer to Table AF88 in Appendix F for tonnage details.

**Retail**

**Chart 126: WSROC – composition of mixed C&I loads from the retail sector**

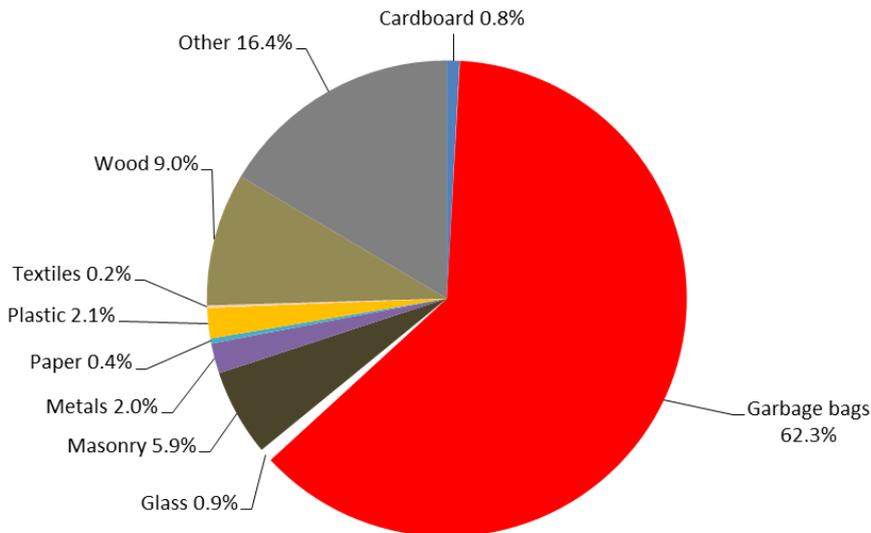
Mixed loads of C&I waste from the retail sector in WSROC contain mainly garbage bags (47.3 per cent), wood (18.9 per cent) and plastic (9.1 per cent).



Refer to Table AF99 in Appendix F for tonnage details.

**Chart 127: WSROC – composition of single-material C&I loads from the retail sector**

Single-material C&I loads from the retail sector in WSROC are mainly loads of garbage bags (62.3 per cent), other materials (16.4 per cent), wood (nine per cent) or masonry (5.9 per cent).



Refer to Table AF100 in Appendix F for tonnage details.

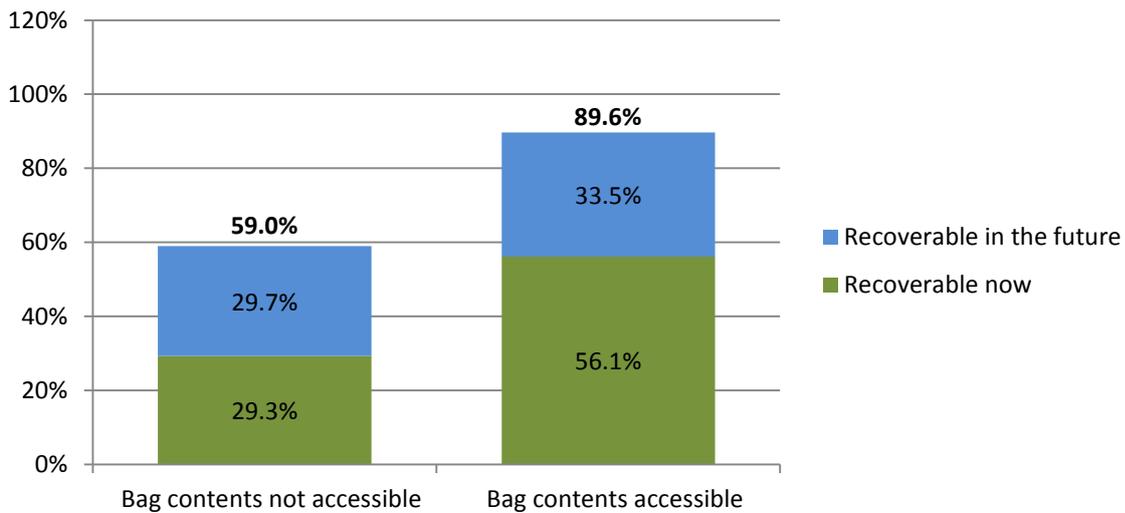
### 6.2.3 WSROC recoverable materials

Materials in the C&I waste stream have been classified as recyclable now, recyclable in the future, or not recyclable – refer to Section 2.14.

If garbage bags and their contents are considered to be not recyclable, then 29.3 per cent of C&I waste disposed from WSROC is recoverable now, and 29.7 per cent is recoverable in the future, making a total of 59 per cent of C&I that is potentially recoverable.

If we assume that the contents of garbage bags can be accessed, then 56.1 per cent of C&I waste is recoverable now and 33.5 per cent is recoverable in the future, making a total of 89.6 per cent of C&I waste that is potentially recoverable.

**Chart 128: WSROC – C&I currently disposed that could be recycled**



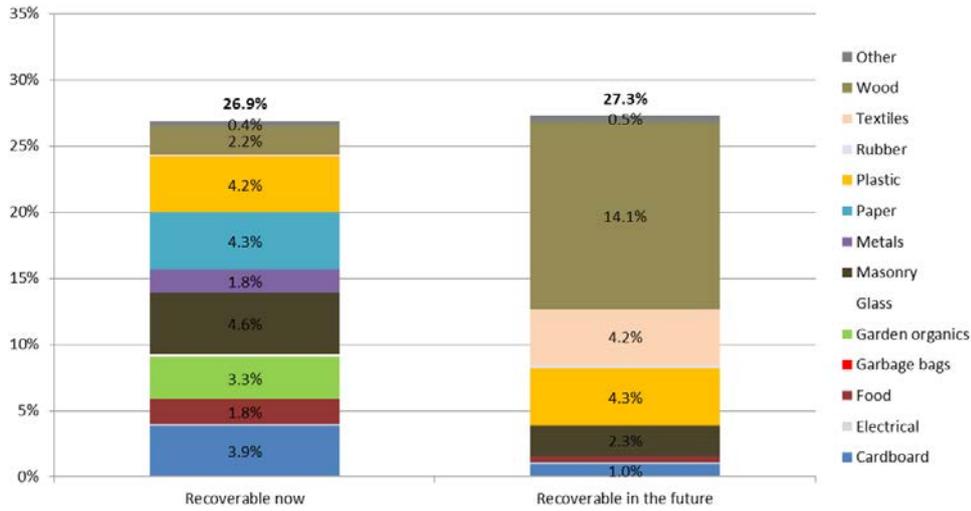
Refer to Tables AF5 and AF7 in Appendix F for tonnage details.

Chart 129 shows more detail of the potential recovery of C&I waste from WSROC, assuming that garbage bag contents are not available for recycling.

The largest current opportunities are the recovery of masonry materials, paper and plastics. There are small amounts of garden organics, plastic, paper and cardboard, with smaller amounts of cardboard, garden organics, wood, metal and food available for recycling.

In the future, the largest opportunities for increased recycling of C&I is treated wood, followed by textiles, extra plastic and extra masonry materials.

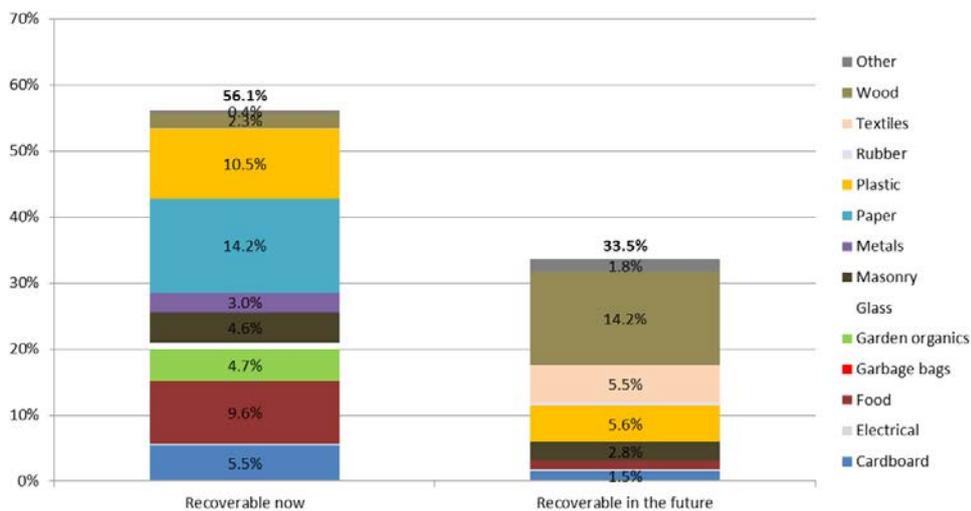
**Chart 129: WSROC – detail of C&I waste currently disposed that could be recycled – garbage bag contents not accessible**



Refer to Tables AF9 and AF11 in Appendix F for tonnage details.

Chart 130 shows more detail of the potential recovery of C&I waste, assuming that garbage bag contents can be made available, which releases food, plastic and paper for recycling. If garbage bag contents can be accessed, the largest current opportunities become the recovery of paper, plastic and food. In the future, garbage bag contents add an extra seven per cent recovery potential. The largest future opportunities are treated wood, plastics and textiles.

**Chart 130: WSROC – detail of C&I waste currently disposed that could be recycled – garbage bag contents accessible**



Refer to Tables AF13 and AF15 in Appendix F for tonnage details.

## 6.3 Northern Sydney Regional Organisation of Councils (NSROC)

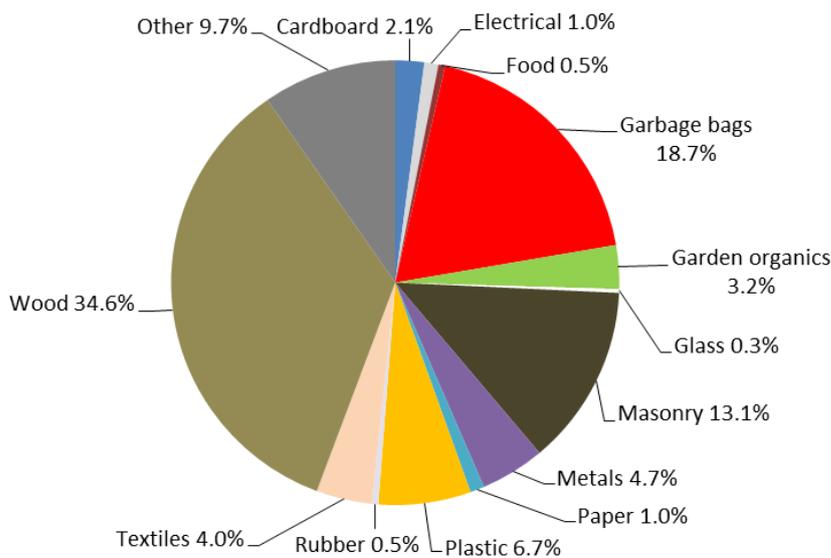
### 6.3.1 NSROC waste composition

The main components of C&I waste in NSROC are wood (34.6 per cent), garbage bags (18.7 per cent), masonry (13.1 per cent) and other materials (such as fines, floc and pulp, 9.7 per cent).

**Table 50: Composition of C&I waste - NSROC - bags as a category**

Material	Tonnes audited	% of waste stream
Wood	50	34.6%
Garbage bags	30	18.7%
Masonry	20	13.1%
Other	10	9.7%
Plastic	10	6.7%
Metals	7	4.7%
Textiles	6	4%
Garden organics	5	3.2%
Cardboard	3	2.1%
Paper	1	1%
Electrical	1	1%
Food	1	0.5%
Rubber	1	0.5%
Glass	0	0.3%
<b>Total</b>	<b>150</b>	<b>100%</b>

**Chart 131: NSROC – overall C&I composition – garbage bags as a category**



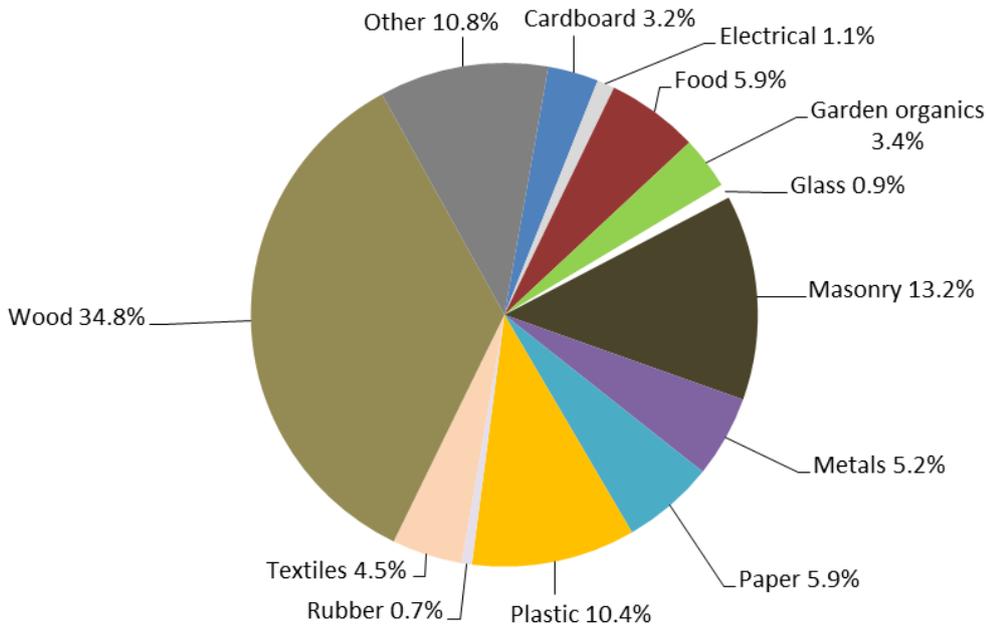
Refer to Table AF49 in Appendix F for detailed material categories and tonnages.

**Table 51: NSROC C&I waste composition - garbage bags distributed**

When the contents of garbage bags are distributed, the main waste materials in NSROC are wood (34.8 per cent), masonry (13.2 per cent), other materials (10.8 per cent) and plastic (10.4 per cent).

Material	Tonnes audited	% of waste stream
Wood	50	34.8%
Masonry	20	13.2%
Other	20	10.8%
Plastic	20	10.4%
Paper	9	5.9%
Food	9	5.9%
Metals	8	5.2%
Textiles	7	4.5%
Garden organics	5	3.4%
Cardboard	5	3.2%
Electrical	2	1.1%
Glass	1	0.9%
Rubber	1	0.7%
<b>Total</b>	<b>145</b>	<b>100%</b>

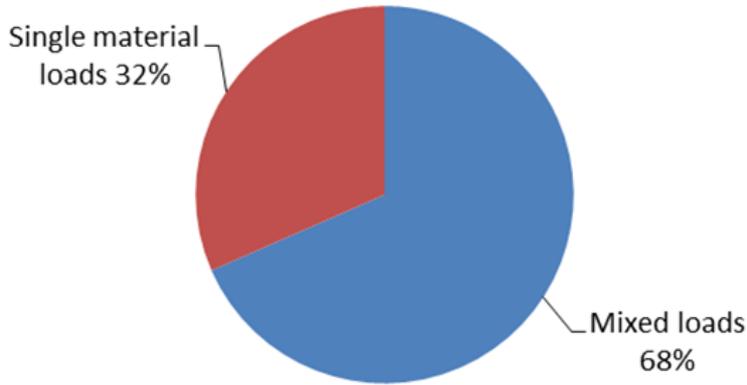
**Chart 132: NSROC - C&I waste composition - garbage bags distributed**



Refer to Table AF49 in Appendix F for detailed material categories and tonnages.

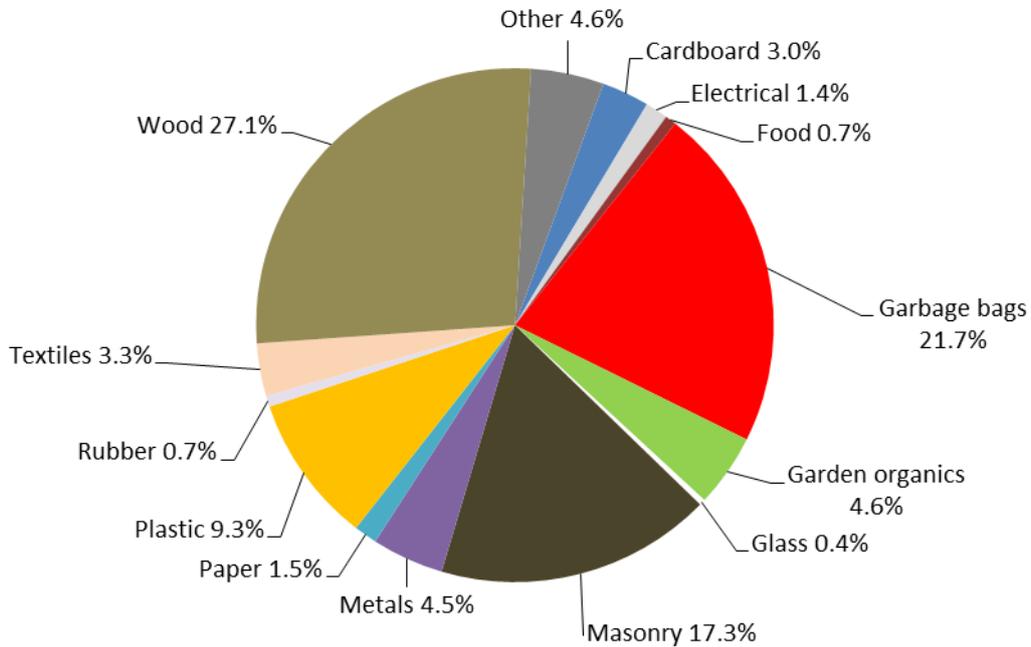
**Chart 133: NSROC - mixed vs single material loads**

Sixty-eight per cent (68 per cent) of C&I waste generated in NSROC arrives at the disposal point in mixed loads; 32 per cent arrives as single-material loads (where one material makes up 90 per cent or more of the whole load).



**Chart 134: NSROC - composition of mixed C&I waste, garbage bags as a separate category**

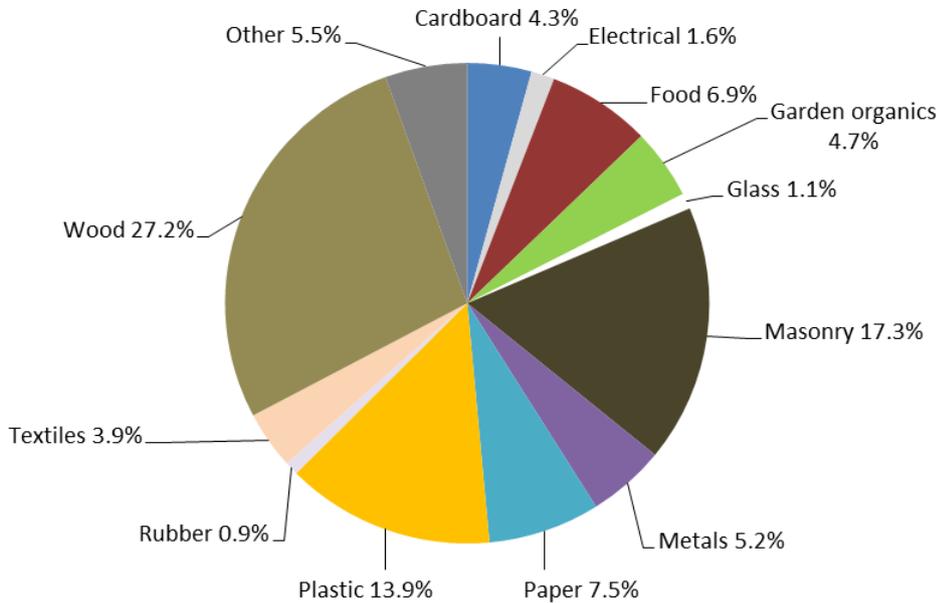
Mixed loads of C&I waste generated in NSROC comprise mainly wood (27.1 per cent), garbage bags (21.7 per cent), masonry (17.3 per cent) and plastic (9.3 per cent).



Refer to Tables AF46 and AF50 in Appendix F for detailed material categories and tonnages.

**Chart 135: NSROC - composition of mixed C&I waste, garbage bags distributed**

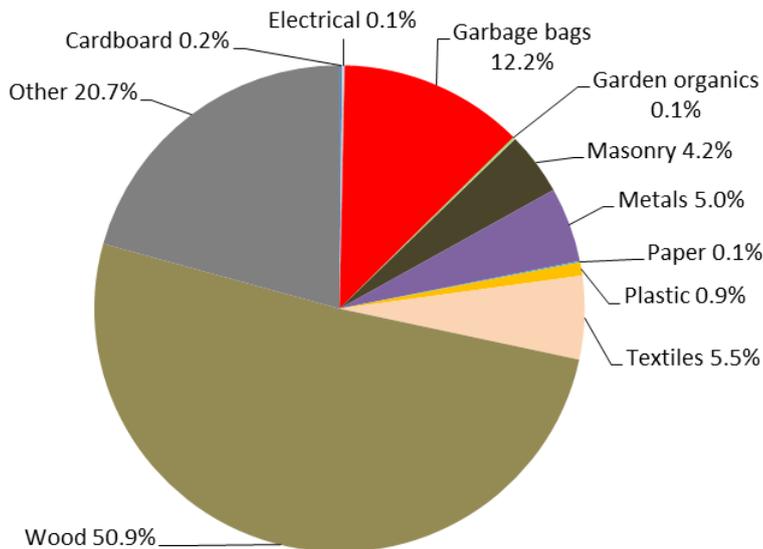
When the contents of the garbage bags are distributed, the main components of C&I waste from NSROC are wood (27.2 per cent), masonry (17.3 per cent) and plastic (13.9 per cent).



Refer to Tables AF47 and AF50 in Appendix F for detailed material categories and tonnages.

**Chart 136: NSROC - composition of single material C&I waste**

The most common types of single-material loads are loads of wood (50.9 per cent), other materials (20.7 per cent – such as fines and floc) and garbage bags (12.2 per cent). There are also single loads of textiles, metals and masonry.



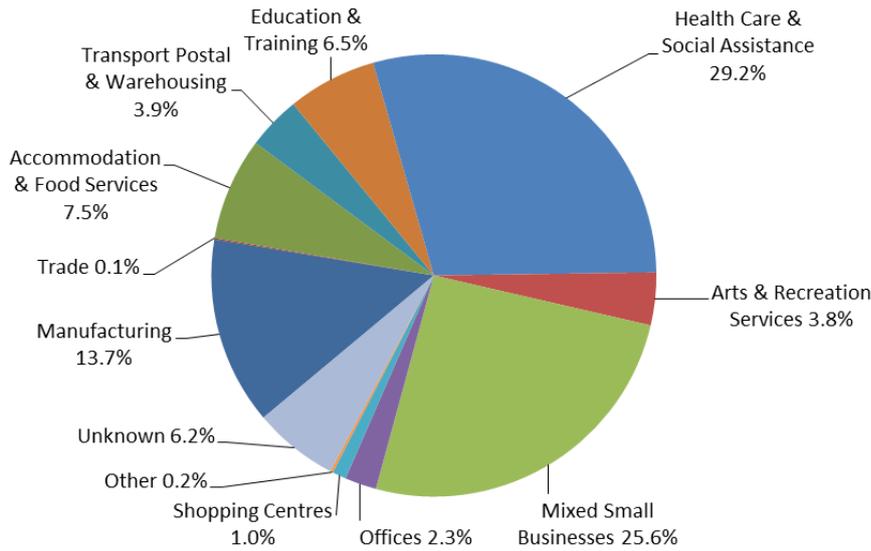
Refer to Tables AF48 and AF51 in Appendix F for detailed material categories and tonnages.

### 6.3.2 NSROC waste generation by industry sector

The industry sectors in the NSROC that dispose of the most C&I waste are healthcare and social assistance (33 per cent of the C&I disposed by NSROC), mixed small businesses (24 per cent) and manufacturing (16 per cent).

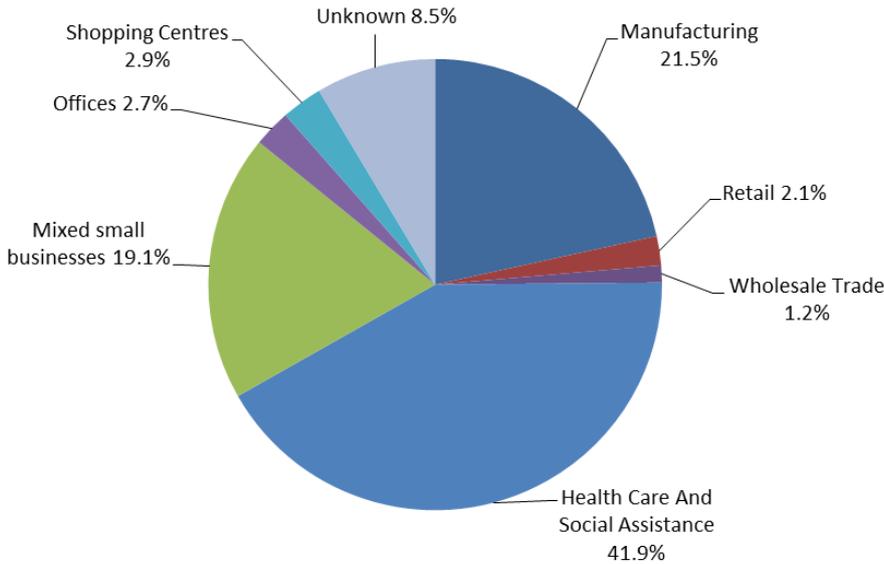
Both mixed loads and single-material loads are mainly generated by healthcare/social assistance, mixed small businesses and manufacturing.

**Chart 137: NSROC - C&I mixed loads generation by industry sector**



Refer to Table AF68 in Appendix F for tonnage details.

**Chart 138: NSROC - C&I single-material loads generation by industry sector**

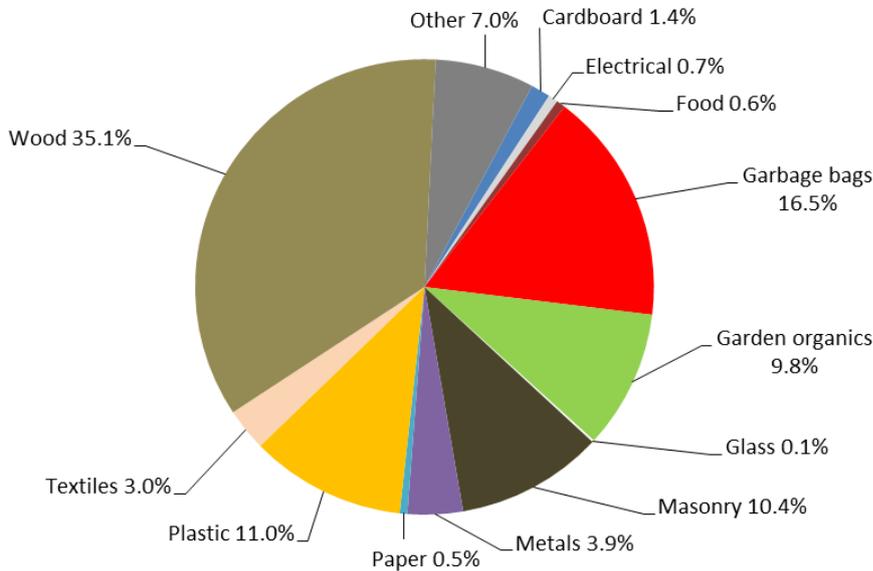


Refer to Table AF70 in Appendix F for tonnage details.

**Healthcare and social assistance**

**Chart 139: NSROC - composition of mixed C&I loads from healthcare/social assistance sector**

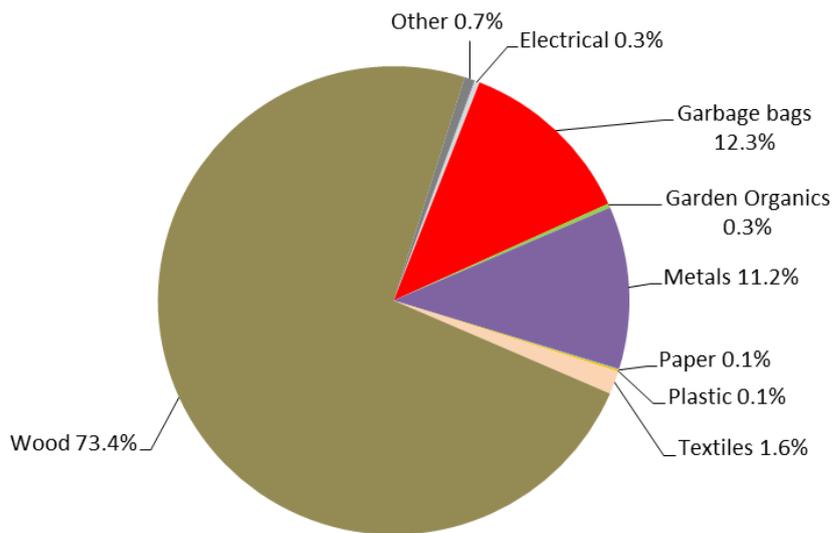
Mixed loads of C&I waste from healthcare/social assistance in NSROC contain mainly wood (35.1 per cent), garbage bags (16.5 per cent), plastics (11 per cent), masonry (10.4 per cent) and garden organics (9.8 per cent).



Refer to Table AF111 in Appendix F for tonnage details.

**Chart 140: NSROC - composition of single-material C&I loads from the healthcare and social assistance sector**

Single-material loads of C&I waste from the healthcare/social assistance sector in NSROC are mainly loads of wood (73.4 per cent), garbage bags (12.3 per cent) or metals (11.2 per cent).

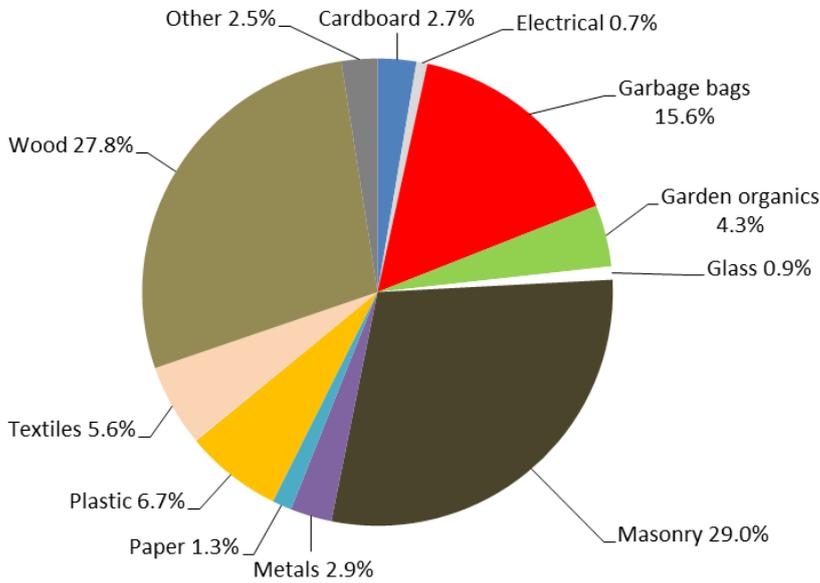


Refer to Table AF112 in Appendix F for tonnage details.

**Mixed small businesses**

**Chart 141: NSROC - composition of mixed C&I loads from mixed small businesses**

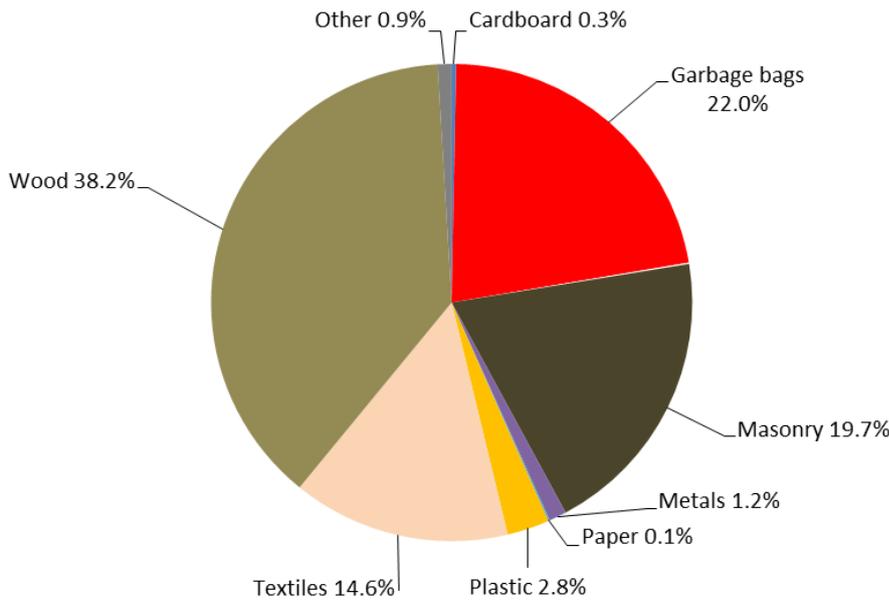
Mixed loads of C&I waste from mixed small businesses in NSROC contain mainly masonry (29 per cent), wood (28 per cent) and garbage bags (16 per cent).



Refer to Table AF87 in Appendix F for tonnage details.

**Chart 142: NSROC - composition of single-material C&I loads from mixed small businesses**

Single-material loads of C&I waste from mixed small businesses in NSROC are mainly loads of wood (38 per cent), garbage bags (22 per cent), masonry (19 per cent) or textiles (15 per cent).

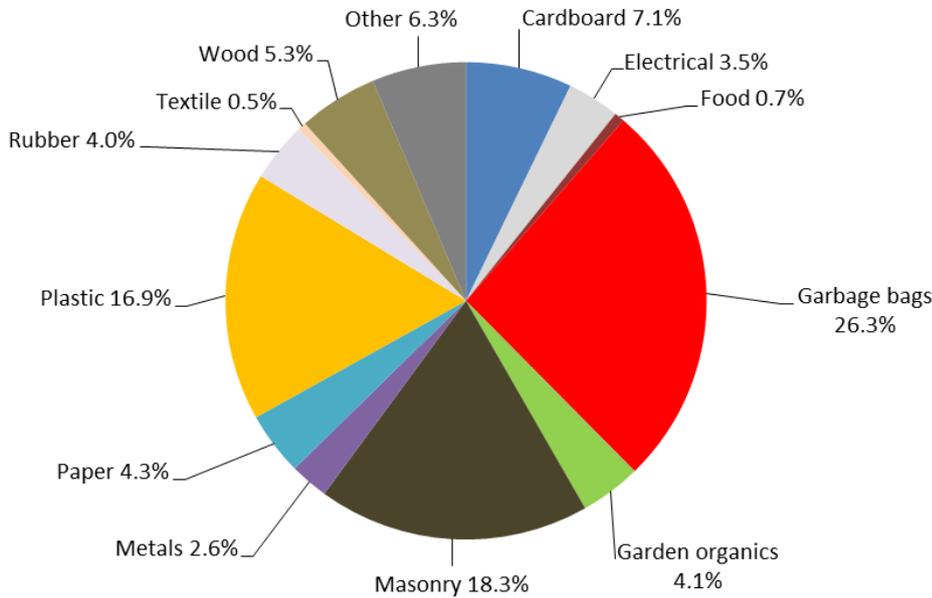


Refer to Table AF88 in Appendix F for tonnage details.

## Manufacturing

**Chart 143: NSROC - composition of mixed C&I loads from manufacturing**

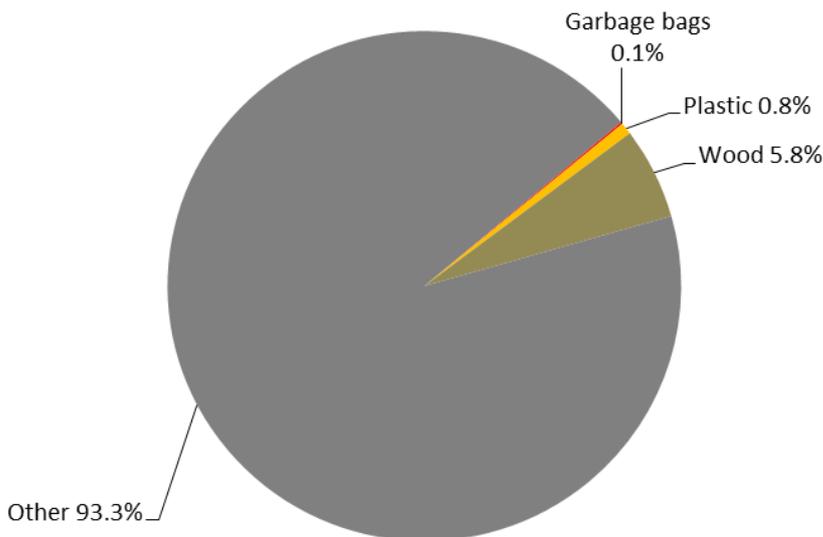
Mixed loads of C&I waste from manufacturing in NSROC contain mainly garbage bags (26.3 per cent), masonry (18.3 per cent and plastic (16.9 per cent).



Refer to Table AF75 in Appendix F for tonnage details.

**Chart 144: NSROC - composition of single-material C&I loads from manufacturing**

Single-material loads of C&I waste from the manufacturing sector in NSROC are almost all loads of 'other' materials (93.3 per cent – almost all is fines), or loads of wood (5.8 per cent).



Refer to Table AF76 in Appendix F for tonnage details.

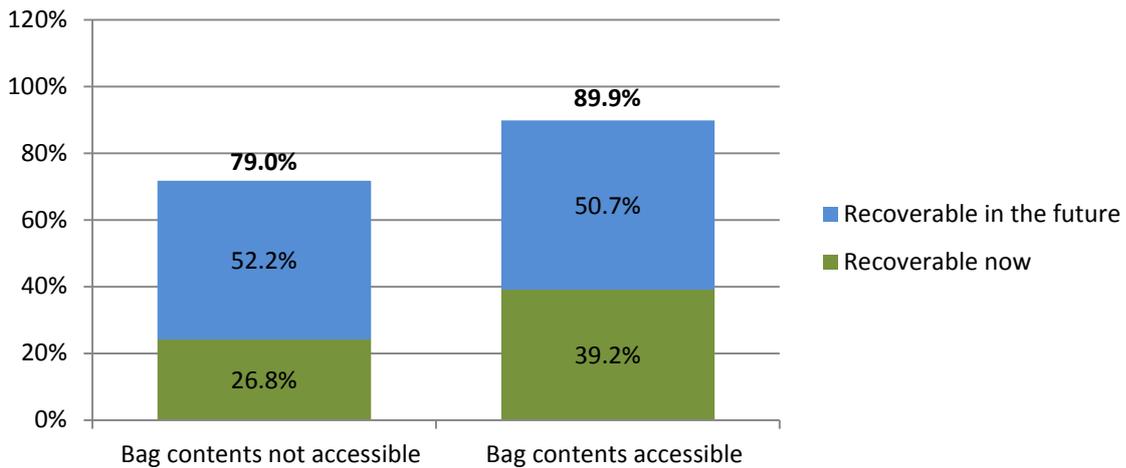
### 6.3.3 NSROC recoverable materials

Materials in the C&I waste stream have been classified as recyclable now, recyclable in the future, or not recyclable – refer to Section 2.14.

If garbage bags and their contents are considered to be not recyclable, then 24.2 per cent of C&I waste disposed from NSROC is recoverable now and 47.5 per cent is recoverable in the future, making a total of 71.7 per cent of C&I that is potentially recoverable.

If we assume that the contents of garbage bags can be accessed, then 39.2 per cent of C&I waste is recoverable now and 50.7 per cent is recoverable in the future, making a total of 89.8 per cent of C&I waste that is potentially recoverable.

**Chart 145: NSROC - C&I waste currently disposed that could be recycled**



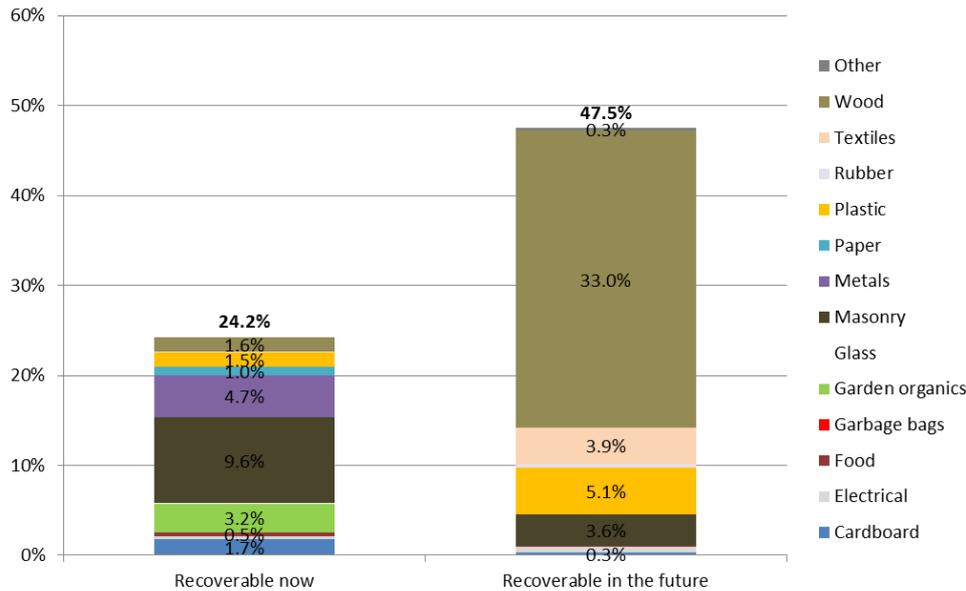
Refer to Tables AF5 and AF7 in Appendix F for tonnage details.

Chart 146 shows more detail of the potential recovery of C&I waste from NSROC, assuming that garbage bag contents are not available for recycling.

The largest current opportunity is the recovery of masonry materials, followed by metals and garden organics. There are also smaller amounts of paper, cardboard, plastic and wood available for recycling.

In the future, the largest opportunities for increased recycling of C&I is treated wood, followed by extra plastic, textiles, extra masonry materials and some other materials (such as insulation and sludge).

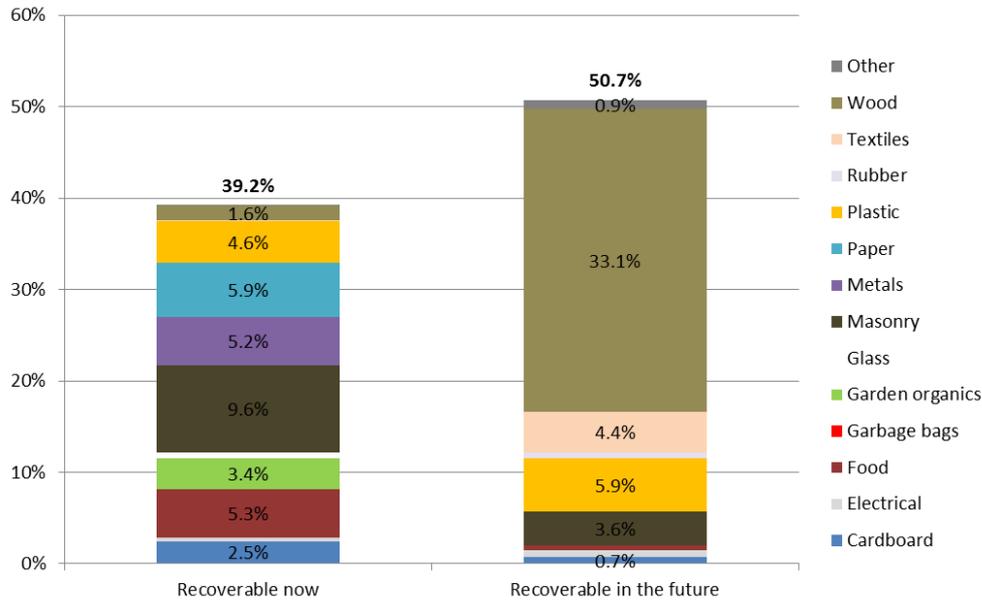
**Chart 146: NSROC - detail of C&I waste currently disposed that could be recycled - bags mixed**



Refer to Tables AF9 and AF11 in Appendix F for tonnage details.

Chart 147 shows more detail of the potential recovery of C&I waste, assuming that garbage bag contents can be made available, which releases food, plastic and paper for recycling. If garbage bag contents can be accessed, the largest current opportunities become the recovery of masonry, paper, food and metal. In the future, garbage bag contents add an extra three per cent recovery potential. The largest future opportunities are treated wood, plastics and textiles.

**Chart 147: NSROC - detail of C&I waste currently disposed that could be recycled - bags distributed**



Refer to Tables AF13 and AF15 in Appendix F for tonnage details.

## 6.4 Hunter Councils Inc.

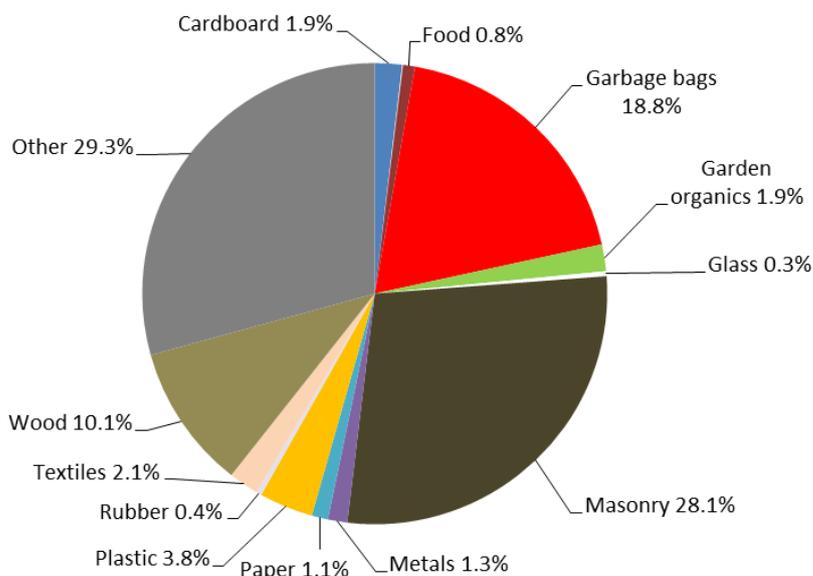
### 6.4.1 Hunter Councils Inc. waste composition

The main components of C&I waste in the region are other materials (29.3 per cent – such as fines, floc and pulp), masonry (28.1 per cent), garbage bags (18.8 per cent) and wood (10.1 per cent).

**Table 52: Composition of C&I waste - Hunter Councils - garbage bags as a separate category**

Material	Tonnes audited	% of waste stream
Other	280	29.3%
Masonry	270	28.1%
Garbage bags	180	18.8%
Wood	100	10.1%
Plastic	40	3.8%
Textiles	20	2.1%
Cardboard	20	1.9%
Garden organics	20	1.9%
Metals	10	1.3%
Paper	10	1.1%
Food	8	0.8%
Rubber	3	0.4%
Glass	3	0.3%
Electrical	1	0.1%
<b>Total</b>	<b>950</b>	<b>100%</b>

**Chart 148: Hunter Councils - C&I waste composition - garbage bags as a separate category**



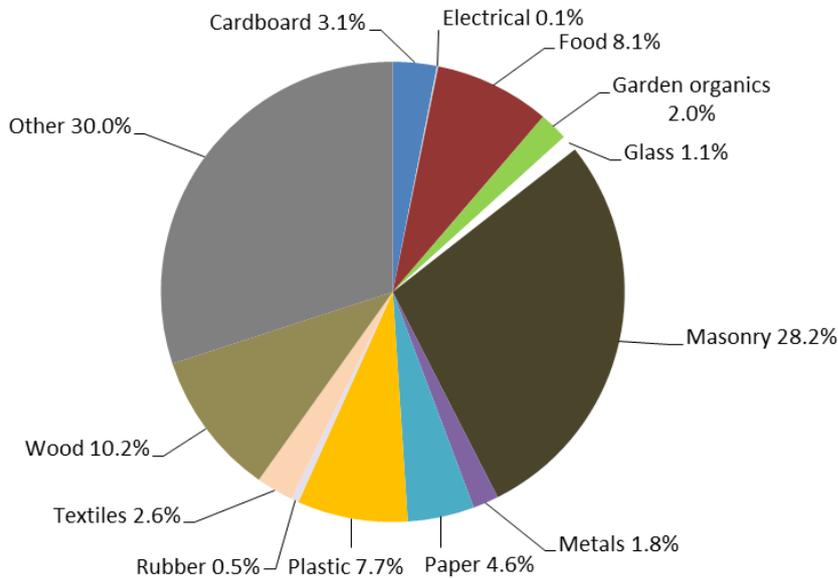
Refer to Table AF55 in Appendix F for detailed categories and tonnage details.

**Table 53: Hunter Councils Inc. C&I waste composition - garbage bags distributed**

When the contents of garbage bags are distributed, the main materials in C&I waste in the Hunter Councils Inc. region are other materials (30 per cent), masonry (28.2 per cent), wood (10.2 per cent) and food (8.1 per cent).

Material	Tonnes audited	% of waste stream
Other	290	30%
Masonry	270	28.2%
Wood	100	10.2%
Food	80	8.1%
Plastic	70	7.7%
Paper	40	4.6%
Cardboard	30	3.1%
Textiles	30	2.6%
Garden organics	20	2%
Metals	20	1.8%
Glass	10	1.1%
Rubber	5	0.5%
Electrical	1	0.1%
<b>Total</b>	<b>950</b>	<b>100%</b>

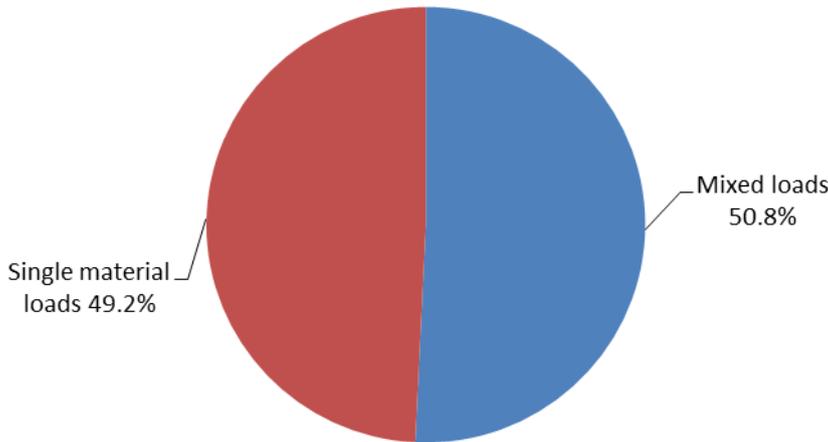
**Chart 149: Hunter Councils Inc. - C&I waste composition - garbage bags distributed**



Refer to Table AF55 in Appendix F for detailed categories and tonnage details.

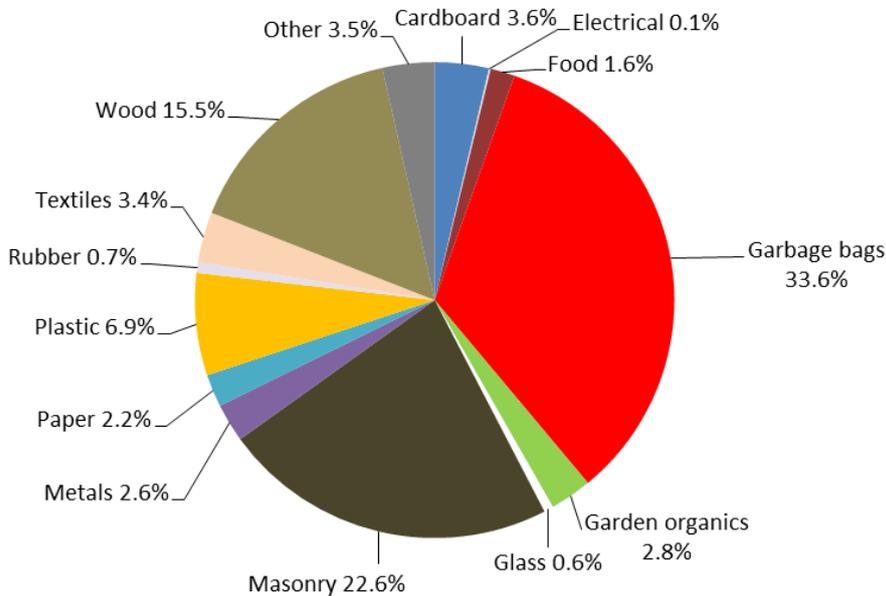
**Chart 150: Hunter Councils Inc. - mixed vs single material loads**

About half (51 per cent) of C&I waste generated in the Hunter Councils Inc. region arrives at the disposal point in mixed loads; 49 per cent arrives as single-material loads (where one material makes up 90 per cent or more of the whole load).



**Chart 151: Hunter Councils Inc. - composition of mixed C&I waste, garbage bags as a separate category**

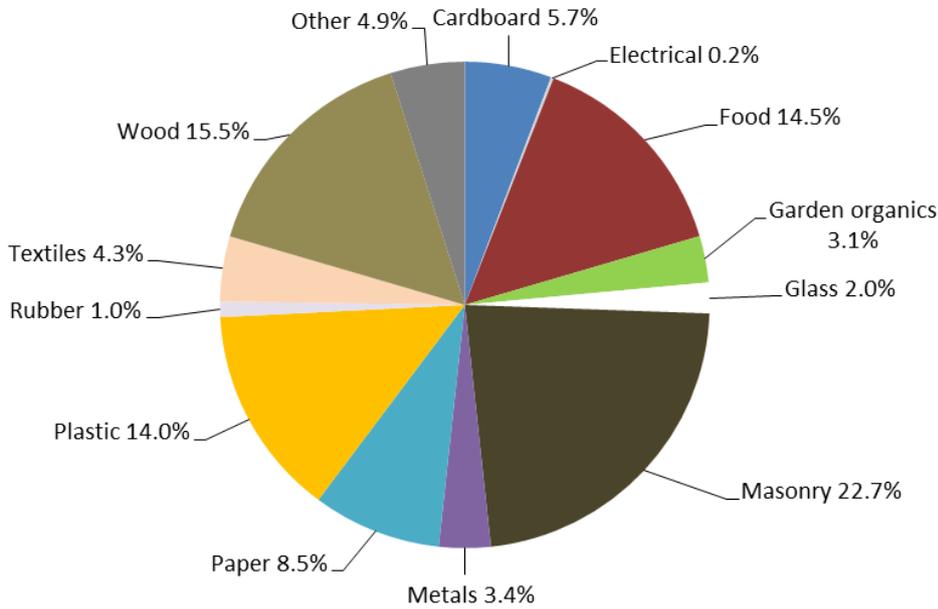
Mixed loads of C&I waste generated in the Hunter Councils Inc. region comprise mainly garbage bags (33.6 per cent), masonry (22.6 per cent), wood (15.5 per cent) and plastic (6.9 per cent).



Refer to Tables AF52 and AF56 in Appendix F for detailed categories and tonnage details.

**Chart 152: Hunter Councils Inc. - composition of mixed C&I waste, garbage bags distributed**

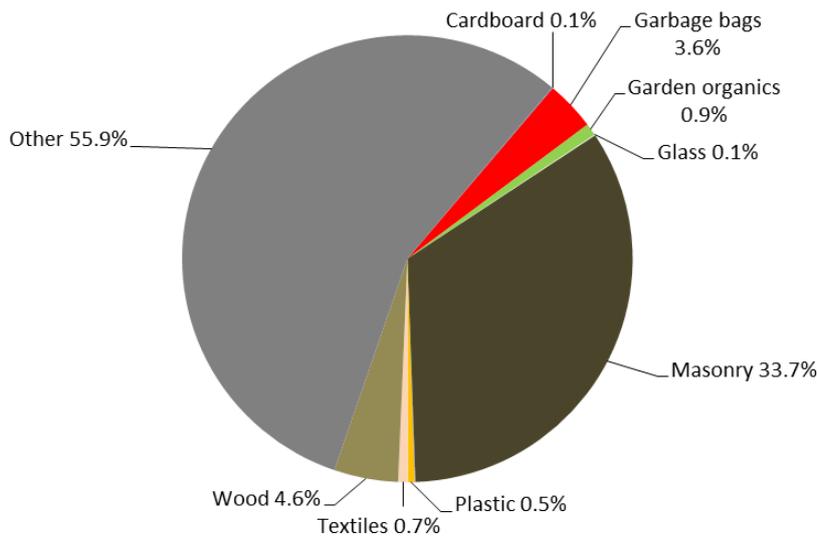
When the contents of the garbage bags are distributed, the main waste components from this region are masonry (22.7 per cent), wood (15.5 per cent), food (14.5 per cent) and plastic (14 per cent).



Refer to Tables AF53 and AF56 in Appendix F for detailed categories and tonnage details.

**Chart 153: Hunter Councils Inc. - composition of single material C&I waste**

The composition of single-material loads are other (55.9 per cent – such as fines) and masonry (33.7 per cent). There are also single loads of wood (4.6 per cent) and garbage bags (3.6 per cent).



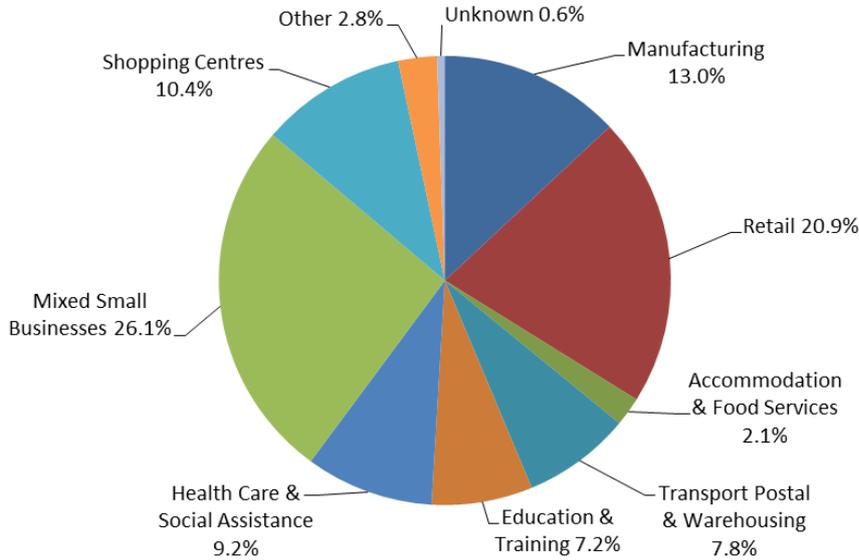
Refer to Tables AF54 and AF57 in Appendix F for detailed categories and tonnage details.

### 6.4.2 Hunter Councils Inc. waste generation by industry sector

The industry sectors in Hunter Councils Inc. that dispose of the most C&I waste are manufacturing (23 per cent), mixed small businesses (17 per cent) and retail (12 per cent).

**Chart 154: Hunter Councils Inc. - C&I mixed loads generation by industry sector**

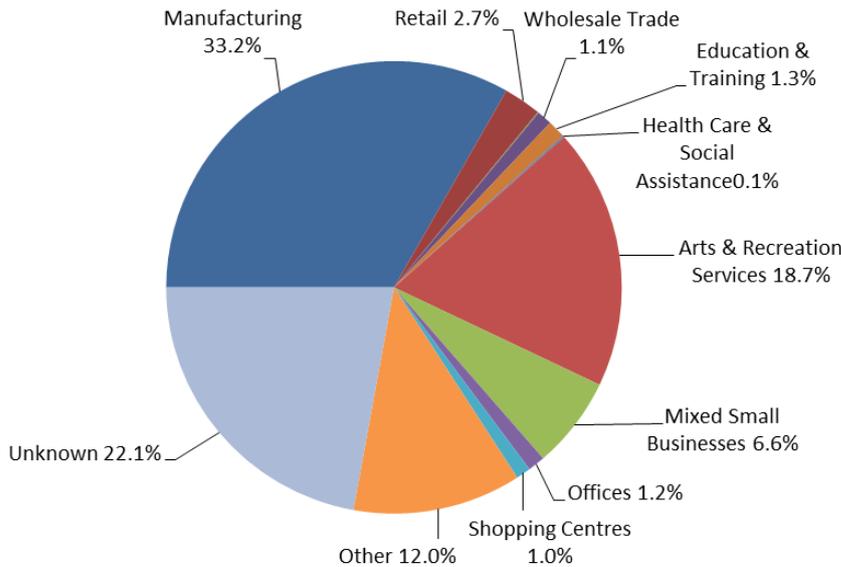
Mixed C&I loads are mainly generated by mixed small businesses, retail and manufacturing.



Refer to Table AF68 in Appendix F for tonnage details.

**Chart 155: Hunter Councils Inc. - C&I single material loads generation by industry sector**

Single-material C&I loads are mainly generated by manufacturing, arts/recreation and other unknown industry sectors.

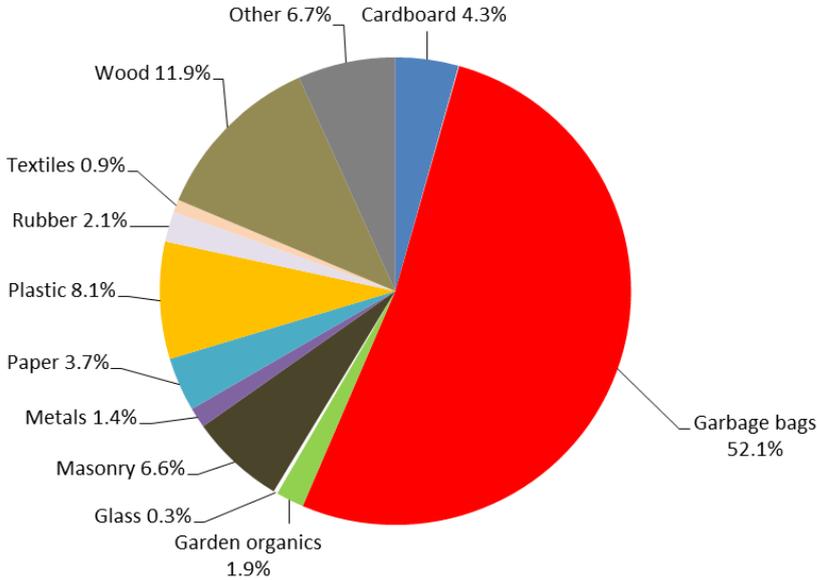


Refer to Table AF70 in Appendix F for tonnage details.

## Manufacturing

**Chart 156: Hunter Councils Inc. - composition of mixed C&I loads from manufacturing**

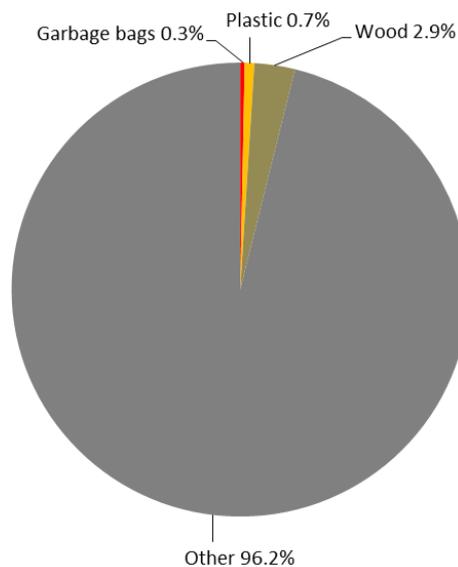
Mixed loads of C&I waste from manufacturing in the Hunter Councils Inc. region contain mainly garbage bags (52.1 per cent), wood (11.9 per cent) and plastic (8.1 per cent).



Refer to Table AF75 in Appendix F for tonnage details.

**Chart 157: Hunter Councils Inc. - composition of single material C&I loads from manufacturing**

Single-material loads of C&I waste from the manufacturing sector in the Hunter Councils Inc. region are almost all loads of other materials (96.2 per cent – almost all of this is floc with smaller amounts of sludge and fines), or loads of wood (2.9 per cent).

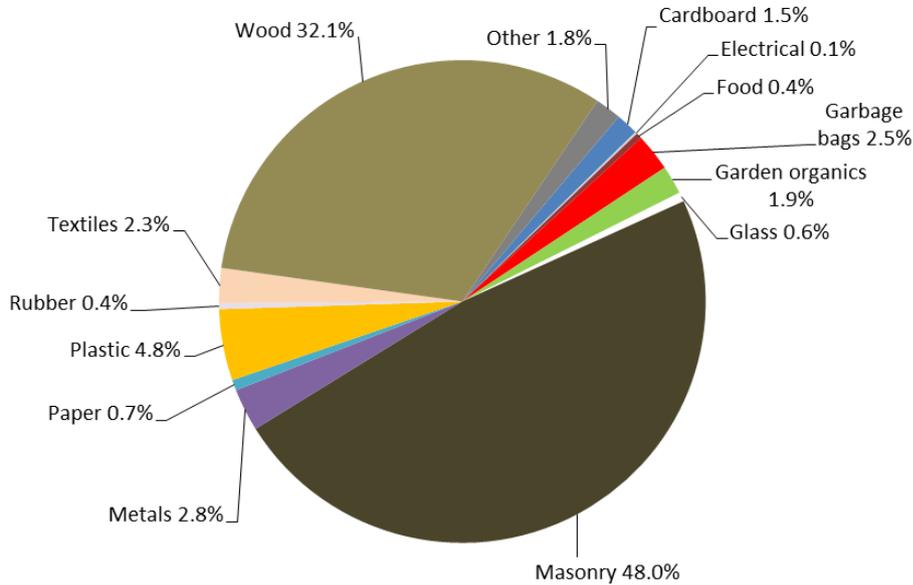


Refer to Table AF76 in Appendix F for tonnage details.

**Mixed small businesses**

**Chart 158: Hunter Councils - composition of mixed C&I loads from mixed small businesses**

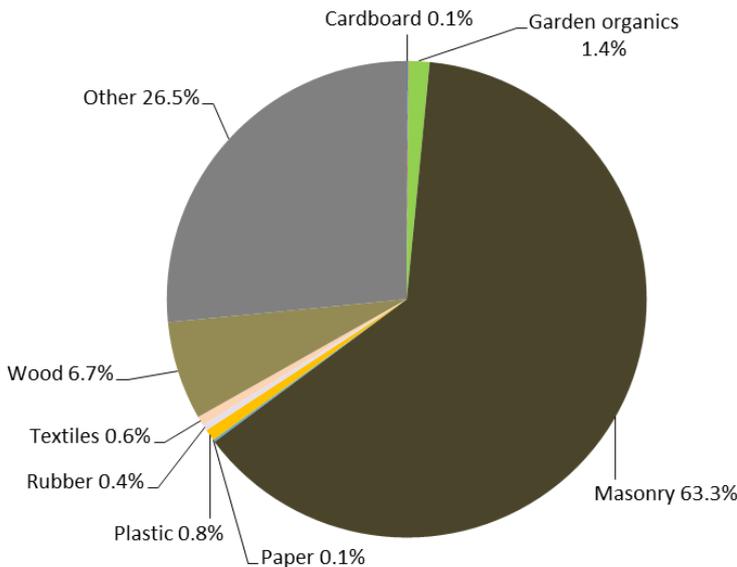
Mixed loads of C&I waste from mixed small businesses in the Hunter Councils Inc. region contain mainly masonry (48 per cent) and wood (32.1 per cent).



Refer to Table AF87 in Appendix F for tonnage details.

**Chart 159: Hunter Councils Inc. - composition of single-material C&I loads from mixed small businesses**

Single-material loads of C&I waste from mixed small businesses in the Hunter Councils Inc. region are mainly loads of masonry (66.3 per cent), wood (15.9 per cent) or garden organics (9.4 per cent).

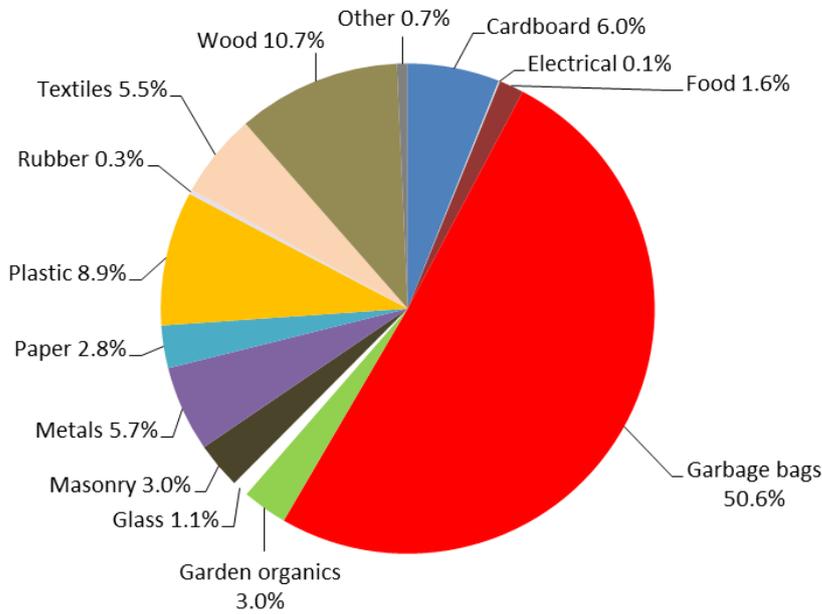


Refer to Table AF88 in Appendix F for tonnage details.

**Retail**

**Chart 160: Hunter Councils Inc. - composition of mixed C&I loads from the retail sector**

Mixed loads of C&I waste from the retail sector in the Hunter Councils Inc region contain mainly garbage bags (50.6 per cent), wood (10.7 per cent) and plastic (8.9 per cent). The retail sector did not produce a significant number of single-material loads.



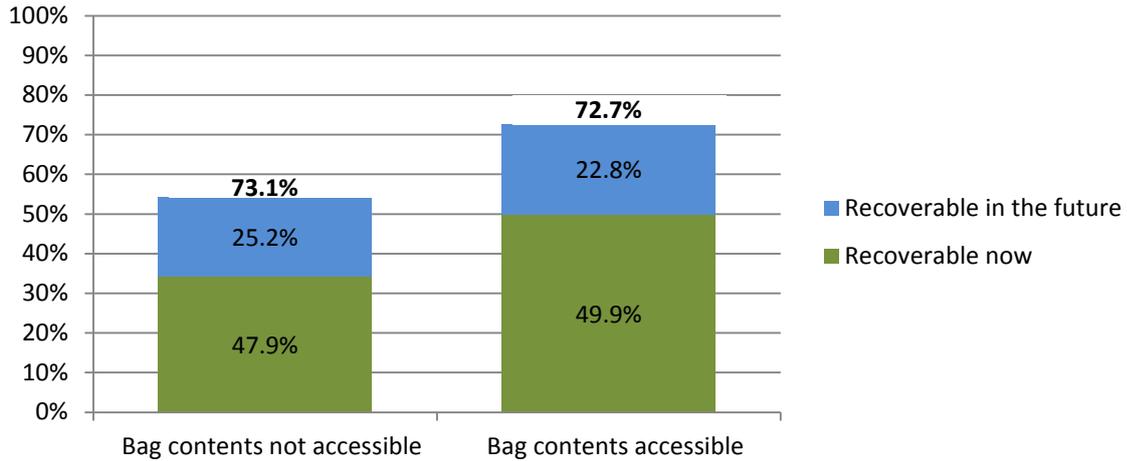
Refer to Table AF99 in Appendix F for tonnage details.

### 6.4.3 Hunter Councils Inc. recoverable materials

Materials in the C&I waste stream have been classified as recyclable now, recyclable in the future, or not recyclable – refer to Section 2.14.

If garbage bags and their contents are considered to be not recyclable, then 34.1 per cent of C&I waste disposed from the Hunter Councils Inc. region is recoverable now, and 20 per cent is recoverable in the future, making a total of 54.1 per cent of C&I that is potentially recoverable. If we assume that the contents of garbage bags can be accessed, then 49.9 per cent of C&I waste is recoverable now and 22.8 per cent is recoverable in the future, making a total of 72.7 per cent of C&I waste that is potentially recoverable.

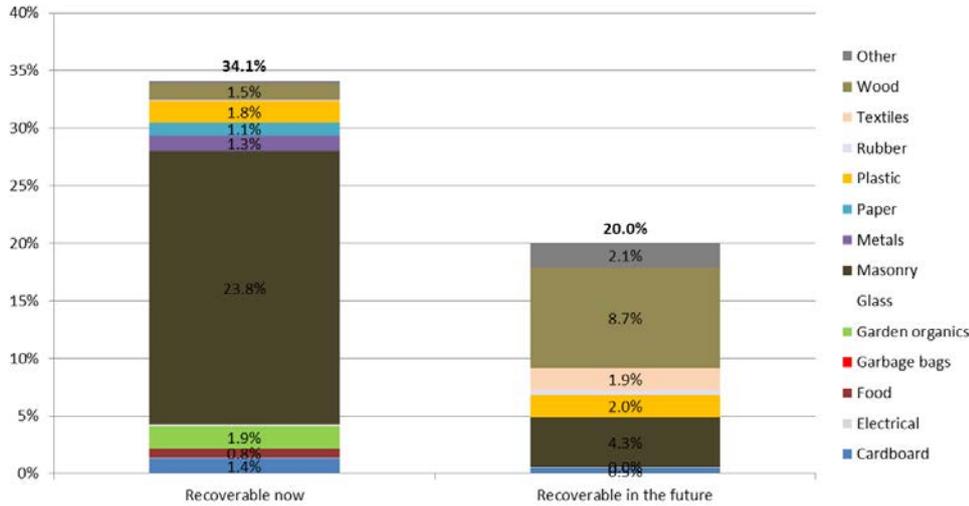
**Chart 161: Hunter Councils Inc. - C&I currently disposed that could be recycled**



Refer to Tables AF5 and AF7 in Appendix F for tonnage details.

Chart 162 shows masonry as having by far the largest potential for recovery in region (excluding the contents of garbage bags), followed by small amounts of wood, cardboard, plastics, metals, garden organics, paper and food. In the future, the largest opportunities will be for treated wood, then extra masonry materials, some other materials (such as insulation and sludge), extra plastics and textiles.

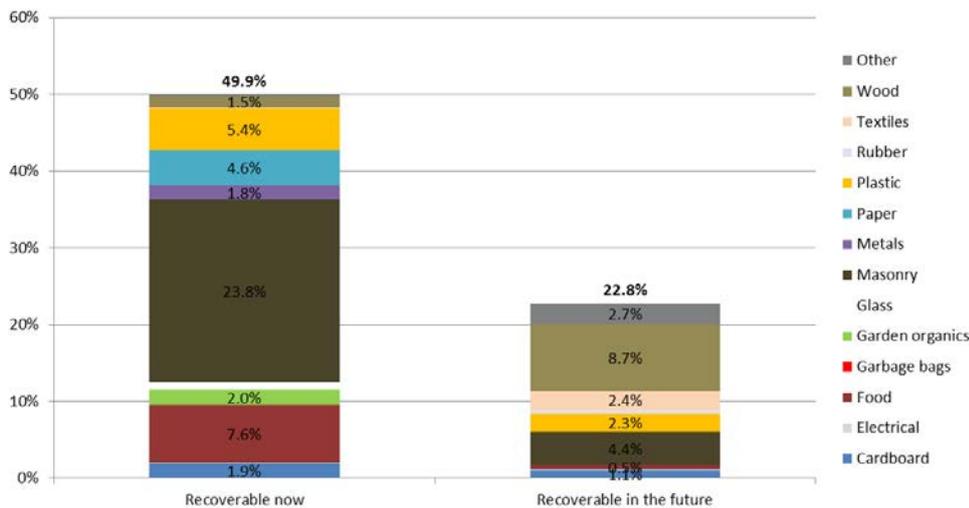
**Chart 162: Hunter Councils Inc. - detail of C&I waste currently disposed that could be recycled - garbage bags not included**



Refer to Tables AF9 and AF11 in Appendix F for tonnage details.

Chart 163 shows when the contents of garbage bags are included in C&I waste there is an increase in the amount of recyclable food, plastic and paper – all of which, along with masonry, provide the largest potential for recovery. Garbage bag contents will add three per cent to future recovery potential, with treated wood, masonry, other materials, plastics and textiles being the biggest opportunities.

**Chart 163: Hunter Councils Inc - detail of C&I waste currently disposed that could be recycled -garbage bag contents accessible**



Refer to Tables AF13 and AF15 in Appendix F for tonnage detail

## 6.5 MIDWASTE

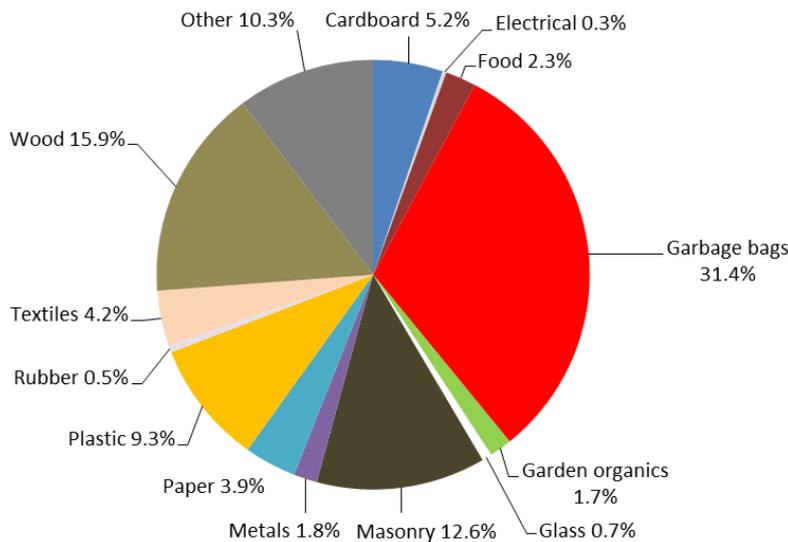
### 6.5.1 MIDWASTE waste composition

The main components of C&I waste generated in this region are garbage bags (31.4 per cent), wood (15.9 per cent), masonry (12.6 per cent) and other materials such as fines and floc (10.3 per cent).

**Table 54: Composition of C&I waste - MIDWASTE - garbage bags as a separate category**

Material	Tonnes audited	% of waste stream
Garbage bags	60	31.4%
Wood	30	15.9%
Masonry	20	12.6%
Other	20	10.3%
Plastic	20	9.3%
Cardboard	10	5.2%
Textiles	8	4.2%
Paper	7	3.9%
Food	4	2.3%
Metals	3	1.8%
Garden organics	3	1.7%
Glass	1	0.7%
Rubber	1	0.5%
Electrical	1	0.3%
<b>Total</b>	<b>190</b>	<b>100%</b>

**Chart 164: MIDWASTE - C&I waste composition - garbage bags as a separate category**



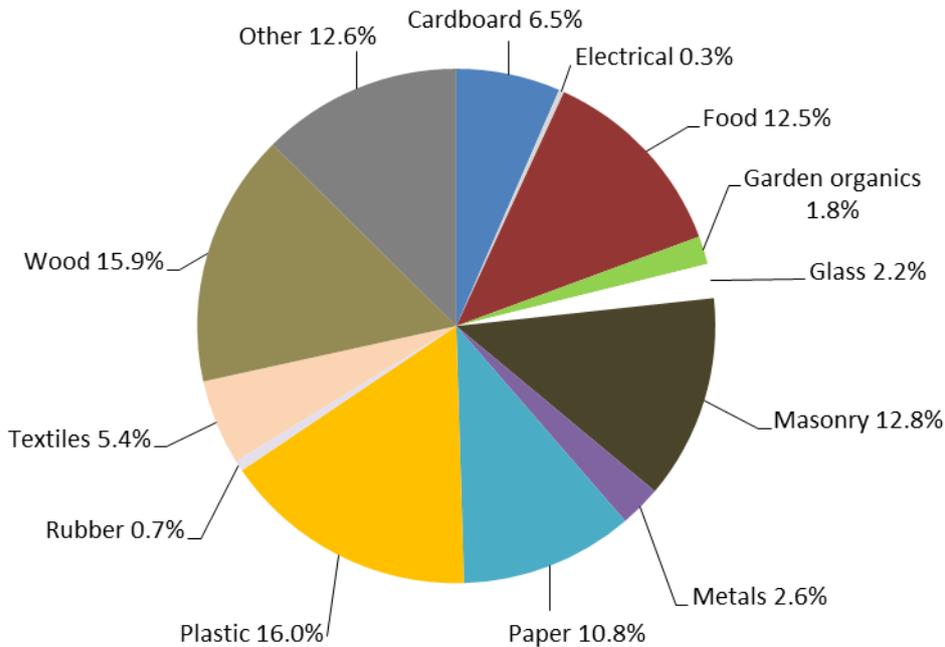
Refer to Table AF61 in Appendix F for detailed material categories.

When the contents of garbage bags are distributed, the main materials in C&I waste in the MIDWASTE region are plastic (16 per cent), wood (16 per cent), masonry (13 per cent), other material (13 per cent) and food (13 per cent).

**Table 55: MIDWASTE C&I waste composition - garbage bags distributed**

Material	Tonnes audited	% of waste stream
Plastic	30	16%
Wood	30	15.9%
Masonry	20	12.8%
Other	20	12.6%
Food	20	12.5%
Paper	20	10.8%
Cardboard	10	6.5%
Textiles	10	5.4%
Metals	5	2.6%
Glass	4	2.2%
Garden organics	3	1.8%
Rubber	1	0.7%
Electrical	1	0.3%
<b>Total</b>	<b>185</b>	<b>100%</b>

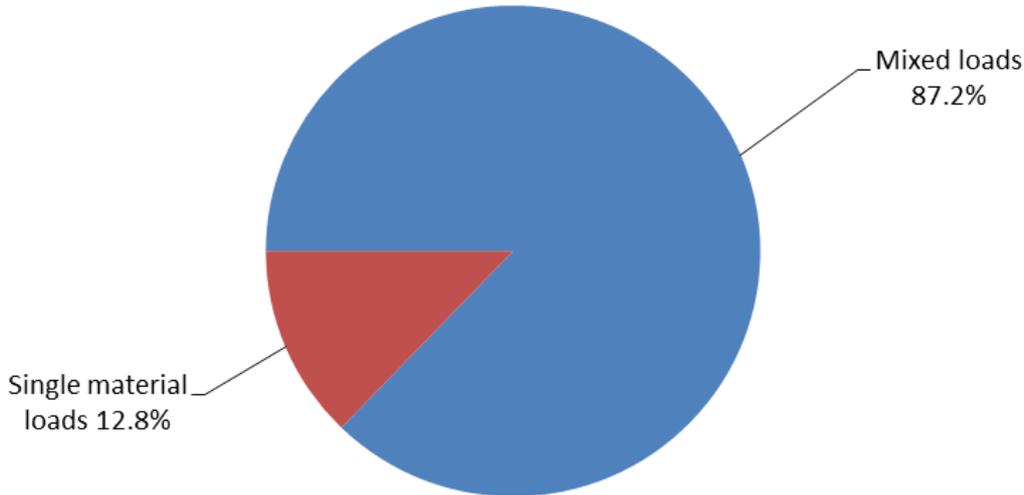
**Chart 165: MIDWASTE - C&I waste composition - garbage bags distributed**



Refer to Table AF61 in Appendix F for detailed material categories.

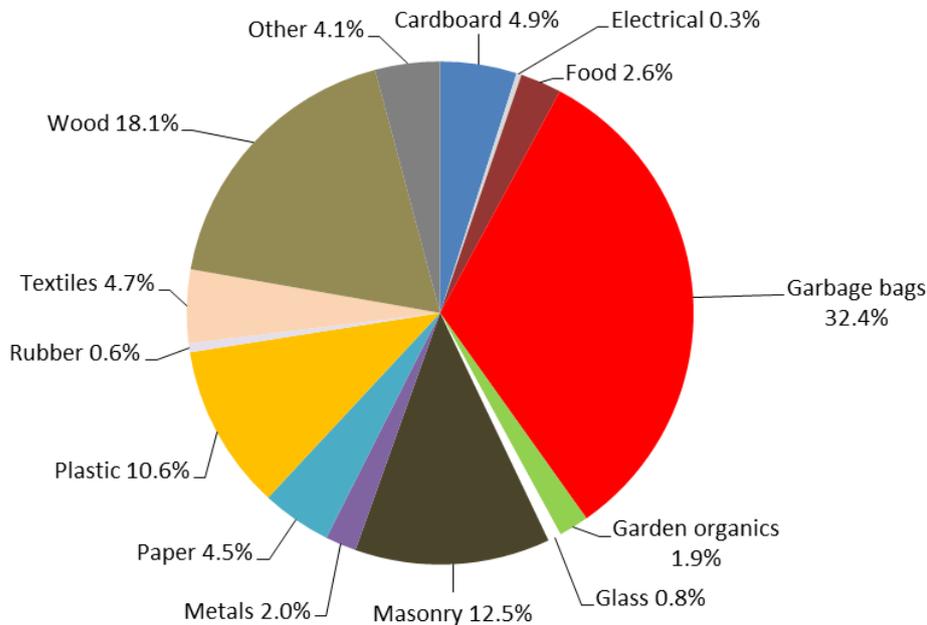
**Chart 166: MIDWASTE - mixed vs single material loads**

Most (87 per cent) of C&I waste generated in the MIDWASTE region arrives at the disposal point in mixed loads; 13 per cent arrives as single-material loads (where one material makes up 90 per cent or more of the whole load).



**Chart 167: MIDWASTE - composition of mixed C&I waste, garbage bags as a separate category**

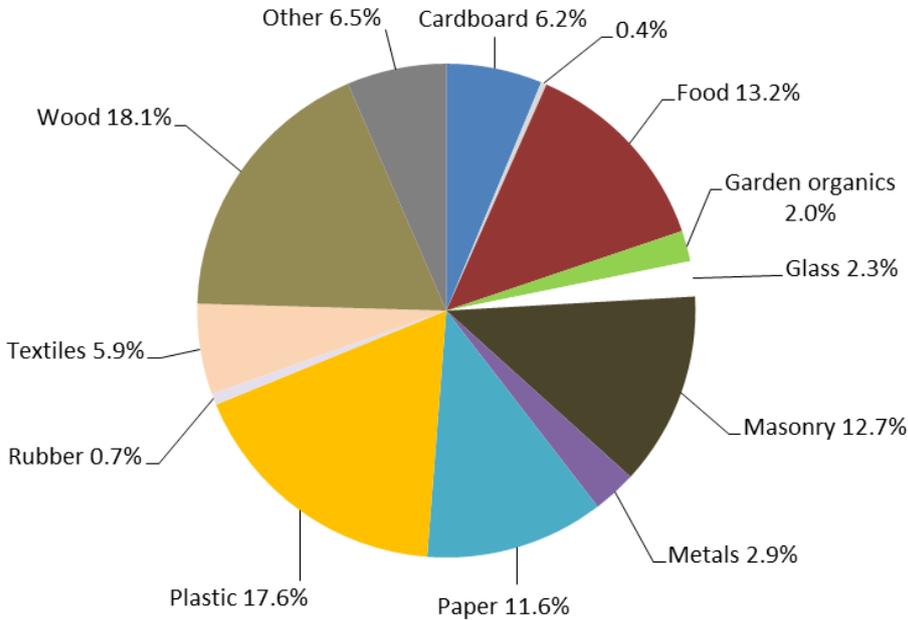
Mixed loads of C&I waste generated in the MIDWASTE region comprise mainly garbage bags (32.4 per cent), wood (18.1 per cent), masonry (12.5 per cent) and plastic (10.6 per cent).



Refer to Tables AF58 and AF62 in Appendix F for detailed material categories and tonnages.

**Chart 168: MIDWASTE - composition of mixed C&I waste, garbage bags distributed**

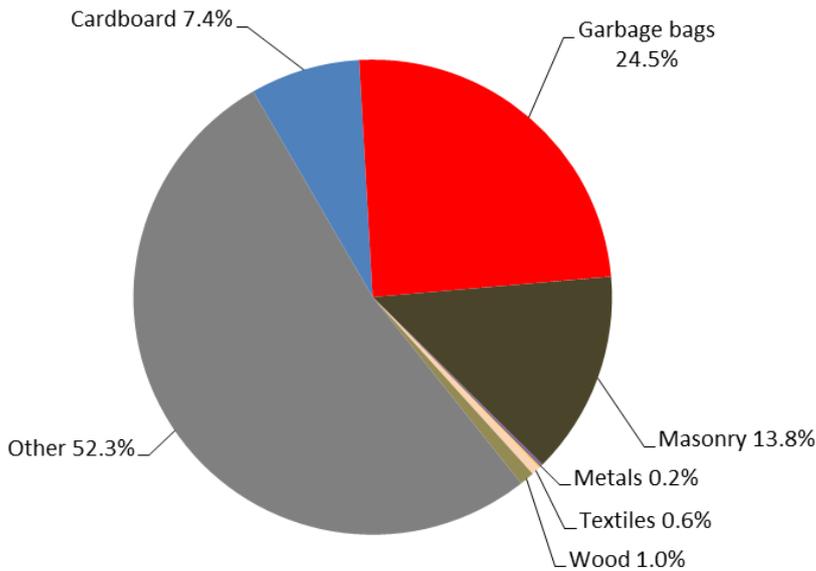
When the contents of the garbage bags are distributed, the main components of C&I waste from the MIDWASTE region are wood (18.1 per cent), plastic (17.6 per cent), food (13.2 per cent), masonry (12.7 per cent) and paper (11.6 per cent).



Refer to Tables AF59 and AF62 in Appendix F for detailed material categories and tonnages.

**Chart 169: MIDWASTE - composition of single material C&I waste**

The most common types of single-material loads are loads of other materials (52.3 per cent – such as fines), garbage bags (24.5 per cent), masonry (13.5 per cent) or cardboard (7.4 per cent).



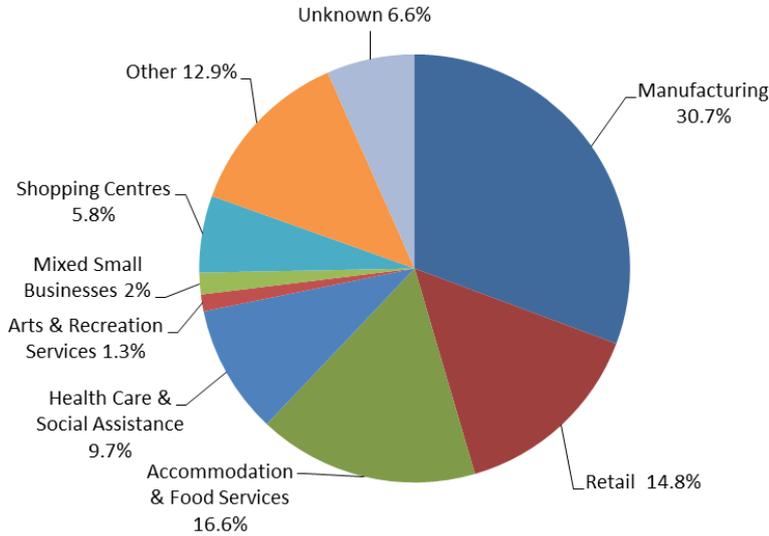
Refer to Tables AF60 and AF63 in Appendix F for detailed material categories and tonnages.

### 6.5.2 MIDWASTE waste generation by industry sector

The industry sectors in the MIDWASTE region that dispose of the most C&I waste are manufacturing (28 per cent), accommodation and food services (15 per cent) and retail (13 per cent).

**Chart 170: MIDWASTE - C&I mixed loads generation by industry sector**

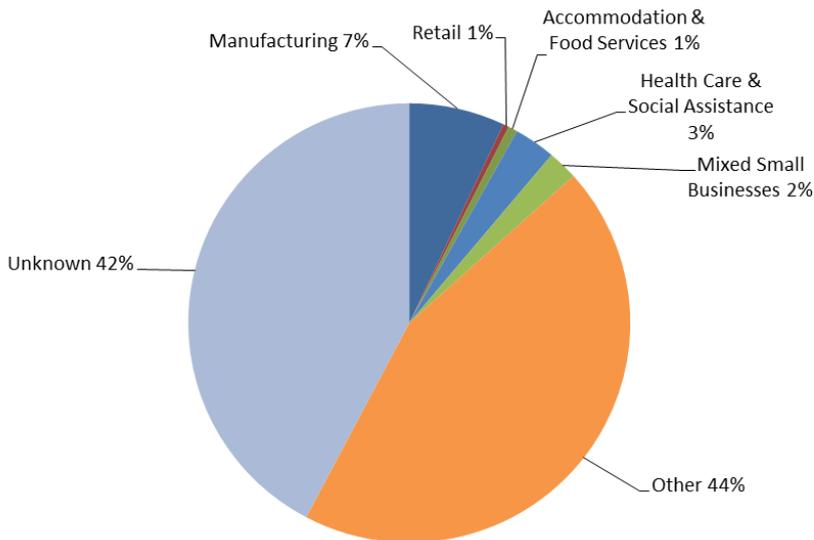
Mixed C&I loads are mainly generated by manufacturing, accommodation and food services, retail and health care/social assistance.



Refer to Table AF68 in Appendix F for tonnage details.

**Chart 171: MIDWASTE - C&I single material loads generation by industry sector**

Single-material loads are mainly generated by other sectors that do not fit into the classifications used, unknown industry sectors and manufacturing.

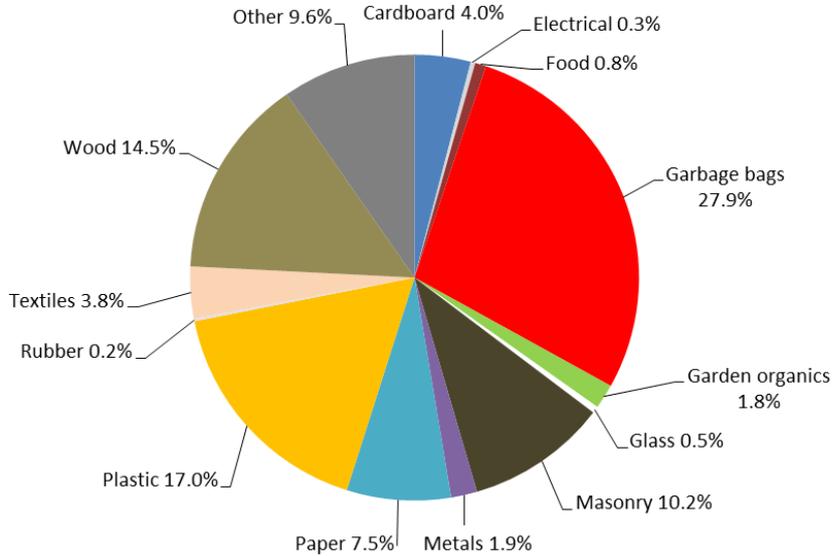


Refer to Table AF70 in Appendix F for tonnage details.

## Manufacturing

**Chart 172: MIDWASTE - composition of mixed C&I loads from manufacturing**

Mixed loads of C&I waste from manufacturing in the MIDWASTSE region contain mainly garbage bags (27.9 per cent), plastic (17 per cent), wood (14.5 per cent) and masonry (10.2 per cent). All the single-material loads from manufacturing contained only cardboard.

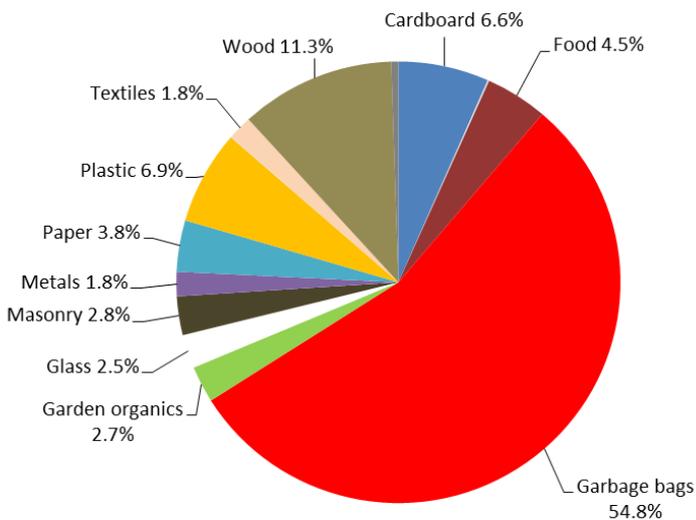


Refer to Tables AF75 and AF76 in Appendix F for tonnage details.

## Accommodation and food services

**Chart 173: MIDWASTE - composition of mixed C&I loads from accommodation/food services**

Mixed loads of C&I waste from this sector in the region contain mainly garbage bags (54.8 per cent), wood (11.3 per cent), plastic (6.9 per cent) and cardboard (6.6 per cent). This sector did not generate a significant number of single-material loads.

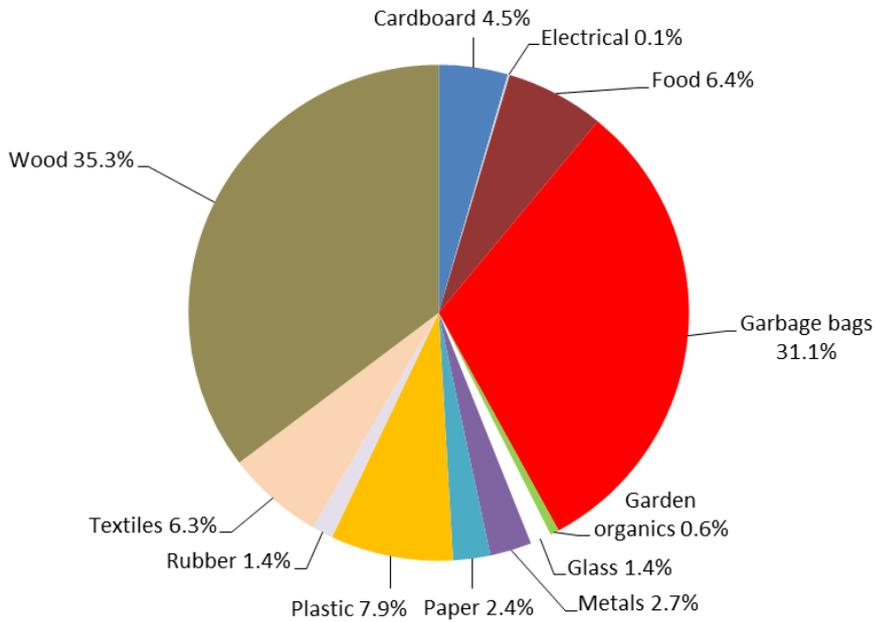


Refer to Table AF121 in Appendix F for tonnage details.

**Retail**

**Chart 174: MIDWASTE - composition of mixed C&I loads from the retail sector**

Mixed loads of C&I waste from the retail sector in the MIDWASTE region contain mainly wood (35.3 per cent) and garbage bags (31.1 per cent). This sector did not generate a significant number of single-material loads.

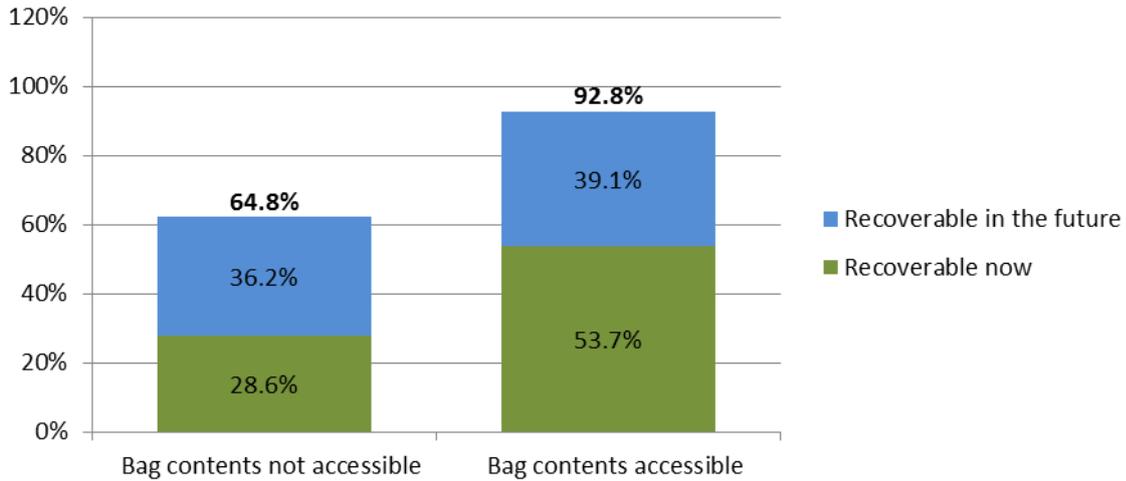


Refer to Table AF99 in Appendix F for tonnage details.

### 6.5.3 MIDWASTE recoverable materials

Materials in the C&I waste stream have been classified as recyclable now, recyclable in the future, or not recyclable – refer to Section 2.14. If garbage bags and their contents are considered to be not recyclable, then 27.9 per cent of C&I waste disposed from the MIDWASTE region is recoverable now, and 34.3 per cent is recoverable in the future, making a total of 62.2 per cent of C&I that is potentially recoverable. If we assume that the contents of garbage bags can be accessed, then 53.7 per cent of C&I waste is recoverable now and 39.1 per cent is recoverable in the future, making a total of 92.8 per cent of C&I waste that is potentially recoverable.

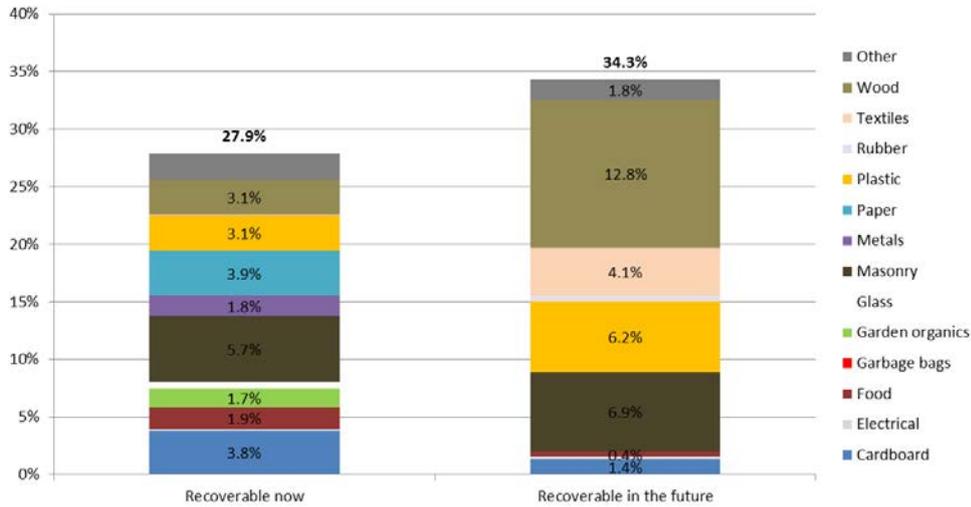
**Chart 175: MIDWASTE - C&I currently disposed that could be recycled**



Refer to Tables AF5 and AF7 in Appendix F for tonnage details.

Chart 176 shows more detail of the potential recovery of C&I waste from the MIDWASTE region, assuming that garbage bag contents are not available for recycling. The largest current opportunity is the recovery of masonry materials, followed by paper, cardboard, wood, plastic, food, metals and garden organics. In the future, the largest opportunities for increased recycling of C&I is treated wood, followed by extra masonry materials, extra plastics, and textiles.

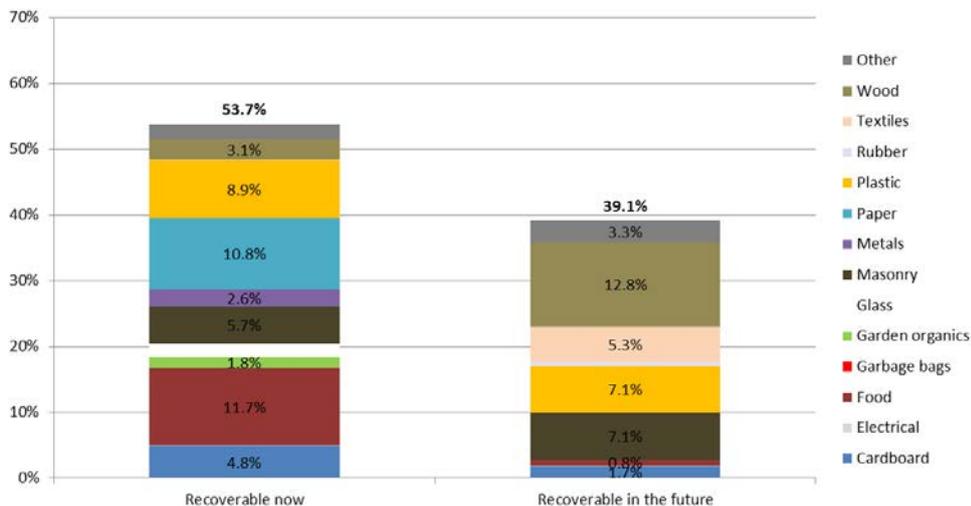
**Chart 176: MIDWASTE – detail of C&I waste currently disposed that could be recycled – garbage bags not included**



Refer to Tables AF9 and AF11 in Appendix F for tonnage details.

Chart 177 shows more detail of the potential recovery of C&I waste, assuming that garbage bag contents can be made available, which releases food, plastic and paper for recycling. If garbage bag contents can be accessed, the largest current opportunities become the recovery of food, paper, plastic and masonry. In the future, garbage bag contents add five per cent recovery potential. The largest future opportunities remain treated wood, masonry, other materials, plastics and textiles.

**Chart 177: MIDWASTE - detail of C&I waste currently disposed that could be recycled - bags distributed**



Refer to Tables AF13 and AF15 in Appendix F for tonnage details.

## 7. Statistical analysis

This is the first time a statistical analysis of a C&I audit project of this size has been undertaken, and is part of the continuous improvement NSW EPA is striving to achieve for waste audits undertaken..

Data validation and statistical analysis was undertaken by Blue Environment and Statworks, external third parties to the project, to review the data analysis contained in this report and to establish confidence intervals and error margins for all waste types and key industry sectors.

The 2014 C&I Waste Audit Methodology specified the overall sample size and samples required within the SMA, ERA and RRA which at 90 per cent confidence interval would provide an estimated error of seven per cent. The SMA/ERA/RRA indicative audit sample sizes were generally pro-rated estimates based on the quantities of C&I waste received at landfills and transfer stations in each of the regulated areas during 2011–12. The survey sample was thus stratified by regulated area and based on results from a previous analysis project. The overall sample size of C&I vehicles audited at all sites was 2000.

The sample of vehicles can be described as a random, representative sample of vehicles audited on selected days at landfill and transfer station locations and classified as carrying C&I loads, stratified by regulated area.

Several waste management landfill and transfer station locations were selected within each regulated area as being representative of that area. The audit observations were selected as being C&I loads arriving at the selected locations during the timespan of the audit at that location. One or more days were completely enumerated for C&I loads during these timespans. The loads of each in-scope C&I vehicle were assessed for volumes of materials according to a standard list.

Weights of materials were estimated by use of volume-to-weight algorithms sourced from previous audits. The exact weights of vehicle loads were obtained from weighbridge records at each audited location, and calculated weights of individual materials were scaled to conform to weighbridge weights. A separate data collection obtained estimates of composition of bagged waste and this was incorporated into the overall analysis.

The total annual weights of C&I waste for each of the three regulated areas were obtained from EPA data sources. These overall weights were then used to extrapolate individual vehicle material weights to represent annual weights for each regulated area.

The scaled and extrapolated data for the 2000 data points was then used to perform the data analysis to required specifications.

## 7.1 Individual material categories

Table 56 shows the average proportion of individual materials in the entire waste stream, with 90 per cent upper and lower confidence intervals calculated from the standard deviation of individual load percentages, the chosen “Alpha” (0.1 for 90 per cent confidence) and the sample size (n=2001).

**Table 56: Key statistical indicators for all individual materials (scaled, bagged materials distributed)**

Waste component	Per cent	90% CI	Lower bound	Upper bound
Cardboard – dry – loose	2.6%	0.4%	2.1%	3%
Cardboard – dry – compacted	1.5%	0.1%	1.4%	1.6%
Cardboard – wet strength/wax – loose	0.7%	0.1%	0.6%	0.8%
Cardboard – wet /wax – compacted	0.7%	0%	0.6%	0.7%
Electrical– computers and peripherals	0.1%	0.1%	0%	0.1%
Electrical – other	0.3%	0.1%	0.2%	0.4%
Electrical – TVs	0%	0%	0%	0.1%
Electrical – whitegoods	0%	0%	0%	0.1%
Food organics – packaged	1.7%	0.2%	1.5%	1.9%
Food organics – unpackaged	8.2%	0.4%	7.9%	8.6%
Garden organics	4.5%	0.6%	3.9%	5.1%
Glass – non-packaging	0.5%	0.3%	0.2%	0.8%
Glass – packaging	1%	0.1%	1%	1.1%
Masonry materials – concrete/bricks	10.3%	0.9%	9.4%	11.2%
Masonry materials – other	4.4%	0.8%	3.6%	5.1%
Metal (ferrous) – packaging	0.8%	0.1%	0.7%	0.9%
Metal (ferrous)– non-packaging – LD	1%	0.3%	0.7%	1.2%
Metal (ferrous)– non-packaging – HD	0%	0.1%	0%	0.1%
Metal (non-ferrous) – packaging	0.4%	0%	0.3%	0.4%
Metal (non-ferrous)– non-pack – LD	0.4%	0.1%	0.3%	0.5%
Metal (non-ferrous)– non-pack – HD	0%	0%	0%	0%
Paper – office	2.5%	0.1%	2.4%	2.6%
Paper – other	4.8%	0.2%	4.6%	5%
Paper – packaging	2.6%	0.2%	2.4%	2.8%
Plastic – EPS foam	0.4%	0.2%	0.2%	0.6%
Plastic – film packaging	5.9%	0.3%	5.7%	6.2%
Plastic – other	4.5%	0.5%	4.1%	5%
Plastic – rigid packaging	1.9%	0.2%	1.7%	2%
Rubber	0.7%	0.2%	0.5%	0.8%
Textiles & leather	2%	0.3%	1.7%	2.3%
Textiles – carpet	2%	0.7%	1.2%	2.7%
Textiles – mattresses	0.2%	0.2%	0%	0.4%

Textiles- covered furniture	0.9%	0.4%	0.5%	1.3%
Wood – treated/painted	10.8%	1.1%	9.7%	11.9%
Wood – treated – pallets	1.4%	0.4%	1.1%	1.8%
Wood – untreated	1.4%	0.4%	1.1%	1.8%
Wood – untreated – pallets	0.7%	0.3%	0.4%	1%
Other – Batteries	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%
Other – nappies	1.1%	0.1%	1.1%	1.2%
Other (including fines <10 mm)	17.1%	0.8%	16.3%	17.9%
<b>Total</b>	<b>100%</b>	-	-	-

Overall, the estimates appear quite accurate and the variance (represented by the standard deviation), while reasonably high, is countered by the large sample size, leading to quite accurate percentage measures, even for small amounts. An example would be “Cardboard – dry – loose” which, while only representing 2.6 per cent of material, has a low 90 per cent CI of 0.4 per cent leading to quite a tight estimate of between 2.1 per cent and 3.0 per cent. Garden organics, with quite a large representation of 4.5 per cent, still has quite a low 90 per cent CI of 0.6 per cent, leading to another compact estimate of between 3.9 per cent and 5.1 per cent.

The statistical analysis undertaken indicates that overall, the results appear remarkably robust, due to the large sample size (2000 observations) and also the comparatively low variances of material distributions. This data should form the base for very accurate estimates of material distributions in the C&I waste stream with no materials exceeding 90 per cent confidence intervals of seven per cent – the maximum 90 per cent confidence interval calculated for individual materials was 1.1 per cent (wood treated/painted).

## 7.2 Consolidated material categories

Analysis was undertaken of the consolidated material categories by weight to determine the confidence intervals at this level. This analysis shows particular strong patterns in the data, and that the variability in composition of loads is quite high in particular material types. In summary, the analysis forms a robust body of data but caution should be taken in interpreting patterns in some of the finer aspects of the analysis.

This analysis suggests:

- Considerable variability in the weight of different audited loads, varying from 30kg to over 37 tonnes.
- Considerable variability regarding the presence of different materials types in C&I waste.
- C&I is not a homogenous waste stream.

The most prevalent items in C&I loads are plastics (present in 67 per cent of undistributed loads and 72 of loads when garbage bag contents were distributed); wood (present in 61 per cent of undistributed loads and 77 per cent of loads when garbage bag contents were distributed); and cardboard (53 per cent; 62 per cent). Paper, masonry, textiles and metals were also prevalent in loads.

The key finding of the statistical analysis indicates:

- There is less variability for most materials streams present in bagged waste, suggesting the content of bagged waste is more uniform across businesses
- There is less variability for more prevalent, common and heavier materials such as cardboard, paper, film and 'other' plastic, wood, unpackaged food organics, garden organics, packaging glass, and 'other' electrical waste.
- There is medium to high variability for materials such as fines, wood pallets, rubber and textiles, non-packaging glass and nappies.
- There are high levels of variability for items such as white goods, some metal packaging, EPS plastics, rubber and textiles, batteries and gas bottles.
- Only cardboard, film plastic, 'other' plastic, ferrous metals and wood were present in over 50 per cent of C&I loads surveyed. Other items that were frequently found (in more than 40 per cent of loads) include garden organics, electrical waste, masonry, non-ferrous metals, paper, rigid plastic packaging, textiles and fines.
- Items such as batteries and gas bottles are highly variable and found less frequently in C&I waste.

### 7.3 Scaled vs. unscaled results

The derivation of individual weights comprising the materials of a single load is a three stage process:

- Estimation of individual material volumes;
- Application of density factors to convert estimated material volume to weight;
- Scaling of the converted material weights to known vehicle weight – i.e. applying the material composition derived at Stage 2 to the net vehicle weight.

Ideally, the sum of all materials in the load using of just Stages 1 and 2 should be as close as possible to the actual net vehicle weight.

APC were asked to comment on the applicability of the density factors, i.e. to compare the results obtained through use of all three stages (the method used in this study and referred to as 'scaled') to the results obtained through the use of only Stages 1 and 2 (referred to as 'unscaled'). The comparison is expressed as a 'percentage difference' between the two methods, calculated as the degree to which the unscaled result represents the scaled. A negative per cent difference between the two methods indicates an underestimate of the scaled (i.e. true) weight by the unscaled method, while a positive per cent difference indicates the opposite. The closer the percentage difference to zero, the more accurately unscaled results represent the scaled results (or true audit weight).

Table 57 shows that across the 2000 observations, the use of volume estimation with application of conversion factors underestimated the true total audit weight (i.e. the sum of the 2000 vehicle weights) by 2.6 per cent. Regionally there was negligible difference between the results derived by the two methods for the SMA, while results for the ERA and RRA varied by negative and positive 15 per cent. The minimal difference in weights according to the two methods for the SMA is most likely to be as a result of the larger sample size, 'smoothing' out load by load variability. The key reason for the difference in the ERA scaled vs unscaled is due to large amounts of soil at one of the audit sites – the density factor underestimated the weight of these soil loads, as they were classed as 'other'.

**Table 57: Overall results unscaled and scaled by region**

Region	Tonnes audited		% difference
	Unscaled	Scaled	
SMA	2739.9	2741.3	-0.1%
ERA	812.6	954.3	-14.9%
RRA	302.7	262.0	15.6%
<b>Total</b>	<b>3855.2</b>	<b>3957.5</b>	<b>-2.6%</b>

Without weighing the individual material components of each load it is impossible to compare methods on an individual material basis. Table 58 provides an indication, but note scaled material weights are skewed towards the composition as determined by the unscaled method. The greatest percentage difference is seen for those materials with a small sample size (e.g. rubber and textiles) and those with an expected variable density within the material category, such as garden organics and wood. Most notably, 'other' is known to comprise mostly dense materials such as floc and fines and is therefore underestimated by its current set of density factors.

**Table 58: Overall results unscaled and scaled by consolidated material category**

Consolidated material category	Tonnes audited		% difference
	Unscaled	Scaled	
Cardboard	153	148	3.3%
Electrical	10	10	3%
Food	90	83	7.4%
Garbage bags	1142	1115	2.4%
Garden organics	124	143	-13.5%
Glass	27	28	-3.5%
Masonry	584	570	2.6%
Metals	62	66	-7.2%
Paper	123	118	4.7%
Plastic	288	274	5.2%
Rubber	14	17	-14.5%
Textiles	186	167	11.4%
Wood	629	561	12%
Other	423	657	-35.6%
<b>Total</b>	<b>3855</b>	<b>3958</b>	<b>-2.6%</b>

## 7.4 Data extrapolation

Material quantities are reported in terms of tonnage per year through the application of regional extrapolation factors. Extrapolation factors were derived by dividing the total annual quantity of C&I waste disposed by the quantity of C&I waste audited. This factor was then applied to each analysis, according to the relevant region, as shown in Table 59.

**Table 59: Extrapolated factors by region**

Region	Tonnes audited	Tonnes disposed per year	Extrapolated factor
SMA	2741	1,415,561	516
ERA	954	252,545	265
RRA	262	106,539	407
<b>Overall</b>	<b>3956</b>	<b>1,774,645</b>	<b>No scaling factor applied</b>

Overall tonnages were calculated as the sum of each extrapolated regional figure and therefore did not require the application of a specific extrapolation factor. Through applying a single extrapolation factor to each material in this manner, the material composition of each load and across all observations does not change.

## 8. Discussion

Despite increased economic activity, C&I waste disposed to landfill within the SMA between 2008 and 2014 has reduced by 800,000 tonnes from a reported 2,222,856 tonnes in 2007–2008 to 1,415,561 tonnes in 2014. While there are many reasons for this decrease, it is considered that investment in resource recovery by the private sector through commissioning of new remanufacturing and processing facilities, as well as the expansion of existing facilities, NSW Government resource recovery programs aimed at businesses avoiding waste and increasing recycling, and the increase in the landfill levy have all contributed.

While 2000 loads were visually assessed over 33 consecutive days to gain indicative data on waste composition and generation, care should be taken in drawing conclusions as only a small number of loads were assessed in certain sectors and regions as the statistical analysis shows. Data collected from 2000 C&I loads and 3000 garbage bags have been extrapolated for the purpose of this report and are deemed to represent the entire sector and region. The assessors were typically at each waste disposal facility for two consecutive days only. In some cases, the number of days was extended to gain the quota prescribed in the brief.

With these constraints in mind, this report clearly shows the real and immediate opportunities to further reduce waste to landfill from the C&I sector by material, region and industry sector.

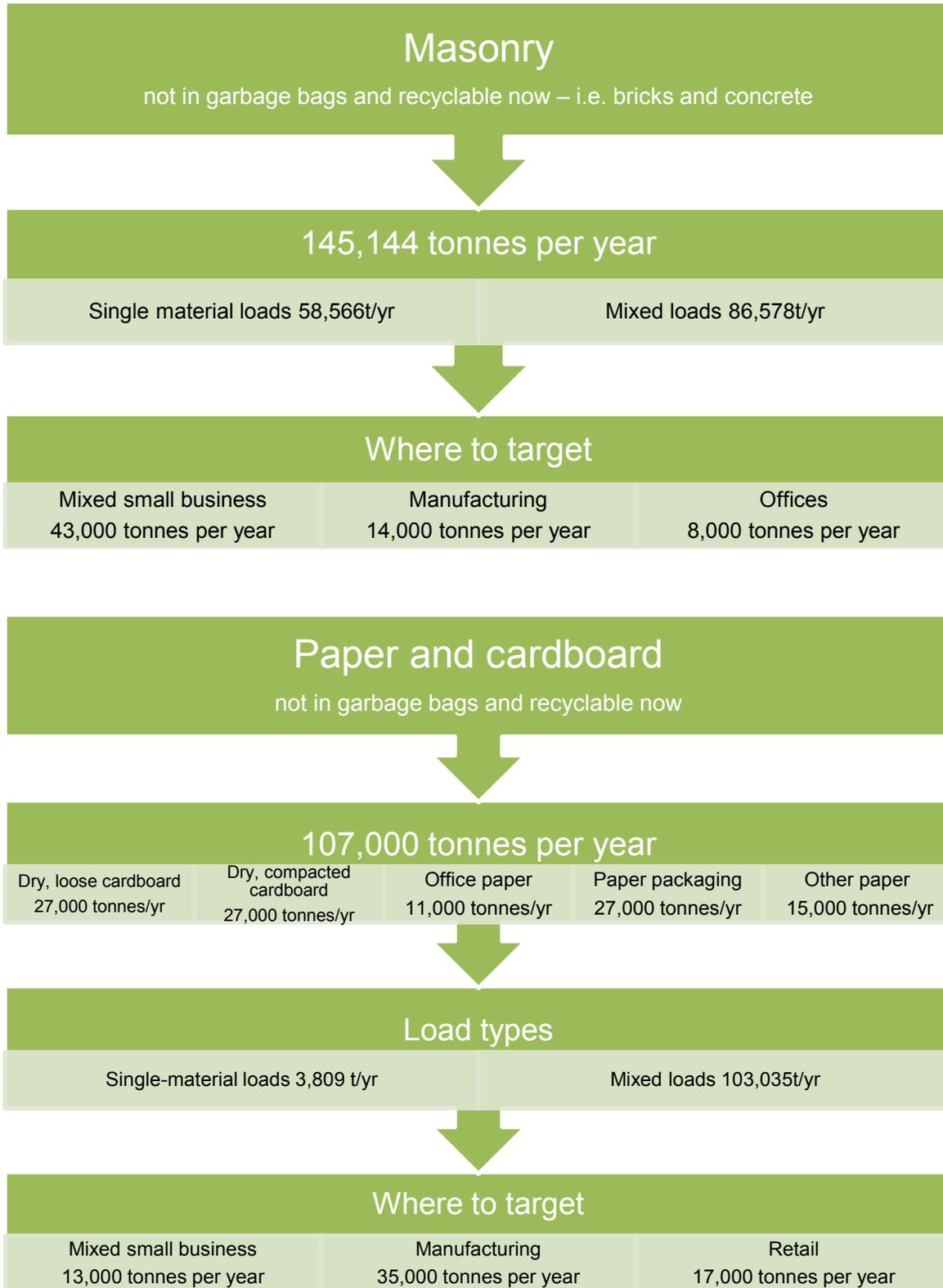
### 8.1 NSW regulated area

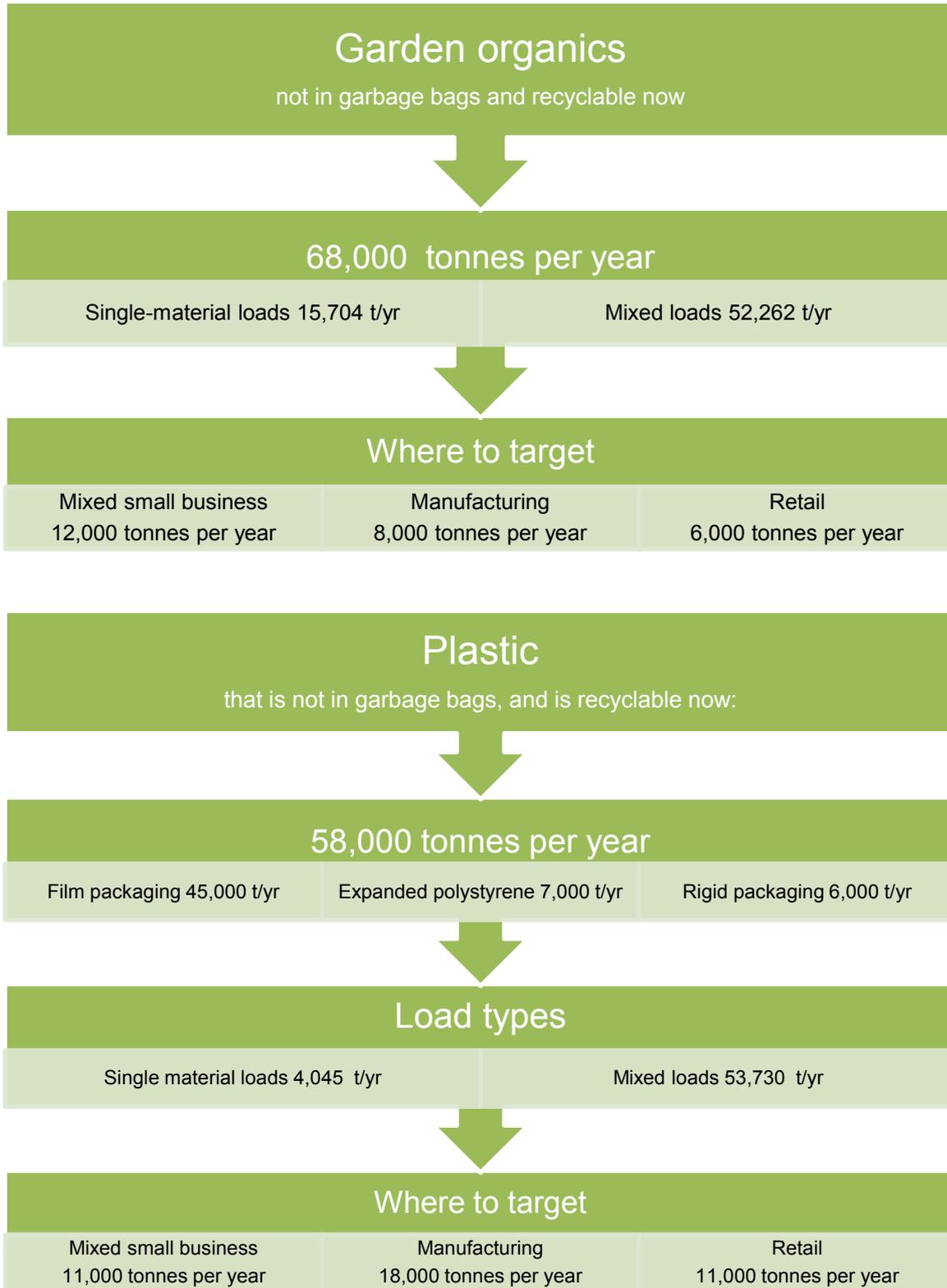
The largest C&I waste contributors to landfill in the NSW regulated area are manufacturing, mixed small businesses, retail and healthcare/social assistance. These sectors generate 60 per cent of the C&I disposed in the NSW regulated area.

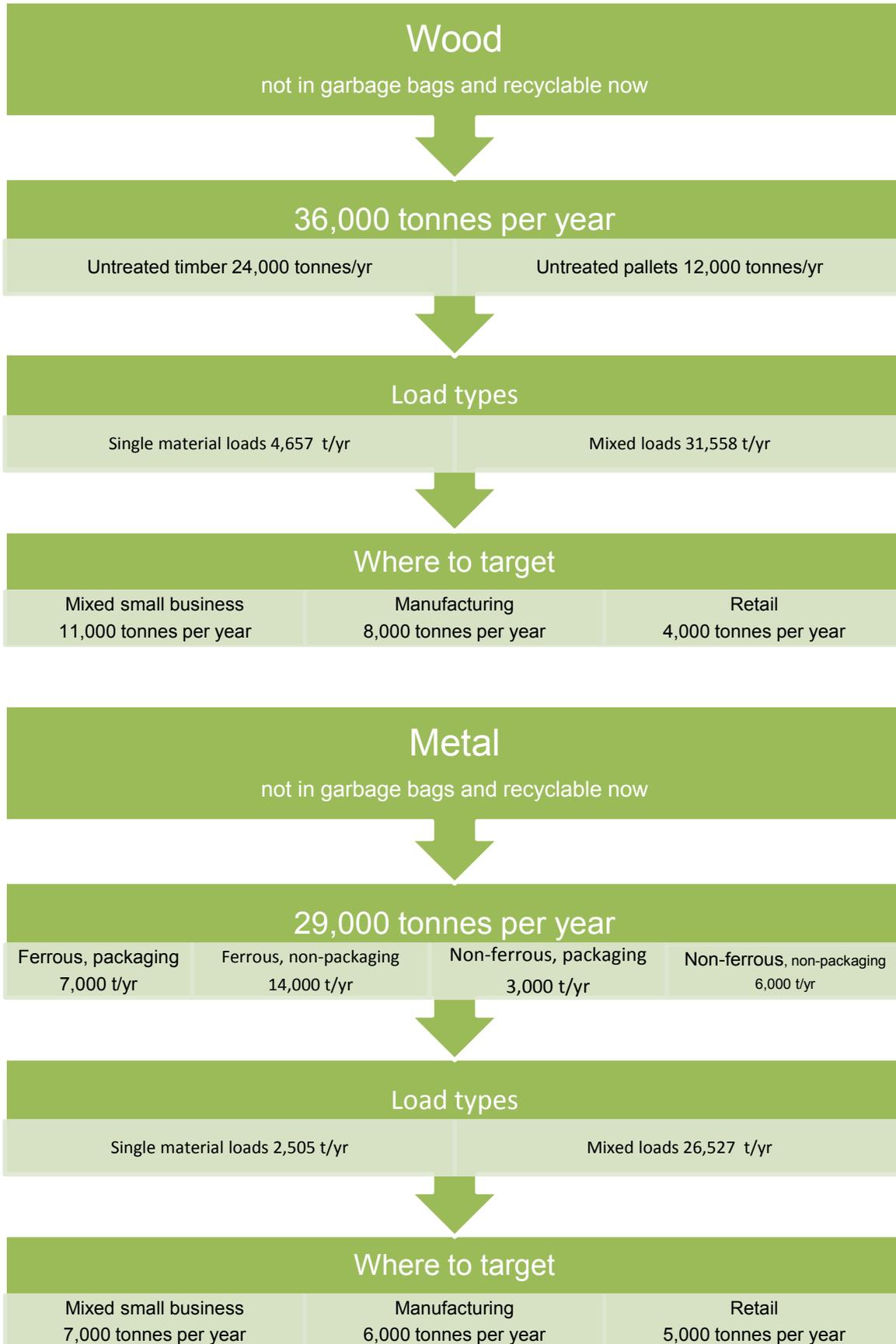
Currently, 32 per cent by weight of all loads arriving for disposal are defined as single-material loads (where one material makes up 90 per cent or more of the whole load). Almost 70 per cent of these loads contain 'other' waste such as fines, residues from existing waste processing facilities and garbage bags. Masonry represents 12 per cent and wood 10 per cent – these two categories present opportunities for recovery.

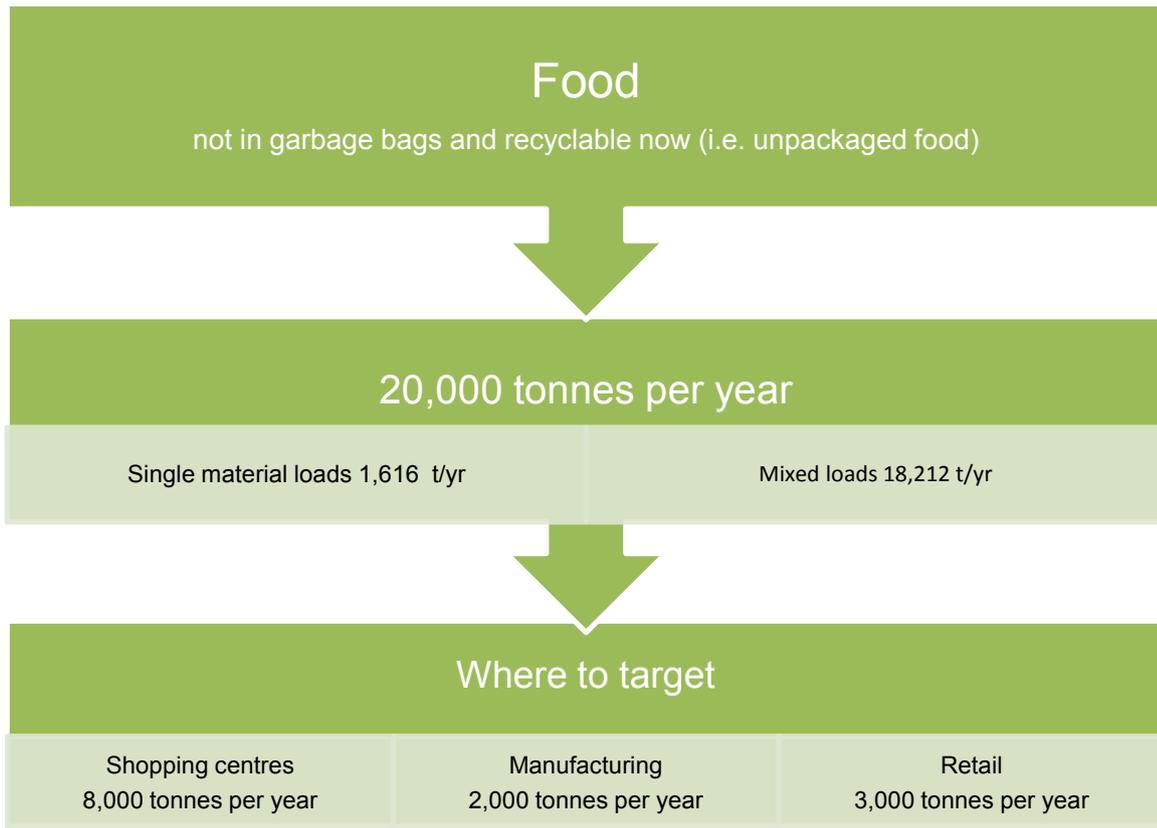
If garbage bags and their contents are considered to be not recyclable, then 27 per cent of overall C&I waste is recoverable now. The largest current opportunities are recovery of masonry materials, paper and cardboard, garden organics and plastic, with smaller amounts of wood, metals and food also available for recycling.

The scope of material recovery at source by the key industry sectors is summarised below:









However, only 10 per cent of mixed C&I deliveries contain materials that are clumped together and could be potentially separated for recycling. The other 90 per cent of deliveries are highly mixed, making recovery difficult without the aid of more complex machinery to separate materials. Front-lift and rear-lift trucks have the most loads containing materials that are clumped together.

In the future, as better source segregation and new technologies emerge (but assuming that garbage bags are still not recoverable) an extra 28 per cent of C&I could be recycled, making a total of 55 per cent of C&I that is potentially recoverable. The largest opportunity for increased recycling of C&I is treated wood, followed by textiles, extra masonry, extra plastics, and smaller amounts of wet/waxed cardboard and packaged food and other materials (insulation, pulp and sludge).

### **Manufacturing sector**

Assuming that the contents of garbage bags are not accessible for recycling, the largest current diversion opportunities for the C&I waste disposed by the manufacturing sector are paper, plastic, cardboard and masonry – a total of 22.1 per cent. In the future, another 30.3 per cent could be recovered, with the main opportunities being the recovery of treated wood, other materials (sludge, insulation, pulp) and other plastics.

### **Mixed small to medium size businesses**

For waste from mixed small businesses, the largest current opportunities for increased recovery are masonry, garden organics and plastic – a total of 33.6 per cent. In the future, another 44.9 per cent could be recovered, with the main opportunities being recovery of treated wood, other masonry materials, textiles and other plastics.

### **Retail sector**

For waste from the retail sector, the largest current recovery opportunities are plastic, cardboard, paper and garden organics – a total of 23.6 per cent. In the future, another 22.8 per cent could be recovered, with the main opportunities being recovery of treated wood, plastics, textiles and masonry materials.

### **Healthcare/Social assistance sector**

For waste from the healthcare/social assistance sector, the largest current opportunities are metal, masonry, garden organics and paper – a total of 20 per cent. In the future, another 33.8 per cent could be recovered, with the main opportunities being recovery of treated wood, textiles and extra plastics.

If we assume that the contents of garbage bags can be effectively accessed using waste separation machinery, then much more paper, plastic and food becomes available for recovery. In this scenario, 50 per cent of C&I waste is recoverable now and 33 per cent is recoverable in the future, making a total of 83 per cent of C&I waste that is potentially recoverable.

## **8.2 SMA**

More than one-third of C&I loads arriving for disposal in the SMA are single-material (segregated) loads. While most of these loads contain 'other' waste, such as fines, residues from existing waste-processing facilities and garbage bags, 9.8 per cent of segregated loads are loads of wood. These loads could be targeted for recovery.

If garbage bags and their contents are considered to be not recyclable, then 24 per cent of C&I waste disposed in the SMA is recoverable now and 28 per cent is recoverable in the future, making a total of 52 per cent of C&I that is potentially recoverable.

The largest current opportunities are recovery of masonry materials, garden organics, plastic, paper and cardboard, with smaller amounts of wood, metals and food also available for recycling.

In the future, the largest opportunity for increased recycling of C&I is treated wood, followed by textiles, extra plastics, extra masonry, and smaller amounts of wet/waxed cardboard, and packaged food and other materials (insulation, pulp and sludge).

If we assume that the contents of garbage bags can be accessed, then 46.7 per cent of C&I waste is recoverable now, and 33.1 per cent is recoverable in the future, making a total of 80 per cent of C&I waste that is potentially recoverable.

### 8.3 ERA

More than one-quarter of C&I loads arriving for disposal in the ERA are single-material (segregated) loads. Almost two-thirds of these loads contain masonry materials and eight per cent are loads of segregated wood. These loads could be targeted for recovery.

If garbage bags and their contents are considered to be not recyclable, then 43.1 per cent of C&I waste disposed in the ERA is recoverable now and 28.2 per cent is recoverable in the future, making a total of 71.3 per cent of C&I that is potentially recoverable.

The largest current opportunity is the recovery of masonry materials. There are small amounts of garden organics, plastic, paper and cardboard, with smaller amounts of plastic, paper, cardboard, garden organics, metals, wood and food waste also available for recycling.

In the future, the largest opportunities for increased recycling of C&I is treated wood, followed by extra masonry materials, extra plastics, and textiles. Smaller amounts of wet/waxed cardboard and packaged food and other materials (insulation, pulp and sludge) also become available for recovery in the future.

If we assume that the contents of garbage bags can be accessed, then 64.8 per cent of C&I waste is recoverable now and 32.3 per cent is recoverable in the future, making a total of 97.1 per cent of C&I waste that is potentially recoverable.

### 8.4 RRA

Only 12 per cent of C&I loads arriving for disposal in the RRA are single-material (segregated) loads. However, loads of masonry materials, wood, garden organics and cardboard make up almost one-third of these segregated loads. These loads could be targeted for recovery.

If garbage bags and their contents are considered to be not recyclable, then 29.9 per cent of C&I waste disposed in the RRA is recoverable now and 30.7 per cent is recoverable in the future, making a total of 60.6 per cent of C&I that is potentially recoverable.

The largest current opportunities are the recovery of masonry materials, paper, cardboard and wood. There are small amounts of garden organics, plastic, paper and cardboard, with smaller amounts of plastic, garden organics, metals and food waste also available for recycling.

In the future, the largest opportunities for increased recycling of C&I is treated wood, followed by extra masonry materials, extra plastics, and textiles. Smaller amounts of wet/waxed cardboard and packaged food and other materials (insulation, pulp and sludge) also become available for recovery in the future.

If we assume that the contents of garbage bags can be accessed, then 58.1 per cent of C&I waste is recoverable now and 36 per cent is recoverable in the future, making a total of 94.1 per cent of C&I waste that is potentially recoverable.

## 9. Conclusion

In 2013-14, almost 1.8m tonnes of Commercial and Industrial (C&I) waste from the regulated areas of NSW were disposed of at landfills. The results of the 2014 waste audit of 2000 C&I loads and 3000 garbage bags at 14 landfills and transfer stations shows that the majority of this waste is from the manufacturing, mixed small businesses, retail and healthcare/social assistance sectors, and that the main components of the waste are garbage bags, material such as residue from waste processing, shredder floc and pulp, wood, masonry materials and plastic. C&I waste also contains food, cardboard, vegetation, paper, textiles, metals, and small amounts of glass, rubber and electrical items. The NSW EPA's Draft *Waste Avoidance and Resource Recovery Strategy 2013-2021* aims to divert 75 per cent of all waste from landfill and recycle 70 per cent of commercial and industrial waste by 2021–22.

The results of this audit of waste disposed of by the commercial and industrial sector can help to achieve these recovery targets by:

- informing infrastructure and other investment decisions made under the NSW Government's *Waste Less, Recycle More* program;
- Informing regional and sub-regional waste and resource-recovery planning.
- Providing baseline data to assess the impact of the infrastructure funding program on resource recovery in the period 2013/14 to 2016/17 and beyond.
- Informing the waste and resource-recovery industry and businesses from the key industry sectors about C&I waste composition, particularly regarding recyclable materials.
- Assisting NSW EPA in developing business recycling programs to divert more materials away from landfills.

Of the C&I waste disposed of to landfill, 27 per cent is currently recyclable. The main opportunities for recovery are masonry materials, garden organics, paper, cardboard and plastic. If the contents of garbage bags can also be accessed for recycling, then 50 per cent of C&I waste can be recycled, as more paper, plastic and food becomes available.

In the future, better source segregation, new technologies, expanded Alternavie Waste Treatment (AWT) facilities and the commissioning of energy-from-waste plants will enable more materials (such as treated wood and textiles) and garbage bag contents to be accessed for recycling. Theoretically, up to 83 per cent of the C&I waste currently landfilled could be potentially recovered for recycling, including shredder floc in energy-from-waste facilities.

In the Sydney Metropolitan Area, a reduction in C&I waste to landfill of 800,000 tonnes per year was observed in 2014 compared with the previous audit in 2008. The next audit planned for 2017 will help to measure and determine whether the policy and investment decisions made under the *Waste Less, Recycle More* program and associated waste reduction and recycling initiatives has resulted in a further decrease in landfilling of C&I waste and, if so, by what magnitude.

## 10. Appendices

### Appendix A 2014 C&I Waste Stream Audit Methodology in NSW Regulated Areas

#### Disposal-based audit (DBA) – vehicles

##### Audit scheduling

It is anticipated the DBA (vehicles) audits, undertaken across the SMA, ERA and RRA, will typically occur over at least two full representative days in the same week from Monday to Friday addressing the number of loads allocated for auditing in each region. The DBA (vehicles) and DBA (garbage bags) audit programs must be undertaken concurrently with the bags being retrieved from loads that were visually assessed.

##### Audit site recruitment arrangements

###### *Landfill and transfer station liaison*

Based on the quantities of C&I waste received and their geographical locations, landfills and transfer stations in the regulated areas were shortlisted as potential sites. NSW EPA sought information from these sites on site conditions and number and type of C&I waste received to determine their suitability and their availability to host the audits. Based on the information supplied, the most suitable and available sites for the audit were determined.

The table below provides a breakdown on the number of, audit sites, mixed C&I loads and garbage bag samples to be audited across the regulated areas of New South Wales.

##### DBA (vehicles) and DBA (garbage bags) site summary

Regulated area	Site type	DBA (vehicles)		DBA (garbage bags)	
		Number of sites to be audited	Approx. number of audits <sup>3</sup>	Number of sites to be audited	Approx. number of audit (sample of 10 bags each)
<b>SMA</b> <sup>1</sup>	Landfill	five	900	five	120
	Transfer station	four	700	four	120
<b>ERA</b> <sup>2</sup>	Landfill	three	240	two	60
	Transfer station	-	-	-	-
<b>RRA</b>	Landfill	two	160	-	-
	Transfer station	-	-	-	-
<b>Totals</b>		<b>14</b>	<b>2 000</b>	<b>10</b>	<b>300</b>

<sup>1</sup> Sites to be selected to cover the bulk of the tonnages and the geographical area within SMA.

<sup>2</sup> Both Illawarra and Hunter regions to be covered.

<sup>3</sup> These vehicles numbers are for all loads recorded. Based upon the 2008 audit about 80 per cent of these loads will be mixed requiring visual audits. The remaining loads will need to be sighted, recorded and data used in the analysis.

#### *Pre-audit site visits and site specific documentation*

Waste audit contractors must arrange a minimum of one pre-audit inspection of each selected landfill and transfer station to:

- ensure its suitability for inclusion in the audit program
- identify audit locations taking safety, weather sensitivity and amenity into consideration
- agree upon any access restrictions or WHS issues which may impact upon the audit.

The waste audit contractor must provide each site operator with drafts of the following site documentation for discussion and finalisation:

- site work procedure
- WHS plan (including a risk assessment)
- site and safety induction procedure and checklist.

All waste audit team members will be required to undergo site and safety induction for every site at which they undertake auditing activities.

### **Audit data collection**

#### *Auditor training*

Close observations of site operations and liaison with site management will need to be undertaken prior to the commencement of the DBA (vehicles) to:

- refine the visual assessment techniques and WHS provisions (if required)
- train auditors to ensure they have the necessary skills and experience to under visual audits in a busy and hazardous environment
- ensure consistent application of the audit method across all sites.

It is important to ensure all audit staff have the required experience (ideally three to five years) in undertaking visual audits and working in a busy, hazardous environment. Auditor training should be undertaken at a site that has relatively safe operating conditions, and should target the completion of approximately 100 trial visual audits of mixed C&I loads and weight-based audit of 30–40 garbage bag samples (of 10 bags), collectively by all field staff. EPA staff may attend this audit.

#### *Survey on vehicle arrival*

All loads of C&I waste must be recorded at the gatehouse and/or disposal point with loads from non-C&I sources disregarded. The information in the Table below should be recorded by the waste audit contractor at the gatehouse and the waste auditor at the appropriate drop-off area notified of the vehicle carrying mixed C&I loads for visual assessment.

The following data will need to be recorded on vehicle arrival:

**Vehicle arrival data to be recorded by site operator and waste audit contractor**

Vehicle arrival data	Collected by	
	Site operator	Waste audit contractor
Vehicle registration number	√	√
Date	√	√
Time of entry	√	√
Vehicle company	√	√
Waste material type by Section 88 classification (see Appendix D)	√	√
Net weight of waste (tonnes)	√	√
Waste stream (C&I, C&D, municipal, transfer station, private)	√	√
Vehicle type (bulk bin, front lift, rear lift, side lift, skips, trucks & trailers, utilities & small trailers, on-site packers, cars, other)		√
Estimate of the vehicle volume (m <sup>3</sup> )		√
Type of business where the waste was generated by C&I waste ANZSIC industry division/subdivision source where possible, otherwise: Mixed SMEs; Office waste; or Shopping centre waste. If the load relates to more than one source type then the percentage of waste related to each must be recorded		√
Geographical source location by council area		√
Disposal point (tipping face location if the site has multiple tipping faces – to alert the visual auditors, push pit, or recycling bin)		√
Whether it is a single material load (with category)		√

The waste audit contractor must negotiate the location at which the information is collected with each site operator. Participating site operators have previously indicated a preference for collecting some of the required information at the disposal point / tip face or pit rather than at the gatehouse.

Mixed loads of C&I waste are to be identified at the gate house for visual auditing. Single material loads and loads from transfer stations are not required to be visually audited, however the details as outlined above must be recorded.

The site operator data is to be requested and obtained by the waste audit contractor. The waste audit contractor will negotiate with participating facilities for the provision of this data during audit preparations. This data is to be reconciled by the waste audit contractor against the auditor recorded data.

**Visual vehicle audit method**

A visual assessment of the composition must be conducted on each mixed C&I load being discharged at the tip face if at landfill, or the push pit if at transfer station. Visual observations are to be recorded on approved data-recording sheets.

For these loads the following data, in addition to that collected at the vehicle entry, should be recorded by one auditor at the drop-off area:

- Vehicle registration number.
- Date.
- Time.
- Disposal point.
- Observed volume (m<sup>3</sup>).
- Degree of compaction (low/medium/high).

- Degree of mixing (ie is there clumping of material in the load?)
- Material composition.
- Loads where greater than 90 per cent of the load is a single material – these are classified as ‘single material loads’.
- Load with clumps of potentially recoverable materials (rather than being distributed throughout the load).

If time permits, visual assessment of mixed loads should be refined by making a second assessment when the loads is well spread or some material removed for recycling.

A general assessment on the materials removed for recycling should be made based on the effectiveness of recovery on site and disposal volumes of material types further refined using a site specific per cent rate of recovery.

The draft data recording sheets will be prepared by the waste audit contractor for review and sign-off by EPA. Approved data sheets will be pre-numbered to ensure all recording sheets are accounted for after the audit. Waste audit contractors are not to copy the sheets. Each auditor using any pre-numbered sheet will need to enter their name at the top of the sheet and initial a chain of custody at the bottom of the sheet.

The material categories on the data record sheet should be used for recording composition. A section on the sheet for recording other categories, such as specific items present in large quantities or items made from unknown/composite materials should be provided. However, use of these categories should be reserved for special cases and not used as a matter of course.

Compositions are recorded as either a volume percentage or per cubic metre of the total load, whichever the auditor’s judge will provide the more accurate estimate. Minute or minor quantities of material categories should be recorded as <1 per cent. While usually a practical auditing reality, whenever possible auditors should avoid rounding to the nearest five per cent or 10 per cent, as this produces data artefacts during the statistical analysis.

Other information of interest to be incorporated into the visual assessment includes identifying loads where greater than 90 per cent of the load is a single material and/or where the load includes clumps of potentially recoverable materials rather than materials being distributed throughout the load. The reporting required will include a discussion of these aspects.

All completed hardcopy visual audit recording sheets are to be kept in a central location at the audit site, and must be made available to EPA for inspection on request.

Conversion of volume data to weight data must be undertaken using the agreed density factors provided. The estimated weight (based on the converted volumetric data) and the actual load weight must be compared. The estimated weight of each material type component should be scaled so that the aggregate equals the known measured weight of waste in each vehicle.

## **Analysis and reporting**

### *Total C&I waste to landfill*

The total disposal of C&I waste to landfill in each of the regulated areas of NSW will be provided to the waste audit contractor(s) for the audit reporting year. This data will be used to scale the DBA (vehicles) and DBA (garbage bags) data to quantify total C&I disposal in terms of material composition.

**Gatehouse survey form**

Day \_\_\_\_\_ Date \_\_\_\_\_ Site: \_\_\_\_\_ Auditor: \_\_\_\_\_

Details	Vehicle	Vehicle
Time (00:00 – 24:00)		
Rego Number		
Vehicle type		
Suburb of origin		
Business Code / sub code		
Bus name if single source		
Disposal point SV, LF, TS		
Postcode		
Company delivering		
Comments		
Details	Vehicle	Vehicle
Time (00:00 – 24:00)		
Rego Number		
Vehicle type		
Suburb of origin		
Business Code / sub code		
Bus name if single source		
Disposal point SV, LF, TS		
Postcode		
Company delivering		
Comments		
Details	Vehicle	Vehicle
Time (00:00 – 24:00)		
Rego Number		
Vehicle type		
Suburb of origin		
Business Code / sub code		
Bus name if single source		
Disposal point SV, LF, TS		
Postcode		
Company delivering		
Comments		

**Visual assessment recording sheet**

*NSW C& I LANDFILL AUDIT – VISUAL audit Data recording sheet*

Site \_\_\_\_\_ Day \_\_\_\_\_ Date \_\_\_\_\_ Assessor \_\_\_\_\_ Sheet No: \_\_\_\_\_

<b>Disposal location – SV, LF, TT</b>								
<b>Time</b>								
<b>Registration Number</b>								
<b>Vehicle type – as per codes</b>								
<b>Volume</b>								
<b>Volume observed at discharge</b>								
<b>Clumping of material</b>	Yes / No				Yes / No			
<b>Compaction high/ medium/ low</b>	H M L				H M L			
<b>Description</b>	<b>Visual 1</b>	<b>Visual 2</b>	<b>Count</b>	<b>Comment</b>	<b>Visual 1</b>	<b>Visual 2</b>	<b>Count</b>	<b>Comment</b>
Cardboard – dry – loose								
Cardboard – dry – compacted								
Cardboard – wet strength/wax – loose								
Cardboard – wet /wax – compacted								
Electrical– computers and peripherals								
Electrical – other								
Electrical – TVs								
Electrical – whitegoods								
Food organics – packaged								
Food organics – unpackaged								
Garbage bags								

Garden organics							
Glass – non-packaging							
Glass – packaging							
Masonry materials – concrete/bricks							
Masonry materials – other							
Metal (ferrous) – packaging							
Metal (ferrous) – non-packaging – LD							
Metal (ferrous)– non-packaging – HD							
Metal (non-ferrous) – packaging							
Metal (non-ferrous)– non-pack – LD							
Metal (non-ferrous)– non-pack – HD							
Paper – office							
Paper – other							
Paper – packaging							
Plastic – EPS foam							
Plastic – film packaging							
Plastic – other							
Plastic – rigid packaging							
Rubber							
Textiles & leather							
Textiles – mattresses							
Textiles-covered furniture							
Wood – treated/painted							

Wood – untreated								
Other – Batteries								
Other – gas bottles								
Other (including fines <10 mm) NOTE								
E WASTE LIST								
<b>Chain of custody</b>	<b>Auditor</b>	<b>Checker</b>	<b>Data entry</b>	<b>Analysist</b>	<b>Other</b>			

**Work health and safety**

A detailed risk assessment was completed for the project. Based on this, a comprehensive Work Health and Safety plan was developed for the audit project. This Plan was provided to EPA for review prior to work commencing.

No accidents, incidents or injuries occurred during the audit. Site permits to work were issued at every site after a full staff briefing, induction and approval of a site specific Safe Work Method Statement which had been agreed to by site management.

## Disposal-based audit (DBA) – garbage bags

The audit was carried out over 37 consecutive days in July and August 2014. The data was collected during the winter season, after the new financial year.

### Garbage bag survey method summary

1. Planning – stakeholder engagement, site visits and safe work methods.
2. Mobilisation – staff training, site inductions, develop management systems and quality control.
3. Set up audit collection area at landfill or transfer station.
4. Sample bags from C&I loads containing more than 20% garbage bags.
5. Label bags and complete a run sheet of sampling details for transfer to the sorting site.
6. Transfer bags to sorting site, receive and reconcile bags against run sheet.
7. Set up audit sorting area, label sorting bins and calibrate scales.
8. Weigh bag start weights, sort contents into 85 types of materials and weigh individual materials.
9. Dispose of / recycle sorted materials and clean up audit site.
10. Data entry, data analysis and reporting.

### Definition of garbage bags

Disposable plastic bags that are used to discard waste from onsite bins at C&I premises. Paper bags, hessian bags, bulka bags, small shopping carrier bags, bags containing bulk non-spec material from manufacturing processes, insulation wrap and packaging materials wrapped in plastic are excluded from this definition.

The Figure below provides an example of a type of bag included and excluded from the study.

**Figure 1: Garbage bag types included and excluded**



## Sampling

### *Locations and sample size*

The garbage bag audit was conducted at 12 sites across NSW, which is two less sites than the visual audit due to the exclusion of garbage bag sampling from two RRA sites. The types of sites and the number of bags audited by region are shown in Table 1.

**Table 1: Garbage bag sample details**

Site type	Number of sites audited by region				Number of bags audited by region			
	SMA	ERA	RRA	Overall	SMA	ERA	RRA	Overall
Landfills	4	3	1	8	930	620	420	1970
Transfer stations	4	0	0	4	1040	0	0	1040
<b>Total</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>12</b>	<b>1970</b>	<b>620</b>	<b>420</b>	<b>3010</b>

### *Bag collection process*

The sampling process is shown in Figure 2.

**Figure 2: Garbage bag sampling and collection method**



#### **Step 1**

The garbage bag survey team wait in the base survey area until a suitable load arrives at the facility. The two person team then leave the area and adopts a position in a safe distance from moving vehicles.



#### **Step 2**

A C&I waste truck tips material at the waste and recycling facility. The rego and delivery truck details are recorded and communication is made with a gatehouse survey and visual survey teams, to ensure that the load is C&I material, and if so, which industry source and that the load is confirmed as containing more than 20 per cent garbage bags.



#### **Step 3**

A two person garbage bag collection team approaches the load once the garbage delivery truck exits the area. The team checks the surroundings to ensure a safe collection process. The team takes a trolley (or set of 240L Mobile Garbage Bins [MGBs]) to the delivered load to carry the bags with minimal manual handling risk.



#### **Step 4**

The team assess the proportion of the type and colour of bags delivered and the size of the bags in the load and randomly select a representative 12 bags from the industry sector. The bags are placed in hessian bags secured to them for secure movement to the base survey area.



#### **Step 5**

The bags are taken to the base survey area so the bag sources can be checked and two bags of the 12 sampled are removed if they are not from the same industry source or two bags are removed at random if all of the bags are from the same source. The bags are then weighed and a volume measured and loaded onto truck in hessian bags (one or two per sample of 10 bags). The sample details are recorded onto a runsheet and the bags are delivered to the sorting site.

*Industry sectors*

The garbage bag survey focuses on industry sectors that generate garbage bags and these are categorised into eight ANZSIC codes as shown in Table 2.

One sample was defined as 10 bags from a known individual business, except for SME samples which comprised 10 bags from a mixture of small businesses. Therefore, the 3010 garbage bags were sourced from 301 individual samples. These 301 samples were coded into the industry sectors shown in Table 2.

**Table 2: Industry sectors surveyed**

Visual audit code	Sector name	Number of samples audited by region				Number of bags audited by region			
		SMA	ERA	RRA	Overall	SMA	ERA	RRA	Overall
M	Manufacturing	51	2	1	54	510	20	10	540
R	Retail trade	23	12	12	47	230	120	120	470
H	Accommodation, cafes and restaurants (Hospitality)	11	3	9	23	110	30	90	230
C	Health and social assistance (charity) ^	21	11	8	40	210	110	80	400
O	Offices	20	4	1	25	200	40	10	250
S	Shopping centres	10	7	2	19	100	70	20	190
E	Education (and training)	16	5	2	23	160	50	20	230
X	Mixed small business (SME)	29	13	6	48	290	130	60	480
Z	Other (businesses)	16	5	1	22	160	50	10	220
<b>Total</b>		<b>197</b>	<b>62</b>	<b>42</b>	<b>301</b>	<b>1970</b>	<b>620</b>	<b>420</b>	<b>3010</b>
^ For additional information to match 2008, healthcare and social assistance (charity) was split into health services and community services as shown below.									
C1	Health services ^	10	7	3	20	100	70	30	200
C2	Social assistance (Community services in 2008 audit) ^	11	4	5	20	110	40	50	200

## Material sorting

### Sorting process

Collection was undertaken using the aggregated truck method system and an auditor accompanied the collection truck to ensure that all samples collected were those with stickers.

**Figure 3: Garbage bag sorting method**



#### Step 1

The survey team receive the garbage bags at the sorting site and line them up in order of the sample number. Bags from the same load are placed on top of each other.

The gate fees were paid on entry to the sorting facility after the tonnages removed from the collection facility, to ensure that the appropriate levies were only paid once.



#### Step 2

In the sample number order, the bags are sorted by the sorting teams of up to eight staff. There are two to four people per team including one consultant per team for data entry, sorting compliance checking and general methods analysis.

The bags are first weighed as a complete sample to ensure the weight reconciles with the weight recorded at the collection site, and the weight of the separated materials following sorting.



#### Step 3

The composition of the ten bags in each of the sorting categories are sorted by the teams into 60L sorting bins each labelled with the material category using laminated sorting bin labels. The sorting categories are provided in Table 3.



#### Step 4

The consultant records the weight of each material category in the 60L sorting bins. A tare and gross bin weight is taken by the data recorder. The material is then tipped into 240L MGB's and removed or recycled at the sorting site.

*Sorting categories*

The materials were sorted and classified for analysis using the 85 categories shown in Table 3. The data was analysed based on the groupings of materials shown.

**Table 3: Sorting categories and aggregation method**

Sorting category		Analysis groups			
		Visual audit	Recyclability	DOC	Pack
S-1	Food organics – unpackaged	Food organics – unpackaged	Organic compostable food <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-2	Food organics – packaged	Food organics – packaged	Organic other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-3	Food organics – liquid	Food organics – packaged	Organic compostable food <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-4	Garden organics	Garden organics	Organic compostable wood <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-5	Wood/untreated – board/pole, untreated	Wood – untreated	Organic compostable wood <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-6	Wood/untreated – pallets/furniture	Wood – untreated – pallets	Organic compostable wood <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-7	Wood/untreated – chipboard / MDF	Wood – untreated	Organic compostable wood <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-8	Wood/treated/painted – board/pole, treated	Wood – treated/painted	Organic other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-9	Wood/treated/painted – pallets/furniture	Wood – treated/painted – pallets	Organic other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-10	Wood/treated/painted – chipboard / MDF	Wood – treated/painted	Organic other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-11	Cardboard dry – packaging	Cardboard dry – loose	Cardboard commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-12	Cardboard dry – production spoils	Cardboard dry – loose	Cardboard commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-13	Cardboard dry – waxed	Cardboard – wet strength/waxed – loose	Cardboard other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-14	Cardboard wet – packaging	Cardboard – wet strength/waxed – loose	Cardboard other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-15	Cardboard wet – production spoils	Cardboard – wet strength/waxed – loose	Cardboard other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-16	Cardboard wet – waxed	Cardboard – wet strength/waxed – loose	Cardboard other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-17	Paper – photocopy paper	Paper – office	Paper commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-18	Paper – magazines / catalogues	Paper – office	Paper commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-19	Paper – brochures and leaflets	Paper – office	Paper commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-20	Paper – books	Paper – office	Paper commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-21	Paper - printing/writing (other office)	Paper – office	Paper commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Disposal-based audit – Main Report

S-22	Paper – other packaging	Paper – packaging	Paper commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-23	Paper – newsprint	Paper – other	Paper commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-24	Paper – brown kraft paper	Paper – other	Paper commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-25	Paper – rolls of low grade	Paper – other	Paper commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-26	Paper – hand towels	Paper – other	Organic compostable paper <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-27	Paper – contaminated	Paper – other	Organic compostable paper <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-28	Plastic – PET bev. cont. (P1)	Plastic – rigid packaging	Plastic commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-29	Plastic – PET pack. (excl bev cont.) (P1)	Plastic – rigid packaging	Plastic commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-30	Plastic – PET other non-bev/non-pack. (P1)	Plastic – other	Plastic other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-31	Plastic – HDPE bev. cont. (P2)	Plastic – rigid packaging	Plastic commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-32	Plastic – HDPE pack. (excl bev cont.) (P2)	Plastic – rigid packaging	Plastic commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-33	Plastic – HDPE other non-bev/non-pack. (P2)	Plastic – other	Plastic other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-34	Plastic – PVC bev. cont. (P3)	Plastic – rigid packaging	Plastic commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-35	Plastic – PVC pack. (excl bev cont.) (P3)	Plastic – rigid packaging	Plastic commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-36	Plastic – PVC other non-bev/non-pack. (P3)	Plastic – other	Plastic other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-37	Plastic – LDPE pack. (P4)	Plastic – rigid packaging	Plastic commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-38	Plastic – LDPE non-pack (P4)	Plastic – other	Plastic other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-39	Plastic – PP pack. (P5)	Plastic – rigid packaging	Plastic commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-40	Plastic – PP non-pack. (P5)	Plastic – other	Plastic other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-41	Plastic – PS pack. (P6)	Plastic – rigid packaging	Plastic commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-42	Plastic – EPS pack cont. (P6)	Plastic – EPS foam	Plastic other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-43	Plastic – PS & EPS non-pack. (P6)	Plastic – other	Plastic other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-44	Plastic – Other plastic cont. (P7)	Plastic – rigid packaging	Plastic commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-45	Plastic – film packaging (bags and film)	Plastic – film packaging	Plastic film <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-46	Plastic – polystyrene foam (EPS)	Plastic – EPS foam	Plastic other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-47	Plastic – other	Plastic – other	Plastic other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-48	Glass – containers bev	Glass – packaging	Glass commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Disposal-based audit – Main Report

S-49	Glass – containers non-bev	Glass – packaging	Glass commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-50	Glass – containers (fines)	Glass – packaging	Glass commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-51	Glass – plate / non-pack. (other glass)	Glass – non-packaging	Glass other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-52	Metal (ferrous) – packaging bev	Metal (ferrous) – packaging	Metal commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-53	Metal (ferrous) – packaging non-bev	Metal (ferrous) – packaging	Metal commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-54	Metal (ferrous) – non-packaging	Metal (ferrous) – non-packaging (low density)	Metal other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-55	Metal (non-ferrous) – packaging bev	Metal (non-ferrous) – packaging	Metal commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-56	Metal (non-ferrous) – packaging non-bev	Metal (non-ferrous) – packaging	Metal commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-57	Metal (non-ferrous) – non-packaging	Metal (non-ferrous) – non-packaging (low density)	Metal other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-58	Textiles – carpet and underlay	Textiles – carpet and underlay	Textiles other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-59	Textiles – cloth	Textiles and leather	Textiles other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-60	Textiles – covered furniture	Textiles – covered furniture	Textiles other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-61	Textiles – mattresses	Textiles – mattresses	Textiles (mattresses) <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-62	Textiles – other	Textiles and leather	Textiles other <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-63	Rubber – tyres, tubes	Rubber	Rubber <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-64	Rubber – other	Rubber	Rubber <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-65	Electrical and electronic – TVs	Electrical – TVs	Electrical <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-66	Electrical – computers and peripherals	Electrical – computers and peripherals	Electrical <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-67	Electrical – toner cartridges	Electrical – computers and peripherals	Electrical <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-68	Electrical – whitegoods	Electrical – whitegoods	Electrical <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-69	Electrical – WEEE (other)	Electrical – other	Electrical <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-70	C&D – concrete	Masonry materials – concrete/bricks	Masonry <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-71	C&D – bricks	Masonry materials – concrete/bricks	Masonry <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-72	C&D – tiles	Masonry materials – concrete/bricks	Masonry <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-73	C&D – rock/dirt/soil	Masonry materials – concrete/bricks	Masonry <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-74	C&D – asphalt	Masonry materials – concrete/bricks	Masonry <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

S-75	C&D – plasterboard	Masonry materials – other	Masonry <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-76	Contaminated soils and processing residuals	Other (including fines <10 mm)	Other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-77	Hazardous / special – batteries	Other – batteries	Other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-78	Hazardous / special – gas bottles	Other – gas bottles	Other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-79	Hazardous / special – fluorescent tubes	Other (including fines <10 mm)	Other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-80	Hazardous / special – chemicals	Other (including fines <10 mm)	Other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-81	Hazardous / special – clinical	Other (including fines <10 mm)	Other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-82	Fines (<10mm) not able to be categorised	Other (including fines <10 mm)	Other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-83	Liquid paperboard (cardboard)	Paper – other	Paper commingled <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-84	Nappies (including Absorbent Hygiene Waste (AHW))	Other – nappies	Nappies <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
S-85	Other	Other (including fines <10 mm)	Other <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

^ Not deemed to be currently recyclable based on the type of material identified within garbage bags in small quantities.

*Potential recovery of C&I waste currently disposed*

Each material in the C&I waste has been classified as either:

- **recyclable now** – using available technology.
- **recyclable in the future** – through better source separation and/or emerging technologies
- **not recyclable** – no current or emerging technologies that can feasibly recycle this material.

**Figure 4: Material recyclability aggregation**



Recyclable now	Recyclable in the future	Not recyclable
<ul style="list-style-type: none"> <li>• cardboard – dry, loose</li> <li>• cardboard – dry, compacted</li> <li>• electrical – computers and peripherals</li> <li>• electrical – TVs</li> <li>• electrical – white goods</li> <li>• food organics – unpackaged</li> <li>• garden organics</li> <li>• glass – packaging</li> <li>• masonry materials – concrete/bricks</li> <li>• metal (ferrous) – packaging</li> <li>• metal (ferrous) – non-packaging, LD and HD</li> <li>• metal (non-ferrous) – packaging</li> <li>• metal (non-ferrous) – non-packaging, LD and HD</li> <li>• paper – office</li> <li>• paper – other</li> <li>• paper – packaging</li> <li>• plastic – EPS foam</li> <li>• plastic – film packaging</li> <li>• plastic – rigid packaging</li> <li>• textiles – mattresses</li> <li>• wood – untreated</li> <li>• wood – untreated, pallets</li> <li>• sawdust</li> </ul>	<ul style="list-style-type: none"> <li>• cardboard – wet strength/wax, loose</li> <li>• cardboard – wet/wax, compacted</li> <li>• electrical – other</li> <li>• food organics – packaged</li> <li>• glass – non-packaging</li> <li>• masonry materials – other</li> <li>• plastic – other</li> <li>• rubber</li> <li>• textiles and leather</li> <li>• textiles – carpet</li> <li>• textiles – covered furniture</li> <li>• wood – treated/painted</li> <li>• wood – treated – pallets</li> <li>• pulp</li> <li>• insulation</li> <li>• sludge</li> </ul>	<ul style="list-style-type: none"> <li>• fines</li> <li>• floc (plastic and metal residue from shredding)</li> <li>• building waste (composites)</li> <li>• pharmaceutical</li> <li>• asbestos</li> <li>• clinical</li> <li>• miscellaneous (this included mixed boxes of items, luggage, bric-a-brac, brake residue, drums of charcoal, air filters, glue, lino, synthetic grass, ducting)</li> </ul>

### Data verification and accuracy

Several quality control actions were taken including third party checking of data and weighing aggregated samples prior to sub-sorting to check audit accuracy. In addition some random bins were re-sorted by an audit supervisor to check the sorting quality.

Rounding has been applied to this data; therefore the data represented is a calculated approximation of the raw data and its exact mathematical value. The rounding of figures may cause some variances with totals.

### Unit of measurement

All results in the tables, the charts and the text are represented as percentage by weight unless otherwise stated.

### Raw data

The raw data is provided in Appendix F.

### Comparison of 2014 project method with 2008

Table 4 provides a comparison of the garbage bag project method with 2008.

**Table 4: Comparison of 2014 project method with 2008**

Item	2008 garbage bag survey		2014 garbage bag survey	
Minimum bags	2400		3000	
Minimum sets of 10 bags	240		300	
Sampling region	SMA		SMA, ERA and RRA	
Interception points	Landfills	five	Landfills	eight
	Transfer stations	four	Transfer stations	four
Number of sampling sites	nine		10 (two extra ERA, one extra RRA, one less SMA)	
Number of sorting categories	50		85	

In 2008, the sample size for each select industry sector was pre-determined, resulting in difficulties in achieving the set targets. To more accurately profile the bag composition in 2014, the bags were picked up from the loads delivered that represented the selected industry sectors.

### Limitations

The following limitations of the study are noted, although there are few limitations based lessons learnt after the 2008 audits which generally used similar methods:

- The sampling included only 12 waste disposal sites.
- NSW EPA targeted a sample size that achieved a confidence level of 90 per cent with an interval of +/-7 per cent either side of the mean result for each of the 42 visual auditing categories. The confidence intervals at 90 per cent confidence have the following maximum intervals within each of the following datasets:
  - Consolidated visual auditing categories have a maximum interval of +/- 4.2 percentage points either side of the mean on paper.
  - Detailed visual auditing categories have a maximum interval of +/- 4.0 percentage points either side of the mean on food organics – unpackaged.

These values are calculated based on the percentage composition of all samples sorted as one overall region. The garbage bag audit did not obtain true generation weights for any unit such as a

source generator or truckload, therefore, the percentages have been used. The confidence intervals are only calculated for the visual auditing categories to match the original design specification of the audit. Appendix I provides the confidence intervals for each material.

- The audits do not account for season, or the impact of holidays and festivals on C&I waste composition.
- Sampling was conducted just after the end of the financial year which may have resulted in increased amounts of paper in the waste from records disposed by businesses that were not recycled. However, this impact is deemed to be minimal based on comparisons with the previous data from 2008 which was conducted in April/May.
- The target garbage bag sample size of 2400 bags for SMA was not reached based on the number of audit days specified by NSW EPA. This shortfall paved the way to extend the garbage bag audit to cover the RRA, which was initially not included. This provides data for all three regulated areas.
- The garbage bags were mainly sourced from mixed loads that were coded as mixed SME loads by the visual audit staff (i.e. predominantly front lifts and rear lifts, which comprised approximately two thirds of all samples). The garbage bag audit staff then separated up to three source sectors of bags from within the load. This method provides a higher level of detail on the source sectors of wastes received within mixed loads. However, there can be a discrepancy between the sectors coded in the visual audit based on data supplied by the driver, compared to a detailed physical inspection of the load. The garbage bag audit provides additional data on the source sectors of wastes received in mixed loads.
- The bag weights decrease from the time of collection (start weight) to the time of sorting (individual category weights). This is likely to be due to evaporation within the truck. While this meant that all bags were sorted at a centralised safe location, some additional weights needed to be added to the liquids category in the sorting data for liquid correction.
- In 2008, the industry sector of education and training was not reported separately. However, since the organisation names were recorded, these organisations were recoded for use in this report from health and community services to education and training. A couple of educational premises in 2008 were listed as offices, because the waste was administrative. These were not recoded to education and training.
- The results in this report vary slightly to those reported in the visual audit. This is due to the garbage bag report being developed based on the sorted weights by region and the visual audit being based on the results by site factored to the tonnes delivered to each site. Factoring was not required in the visual audit, because whole loads were not audited.

**Garbage bag collection recording sheet**

Load Number	Waste Facility Name	Day (xxx)	Date (dd/mmm)	Load Arrival Time (24hr, hr.min)	Waste Source (Company)	Waste Source (Address/ Suburb)	Waste Source (Sector & Sub-Sector)	Vehicle Type	Vehicle Rego	No. Bags Sampled	No. Bags Sent for Sorting	Bag Types Sourced (e.g. 1 bulka bag, 9 cleaner bags)	Volume of Total Bags Sent (litres)	Weight of Total Bags Sent (kg) (2 d.p.)	Other Notes (e.g.sharps, heavy)
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
32															

Disposal-based audit – Main Report

Garbage bag sorting data recording sheet

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NSW EPA Commercial and Industrial Waste Survey  
2014 Garbage Bag Survey

FORM003-Sorting Data Recording Form  
Composition Data

Day ..... Industry Sector: ..... Waste Facility Source ..... Date Load Sampled: .....  
 Audit Date ..... Industry Sub-sector: ..... Rego ..... Load Number (e.g. x of 30): ..... of .....  
 Audit Start Time ..... Company Source: ..... No. of Bags Sorted: .....  
 Audit Finish Time ..... No. of Bags Received: ..... Vehicle Type ..... Time Bags Sampled: .....

Bag Number	1	2	3	4	5	6	7	8	9	10
Bag Type (e.g. Bulka bag, black cleaner bag, white cleaner bag)										
Weight of Bag (kg) (2 d.p.)										
Volume of Bag (Litres)										

Category	Weight in Kilograms (kg) / Volume (L)									Notes
	Container 1			Container 2			Container 3			
	GROSS	TARE	VOLUME	GROSS	TARE	VOLUME	GROSS	TARE	VOLUME	
1 Food organics - unpackaged										
2 Food organics - packaged										
3 Food organics - liquid										
4 Garden organics										
5 Wood/untreated - board/pole, untreated										
6 Wood/untreated - pallets/furniture										
7 Wood/untreated - chipboard / MDF										
8 Wood/treated/painted - board/pole, treated										
9 Wood/treated/painted - pallets/furniture										
10 Wood/treated/painted - chipboard / MDF										
11 Cardboard dry - packaging										
12 Cardboard dry - production spoils										
13 Cardboard dry - waxed										
14 Cardboard wet - packaging										
15 Cardboard wet - production spoils										
16 Cardboard wet - waxed										
17 Paper - photocopy paper										
18 Paper - magazines / catalogues										
19 Paper - brochures and leaflets										
20 Paper - books										
21 Paper - printing/writing (other office)										
22 Paper - other packaging										
23 Paper - newsprint										
24 Paper - brown kraft paper										
25 Paper - rolls of low grade										
26 Paper - hand towels										
27 Paper - contaminated (in.tissue/ex.hand towels)										
28 Plastic - PET bev. cont. (P1)										
29 Plastic - PET pack. (excl bev cont.) (P1)										
30 Plastic - PET other non-bev/non-pack. (P1)										
31 Plastic - HDPE bev. cont. (P2)										
32 Plastic - HDPE pack. (excl bev cont.) (P2)										
33 Plastic - HDPE other non-bev/non-pack. (P2)										
34 Plastic - PVC bev. cont. (P3)										
35 Plastic - PVC pack. (excl bev cont.) (P3)										
36 Plastic - PVC other non-bev/non-pack. (P3)										
37 Plastic - LDPE pack. (P4)										
38 Plastic - LDPE non-pack (P4)										



## Appendix B Industry sector definitions

Industry sector	Subsectors	Examples of business types within the division
Manufacturing		Manufacturers of: food products, beverage and tobacco products, textile, leather, clothing and footwear, wood products, pulp, paper and converted paper products, printing, petroleum and coal products, chemical and chemical products, polymer products, non-metallic mineral products, metal and metal products, machinery and equipment and furniture.
	Food product manufacturing	Meat and meat product manufacturing, seafood processing, dairy product manufacturing, fruit and vegetable processing, oil and fat manufacturing, grain mill and cereal product manufacturing, bakery product manufacturing, sugar and confectionery manufacturing, other food product manufacturing
Retail trade		Food retailing, store and non-store retailing, fuel retailing, motor vehicle and motor vehicle parts retailing
	Food retailing	Supermarket and grocery stores, specialised food retailing, liquor retailing
	Other store-based retailing	Retailing of: furniture, floor coverings, housewares, textile goods, electrical and electronic goods, hardware, building and garden supplies, recreational goods, clothing, footwear, personal accessories, department stores, pharmaceutical, other store-based.
Accommodation and food services		Hotels, hostels, bed & breakfast, restaurants, cafes, take-away food services, pubs, taverns and clubs
	Accommodation	Accommodation
	Food and beverage services	Cafes, restaurants and takeaway food services, pubs, taverns and bars, clubs (hospitality)

Wholesale trade		Fuel distribution centres, car distribution centres, agricultural product wholesalers
Education and training		Pre-school, school and tertiary education. Adult, community and other education and associated support services
Arts and recreation services		Museums, parks and gardens, art galleries, sports and recreation facilities, horse and dog racing activities, creative and performing arts activities, gambling activities
Transport, postal and warehousing		Road, rail and water transport and the associated support services. Courier and logistics services. Warehousing and storage services
Healthcare and social assistance		Hospitals, medical and other healthcare services, residential care, social assistance services, childcare services
Mixed small businesses		Any other small business that does not fit above categories
Shopping centres		Groups of shops centrally managed
Offices		Office-based activities
Unknown		
Other		Known but not any of the above

## Appendix C Material categories and definitions

Material category	Definition
Cardboard – dry – loose	Dry cardboard boxes, printed and branded cardboard, cardboard off cuts
Cardboard – dry – compacted	Compacted Dry cardboard boxes and off cuts
Cardboard – wet – loose	Wet / waxed and soiled cardboard, including fruit boxes, etc.
Cardboard – dry – compacted	Compacted Wet / waxed and soiled cardboard, including fruit boxes, etc.
Electrical – computers/peripherals	Computers, monitors, photocopiers, fax machines, printers, etc.
Electrical – other	Includes small appliances – details to be noted
Electrical – TVs	Televisions.
Electrical– whitegoods	Washing machines, fridges, etc
Food organics – packaged	Packaging post-consumer food items
Food organics – unpackaged	Pre and post-consumer fruit, vegetable, meta, fat, bone
Garbage bags	Enclosed bags of garbage
Garden organics	Plant material, leaves, grass, small branches
Glass – non-packaging	Window glass, windscreens, broken bottles, non-recyclable glass such as wine glasses.
Glass – packaging	Glass bottles and jars
Masonry materials – concrete/bricks	Any concrete, bags of cement dust, etc. Full-bricks, broken bricks, Roof tiles, clay tiles – whole or broken. Stones, uncontaminated soil, Inert material not elsewhere classified. Asphalt, bitumen.
Masonry materials – other	Includes plasterboard, gypsum – details to be noted
Metal (ferrous) – packaging	Packaging items that are mainly steel/iron
Metal (ferrous) – non-packaging – LD	Non-packaging items that are mainly steel/iron – low density (LD)
Metal (ferrous) – non-packaging – HD	Non-packaging items that are mainly steel/iron solid i.e. motors – high density (HD)
Metal (non-ferrous) – packaging	Aluminium cans, trays and foil
Metal (non-ferrous)– non-packaging – LD	Aluminium siding, copper wire, any items that are mainly non-packaging related metal but are not steel/iron – low density (HD)
Metal (non-ferrous)– non-packaging – HD	Non-packaging – solid aluminium, etc. i.e. motors High density (HD)
Paper – office	Photocopy paper, books, printing and writing papers, magazines, catalogues, brochures and leaflets.
Paper – other	Newspapers, craft paper, rolls of low-grade paper, hand towels, contaminated paper.
Paper – packaging	Coated and uncoated paper packaging.

Plastic – EPS foam	Expanded Polystyrene Packaging foam
Plastic – film packaging	Film wrap, plastic bags (not filled)
Plastic – other	All other plastics not elsewhere classified – details to be noted
Plastic – rigid packaging	Plastic bottles and jars – margarine, food/beverage containers (PICs 1–6).
Rubber	All tyres (full and shredded) and inner-tubes, rubber mats, rubber tubes, rubber washers, foam rubber
Textiles & leather	Clothes, rags, rolls of fabric, fabric off-cuts.
Textiles – carpet	Rolls of carpet, carpet off-cuts, carpet tiles, felt or foam underlay, synthetic underlay
Textiles – mattresses	Any mattress,
Textiles- covered furniture	Material or leather / vinyl covered furniture
Wood – treated/painted	Pieces of solid timber with visible signs of chemical treatment. CCA treated timber has a green tinge, e.g. “coppers logs”. Wardrobes, painted fence posts, varnished furniture, wooden chairs, doors, engineered timber products, old kitchen benches, chipboard, etc.
Wood – treated – pallets	Timber treated pallets
Wood – untreated	Pieces of solid timber without any visible signs of treatment. timber off-cuts, posts.
Wood -untreated pallets	Timber untreated pallets
Other – batteries	batteries (lead/acid batteries)
Other – gas bottles	Gas bottles
Other (including hazardous and fines <10 mm)	This includes contaminated soil recorded as C&I and residues from a range of processing facilities (MRF, AWT) slags and flyash. Includes chemicals, lamps, ceramics, clinical waste including sharps and cytotoxic wastes, contaminated material

## Appendix D Material density conversion factors

Material	Density by compaction (kg/m <sup>3</sup> )		
	low	medium	high
Cardboard – dry – loose *	55	55	55
Cardboard – dry – compacted	130	130	130
Cardboard – wet strength/wax – loose *	190	190	190
Cardboard – wet/wax – compacted	260	260	260
Electrical – computers and peripherals	265	265	265
Electrical – other	105	113	120
Electrical – TVs #	185	185	185
Electrical – white goods	105	113	120
Food organics – packaged	343	514	1.029
Food organics – unpackaged	343	514	1.029
Garbage bags	87	170	348
Garden organics	91	227	445
Glass – non-packaging	411	411	411
Glass – packaging	280	280	280
Masonry materials – concrete/bricks	830	830	830
Masonry materials – other	470	550	640
Metal (ferrous) – packaging	120	120	120
Metal (ferrous)– non-packaging – LD	120	120	120
Metal (ferrous)– non-packaging – HD #	500	500	500
Metal (non-ferrous) – packaging	139	139	139
Metal (non-ferrous)– non-pack – LD	139	139	139
Metal (non-ferrous)– non-pack – HD #	200	200	200
Paper – office	76	152	228
Paper – other	76	152	228
Paper – packaging	76	152	228
Plastic – EPS foam	14	21	28
Plastic – film packaging	39	78	156
Plastic – other	170	170	360
Plastic – rigid packaging	72	72	72
Rubber	260	260	260
Textiles & leather	91	91	240
Textiles – carpet *	100	150	350
Textiles – mattresses *	50	50	50
Textiles – covered furniture *	90	100	450

Disposal-based audit – Main Report

Wood – treated/painted	180	220	260
Wood – treated – pallets *	156	156	156
Wood – untreated	120	160	360
Wood – untreated – pallets *	156	156	156
Other – batteries	170	170	350
Other – gas bottles	170	170	350
Other – nappies #	140	160	200
Other (including fines <10 mm)	170	170	350

Source: Methodology for the 2014 C&I Waste Stream Audit in the Regulated Areas in NSW

\* 2008 C&I report methodology

# Industry sources: 2014

## Appendix E Consolidated material categories

Reporting	Aggregated
Cardboard – dry	Cardboard
Cardboard – wet/wax	Cardboard
Electrical – computers and peripherals	Electrical
Electrical – other	Electrical
Electrical – TVs	Electrical
Food organics – packaged	Food
Food organics – unpackaged	Food
Garbage bags	Garbage bags
Garden organics	Garden organics
Glass – non-packaging	Glass
Glass – packaging	Glass
Masonry materials – concrete/bricks	Masonry
Masonry materials – other	Masonry
Metal (ferrous) – packaging	Metals
Metal (ferrous) – non-packaging	Metals
Metal (non-ferrous) – packaging	Metals
Metal (non-ferrous) – non-packaging	Metals
Paper – office	Paper
Paper – other	Paper
Paper – packaging	Paper
Plastic – EPS foam	Plastic
Plastic – film packaging	Plastic
Plastic – other	Plastic
Plastic – rigid packaging	Plastic
Rubber	Rubber
Textiles & leather	Textiles
Textiles – carpet	Textiles
Textiles – mattresses	Textiles
Textiles – covered furniture	Textiles
Wood – treated/painted	Wood
Wood – treated – pallets	Wood
Wood – untreated	Wood
Wood – untreated – pallets	Wood
Other – Batteries	Other
Other – gas bottles	Other
Other – nappies	Other
Other (including fines <10 mm)	Other

## Appendix F Data

### Overall NSW Regulated Area

Table AF1 - All load types - detailed categories

Materials	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	27,116	1.5%	47,585	2.7%	20,469	4.1%
Cardboard dry – compacted	26,563	1.5%	26,563	1.5%	0	0%
Cardboard – wet strength/waxed	2256	0.1%	11,797	0.7%	9542	1.9%
Cardboard – wet strength/waxed	12,357	0.7%	12,357	0.7%	0	0%
Electrical – computers and	1036	0.1%	1091	0.1%	55	0%
Electrical – other	2937	0.2%	5066	0.3%	2128	0.4%
Electrical – TVs	610	0%	921	0.1%	311	0.1%
Electrical – whitegoods	297	0%	299	0%	2	0%
Food organics – packaged	18,886	1.1%	30,789	1.7%	11,903	2.4%
Food organics – unpackaged	19,828	1.1%	140,529	7.9%	120,701	24%
Garbage bags	503,310	28.4%	0	0%	0	0%
Garden organics	67,966	3.8%	84,165	4.7%	16,200	3.2%
Glass – non-packaging	8563	0.5%	8707	0.5%	144	0%
Glass – packaging	4023	0.2%	17,547	1%	13,524	2.7%
Masonry materials –	145,144	8.2%	145,225	8.2%	81	0%
Masonry materials – other	67,885	3.8%	72,731	4.1%	4846	1%
Metal (ferrous) – packaging	6693	0.4%	13,442	0.8%	6749	1.3%
Metal (ferrous) – non-packaging	13,698	0.8%	17,784	1%	4086	0.8%
Metal (ferrous) – non-packaging	338	0%	338	0%	0	0%
Metal (non-ferrous) – packaging	2521	0.1%	6662	0.4%	4141	0.8%
Metal (non-ferrous) – non-	5291	0.3%	6767	0.4%	1476	0.3%
Metal (non-ferrous) – non-	492	0%	492	0%	0	0%
Paper – office	10,927	0.6%	47,150	2.7%	36,223	7.2%
Paper – other	15,007	0.8%	85,941	4.8%	70,934	14.1%
Paper – packaging	27,230	1.5%	47,156	2.7%	19,926	4%
Plastic – EPS foam	6944	0.4%	7763	0.4%	820	0.2%
Plastic – film packaging	45,139	2.5%	105,431	5.9%	60,293	12%
Plastic – other	65,328	3.7%	81,587	4.6%	16,259	3.2%
Plastic – rigid packaging	5692	0.3%	33,745	1.9%	28,053	5.6%
Rubber	7096	0.4%	11,110	0.6%	4013	0.8%
Textiles and leather	21,508	1.2%	36,457	2.1%	14,949	3%
Textiles – carpet and underlay	33,950	1.9%	35,967	2%	2018	0.4%
Textiles – mattresses	4350	0.2%	4350	0.2%	0	0%

Disposal-based audit – Main Report

Textiles – covered furniture	17,587	1%	17,587	1%	0	0%
Wood – treated/painted	190,232	10.7%	191,905	10.8%	1673	0.3%
Wood – treated/painted – pallets	26,584	1.5%	26,597	1.5%	14	0%
Wood – untreated	23,952	1.3%	25,443	1.4%	1491	0.3%
Wood – untreated – pallets	12,263	0.7%	12,263	0.7%	0	0%
Other – batteries	90	0%	206	0%	116	0%
Other – gas bottles	5	0%	5	0%	0	0%
Other – nappies	0	0%	20,563	1.2%	20,563	4.1%
Other (including fines <10 mm)	322,952	18.2%	332,562	18.7%	9609	1.9%
<b>Total</b>	<b>1,774,645</b>	<b>100%</b>	<b>1,774,645</b>	<b>100%</b>	<b>503,310</b>	<b>100%</b>

**Table AF2: Overall NSW regulated area: mixed loads - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	24,658	2.1%	41,050	3.4%	16,392	4%
Cardboard dry – compacted	25,938	2.2%	25,938	2.2%	0	0%
Cardboard – wet strength/waxed – loose	2182	0.2%	9898	0.8%	7716	1.9%
Cardboard – wet strength/waxed – compacted	10,919	0.9%	10,919	0.9%	0	0%
Electrical – computers and peripherals	1035	0.1%	1082	0.1%	47	0%
Electrical – other	2869	0.2%	4587	0.4%	1718	0.4%
Electrical – TVs	604	0.1%	874	0.1%	270	0.1%
Electrical – whitegoods	297	0%	299	0%	2	0%
Food organics – packaged	4818	0.4%	14,591	1.2%	9773	2.4%
Food organics – unpackaged	18,212	1.5%	117,306	9.8%	99,094	24.5%
Garbage bags	405,235	33.7%	0	0%	0	0%
Garden organics	52,262	4.3%	64,302	5.3%	12,040	3%
Glass – non-packaging	6253	0.5%	6367	0.5%	114	0%
Glass – packaging	3831	0.3%	14,785	1.2%	10,954	2.7%
Masonry materials – concrete/bricks	86,578	7.2%	86,636	7.2%	58	0%
Masonry materials – other	60,501	5%	64,151	5.3%	3650	0.9%
Metal (ferrous) – packaging	6375	0.5%	11,812	1%	5437	1.3%
Metal (ferrous) – non-packaging (low density)	12,142	1%	15,045	1.3%	2904	0.7%
Metal (ferrous) – non-packaging (high density)	322	0%	322	0%	0	0%
Metal (non-ferrous) – packaging	2438	0.2%	5818	0.5%	3380	0.8%
Metal (non-ferrous) – non-packaging (low density)	4758	0.4%	6054	0.5%	1297	0.3%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	492	0%	492	0%	0	0%
Paper – office	10,768	0.9%	39,572	3.3%	28,804	7.1%
Paper – other	14,893	1.2%	73,268	6.1%	58,375	14.4%
Paper – packaging	26,778	2.2%	42,732	3.6%	15,953	3.9%
Plastic – EPS foam	4366	0.4%	5041	0.4%	675	0.2%
Plastic – film packaging	44,002	3.7%	92,486	7.7%	48,483	12%
Plastic – other	61,494	5.1%	74,892	6.2%	13,398	3.3%
Plastic – rigid packaging	5361	0.4%	27,926	2.3%	22,565	5.6%
Rubber	6986	0.6%	10,192	0.8%	3206	0.8%
Textiles and leather	18,290	1.5%	30,533	2.5%	12,244	3%
Textiles – carpet and underlay	23,389	1.9%	24,714	2.1%	1325	0.3%
Textiles – mattresses	1650	0.1%	1650	0.1%	0	0%
Textiles – covered furniture	15,135	1.3%	15,135	1.3%	0	0%
Wood – treated/painted	144,946	12.1%	146,250	12.2%	1305	0.3%
Wood – treated/painted – pallets	21,851	1.8%	21,862	1.8%	11	0%
Wood – untreated	21,382	1.8%	22,457	1.9%	1075	0.3%
Wood – untreated – pallets	10,177	0.8%	10,177	0.8%	0	0%
Other – batteries	89	0%	191	0%	101	0%
Other – gas bottles	5	0%	5	0%	0	0%
Other – nappies	0	0%	15,502	1.3%	15,502	3.8%
Other (including fines <10 mm)	37,645	3.1%	45,012	3.7%	7367	1.8%
<b>Total</b>	<b>1,201,925</b>	<b>100%</b>	<b>1,201,925</b>	<b>100%</b>	<b>405,235</b>	<b>100%</b>

**Table AF3: Overall NSW regulated area – single material loads – detailed categories**

Material	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	2458	0.4%	6535	1.1%	4077	4.2%
Cardboard dry – compacted	625	0.1%	625	0.1%	0	0%
Cardboard – wet strength/waxed – loose	74	0%	1899	0.3%	1826	1.9%
Cardboard – wet strength/waxed – compacted	1437	0.3%	1437	0.3%	0	0%
Electrical – computers and peripherals	1	0%	9	0%	8	0%
Electrical – other	68	0%	479	0.1%	411	0.4%
Electrical – TVs	6	0%	47	0%	41	0%
Electrical – whitegoods	0	0%	0	0%	0	0%
Food organics – packaged	14,068	2.5%	16,197	2.8%	2130	2.2%
Food organics – unpackaged	1616	0.3%	23,223	4.1%	21,607	22%
Garbage bags	98,075	17.1%	0	0%	0	0%
Garden organics	15,704	2.7%	19,864	3.5%	4160	4.2%
Glass – non-packaging	2310	0.4%	2340	0.4%	30	0%
Glass – packaging	192	0%	2762	0.5%	2570	2.6%
Masonry materials – concrete/bricks	58,566	10.2%	58,589	10.2%	23	0%
Masonry materials – other	7384	1.3%	8580	1.5%	1196	1.2%
Metal (ferrous) – packaging	318	0.1%	1629	0.3%	1312	1.3%
Metal (ferrous) – non-packaging (low density)	1557	0.3%	2739	0.5%	1182	1.2%
Metal (ferrous) – non-packaging (high density)	15	0%	15	0%	0	0%
Metal (non-ferrous) – packaging	83	0%	844	0.1%	762	0.8%
Metal (non-ferrous) – non-packaging (low density)	533	0.1%	712	0.1%	180	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%
Paper – office	159	0%	7578	1.3%	7419	7.6%
Paper – other	114	0%	12,673	2.2%	12,559	12.8%
Paper – packaging	452	0.1%	4424	0.8%	3972	4.1%
Plastic – EPS foam	2578	0.5%	2722	0.5%	145	0.1%
Plastic – film packaging	1136	0.2%	12,945	2.3%	11,809	12%
Plastic – other	3834	0.7%	6695	1.2%	2861	2.9%
Plastic – rigid packaging	331	0.1%	5819	1%	5488	5.6%
Rubber	111	0%	918	0.2%	807	0.8%
Textiles and leather	3218	0.6%	5924	1%	2706	2.8%
Textiles – carpet and underlay	10,561	1.8%	11,253	2%	693	0.7%
Textiles – mattresses	2699	0.5%	2699	0.5%	0	0%
Textiles – covered furniture	2453	0.4%	2453	0.4%	0	0%
Wood – treated/painted	45,286	7.9%	45,655	8%	368	0.4%
Wood – treated/painted – pallets	4732	0.8%	4735	0.8%	3	0%
Wood – untreated	2570	0.4%	2986	0.5%	416	0.4%
Wood – untreated – pallets	2087	0.4%	2087	0.4%	0	0%
Other – batteries	1	0%	15	0%	14	0%
Other – gas bottles	0	0%	0	0%	0	0%
Other – nappies	0	0%	5060	0.9%	5060	5.2%
Other (including fines <10 mm)	285,307	49.8%	287,549	50.2%	2242	2.3%
<b>Total</b>	<b>572,720</b>	<b>100%</b>	<b>572,720</b>	<b>100%</b>	<b>98,075</b>	<b>100%</b>

## Potential recovery of C&I currently disposed

**Table AF4: C&I currently disposed that could be recycled - if bag contents not accessible - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Recoverable now	340,399	24%	108,774	43.1%	31,875	29.9%	481,048	27.1%
Recoverable in the future	396,311	28%	71,337	28.2%	32,738	30.7%	500,386	28.2%
Non-recoverable	678,850	48%	72,435	28.7%	41,926	39.4%	793,212	44.7%
<b>Total</b>	<b>1,415,561</b>	<b>100%</b>	<b>252,545</b>	<b>100%</b>	<b>106,539</b>	<b>100%</b>	<b>1,774,645</b>	<b>100%</b>

**Table AF5: C&I currently disposed that could be recycled - if bag contents *not* accessible - by Regional Grouping of Councils**

Material	SSROC		WSROC		NSROC		Hunter		MIDWASTE	
	Tonnes audited	% of waste stream								
Recoverable	209	31.3%	328	29.3%	35	26.8%	321	47.9%	48	28.6%
Potentially Recoverable	228	34.1%	332	29.7%	68	52.2%	169	25.2%	60	36.2%
Non-recoverable	231	34.6%	457	40.9%	28	21%	180	26.8%	59	35.2%
<b>Total</b>	<b>668</b>	<b>100%</b>	<b>1117</b>	<b>100%</b>	<b>131</b>	<b>100%</b>	<b>670</b>	<b>100%</b>	<b>166</b>	<b>100%</b>

**Table AF6: C&I currently disposed that could be recycled - if bag contents *are* accessible - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Recoverable	661,105	46.7%	163,650	64.8%	61,941	58.1%	886,696	50%
Potentially Recoverable	468,509	33.1%	81,448	32.3%	38,336	36%	588,293	33.1%
Non-recoverable	285,946	20.2%	7447	2.9%	6262	5.9%	299,655	16.9%
<b>Total</b>	<b>1,415,561</b>	<b>100%</b>	<b>252,545</b>	<b>100%</b>	<b>106,539</b>	<b>100%</b>	<b>1,774,645</b>	<b>100%</b>

**Table AF7: C&I currently disposed that could be recycled - if bag contents *are* accessible - Regional Grouping of Councils**

Material	SSROC		WSROC		NSROC		Hunter		MIDWASTE	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Recoverable	390	52.2%	695	56.1%	57	39.2%	473	49.9%	100	53.7%
Potentially Recoverable	296	39.7%	415	33.5%	74	50.7%	216	22.8%	73	39.1%
Non-recoverable	60	8.1%	128	10.3%	15	10.2%	259	27.3%	13	7.2%
<b>Total</b>	<b>747</b>	<b>100%</b>	<b>1237</b>	<b>100%</b>	<b>145</b>	<b>100%</b>	<b>948</b>	<b>100%</b>	<b>185</b>	<b>100%</b>

**Table AF8: C&I currently disposed that could be recycled - recoverable *now* - bag contents *not* accessible - by material - by regions**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	44,174	3.1%	5348	2.1%	4158	3.9%	53,680	3%
Electrical	1709	0.1%	104	0%	131	0.1%	1943	0.1%
Food	14,646	1%	2160	0.9%	3022	2.8%	19,828	1.1%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	59,580	4.2%	5379	2.1%	3007	2.8%	67,966	3.8%
Glass	2450	0.2%	864	0.3%	708	0.7%	4023	0.2%
Masonry	72,951	5.2%	66,726	26.4%	5467	5.1%	145,144	8.2%
Metals	22,248	1.6%	4940	2%	1844	1.7%	29,032	1.6%
Paper	41,822	3%	6819	2.7%	4523	4.2%	53,164	3%
Plastic	46,315	3.3%	8152	3.2%	3308	3.1%	57,775	3.3%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles	3754	0.3%	426	0.2%	169	0.2%	4350	0.2%
Wood	27,327	1.9%	5080	2%	3808	3.6%	36,215	2%
Other	3423	0.2%	2776	1.1%	1729	1.6%	7928	0.4%
<b>Total</b>	<b>340,399</b>	<b>24%</b>	<b>108,774</b>	<b>43.1%</b>	<b>31,875</b>	<b>29.9%</b>	<b>481,048</b>	<b>27.1%</b>

**Table AF9: C&I currently disposed that could be recycled - recoverable now - bag contents not accessible  
- by material - by Regional Grouping of Councils**

Material	SSROC		WSROC		NSROC		Hunter		MIDWASTE	
	Tonnes assessed	% of waste stream								
Cardboard	22	2.9%	48	3.9%	3	1.7%	13	1.4%	7	3.8%
Electrical	1	0.1%	2	0.1%	1	0.4%	0	0%	0	0.1%
Food	8	1%	23	1.8%	1	0.5%	8	0.8%	3	1.9%
Garden organics	51	6.8%	40	3.3%	5	3.2%	18	1.9%	3	1.7%
Glass	3	0.4%	2	0.2%	0	0%	2	0.2%	1	0.5%
Masonry	47	6.3%	57	4.6%	14	9.6%	226	23.8%	11	5.7%
Metals	12	1.6%	22	1.8%	7	4.7%	13	1.3%	3	1.8%
Paper	20	2.7%	53	4.3%	1	1%	11	1.1%	7	3.9%
Plastic	25	3.3%	52	4.2%	2	1.5%	17	1.8%	6	3.1%
Rubber	0	0%	0	0%	0	0%	0	0%	0	0%
Textiles	1	0.1%	1	0.1%	0	0.1%	1	0.2%	0	0%
Wood	19	2.6%	27	2.2%	2	1.6%	14	1.5%	6	3.1%
Other	5	0.7%	5	0.4%	0	0%	2	0.2%	4	2.2%
<b>Total</b>	<b>214</b>	<b>28.7%</b>	<b>332</b>	<b>26.9%</b>	<b>35</b>	<b>24.2%</b>	<b>323</b>	<b>34.1%</b>	<b>52</b>	<b>27.9%</b>

**Table AF10: C&I currently disposed that could be recycled - recoverable in the future - bag contents not accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	11,422	0.8%	1688	0.7%	1502	1.4%	14,612	0.8%
Electrical	2625	0.2%	162	0.1%	150	0.1%	2937	0.2%
Food	16,975	1.2%	1371	0.5%	540	0.5%	18,886	1.1%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%
Masonry	46,524	3.3%	15,458	6.1%	5902	5.5%	67,885	3.8%
Metals	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%
Plastic	50,846	3.6%	8596	3.4%	5886	5.5%	65,328	3.7%
Rubber	4919	0.3%	1546	0.6%	631	0.6%	7096	0.4%
Textiles	61,352	4.3%	7612	3%	4081	3.8%	73,045	4.1%
Wood	175,455	12.4%	29,082	11.5%	12,278	11.5%	216,815	12.2%
Other	26,193	1.9%	5820	2.3%	1767	1.7%	33,780	1.9%
<b>Total</b>	<b>396,311</b>	<b>28%</b>	<b>71,337</b>	<b>28.2%</b>	<b>32,738</b>	<b>30.7%</b>	<b>500,386</b>	<b>28.2%</b>

**Table AF11: C&I currently disposed that could be recycled - recoverable in the future - bag contents not accessible - by material - by Regional Grouping of Councils**

Material	SSROC		WSROC		NSROC		Hunter		MIDWASTE	
	Tonnes assessed	% of waste stream								
Cardboard	9	1.1%	12	1%	0	0.3%	5	0.5%	3	1.4%
Electrical	2	0.2%	2	0.1%	1	0.7%	0	0%	0	0.2%
Food	2	0.2%	6	0.5%	0	0%	0	0%	1	0.4%
Garbage bags	0	0%	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%	0	0%
Masonry	44	5.8%	29	2.3%	5	3.6%	41	4.3%	13	6.9%
Metals	0	0%	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%	0	0%
Plastic	27	3.6%	53	4.3%	7	5.1%	19	2%	11	6.2%
Rubber	2	0.3%	3	0.3%	1	0.5%	3	0.4%	1	0.5%
Textiles	50	6.7%	52	4.2%	6	3.9%	18	1.9%	8	4.1%
Wood	93	12.4%	175	14.1%	48	33%	82	8.7%	24	12.8%
Other	23	3.1%	6	0.5%	0	0.3%	20	2.1%	3	1.8%
<b>Total</b>	<b>251</b>	<b>33.7%</b>	<b>337</b>	<b>27.3%</b>	<b>69</b>	<b>47.5%</b>	<b>190</b>	<b>20%</b>	<b>64</b>	<b>34.3%</b>

**Table AF12: C&I currently disposed that could be recycled - recoverable now - bag contents accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	61,575	4.3%	7302	2.9%	5271	4.9%	74,148	4.2%
Electrical	2047	0.1%	104	0%	160	0.2%	2312	0.1%
Food	101,143	7.1%	24,925	9.9%	14,461	13.6%	140,529	7.9%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	74,157	5.2%	6902	2.7%	3107	2.9%	84,165	4.7%
Glass	11,860	0.8%	3355	1.3%	2331	2.2%	17,547	1%
Masonry	73,032	5.2%	66,726	26.4%	5467	5.1%	145,225	8.2%
Metals	36,177	2.6%	6483	2.6%	2824	2.7%	45,484	2.6%
Paper	147,806	10.4%	19,839	7.9%	12,602	11.8%	180,247	10.2%
Plastic	117,229	8.3%	19,722	7.8%	9988	9.4%	146,939	8.3%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles	3754	0.3%	426	0.2%	169	0.2%	4350	0.2%
Wood	28,807	2%	5081	2%	3818	3.6%	37,706	2.1%
Other	3517	0.2%	2784	1.1%	1743	1.6%	8044	0.5%
<b>Total</b>	<b>661,105</b>	<b>46.7%</b>	<b>163,650</b>	<b>64.8%</b>	<b>61,941</b>	<b>58.1%</b>	<b>886,696</b>	<b>50%</b>

**Table AF13: C&I currently disposed that could be recycled - recoverable now - bag contents accessible - by material - by Regional Grouping of Councils**

Material	SSROC		WSROC		NSROC		Hunter		MIDWASTE	
	Tonnes assessed	% of waste stream								
Cardboard	31	4.1%	68	5.5%	4	2.5%	18	1.9%	9	4.8%
Electrical	1	0.2%	2	0.2%	1	0.4%	0	0%	0	0.2%
Food	58	7.7%	118	9.6%	8	5.3%	72	7.6%	22	11.7%
Garbage bags	0	0%	0	0%	0	0%	0	0%	0	0%
Garden organics	58	7.8%	59	4.7%	5	3.4%	19	2%	3	1.8%
Glass	9	1.1%	13	1%	1	0.6%	9	1%	4	1.9%
Masonry	47	6.3%	57	4.6%	14	9.6%	226	23.8%	11	5.7%
Metals	21	2.8%	37	3%	8	5.2%	17	1.8%	5	2.6%
Paper	73	9.8%	176	14.2%	9	5.9%	44	4.6%	20	10.8%
Plastic	66	8.8%	131	10.5%	7	4.6%	51	5.4%	16	8.9%
Rubber	0	0%	0	0%	0	0%	0	0%	0	0%
Textiles	1	0.1%	1	0.1%	0	0.1%	1	0.2%	0	0%
Wood	20	2.7%	29	2.3%	2	1.6%	14	1.5%	6	3.1%
Other	5	0.7%	5	0.4%	0	0%	2	0.2%	4	2.3%
<b>Total</b>	<b>390</b>	<b>52.2%</b>	<b>695</b>	<b>56.1%</b>	<b>57</b>	<b>39.2%</b>	<b>473</b>	<b>49.9%</b>	<b>100</b>	<b>53.7%</b>

**Table AF14: C&I currently disposed that could be recycled - recoverable in the *future* - bag contents *accessible* - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	18,845	1.3%	3407	1.3%	1902	1.8%	24,154	1.4%
Electrical	4576	0.3%	324	0.1%	165	0.2%	5066	0.3%
Food	26,448	1.9%	3323	1.3%	1018	1%	30,789	1.7%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%
Masonry	50,961	3.6%	15,636	6.2%	6134	5.8%	72,731	4.1%
Metals	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%
Plastic	64,626	4.6%	9937	3.9%	7024	6.6%	81,587	4.6%
Rubber	8097	0.6%	2187	0.9%	826	0.8%	11,110	0.6%
Textiles	75,368	5.3%	9199	3.6%	5446	5.1%	90,012	5.1%
Wood	176,979	12.5%	29,245	11.6%	12,278	11.5%	218,502	12.3%
Other	42,610	3%	8190	3.2%	3543	3.3%	54,343	3.1%
<b>Total</b>	<b>468,509</b>	<b>33.1%</b>	<b>81,448</b>	<b>32.3%</b>	<b>38,336</b>	<b>36%</b>	<b>588,293</b>	<b>33.1%</b>

**Table AF15: C&I currently disposed that could be recycled - recoverable in the *future* - bag contents *accessible* - by material - by Regional Grouping of Councils**

Material	SSROC		WSROC		NSROC		Hunter		MIDWASTE	
	Tonnes assessed	% of waste stream								
Cardboard	14	1.9%	19	1.5%	1	0.7%	10	1.1%	3	1.7%
Electrical	3	0.3%	4	0.3%	1	0.7%	1	0.1%	0	0.2%
Food	7	0.9%	16	1.3%	1	0.6%	5	0.5%	2	0.8%
Garbage bags	0	0%	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%	0	0%
Masonry	46	6.2%	34	2.8%	5	3.6%	41	4.4%	13	7.1%
Metals	0	0%	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%	0	0%
Plastic	34	4.6%	69	5.6%	9	5.9%	22	2.3%	13	7.1%
Rubber	4	0.6%	7	0.5%	1	0.7%	5	0.5%	1	0.7%
Textiles	58	7.8%	68	5.5%	6	4.4%	23	2.4%	10	5.3%
Wood	94	12.6%	176	14.2%	48	33.1%	83	8.7%	24	12.8%
Other	37	4.9%	22	1.8%	1	0.9%	26	2.7%	6	3.3%
<b>Total</b>	<b>296</b>	<b>39.7%</b>	<b>415</b>	<b>33.5%</b>	<b>74</b>	<b>50.7%</b>	<b>216</b>	<b>22.8%</b>	<b>73</b>	<b>39.1%</b>

## Sydney Metropolitan Area (SMA)

**Table AF16: SMA - mixed loads - bags as a category - consolidated composition**

Material	Tonnes per year	% of waste stream
Cardboard	51,915	5.6%
Electrical	4268	0.5%
Food	17,272	1.9%
Garbage bags	311,829	33.8%
Garden organics	45,321	4.9%
Glass	7746	0.8%
Masonry	99,597	10.8%
Metals	19,822	2.1%
Paper	41,146	4.5%
Plastic	90,101	9.8%
Rubber	4809	0.5%
Textiles	47,697	5.2%
Wood	154,815	16.8%
Other	27,277	3%
<b>Total</b>	<b>923,615</b>	<b>100%</b>

**Table AF17: SMA - mixed loads - bags distributed - consolidated composition**

<b>Material</b>	<b>Tonnes per year</b>	<b>% of waste stream</b>
Cardboard	71,307	7.7%
Electrical	6122	0.7%
Food	92,637	10%
Garbage bags	0	0%
Garden organics	55,810	6%
Glass	15,028	1.6%
Masonry	102,931	11.1%
Metals	30,524	3.3%
Paper	124,936	13.5%
Plastic	156,298	16.9%
Rubber	7259	0.8%
Textiles	58,569	6.3%
Wood	157,040	17%
Other	45,154	4.9%
<b>Total</b>	<b>923,615</b>	<b>100%</b>

**Table AF18: SMA - single-material loads - consolidated composition**

<b>Material</b>	<b>Tonnes per year</b>	<b>% of waste stream</b>
Cardboard	3681	0.7%
Electrical	65	0%
Food	14,349	2.9%
Garbage bags	89,351	18.2%
Garden organics	14,259	2.9%
Glass	2254	0.5%
Masonry	19,878	4%
Metals	2426	0.5%
Paper	676	0.1%
Plastic	7060	1.4%
Rubber	110	0%
Textiles	17,410	3.5%
Wood	47,967	9.8%
Other	272,460	55.4%
<b>Total</b>	<b>491,946</b>	<b>100%</b>

**Table AF19: SMA – all load types – detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	23,425	1.7%	40,827	2.9%	17,402	4.3%
Cardboard dry – compacted	20,749	1.5%	20,749	1.5%	0	0%
Cardboard – wet strength/waxed – loose	1607	0.1%	9030	0.6%	7423	1.9%
Cardboard – wet strength/waxed – compacted	9815	0.7%	9815	0.7%	0	0%
Electrical – computers and peripherals	971	0.1%	998	0.1%	28	0%
Electrical – other	2625	0.2%	4576	0.3%	1951	0.5%
Electrical – TVs	507	0%	819	0.1%	311	0.1%
Electrical – whitegoods	231	0%	231	0%	0	0%
Food organics – packaged	16,975	1.2%	26,448	1.9%	9473	2.4%
Food organics – unpackaged	14,646	1%	101,143	7.1%	86,497	21.6%
Garbage bags	401,180	28.3%	0	0%	0	0%
Garden organics	59,580	4.2%	74,157	5.2%	14,577	3.6%
Glass – non-packaging	7550	0.5%	7654	0.5%	104	0%
Glass – packaging	2450	0.2%	11,860	0.8%	9410	2.3%
Masonry materials – concrete/bricks	72,951	5.2%	73,032	5.2%	81	0%
Masonry materials – other	46,524	3.3%	50,961	3.6%	4436	1.1%
Metal (ferrous) – packaging	4357	0.3%	9658	0.7%	5301	1.3%
Metal (ferrous) – non-packaging (low density)	11,181	0.8%	15,084	1.1%	3903	1%
Metal (ferrous) – non-packaging (high density)	321	0%	321	0%	0	0%
Metal (non-ferrous) – packaging	1797	0.1%	5300	0.4%	3503	0.9%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	4099	0.3%	5321	0.4%	1223	0.3%
Metal (non-ferrous) – non-packaging (high density)	492	0%	492	0%	0	0%
Paper – office	9171	0.6%	41,743	2.9%	32,572	8.1%
Paper – other	12,078	0.9%	67,628	4.8%	55,550	13.8%
Paper – packaging	20,573	1.5%	38,436	2.7%	17,862	4.5%
Plastic – EPS foam	6116	0.4%	6786	0.5%	670	0.2%
Plastic – film packaging	35,681	2.5%	83,752	5.9%	48,071	12%
Plastic – other	50,846	3.6%	64,626	4.6%	13,780	3.4%
Plastic – rigid packaging	4519	0.3%	26,691	1.9%	22,172	5.5%
Rubber	4919	0.3%	8097	0.6%	3178	0.8%
Textiles and leather	17,428	1.2%	29,685	2.1%	12,257	3.1%
Textiles – carpet and underlay	28,913	2%	30,672	2.2%	1759	0.4%
Textiles – mattresses	3754	0.3%	3754	0.3%	0	0%
Textiles – covered furniture	15,011	1.1%	15,011	1.1%	0	0%
Wood – treated/painted	153,391	10.8%	154,901	10.9%	1510	0.4%
Wood – treated/painted – pallets	22,064	1.6%	22,077	1.6%	14	0%
Wood – untreated	19,098	1.3%	20,578	1.5%	1480	0.4%
Wood – untreated – pallets	8229	0.6%	8229	0.6%	0	0%
Other – batteries	90	0%	184	0%	94	0%
Other – gas bottles	5	0%	5	0%	0	0%
Other – nappies	0	0%	16,417	1.2%	16,417	4.1%
Other (including fines <10 mm)	299,642	21.2%	307,813	21.7%	8171	2%
<b>Total</b>	<b>1,415,561</b>	<b>100%</b>	<b>1,415,561</b>	<b>100%</b>	<b>401,180</b>	<b>100%</b>

**Table AF20: SMA - mixed loads - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	21,805	2.4%	35,398	3.8%	13,593	4.4%
Cardboard dry – compacted	20,136	2.2%	20,136	2.2%	0	0%
Cardboard – wet strength/waxed – loose	1594	0.2%	7392	0.8%	5799	1.9%
Cardboard – wet strength/waxed – compacted	8380	0.9%	8380	0.9%	0	0%
Electrical – computers and peripherals	969	0.1%	991	0.1%	22	0%
Electrical – other	2564	0.3%	4127	0.4%	1563	0.5%
Electrical – TVs	504	0.1%	774	0.1%	270	0.1%
Electrical – whitegoods	231	0%	231	0%	0	0%
Food organics – packaged	4199	0.5%	11,740	1.3%	7542	2.4%
Food organics – unpackaged	13,073	1.4%	80,897	8.8%	67,824	21.8%
Garbage bags	311,829	33.8%	0	0%	0	0%
Garden organics	45,321	4.9%	55,810	6%	10,488	3.4%
Glass – non-packaging	5486	0.6%	5563	0.6%	77	0%
Glass – packaging	2260	0.2%	9464	1%	7204	2.3%
Masonry materials – concrete/bricks	58,480	6.3%	58,538	6.3%	58	0%
Masonry materials – other	41,118	4.5%	44,393	4.8%	3275	1.1%
Metal (ferrous) – packaging	4049	0.4%	8153	0.9%	4104	1.3%
Metal (ferrous) – non-packaging (low density)	9688	1%	12,425	1.3%	2737	0.9%
Metal (ferrous) – non-packaging (high density)	307	0%	307	0%	0	0%
Metal (non-ferrous) – packaging	1720	0.2%	4516	0.5%	2796	0.9%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	3566	0.4%	4630	0.5%	1064	0.3%
Metal (non-ferrous) – non-packaging (high density)	492	0.1%	492	0.1%	0	0%
Paper – office	9052	1%	34,515	3.7%	25,463	8.2%
Paper – other	11,969	1.3%	56,230	6.1%	44,261	14.2%
Paper – packaging	20,125	2.2%	34,191	3.7%	14,065	4.5%
Plastic – EPS foam	3547	0.4%	4084	0.4%	537	0.2%
Plastic – film packaging	34,606	3.7%	71,954	7.8%	37,348	12%
Plastic – other	47,748	5.2%	58,871	6.4%	11,123	3.6%
Plastic – rigid packaging	4199	0.5%	21,388	2.3%	17,189	5.5%
Rubber	4809	0.5%	7259	0.8%	2450	0.8%
Textiles and leather	14,274	1.5%	24,062	2.6%	9788	3.1%
Textiles – carpet and underlay	19,171	2.1%	20,255	2.2%	1084	0.3%
Textiles – mattresses	1177	0.1%	1177	0.1%	0	0%
Textiles – covered furniture	13,075	1.4%	13,075	1.4%	0	0%
Wood – treated/painted	113,020	12.2%	114,169	12.4%	1149	0.4%
Wood – treated/painted – pallets	17,869	1.9%	17,879	1.9%	11	0%
Wood – untreated	16,787	1.8%	17,852	1.9%	1065	0.3%
Wood – untreated – pallets	7140	0.8%	7140	0.8%	0	0%
Other – batteries	89	0%	171	0%	81	0%
Other – gas bottles	5	0%	5	0%	0	0%
Other – nappies	0	0%	11,742	1.3%	11,742	3.8%
Other (including fines <10 mm)	27,183	2.9%	33,236	3.6%	6053	1.9%
<b>Total</b>	<b>923,615</b>	<b>100%</b>	<b>923,615</b>	<b>100%</b>	<b>311,829</b>	<b>100%</b>

**Table AF21: SMA - single-material loads - detailed categories**

Material	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	1620	0.3%	5428	1.1%	3808	4.3%
Cardboard dry – compacted	613	0.1%	613	0.1%	0	0%
Cardboard – wet strength/waxed – loose	14	0%	1638	0.3%	1624	1.8%
Cardboard – wet strength/waxed – compacted	1434	0.3%	1434	0.3%	0	0%
Electrical – computers and peripherals	1	0%	7	0%	6	0%
Electrical – other	61	0%	450	0.1%	388	0.4%
Electrical – TVs	3	0%	44	0%	41	0%
Electrical – whitegoods	0	0%	0	0%	0	0%
Food organics – packaged	12,776	2.6%	14,708	3%	1932	2.2%
Food organics – unpackaged	1573	0.3%	20,246	4.1%	18,673	20.9%
Garbage bags	89,351	18.2%	0	0%	0	0%
Garden organics	14,259	2.9%	18,347	3.7%	4088	4.6%
Glass – non-packaging	2064	0.4%	2090	0.4%	27	0%
Glass – packaging	190	0%	2396	0.5%	2206	2.5%
Masonry materials – concrete/bricks	14,472	2.9%	14,495	2.9%	23	0%
Masonry materials – other	5406	1.1%	6567	1.3%	1161	1.3%
Metal (ferrous) – packaging	308	0.1%	1504	0.3%	1197	1.3%
Metal (ferrous) – non-packaging (low density)	1493	0.3%	2659	0.5%	1166	1.3%
Metal (ferrous) – non-packaging (high density)	14	0%	14	0%	0	0%
Metal (non-ferrous) – packaging	77	0%	784	0.2%	707	0.8%
Metal (non-ferrous) – non-packaging (low density)	533	0.1%	691	0.1%	159	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%
Paper – office	119	0%	7228	1.5%	7109	8%
Paper – other	109	0%	11,398	2.3%	11,289	12.6%
Paper – packaging	448	0.1%	4245	0.9%	3797	4.2%
Plastic – EPS foam	2568	0.5%	2702	0.5%	133	0.1%
Plastic – film packaging	1075	0.2%	11,798	2.4%	10,723	12%
Plastic – other	3098	0.6%	5755	1.2%	2657	3%
Plastic – rigid packaging	319	0.1%	5302	1.1%	4983	5.6%
Rubber	110	0%	838	0.2%	728	0.8%
Textiles and leather	3154	0.6%	5622	1.1%	2468	2.8%
Textiles – carpet and underlay	9742	2%	10,417	2.1%	675	0.8%
Textiles – mattresses	2578	0.5%	2578	0.5%	0	0%
Textiles – covered furniture	1936	0.4%	1936	0.4%	0	0%
Wood – treated/painted	40,372	8.2%	40,732	8.3%	361	0.4%
Wood – treated/painted – pallets	4195	0.9%	4198	0.9%	3	0%
Wood – untreated	2311	0.5%	2726	0.6%	415	0.5%
Wood – untreated – pallets	1089	0.2%	1089	0.2%	0	0%
Other – batteries	1	0%	13	0%	12	0%
Other – gas bottles	0	0%	0	0%	0	0%
Other – nappies	0	0%	4675	1%	4675	5.2%
Other (including fines <10 mm)	272,459	55.4%	274,577	55.8%	2118	2.4%
<b>Total</b>	<b>491,946</b>	<b>100%</b>	<b>491,946</b>	<b>100%</b>	<b>89,351</b>	<b>100%</b>

## Extended Regulated Area (ERA)

**Table AF22: ERA - mixed loads - bags as a category - consolidated composition**

Material	Tonnes per year	% of waste stream
Cardboard	6912	3.7%
Electrical	257	0.1%
Food	2197	1.2%
Garbage bags	59,413	32.1%
Garden organics	4844	2.6%
Glass	1449	0.8%
Masonry	37,454	20.3%
Metals	4882	2.6%
Paper	6770	3.7%
Plastic	15,961	8.6%
Rubber	1546	0.8%
Textiles	6944	3.8%
Wood	28,757	15.5%
Other	7554	4.1%
<b>Total</b>	<b>184,938</b>	<b>100%</b>

**Table AF23: ERA – mixed loads – bags distributed – consolidated composition**

Material	Tonnes per year	% of waste stream
Cardboard	10,220	5.5%
Electrical	398	0.2%
Food	24,606	13.3%
Garbage bags	0	0%
Garden organics	6302	3.4%
Glass	3704	2%
Masonry	37,613	20.3%
Metals	6285	3.4%
Paper	18,593	10.1%
Plastic	27,608	14.9%
Rubber	2120	1.1%
Textiles	8370	4.5%
Wood	28,913	15.6%
Other	10,205	5.5%
<b>Total</b>	<b>184,938</b>	<b>100%</b>

**Table AF24: ERA – single-material loads – consolidated composition**

<b>Material</b>	<b>Tonnes per year</b>	<b>% of waste stream</b>
Cardboard	124	0.2%
Electrical	10	0%
Food	1335	2%
Garbage bags	6195	9.2%
Garden organics	535	0.8%
Glass	247	0.4%
Masonry	44,730	66.2%
Metals	59	0.1%
Paper	49	0.1%
Plastic	787	1.2%
Rubber	1	0%
Textiles	1094	1.6%
Wood	5405	8%
Other	7037	10.4%
<b>Total</b>	<b>67,607</b>	<b>100%</b>

Table AF25: ERA - all load types - detailed categories

Materials	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	2181	0.9%	4136	1.6%	1954	3%
Cardboard dry – compacted	3166	1.3%	3166	1.3%	0	0%
Cardboard – wet strength/waxed – loose	446	0.2%	2166	0.9%	1719	2.6%
Cardboard – wet strength/waxed – compacted	1242	0.5%	1242	0.5%	0	0%
Electrical – computers and peripherals	35	0%	35	0%	0	0%
Electrical – other	162	0.1%	324	0.1%	162	0.2%
Electrical – TVs	55	0%	55	0%	0	0%
Electrical – whitegoods	14	0%	14	0%	0	0%
Food organics – packaged	1371	0.5%	3323	1.3%	1952	3%
Food organics – unpackaged	2160	0.9%	24,925	9.9%	22,765	34.7%
Garbage bags	65,608	26%	0	0%	0	0%
Garden organics	5379	2.1%	6902	2.7%	1523	2.3%
Glass – non-packaging	832	0.3%	850	0.3%	18	0%
Glass – packaging	864	0.3%	3355	1.3%	2491	3.8%
Masonry materials – concrete/bricks	66,726	26.4%	66,726	26.4%	0	0%
Masonry materials – other	15,458	6.1%	15,636	6.2%	178	0.3%
Metal (ferrous) – packaging	1812	0.7%	2567	1%	755	1.2%
Metal (ferrous) – non-packaging (low density)	1877	0.7%	1980	0.8%	103	0.2%
Metal (ferrous) – non-packaging (high density)	4	0%	4	0%	0	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – packaging	445	0.2%	947	0.4%	502	0.8%
Metal (non-ferrous) – non-packaging (low density)	802	0.3%	985	0.4%	183	0.3%
Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%
Paper – office	1046	0.4%	3453	1.4%	2407	3.7%
Paper – other	1672	0.7%	10,904	4.3%	9232	14.1%
Paper – packaging	4101	1.6%	5482	2.2%	1381	2.1%
Plastic – EPS foam	398	0.2%	475	0.2%	78	0.1%
Plastic – film packaging	6988	2.8%	14,943	5.9%	7955	12.1%
Plastic – other	8596	3.4%	9937	3.9%	1340	2%
Plastic – rigid packaging	766	0.3%	4305	1.7%	3539	5.4%
Rubber	1546	0.6%	2187	0.9%	640	1%
Textiles and leather	2900	1.1%	4488	1.8%	1587	2.4%
Textiles – carpet and underlay	3623	1.4%	3623	1.4%	0	0%
Textiles – mattresses	426	0.2%	426	0.2%	0	0%
Textiles – covered furniture	1088	0.4%	1088	0.4%	0	0%
Wood – treated/painted	26,621	10.5%	26,784	10.6%	163	0.2%
Wood – treated/painted – pallets	2461	1%	2461	1%	0	0%
Wood – untreated	4030	1.6%	4032	1.6%	2	0%
Wood – untreated – pallets	1050	0.4%	1050	0.4%	0	0%
Other – batteries	0	0%	8	0%	8	0%
Other – gas bottles	0	0%	0	0%	0	0%
Other – nappies	0	0%	2370	0.9%	2370	3.6%
Other (including fines <10 mm)	14,591	5.8%	15,194	6%	603	0.9%
<b>Total</b>	<b>252,545</b>	<b>100%</b>	<b>252,545</b>	<b>100%</b>	<b>65,608</b>	<b>100%</b>

Table AF26: ERA - mixed loads - detailed categories

Materials	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	2133	1.2%	3896	2.1%	1763	3%
Cardboard dry – compacted	3154	1.7%	3154	1.7%	0	0%
Cardboard – wet strength/waxed – loose	386	0.2%	1932	1%	1546	2.6%
Cardboard – wet strength/waxed – compacted	1239	0.7%	1239	0.7%	0	0%
Electrical – computers and peripherals	35	0%	35	0%	0	0%
Electrical – other	155	0.1%	296	0.2%	141	0.2%
Electrical – TVs	52	0%	52	0%	0	0%
Electrical – whitegoods	14	0%	14	0%	0	0%
Food organics – packaged	80	0%	1867	1%	1787	3%
Food organics – unpackaged	2117	1.1%	22,740	12.3%	20,623	34.7%
Garbage bags	59,413	32.1%	0	0%	0	0%
Garden organics	4844	2.6%	6302	3.4%	1459	2.5%
Glass – non-packaging	585	0.3%	602	0.3%	16	0%
Glass – packaging	863	0.5%	3103	1.7%	2239	3.8%
Masonry materials – concrete/bricks	23,973	13%	23,973	13%	0	0%
Masonry materials – other	13,481	7.3%	13,639	7.4%	158	0.3%
Metal (ferrous) – packaging	1808	1%	2495	1.3%	688	1.2%
Metal (ferrous) – non-packaging (low density)	1829	1%	1921	1%	92	0.2%
Metal (ferrous) – non-packaging (high density)	3	0%	3	0%	0	0%
Metal (non-ferrous) – packaging	440	0.2%	896	0.5%	456	0.8%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	802	0.4%	969	0.5%	167	0.3%
Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%
Paper – office	1006	0.5%	3189	1.7%	2183	3.7%
Paper – other	1667	0.9%	10,055	5.4%	8387	14.1%
Paper – packaging	4097	2.2%	5350	2.9%	1253	2.1%
Plastic – EPS foam	390	0.2%	460	0.2%	71	0.1%
Plastic – film packaging	6934	3.7%	14,098	7.6%	7164	12.1%
Plastic – other	7883	4.3%	9099	4.9%	1216	2%
Plastic – rigid packaging	754	0.4%	3950	2.1%	3196	5.4%
Rubber	1546	0.8%	2120	1.1%	575	1%
Textiles and leather	2880	1.6%	4306	2.3%	1427	2.4%
Textiles – carpet and underlay	3000	1.6%	3000	1.6%	0	0%
Textiles – mattresses	426	0.2%	426	0.2%	0	0%
Textiles – covered furniture	638	0.3%	638	0.3%	0	0%
Wood – treated/painted	21,824	11.8%	21,979	11.9%	155	0.3%
Wood – treated/painted – pallets	1964	1.1%	1964	1.1%	0	0%
Wood – untreated	3920	2.1%	3921	2.1%	1	0%
Wood – untreated – pallets	1050	0.6%	1050	0.6%	0	0%
Other – batteries	0	0%	7	0%	7	0%
Other – gas bottles	0	0%	0	0%	0	0%
Other – nappies	0	0%	2107	1.1%	2107	3.5%
Other (including fines <10 mm)	7554	4.1%	8090	4.4%	536	0.9%
<b>Total</b>	<b>184,938</b>	<b>100%</b>	<b>184,938</b>	<b>100%</b>	<b>59,413</b>	<b>100%</b>

Table AF27: ERA - single-material loads - detailed categories

Materials	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	48	0.1%	240	0.4%	192	3.1%
Cardboard dry – compacted	12	0%	12	0%	0	0%
Cardboard – wet strength/waxed – loose	60	0.1%	233	0.3%	173	2.8%
Cardboard – wet strength/waxed – compacted	3	0%	3	0%	0	0%
Electrical – computers and peripherals	0	0%	0	0%	0	0%
Electrical – other	7	0%	28	0%	21	0.3%
Electrical – TVs	3	0%	3	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%
Food organics – packaged	1291	1.9%	1456	2.2%	165	2.7%
Food organics – unpackaged	43	0.1%	2185	3.2%	2142	34.6%
Garbage bags	6195	9.2%	0	0%	0	0%
Garden organics	535	0.8%	600	0.9%	65	1%
Glass – non-packaging	246	0.4%	248	0.4%	2	0%
Glass – packaging	1	0%	252	0.4%	251	4.1%
Masonry materials – concrete/bricks	42,752	63.2%	42,752	63.2%	0	0%
Masonry materials – other	1977	2.9%	1997	3%	19	0.3%
Metal (ferrous) – packaging	4	0%	72	0.1%	67	1.1%
Metal (ferrous) – non-packaging (low density)	48	0.1%	59	0.1%	11	0.2%
Metal (ferrous) – non-packaging (high density)	1	0%	1	0%	0	0%
Metal (non-ferrous) – packaging	5	0%	51	0.1%	46	0.7%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0	0%	16	0%	16	0.3%
Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%
Paper – office	40	0.1%	264	0.4%	224	3.6%
Paper – other	5	0%	849	1.3%	844	13.6%
Paper – packaging	4	0%	132	0.2%	128	2.1%
Plastic – EPS foam	8	0%	15	0%	7	0.1%
Plastic – film packaging	54	0.1%	844	1.2%	791	12.8%
Plastic – other	713	1.1%	838	1.2%	125	2%
Plastic – rigid packaging	12	0%	354	0.5%	342	5.5%
Rubber	1	0%	66	0.1%	66	1.1%
Textiles and leather	21	0%	182	0.3%	161	2.6%
Textiles – carpet and underlay	623	0.9%	623	0.9%	0	0%
Textiles – mattresses	0	0%	0	0%	0	0%
Textiles – covered furniture	450	0.7%	450	0.7%	0	0%
Wood – treated/painted	4797	7.1%	4805	7.1%	8	0.1%
Wood – treated/painted – pallets	498	0.7%	498	0.7%	0	0%
Wood – untreated	111	0.2%	111	0.2%	0	0%
Wood – untreated – pallets	0	0%	0	0%	0	0%
Other – batteries	0	0%	1	0%	1	0%
Other – gas bottles	0	0%	0	0%	0	0%
Other – nappies	0	0%	262	0.4%	262	4.2%
Other (including fines <10 mm)	7037	10.4%	7103	10.5%	66	1.1%
<b>Total</b>	<b>67,607</b>	<b>100%</b>	<b>67,607</b>	<b>100%</b>	<b>6195</b>	<b>100%</b>

**Regional Regulated Area (RRA)**

**Table AF28: RRA - mixed loads - bags as a category - consolidated composition**

Material	Tonnes per year	% of waste stream
Cardboard	4871	5.2%
Electrical	280	0.3%
Food	3562	3.8%
Garbage bags	33,993	36.4%
Garden organics	2097	2.2%
Glass	889	1%
Masonry	10,027	10.7%
Metals	1823	2%
Paper	4523	4.8%
Plastic	9162	9.8%
Rubber	631	0.7%
Textiles	3823	4.1%
Wood	14,783	15.8%
Other	2908	3.1%
<b>Total</b>	<b>93,372</b>	<b>100%</b>

**Table AF29: RRA – mixed loads – bags distributed – consolidated composition**

Material	Tonnes per year	% of waste stream
Cardboard	6278	6.7%
Electrical	322	0.3%
Food	14,654	15.7%
Garbage bags	0	0%
Garden organics	2189	2.3%
Glass	2420	2.6%
Masonry	10,243	11%
Metals	2736	2.9%
Paper	12,042	12.9%
Plastic	16,439	17.6%
Rubber	813	0.9%
Textiles	5093	5.5%
Wood	14,792	15.8%
Other	5352	5.7%
<b>Total</b>	<b>93,372</b>	<b>100%</b>

**Table AF30: RRA – single-material loads – consolidated composition**

<b>Material</b>	<b>Tonnes per year</b>	<b>% of waste stream</b>
Cardboard	789	6%
Electrical	0	0%
Food	0	0%
Garbage bags	2529	19.2%
Garden organics	910	6.9%
Glass	1	0%
Masonry	1343	10.2%
Metals	21	0.2%
Paper	0	0%
Plastic	32	0.2%
Rubber	0	0%
Textiles	428	3.2%
Wood	1303	9.9%
Other	5811	44.1%
<b>Total</b>	<b>13,167</b>	<b>100%</b>

**Table AF31: RRA - all load types - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	1510	1.4%	2623	2.5%	1113	3%
Cardboard dry – compacted	2648	2.5%	2648	2.5%	0	0%
Cardboard – wet strength/waxed – loose	202	0.2%	601	0.6%	400	1.1%
Cardboard – wet strength/waxed – compacted	1300	1.2%	1300	1.2%	0	0%
Electrical – computers and peripherals	31	0%	58	0.1%	27	0.1%
Electrical – other	150	0.1%	165	0.2%	15	0%
Electrical – TVs	47	0%	47	0%	0	0%
Electrical – whitegoods	52	0%	54	0.1%	2	0%
Food organics – packaged	540	0.5%	1018	1%	478	1.3%
Food organics – unpackaged	3022	2.8%	14,461	13.6%	11,439	31.3%
Garbage bags	36,522	34.3%	0	0%	0	0%
Garden organics	3007	2.8%	3107	2.9%	99	0.3%
Glass – non-packaging	181	0.2%	203	0.2%	22	0.1%
Glass – packaging	708	0.7%	2331	2.2%	1623	4.4%
Masonry materials – concrete/bricks	5467	5.1%	5467	5.1%	0	0%
Masonry materials – other	5902	5.5%	6134	5.8%	232	0.6%
Metal (ferrous) – packaging	524	0.5%	1217	1.1%	693	1.9%
Metal (ferrous) – non-packaging (low density)	640	0.6%	720	0.7%	80	0.2%
Metal (ferrous) – non-packaging (high density)	12	0%	12	0%	0	0%
Metal (non-ferrous) – packaging	279	0.3%	415	0.4%	136	0.4%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	390	0.4%	460	0.4%	70	0.2%
Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%
Paper – office	710	0.7%	1954	1.8%	1244	3.4%
Paper – other	1257	1.2%	7409	7%	6152	16.8%
Paper – packaging	2556	2.4%	3238	3%	683	1.9%
Plastic – EPS foam	430	0.4%	502	0.5%	72	0.2%
Plastic – film packaging	2470	2.3%	6737	6.3%	4267	11.7%
Plastic – other	5886	5.5%	7024	6.6%	1138	3.1%
Plastic – rigid packaging	408	0.4%	2749	2.6%	2342	6.4%
Rubber	631	0.6%	826	0.8%	195	0.5%
Textiles and leather	1180	1.1%	2285	2.1%	1105	3%
Textiles – carpet and underlay	1413	1.3%	1672	1.6%	259	0.7%
Textiles – mattresses	169	0.2%	169	0.2%	0	0%
Textiles – covered furniture	1489	1.4%	1489	1.4%	0	0%
Wood – treated/painted	10,219	9.6%	10,220	9.6%	0	0%
Wood – treated/painted – pallets	2059	1.9%	2059	1.9%	0	0%
Wood – untreated	823	0.8%	833	0.8%	10	0%
Wood – untreated – pallets	2984	2.8%	2984	2.8%	0	0%
Other – batteries	0	0%	14	0%	14	0%
Other – gas bottles	0	0%	0	0%	0	0%
Other – nappies	0	0%	1776	1.7%	1776	4.9%
Other (including fines <10 mm)	8719	8.2%	9555	9%	836	2.3%
<b>Total</b>	<b>106,539</b>	<b>100%</b>	<b>106,539</b>	<b>100%</b>	<b>36,522</b>	<b>100%</b>

**Table AF32: RRA - mixed loads - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	721	0.8%	1756	1.9%	1036	3%
Cardboard dry – compacted	2648	2.8%	2648	2.8%	0	0%
Cardboard – wet strength/waxed – loose	202	0.2%	574	0.6%	372	1.1%
Cardboard – wet strength/waxed – compacted	1300	1.4%	1300	1.4%	0	0%
Electrical – computers and peripherals	31	0%	56	0.1%	26	0.1%
Electrical – other	150	0.2%	164	0.2%	14	0%
Electrical – TVs	47	0.1%	47	0.1%	0	0%
Electrical – whitegoods	52	0.1%	54	0.1%	2	0%
Food organics – packaged	540	0.6%	985	1.1%	445	1.3%
Food organics – unpackaged	3022	3.2%	13,669	14.6%	10,647	31.3%
Garbage bags	33,993	36.4%	0	0%	0	0%
Garden organics	2097	2.2%	2189	2.3%	93	0.3%
Glass – non-packaging	181	0.2%	202	0.2%	21	0.1%
Glass – packaging	708	0.8%	2218	2.4%	1510	4.4%
Masonry materials – concrete/bricks	4125	4.4%	4125	4.4%	0	0%
Masonry materials – other	5902	6.3%	6118	6.6%	216	0.6%
Metal (ferrous) – packaging	518	0.6%	1164	1.2%	645	1.9%
Metal (ferrous) – non-packaging (low density)	625	0.7%	699	0.7%	75	0.2%
Metal (ferrous) – non-packaging (high density)	12	0%	12	0%	0	0%
Metal (non-ferrous) – packaging	278	0.3%	405	0.4%	127	0.4%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	390	0.4%	455	0.5%	65	0.2%
Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%
Paper – office	710	0.8%	1868	2%	1157	3.4%
Paper – other	1257	1.3%	6983	7.5%	5726	16.8%
Paper – packaging	2556	2.7%	3191	3.4%	635	1.9%
Plastic – EPS foam	429	0.5%	496	0.5%	67	0.2%
Plastic – film packaging	2463	2.6%	6434	6.9%	3971	11.7%
Plastic – other	5863	6.3%	6922	7.4%	1059	3.1%
Plastic – rigid packaging	408	0.4%	2587	2.8%	2180	6.4%
Rubber	631	0.7%	813	0.9%	182	0.5%
Textiles and leather	1136	1.2%	2165	2.3%	1029	3%
Textiles – carpet and underlay	1218	1.3%	1459	1.6%	241	0.7%
Textiles – mattresses	47	0.1%	47	0.1%	0	0%
Textiles – covered furniture	1422	1.5%	1422	1.5%	0	0%
Wood – treated/painted	10,102	10.8%	10,102	10.8%	0	0%
Wood – treated/painted – pallets	2019	2.2%	2019	2.2%	0	0%
Wood – untreated	675	0.7%	684	0.7%	9	0%
Wood – untreated – pallets	1987	2.1%	1987	2.1%	0	0%
Other – batteries	0	0%	13	0%	13	0%
Other – gas bottles	0	0%	0	0%	0	0%
Other – nappies	0	0%	1653	1.8%	1653	4.9%
Other (including fines <10 mm)	2908	3.1%	3686	3.9%	778	2.3%
<b>Total</b>	<b>93,372</b>	<b>100%</b>	<b>93,372</b>	<b>100%</b>	<b>33,993</b>	<b>100%</b>

**Table AF33: RRA - single-material loads - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes per year	% by weight	tonnes per year	% by weight	tonnes per year	% by weight
Cardboard dry – loose	789	6%	866	6.6%	77	3%
Cardboard dry – compacted	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – loose	0	0%	28	0.2%	28	1.1%
Cardboard – wet strength/waxed – compacted	0	0%	0	0%	0	0%
Electrical – computers and peripherals	0	0%	2	0%	2	0.1%
Electrical – other	0	0%	2	0%	1	0%
Electrical – TVs	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%
Food organics – packaged	0	0%	33	0.3%	33	1.3%
Food organics – unpackaged	0	0%	792	6%	792	31.3%
Garbage bags	2529	19.2%	0	0%	0	0%
Garden organics	910	6.9%	917	7%	7	0.3%
Glass – non-packaging	0	0%	2	0%	2	0.1%
Glass – packaging	1	0%	113	0.9%	112	4.4%
Masonry materials – concrete/bricks	1343	10.2%	1343	10.2%	0	0%
Masonry materials – other	0	0%	16	0.1%	16	0.6%
Metal (ferrous) – packaging	5	0%	53	0.4%	48	1.9%
Metal (ferrous) – non-packaging (low density)	15	0.1%	21	0.2%	6	0.2%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	0	0%	10	0.1%	9	0.4%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0	0%	5	0%	5	0.2%
Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%
Paper – office	0	0%	86	0.7%	86	3.4%
Paper – other	0	0%	426	3.2%	426	16.8%
Paper – packaging	0	0%	47	0.4%	47	1.9%
Plastic – EPS foam	1	0%	6	0%	5	0.2%
Plastic – film packaging	7	0.1%	303	2.3%	295	11.7%
Plastic – other	23	0.2%	102	0.8%	79	3.1%
Plastic – rigid packaging	0	0%	162	1.2%	162	6.4%
Rubber	0	0%	14	0.1%	14	0.5%
Textiles and leather	44	0.3%	120	0.9%	77	3%
Textiles – carpet and underlay	195	1.5%	213	1.6%	18	0.7%
Textiles – mattresses	122	0.9%	122	0.9%	0	0%
Textiles – covered furniture	67	0.5%	67	0.5%	0	0%
Wood – treated/painted	118	0.9%	118	0.9%	0	0%
Wood – treated/painted – pallets	39	0.3%	39	0.3%	0	0%
Wood – untreated	148	1.1%	149	1.1%	1	0%
Wood – untreated – pallets	998	7.6%	998	7.6%	0	0%
Other – batteries	0	0%	1	0%	1	0%
Other – gas bottles	0	0%	0	0%	0	0%
Other – nappies	0	0%	123	0.9%	123	4.9%
Other (including fines <10 mm)	5811	44.1%	5869	44.6%	58	2.3%
<b>Total</b>	<b>13,167</b>	<b>100%</b>	<b>13,167</b>	<b>100%</b>	<b>2529</b>	<b>100%</b>

Southern Sydney Regional Organisation of Councils (SSROC)

**Table AF34: SSROC - mixed loads - bags as a category - consolidated composition**

Material	Tonnes audited	% of waste stream
Cardboard	27	5%
Electrical	3	0.5%
Food	9	1.6%
Garbage bags	175	32.5%
Garden organics	31	5.7%
Glass	6	1.1%
Masonry	67	12.4%
Metals	12	2.2%
Paper	20	3.7%
Plastic	49	9.2%
Rubber	2	0.4%
Textiles	36	6.7%
Wood	89	16.6%
Other	13	2.5%
<b>Total</b>	<b>539</b>	<b>100%</b>

**Table AF35: SSROC - mixed loads - bags distributed - consolidated composition**

Material	Tonnes audited	% of waste stream
Cardboard	39	7.2%
Electrical	3	0.6%
Food	50	9.3%
Garden organics	38	7%
Glass	10	1.8%
Masonry	69	12.8%
Metals	18	3.4%
Paper	62	11.5%
Plastic	87	16.1%
Rubber	4	0.7%
Textiles	42	7.8%
Wood	91	16.9%
Other	26	4.9%
<b>Total</b>	<b>539</b>	<b>100%</b>

**Table AF36: SSROC - single-material loads - consolidated composition**

<b>Material</b>	<b>Tonnes audited</b>	<b>% of waste stream</b>
Cardboard	3	1.6%
Electrical	0	0%
Food	1	0.5%
Garbage bags	50	23.9%
Garden organics	20	9.8%
Glass	3	1.6%
Masonry	24	11.5%
Metals	0	0.2%
Paper	1	0.3%
Plastic	2	1.2%
Rubber	0	0%
Textiles	15	7.1%
Wood	23	11%
Other	65	31.4%
<b>Total</b>	<b>208</b>	<b>100%</b>

**Table AF37: SSROC - all load types- detailed categories**

Material	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	9.2	1.2%	18.4	2.5%	9.1	4.1%
Cardboard dry – compacted	12.6	1.7%	12.6	1.7%	0.0	0%
Cardboard – wet strength/waxed – loose	1.2	0.2%	6.7	0.9%	5.5	2.4%
Cardboard – wet strength/waxed – compacted	7.3	1%	7.3	1%	0.0	0%
Electrical – computers and peripherals	0.5	0.1%	0.5	0.1%	0.0	0%
Electrical – other	1.8	0.2%	2.5	0.3%	0.7	0.3%
Electrical – TVs	0.4	0.1%	0.5	0.1%	0.1	0.1%
Electrical – whitegoods	0.1	0%	0.1	0%	0.0	0%
Food organics – packaged	1.7	0.2%	6.8	0.9%	5.1	2.3%
Food organics – unpackaged	7.8	1%	57.8	7.7%	50.0	22.2%
Garbage bags	224.7	30.1%	0.0	0%	0.0	0%
Garden organics	51.1	6.8%	58.1	7.8%	7.0	3.1%
Glass – non-packaging	6.0	0.8%	6.1	0.8%	0.0	0%
Glass – packaging	2.9	0.4%	8.5	1.1%	5.7	2.5%
Masonry materials – concrete/bricks	47.0	6.3%	47.1	6.3%	0.0	0%
Masonry materials – other	43.6	5.8%	46.1	6.2%	2.5	1.1%
Metal (ferrous) – packaging	2.8	0.4%	6.2	0.8%	3.4	1.5%
Metal (ferrous) – non-packaging (low density)	5.8	0.8%	9.0	1.2%	3.2	1.4%
Metal (ferrous) – non-packaging (high density)	0.1	0%	0.1	0%	0.0	0%
Metal (non-ferrous) – packaging	1.3	0.2%	3.0	0.4%	1.7	0.8%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	2.1	0.3%	2.6	0.3%	0.5	0.2%
Metal (non-ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Paper – office	6.3	0.8%	20.8	2.8%	14.5	6.4%
Paper – other	6.0	0.8%	34.8	4.7%	28.8	12.8%
Paper – packaging	8.2	1.1%	17.6	2.4%	9.4	4.2%
Plastic – EPS foam	2.2	0.3%	2.5	0.3%	0.3	0.1%
Plastic – film packaging	20.5	2.7%	49.3	6.6%	28.8	12.8%
Plastic – other	27.2	3.6%	34.2	4.6%	7.0	3.1%
Plastic – rigid packaging	1.9	0.2%	14.2	1.9%	12.4	5.5%
Rubber	2.2	0.3%	4.2	0.6%	2.0	0.9%
Textiles and leather	17.8	2.4%	23.5	3.1%	5.7	2.6%
Textiles – carpet and underlay	24.6	3.3%	26.8	3.6%	2.2	1%
Textiles – mattresses	0.7	0.1%	0.7	0.1%	0.0	0%
Textiles – covered furniture	7.8	1%	7.8	1%	0.0	0%
Wood – treated/painted	86.8	11.6%	88.0	11.8%	1.1	0.5%
Wood – treated/painted – pallets	6.0	0.8%	6.1	0.8%	0.0	0%
Wood – untreated	14.4	1.9%	15.0	2%	0.7	0.3%
Wood – untreated – pallets	5.0	0.7%	5.0	0.7%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	13.3	1.8%	13.3	5.9%
Other (including fines <10 mm)	78.8	10.6%	82.9	11.1%	4.0	1.8%
<b>Total</b>	<b>746.7</b>	<b>100%</b>	<b>746.7</b>	<b>100%</b>	<b>224.7</b>	<b>100%</b>

**Table AF38: SSROC - mixed loads - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	8.9	1.6%	16.2	3%	7.3	4.2%
Cardboard dry – compacted	12.1	2.2%	12.1	2.2%	0.0	0%
Cardboard – wet strength/waxed – loose	1.2	0.2%	5.8	1.1%	4.5	2.6%
Cardboard – wet strength/waxed – compacted	4.9	0.9%	4.9	0.9%	0.0	0%
Electrical – computers and peripherals	0.5	0.1%	0.5	0.1%	0.0	0%
Electrical – other	1.8	0.3%	2.4	0.4%	0.6	0.3%
Electrical – TVs	0.4	0.1%	0.5	0.1%	0.1	0.1%
Electrical – whitegoods	0.1	0%	0.1	0%	0.0	0%
Food organics – packaged	1.5	0.3%	4.9	0.9%	3.4	2%
Food organics – unpackaged	7.1	1.3%	45.1	8.4%	38.1	21.7%
Garbage bags	175.0	32.5%	0.0	0%	0.0	0%
Garden organics	30.9	5.7%	37.6	7%	6.8	3.9%
Glass – non-packaging	2.9	0.5%	2.9	0.5%	0.0	0%
Glass – packaging	2.8	0.5%	6.6	1.2%	3.8	2.2%
Masonry materials – concrete/bricks	32.5	6%	32.5	6%	0.0	0%
Masonry materials – other	34.3	6.4%	36.6	6.8%	2.3	1.3%
Metal (ferrous) – packaging	2.6	0.5%	5.3	1%	2.7	1.5%
Metal (ferrous) – non-packaging (low density)	5.6	1%	7.7	1.4%	2.1	1.2%
Metal (ferrous) – non-packaging (high density)	0.1	0%	0.1	0%	0.0	0%
Metal (non-ferrous) – packaging	1.3	0.2%	2.5	0.5%	1.2	0.7%
Metal (non-ferrous) – non-packaging (low density)	2.1	0.4%	2.4	0.5%	0.3	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Paper – office	6.3	1.2%	18.8	3.5%	12.5	7.1%
Paper – other	5.9	1.1%	28.3	5.2%	22.3	12.8%
Paper – packaging	7.7	1.4%	15.1	2.8%	7.4	4.3%
Plastic – EPS foam	2.0	0.4%	2.3	0.4%	0.3	0.1%
Plastic – film packaging	20.0	3.7%	42.8	7.9%	22.8	13%
Plastic – other	25.7	4.8%	31.0	5.7%	5.3	3%
Plastic – rigid packaging	1.7	0.3%	10.9	2%	9.2	5.3%
Rubber	2.2	0.4%	3.6	0.7%	1.3	0.8%
Textiles and leather	13.7	2.5%	18.4	3.4%	4.7	2.7%
Textiles – carpet and underlay	16.6	3.1%	17.9	3.3%	1.3	0.7%
Textiles – mattresses	0.7	0.1%	0.7	0.1%	0.0	0%
Textiles – covered furniture	5.0	0.9%	5.0	0.9%	0.0	0%
Wood – treated/painted	65.9	12.2%	66.7	12.4%	0.8	0.4%
Wood – treated/painted – pallets	5.0	0.9%	5.0	0.9%	0.0	0%
Wood – untreated	14.0	2.6%	14.7	2.7%	0.7	0.4%
Wood – untreated – pallets	4.4	0.8%	4.4	0.8%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	9.4	1.7%	9.4	5.4%
Other (including fines <10 mm)	13.5	2.5%	17.0	3.1%	3.5	2%
<b>Total</b>	<b>538.8</b>	<b>100%</b>	<b>538.8</b>	<b>100%</b>	<b>175.0</b>	<b>100%</b>

**Table AF39: SSROC - single-material loads - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	0.3	0.2%	2.2	1%	1.8	3.7%
Cardboard dry – compacted	0.5	0.2%	0.5	0.2%	0.0	0%
Cardboard – wet strength/waxed – loose	0.0	0%	0.9	0.5%	0.9	1.8%
Cardboard – wet strength/waxed – compacted	2.4	1.2%	2.4	1.2%	0.0	0%
Electrical – computers and peripherals	0.0	0%	0.0	0%	0.0	0%
Electrical – other	0.0	0%	0.2	0.1%	0.1	0.3%
Electrical – TVs	0.0	0%	0.0	0%	0.0	0%
Electrical – whitegoods	0.0	0%	0.0	0%	0.0	0%
Food organics – packaged	0.2	0.1%	1.9	0.9%	1.7	3.5%
Food organics – unpackaged	0.8	0.4%	12.7	6.1%	11.9	24%
Garbage bags	49.7	23.9%	0.0	0%	0.0	0%
Garden organics	20.3	9.8%	20.5	9.9%	0.2	0.4%
Glass – non-packaging	3.1	1.5%	3.1	1.5%	0.0	0%
Glass – packaging	0.1	0.1%	1.9	0.9%	1.8	3.7%
Masonry materials – concrete/bricks	14.5	7%	14.5	7%	0.0	0%
Masonry materials – other	9.3	4.5%	9.5	4.6%	0.2	0.3%
Metal (ferrous) – packaging	0.2	0.1%	0.9	0.4%	0.7	1.3%
Metal (ferrous) – non-packaging (low density)	0.2	0.1%	1.2	0.6%	1.0	2.1%
Metal (ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Metal (non-ferrous) – packaging	0.0	0%	0.5	0.2%	0.5	0.9%
Metal (non-ferrous) – non-packaging (low density)	0.0	0%	0.1	0.1%	0.1	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Paper – office	0.0	0%	2.1	1%	2.0	4%
Paper – other	0.0	0%	6.5	3.1%	6.5	13.1%
Paper – packaging	0.6	0.3%	2.5	1.2%	2.0	4%
Plastic – EPS foam	0.2	0.1%	0.3	0.1%	0.1	0.1%
Plastic – film packaging	0.5	0.3%	6.5	3.1%	5.9	11.9%
Plastic – other	1.5	0.7%	3.2	1.5%	1.7	3.4%
Plastic – rigid packaging	0.2	0.1%	3.3	1.6%	3.1	6.3%
Rubber	0.0	0%	0.7	0.3%	0.7	1.3%
Textiles and leather	4.0	1.9%	5.0	2.4%	1.0	2%
Textiles – carpet and underlay	8.0	3.9%	8.9	4.3%	0.9	1.8%
Textiles – mattresses	0.0	0%	0.0	0%	0.0	0%
Textiles – covered furniture	2.7	1.3%	2.7	1.3%	0.0	0%
Wood – treated/painted	20.9	10.1%	21.3	10.2%	0.4	0.7%
Wood – treated/painted – pallets	1.1	0.5%	1.1	0.5%	0.0	0%
Wood – untreated	0.3	0.2%	0.4	0.2%	0.0	0%
Wood – untreated – pallets	0.6	0.3%	0.6	0.3%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	3.9	1.9%	3.9	7.8%
Other (including fines <10 mm)	65.4	31.4%	65.9	31.7%	0.5	1.1%
<b>Total</b>	<b>207.9</b>	<b>100%</b>	<b>207.9</b>	<b>100%</b>	<b>49.7</b>	<b>100%</b>

## Western Sydney Regional Organisation of Councils (WSROC)

**Table AF40: WSROC - mixed loads - bags as a category - consolidated composition**

Material	Tonnes audited	% of waste stream
Cardboard	56	5.8%
Electrical	3	0.3%
Food	23	2.4%
Garbage bags	351	36.2%
Garden organics	37	3.8%
Glass	9	0.9%
Masonry	74	7.6%
Metals	20	2.1%
Paper	53	5.4%
Plastic	99	10.2%
Rubber	3	0.3%
Textiles	43	4.5%
Wood	163	16.8%
Other	35	3.6%
<b>Total</b>	<b>972</b>	<b>100%</b>

**Table AF41: WSROC - mixed loads - bags distributed - consolidated composition**

Material	Tonnes audited	% of waste stream
Cardboard	77	7.9%
Electrical	5	0.6%
Food	109	11.2%
Garbage bags	0	0%
Garden organics	49	5%
Glass	17	1.8%
Masonry	78	8%
Metals	32	3.3%
Paper	149	15.3%
Plastic	173	17.8%
Rubber	6	0.6%
Textiles	56	5.8%
Wood	165	17%
Other	55	5.6%
<b>Total</b>	<b>972</b>	<b>100%</b>

**Table AF42: WSROC – single-material loads – consolidated composition**

<b>Material</b>	<b>Tonnes audited</b>	<b>% of waste stream</b>
Cardboard	4	1.4%
Electrical	0	0%
Food	5	1.8%
Garbage bags	98	37%
Garden organics	3	1.1%
Glass	1	0.4%
Masonry	12	4.3%
Metals	2	0.7%
Paper	1	0.2%
Plastic	6	2.4%
Rubber	0	0.1%
Textiles	10	3.8%
Wood	39	14.5%
Other	86	32.2%
<b>Total</b>	<b>266</b>	<b>100%</b>

Table AF43: WSROC - all load types- detailed categories

Material	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	23.0	1.9%	42.7	3.5%	19.7	4.4%
Cardboard dry – compacted	25.0	2%	25.0	2%	0.0	0%
Cardboard – wet strength/waxed – loose	1.9	0.2%	8.9	0.7%	7.0	1.6%
Cardboard – wet strength/waxed – compacted	10.0	0.8%	10.0	0.8%	0.0	0%
Electrical – computers and peripherals	0.9	0.1%	0.9	0.1%	0.0	0%
Electrical – other	1.7	0.1%	4.1	0.3%	2.4	0.5%
Electrical – TVs	0.4	0%	0.8	0.1%	0.3	0.1%
Electrical – whitegoods	0.3	0%	0.3	0%	0.0	0%
Food organics – packaged	5.7	0.5%	15.7	1.3%	10.0	2.2%
Food organics – unpackaged	22.5	1.8%	118.3	9.6%	95.8	21.3%
Garbage bags	449.8	36.3%	0.0	0%	0.0	0%
Garden organics	40.3	3.3%	58.7	4.7%	18.4	4.1%
Glass – non-packaging	7.5	0.6%	7.6	0.6%	0.1	0%
Glass – packaging	2.3	0.2%	12.7	1%	10.4	2.3%
Masonry materials – concrete/bricks	56.9	4.6%	57.0	4.6%	0.1	0%
Masonry materials – other	28.9	2.3%	34.3	2.8%	5.4	1.2%
Metal (ferrous) – packaging	4.6	0.4%	10.5	0.8%	5.8	1.3%
Metal (ferrous) – non-packaging (low density)	9.7	0.8%	13.3	1.1%	3.6	0.8%
Metal (ferrous) – non-packaging (high density)	0.3	0%	0.3	0%	0.0	0%
Metal (non-ferrous) – packaging	1.8	0.1%	5.7	0.5%	3.9	0.9%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	5.4	0.4%	6.8	0.6%	1.5	0.3%
Metal (non-ferrous) – non-packaging (high density)	0.5	0%	0.5	0%	0.0	0%
Paper – office	9.8	0.8%	48.5	3.9%	38.8	8.6%
Paper – other	15.3	1.2%	79.3	6.4%	64.0	14.2%
Paper – packaging	28.1	2.3%	47.8	3.9%	19.7	4.4%
Plastic – EPS foam	4.6	0.4%	5.4	0.4%	0.8	0.2%
Plastic – film packaging	41.6	3.4%	94.0	7.6%	52.5	11.7%
Plastic – other	53.3	4.3%	69.0	5.6%	15.7	3.5%
Plastic – rigid packaging	6.1	0.5%	31.1	2.5%	25.0	5.6%
Rubber	3.4	0.3%	6.6	0.5%	3.2	0.7%
Textiles and leather	13.9	1.1%	29.0	2.3%	15.1	3.4%
Textiles – carpet and underlay	20.6	1.7%	21.8	1.8%	1.3	0.3%
Textiles – mattresses	1.4	0.1%	1.4	0.1%	0.0	0%
Textiles – covered furniture	17.6	1.4%	17.6	1.4%	0.0	0%
Wood – treated/painted	144.3	11.7%	145.5	11.8%	1.3	0.3%
Wood – treated/painted – pallets	30.6	2.5%	30.6	2.5%	0.0	0%
Wood – untreated	16.5	1.3%	18.4	1.5%	1.9	0.4%
Wood – untreated – pallets	10.2	0.8%	10.2	0.8%	0.0	0%
Other – batteries	0.2	0%	0.3	0%	0.1	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	16.2	1.3%	16.2	3.6%
Other (including fines <10 mm)	120.6	9.7%	130.5	10.6%	10.0	2.2%
<b>Total</b>	<b>1237.3</b>	<b>100%</b>	<b>1237.3</b>	<b>100%</b>	<b>449.8</b>	<b>100%</b>

**Table AF44: WSROC - mixed loads- detailed categories**

Material	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	20.3	2.1%	35.5	3.7%	15.2	4.3%
Cardboard dry – compacted	24.4	2.5%	24.4	2.5%	0.0	0%
Cardboard – wet strength/waxed – loose	1.9	0.2%	7.2	0.7%	5.3	1.5%
Cardboard – wet strength/waxed – compacted	9.8	1%	9.8	1%	0.0	0%
Electrical – computers and peripherals	0.9	0.1%	0.9	0.1%	0.0	0%
Electrical – other	1.7	0.2%	3.5	0.4%	1.9	0.5%
Electrical – TVs	0.4	0%	0.7	0.1%	0.3	0.1%
Electrical – whitegoods	0.3	0%	0.3	0%	0.0	0%
Food organics – packaged	3.1	0.3%	11.8	1.2%	8.7	2.5%
Food organics – unpackaged	20.3	2.1%	97.4	10%	77.1	21.9%
Garbage bags	351.3	36.2%	0.0	0%	0.0	0%
Garden organics	37.3	3.8%	48.9	5%	11.6	3.3%
Glass – non-packaging	6.6	0.7%	6.7	0.7%	0.1	0%
Glass – packaging	2.0	0.2%	10.7	1.1%	8.6	2.5%
Masonry materials – concrete/bricks	46.3	4.8%	46.4	4.8%	0.1	0%
Masonry materials – other	27.9	2.9%	31.4	3.2%	3.5	1%
Metal (ferrous) – packaging	4.3	0.4%	8.8	0.9%	4.5	1.3%
Metal (ferrous) – non-packaging (low density)	9.2	0.9%	11.9	1.2%	2.6	0.7%
Metal (ferrous) – non-packaging (high density)	0.3	0%	0.3	0%	0.0	0%
Metal (non-ferrous) – packaging	1.7	0.2%	4.9	0.5%	3.2	0.9%
Metal (non-ferrous) – non-packaging (low density)	4.4	0.5%	5.7	0.6%	1.3	0.4%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.5	0%	0.5	0%	0.0	0%
Paper – office	9.7	1%	38.6	4%	29.0	8.2%
Paper – other	15.1	1.6%	67.0	6.9%	51.9	14.8%
Paper – packaging	27.9	2.9%	43.2	4.4%	15.3	4.4%
Plastic – EPS foam	4.1	0.4%	4.7	0.5%	0.6	0.2%
Plastic – film packaging	40.5	4.2%	80.9	8.3%	40.4	11.5%
Plastic – other	49.0	5%	62.0	6.4%	13.0	3.7%
Plastic – rigid packaging	5.7	0.6%	25.6	2.6%	19.9	5.7%
Rubber	3.3	0.3%	5.9	0.6%	2.6	0.7%
Textiles and leather	13.1	1.3%	25.0	2.6%	12.0	3.4%
Textiles – carpet and underlay	12.2	1.3%	13.3	1.4%	1.0	0.3%
Textiles – mattresses	1.4	0.1%	1.4	0.1%	0.0	0%
Textiles – covered furniture	16.8	1.7%	16.8	1.7%	0.0	0%
Wood – treated/painted	114.3	11.8%	115.4	11.9%	1.1	0.3%
Wood – treated/painted – pallets	25.7	2.6%	25.7	2.6%	0.0	0%
Wood – untreated	14.2	1.5%	15.4	1.6%	1.2	0.3%
Wood – untreated – pallets	8.7	0.9%	8.7	0.9%	0.0	0%
Other – batteries	0.2	0%	0.3	0%	0.1	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	12.2	1.3%	12.2	3.5%
Other (including fines <10 mm)	34.9	3.6%	42.1	4.3%	7.2	2%
<b>Total</b>	<b>971.6</b>	<b>100%</b>	<b>971.6</b>	<b>100%</b>	<b>351.3</b>	<b>100%</b>

**Table AF45: WSROC - single-material loads - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	2.8	1%	7.3	2.7%	4.5	4.6%
Cardboard dry – compacted	0.6	0.2%	0.6	0.2%	0.0	0%
Cardboard – wet strength/waxed – loose	0.0	0%	1.8	0.7%	1.8	1.8%
Cardboard – wet strength/waxed – compacted	0.3	0.1%	0.3	0.1%	0.0	0%
Electrical – computers and peripherals	0.0	0%	0.0	0%	0.0	0%
Electrical – other	0.0	0%	0.5	0.2%	0.5	0.5%
Electrical – TVs	0.0	0%	0.1	0%	0.0	0%
Electrical – whitegoods	0.0	0%	0.0	0%	0.0	0%
Food organics – packaged	2.6	1%	4.0	1.5%	1.4	1.4%
Food organics – unpackaged	2.3	0.9%	21.0	7.9%	18.7	19%
Garbage bags	98.4	37%	0.0	0%	0.0	0%
Garden organics	3.0	1.1%	9.8	3.7%	6.8	6.9%
Glass – non-packaging	0.8	0.3%	0.9	0.3%	0.0	0%
Glass – packaging	0.3	0.1%	2.0	0.8%	1.8	1.8%
Masonry materials – concrete/bricks	10.6	4%	10.6	4%	0.0	0%
Masonry materials – other	0.9	0.4%	2.8	1.1%	1.9	1.9%
Metal (ferrous) – packaging	0.3	0.1%	1.7	0.6%	1.3	1.3%
Metal (ferrous) – non-packaging (low density)	0.5	0.2%	1.4	0.5%	0.9	1%
Metal (ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Metal (non-ferrous) – packaging	0.1	0%	0.8	0.3%	0.7	0.7%
Metal (non-ferrous) – non-packaging (low density)	1.0	0.4%	1.1	0.4%	0.1	0.1%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Paper – office	0.1	0%	9.9	3.7%	9.8	9.9%
Paper – other	0.2	0.1%	12.3	4.6%	12.1	12.3%
Paper – packaging	0.2	0.1%	4.6	1.7%	4.4	4.5%
Plastic – EPS foam	0.5	0.2%	0.6	0.2%	0.1	0.2%
Plastic – film packaging	1.1	0.4%	13.1	4.9%	12.0	12.2%
Plastic – other	4.3	1.6%	7.0	2.6%	2.7	2.7%
Plastic – rigid packaging	0.4	0.2%	5.6	2.1%	5.1	5.2%
Rubber	0.1	0.1%	0.7	0.2%	0.5	0.5%
Textiles and leather	0.8	0.3%	3.9	1.5%	3.1	3.2%
Textiles – carpet and underlay	8.3	3.1%	8.6	3.2%	0.3	0.3%
Textiles – mattresses	0.0	0%	0.0	0%	0.0	0%
Textiles – covered furniture	0.8	0.3%	0.8	0.3%	0.0	0%
Wood – treated/painted	29.9	11.3%	30.1	11.3%	0.2	0.2%
Wood – treated/painted – pallets	4.9	1.9%	4.9	1.9%	0.0	0%
Wood – untreated	2.3	0.9%	3.0	1.1%	0.7	0.7%
Wood – untreated – pallets	1.5	0.6%	1.5	0.6%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	4.0	1.5%	4.0	4%
Other (including fines <10 mm)	85.7	32.2%	88.5	33.3%	2.8	2.8%
<b>Total</b>	<b>265.7</b>	<b>100%</b>	<b>265.7</b>	<b>100%</b>	<b>98.4</b>	<b>100%</b>

Northern Sydney Regional Organisation of Councils (NSROC)

**Table AF46: NSROC - mixed loads - bags as a category - consolidated composition**

Material	Tonnes audited	% of waste stream
Cardboard	3	3%
Electrical	1	1.4%
Food	1	0.7%
Garbage bags	22	21.7%
Garden organics	5	4.6%
Glass	0	0.4%
Masonry	17	17.3%
Metals	4	4.5%
Paper	1	1.5%
Plastic	9	9.3%
Rubber	1	0.7%
Textiles	3	3.3%
Wood	27	27.1%
Other	5	4.6%
<b>Total</b>	<b>99</b>	<b>100%</b>

**Table AF47: NSROC - mixed loads - bags distributed - consolidated composition**

Material	Tonnes audited	% of waste stream
Cardboard	4	4.3%
Electrical	2	1.6%
Food	7	6.9%
Garbage bags	0	0%
Garden organics	5	4.7%
Glass	1	1.1%
Masonry	17	17.3%
Metals	5	5.2%
Paper	7	7.5%
Plastic	14	13.9%
Rubber	1	0.9%
Textiles	4	3.9%
Wood	27	27.2%
Other	5	5.5%
<b>Total</b>	<b>99</b>	<b>100%</b>

**Table AF48: NSROC – single-material loads – consolidated composition**

<b>Material</b>	<b>Tonnes audited</b>	<b>% of waste stream</b>
Cardboard	0	0.2%
Electrical	0	0.1%
Food	0	0%
Garbage bags	6	12.2%
Garden organics	0	0.1%
Glass	0	0%
Masonry	2	4.2%
Metals	2	5%
Paper	0	0.1%
Plastic	0	0.9%
Rubber	0	0%
Textiles	3	5.5%
Wood	23	50.9%
Other	9	20.7%
<b>Total</b>	<b>46</b>	<b>100%</b>

Table AF49: NSROC - all load types - detailed categories

Materials	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	2.1	1.4%	3.2	2.2%	1.1	3.9%
Cardboard dry – compacted	0.4	0.3%	0.4	0.3%	0.0	0%
Cardboard – wet strength/waxed – loose	0.1	0.1%	0.7	0.5%	0.6	2.1%
Cardboard – wet strength/waxed – compacted	0.3	0.2%	0.3	0.2%	0.0	0%
Electrical – computers and peripherals	0.4	0.3%	0.4	0.3%	0.0	0%
Electrical – other	1.0	0.7%	1.1	0.7%	0.1	0.4%
Electrical – TVs	0.0	0%	0.1	0%	0.0	0.1%
Electrical – whitegoods	0.0	0%	0.0	0%	0.0	0%
Food organics – packaged	0.0	0%	0.8	0.6%	0.8	3.1%
Food organics – unpackaged	0.7	0.5%	7.7	5.3%	7.0	25.8%
Garbage bags	27.2	18.7%	0.0	0%	0.0	0%
Garden organics	4.6	3.2%	4.9	3.4%	0.3	1.1%
Glass – non-packaging	0.4	0.2%	0.4	0.3%	0.1	0.2%
Glass – packaging	0.0	0%	0.9	0.6%	0.9	3.2%
Masonry materials – concrete/bricks	13.9	9.6%	13.9	9.6%	0.0	0%
Masonry materials – other	5.2	3.6%	5.2	3.6%	0.0	0.2%
Metal (ferrous) – packaging	0.5	0.3%	0.8	0.6%	0.3	1.3%
Metal (ferrous) – non-packaging (low density)	5.4	3.7%	5.6	3.8%	0.2	0.6%
Metal (ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Metal (non-ferrous) – packaging	0.2	0.2%	0.5	0.3%	0.3	0.9%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0.2	0.1%	0.3	0.2%	0.1	0.4%
Metal (non-ferrous) – non-packaging (high density)	0.4	0.3%	0.4	0.3%	0.0	0%
Paper – office	0.5	0.4%	2.6	1.8%	2.1	7.6%
Paper – other	0.2	0.1%	4.2	2.9%	4.0	14.7%
Paper – packaging	0.8	0.5%	1.8	1.2%	1.0	3.7%
Plastic – EPS foam	0.2	0.1%	0.2	0.2%	0.1	0.2%
Plastic – film packaging	1.9	1.3%	4.8	3.3%	2.9	10.7%
Plastic – other	7.5	5.1%	8.5	5.9%	1.0	3.9%
Plastic – rigid packaging	0.1	0.1%	1.6	1.1%	1.5	5.5%
Rubber	0.7	0.5%	1.0	0.7%	0.3	1%
Textiles and leather	1.3	0.9%	2.0	1.4%	0.7	2.5%
Textiles – carpet and underlay	3.4	2.3%	3.4	2.3%	0.0	0%
Textiles – mattresses	0.1	0.1%	0.1	0.1%	0.0	0%
Textiles – covered furniture	1.1	0.7%	1.1	0.7%	0.0	0%
Wood – treated/painted	47.2	32.5%	47.4	32.6%	0.2	0.7%
Wood – treated/painted – pallets	0.7	0.5%	0.7	0.5%	0.0	0%
Wood – untreated	2.2	1.5%	2.2	1.5%	0.0	0%
Wood – untreated – pallets	0.1	0.1%	0.1	0.1%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	0.8	0.6%	0.8	3.1%
Other (including fines <10 mm)	14.0	9.7%	14.8	10.2%	0.8	3%
<b>Total</b>	<b>145.2</b>	<b>100%</b>	<b>145.2</b>	<b>100%</b>	<b>27.2</b>	<b>100%</b>

**Table AF50: NSROC - mixed loads - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	2.0	2%	2.9	3%	0.9	4.2%
Cardboard dry – compacted	0.4	0.4%	0.4	0.4%	0.0	0%
Cardboard – wet strength/waxed – loose	0.1	0.1%	0.5	0.5%	0.4	1.8%
Cardboard – wet strength/waxed – compacted	0.3	0.4%	0.3	0.4%	0.0	0%
Electrical – computers and peripherals	0.4	0.4%	0.4	0.4%	0.0	0%
Electrical – other	0.9	0.9%	1.0	1%	0.1	0.5%
Electrical – TVs	0.0	0%	0.1	0.1%	0.0	0.1%
Electrical – whitegoods	0.0	0%	0.0	0%	0.0	0%
Food organics – packaged	0.0	0%	0.7	0.7%	0.7	3.1%
Food organics – unpackaged	0.7	0.7%	6.2	6.2%	5.5	25.6%
Garbage bags	21.6	21.7%	0.0	0%	0.0	0%
Garden organics	4.6	4.6%	4.7	4.7%	0.1	0.7%
Glass – non-packaging	0.3	0.3%	0.4	0.4%	0.0	0.1%
Glass – packaging	0.0	0%	0.7	0.7%	0.7	3%
Masonry materials – concrete/bricks	12.2	12.3%	12.2	12.3%	0.0	0%
Masonry materials – other	5.0	5%	5.0	5.1%	0.0	0.2%
Metal (ferrous) – packaging	0.4	0.5%	0.7	0.7%	0.3	1.2%
Metal (ferrous) – non-packaging (low density)	3.2	3.2%	3.3	3.3%	0.1	0.5%
Metal (ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Metal (non-ferrous) – packaging	0.2	0.2%	0.5	0.5%	0.2	1.1%
Metal (non-ferrous) – non-packaging (low density)	0.2	0.2%	0.2	0.2%	0.1	0.4%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.4	0.4%	0.4	0.4%	0.0	0%
Paper – office	0.5	0.5%	2.2	2.2%	1.7	7.7%
Paper – other	0.2	0.2%	3.5	3.6%	3.4	15.5%
Paper – packaging	0.7	0.7%	1.7	1.7%	1.0	4.4%
Plastic – EPS foam	0.2	0.2%	0.2	0.2%	0.0	0.2%
Plastic – film packaging	1.6	1.6%	4.0	4.1%	2.4	11.3%
Plastic – other	7.4	7.4%	8.2	8.3%	0.9	4.1%
Plastic – rigid packaging	0.1	0.1%	1.4	1.4%	1.2	5.7%
Rubber	0.7	0.7%	0.9	0.9%	0.2	1%
Textiles and leather	0.7	0.7%	1.2	1.2%	0.6	2.6%
Textiles – carpet and underlay	1.5	1.5%	1.5	1.5%	0.0	0%
Textiles – mattresses	0.1	0.1%	0.1	0.1%	0.0	0%
Textiles – covered furniture	1.1	1.1%	1.1	1.1%	0.0	0%
Wood – treated/painted	24.0	24.2%	24.2	24.3%	0.1	0.5%
Wood – treated/painted – pallets	0.7	0.7%	0.7	0.7%	0.0	0%
Wood – untreated	2.1	2.1%	2.1	2.1%	0.0	0%
Wood – untreated – pallets	0.1	0.1%	0.1	0.1%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	0.5	0.5%	0.5	2.4%
Other (including fines <10 mm)	4.5	4.6%	4.9	5%	0.4	1.9%
<b>Total</b>	<b>99.4</b>	<b>100%</b>	<b>99.4</b>	<b>100%</b>	<b>21.6</b>	<b>100%</b>

**Table AF51: NSROC - single-material loads -detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	0.1	0.2%	0.2	0.5%	0.2	2.9%
Cardboard dry – compacted	0.0	0%	0.0	0%	0.0	0%
Cardboard – wet strength/waxed – loose	0.0	0%	0.2	0.4%	0.2	3.3%
Cardboard – wet strength/waxed – compacted	0.0	0%	0.0	0%	0.0	0%
Electrical – computers and peripherals	0.0	0%	0.0	0%	0.0	0.1%
Electrical – other	0.1	0.1%	0.1	0.2%	0.0	0.1%
Electrical – TVs	0.0	0%	0.0	0%	0.0	0%
Electrical – whitegoods	0.0	0%	0.0	0%	0.0	0%
Food organics – packaged	0.0	0%	0.2	0.4%	0.2	2.8%
Food organics – unpackaged	0.0	0%	1.5	3.3%	1.5	26.9%
Garbage bags	5.6	12.2%	0.0	0%	0.0	0%
Garden organics	0.1	0.1%	0.2	0.5%	0.2	2.8%
Glass – non-packaging	0.0	0%	0.0	0.1%	0.0	0.6%
Glass – packaging	0.0	0%	0.2	0.5%	0.2	3.7%
Masonry materials – concrete/bricks	1.7	3.7%	1.7	3.7%	0.0	0%
Masonry materials – other	0.2	0.5%	0.2	0.5%	0.0	0%
Metal (ferrous) – packaging	0.0	0.1%	0.1	0.3%	0.1	1.5%
Metal (ferrous) – non-packaging (low density)	2.2	4.8%	2.2	4.9%	0.0	0.7%
Metal (ferrous) – non-packaging (high density)	0.0	0.1%	0.0	0.1%	0.0	0%
Metal (non-ferrous) – packaging	0.0	0%	0.0	0.1%	0.0	0.4%
Metal (non-ferrous) – non-packaging (low density)	0.0	0%	0.0	0.1%	0.0	0.3%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Paper – office	0.0	0%	0.4	0.9%	0.4	7%
Paper – other	0.0	0%	0.7	1.5%	0.7	11.7%
Paper – packaging	0.0	0%	0.1	0.2%	0.1	1%
Plastic – EPS foam	0.0	0%	0.0	0%	0.0	0.2%
Plastic – film packaging	0.3	0.6%	0.8	1.6%	0.5	8.5%
Plastic – other	0.1	0.3%	0.3	0.6%	0.2	3%
Plastic – rigid packaging	0.0	0%	0.3	0.6%	0.3	4.7%
Rubber	0.0	0%	0.0	0.1%	0.0	0.9%
Textiles and leather	0.6	1.3%	0.7	1.6%	0.1	2.4%
Textiles – carpet and underlay	1.9	4.2%	1.9	4.2%	0.0	0%
Textiles – mattresses	0.0	0%	0.0	0%	0.0	0%
Textiles – covered furniture	0.0	0%	0.0	0%	0.0	0%
Wood – treated/painted	23.2	50.5%	23.2	50.7%	0.1	1.3%
Wood – treated/painted – pallets	0.0	0%	0.0	0%	0.0	0%
Wood – untreated	0.2	0.4%	0.2	0.4%	0.0	0.1%
Wood – untreated – pallets	0.0	0%	0.0	0%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	0.3	0.7%	0.3	6%
Other (including fines <10 mm)	9.5	20.7%	9.9	21.6%	0.4	7.2%
<b>Total</b>	<b>45.9</b>	<b>100%</b>	<b>45.9</b>	<b>100%</b>	<b>5.6</b>	<b>100%</b>

Hunter Councils Inc.

**Table AF52: Hunter Councils Inc - mixed loads - bags as a category - consolidated composition**

Material	Tonnes audited	% of waste stream
Cardboard	18	3.6%
Electrical	1	0.1%
Food	8	1.6%
Garbage bags	162	33.6%
Garden organics	14	2.8%
Glass	3	0.6%
Masonry	109	22.6%
Metals	13	2.6%
Paper	11	2.2%
Plastic	33	6.9%
Rubber	3	0.7%
Textiles	16	3.4%
Wood	75	15.5%
Other	17	3.5%
<b>Total</b>	<b>481</b>	<b>100%</b>

**Table AF53: Hunter Councils Inc - mixed loads - bags distributed - consolidated composition**

Material	Tonnes audited	% of waste stream
Cardboard	28	5.7%
Electrical	1	0.2%
Food	70	14.5%
Garden organics	15	3.1%
Glass	10	2%
Masonry	109	22.7%
Metals	16	3.4%
Paper	41	8.5%
Plastic	67	14%
Rubber	5	1%
Textiles	21	4.3%
Wood	75	15.5%
Other	24	4.9%
<b>Total</b>	<b>481</b>	<b>100%</b>

**Table AF54: Hunter Councils Inc – single-material loads – consolidated composition**

<b>Material</b>	<b>Tonnes audited</b>	<b>% of waste stream</b>
Cardboard	0	0.1%
Electrical	0	0%
Food	0	0%
Garbage bags	17	3.6%
Garden organics	4	0.9%
Glass	0	0.1%
Masonry	157	33.7%
Metals	0	0%
Paper	0	0%
Plastic	2	0.5%
Rubber	0	0%
Textiles	3	0.7%
Wood	21	4.6%
Other	261	55.9%
<b>Total</b>	<b>467</b>	<b>100%</b>

**Table AF55: Hunter Councils Inc - all load types - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	5.5	0.6%	11.0	1.2%	5.5	3.1%
Cardboard dry – compacted	7.4	0.8%	7.4	0.8%	0.0	0%
Cardboard – wet strength/waxed – loose	1.6	0.2%	7.2	0.8%	5.6	3.1%
Cardboard – wet strength/waxed – compacted	3.3	0.3%	3.3	0.3%	0.0	0%
Electrical – computers and peripherals	0.1	0%	0.1	0%	0.0	0%
Electrical – other	0.3	0%	0.6	0.1%	0.3	0.2%
Electrical – TVs	0.2	0%	0.2	0%	0.0	0%
Electrical – whitegoods	0.0	0%	0.0	0%	0.0	0%
Food organics – packaged	0.3	0%	4.9	0.5%	4.6	2.6%
Food organics – unpackaged	7.6	0.8%	71.6	7.6%	64.1	36%
Garbage bags	178.2	18.8%	0.0	0%	0.0	0%
Garden organics	17.8	1.9%	19.1	2%	1.3	0.7%
Glass – non-packaging	1.6	0.2%	1.7	0.2%	0.1	0%
Glass – packaging	1.7	0.2%	9.1	1%	7.4	4.2%
Masonry materials – concrete/bricks	225.5	23.8%	225.5	23.8%	0.0	0%
Masonry materials – other	40.9	4.3%	41.4	4.4%	0.5	0.3%
Metal (ferrous) – packaging	6.2	0.6%	8.2	0.9%	2.1	1.2%
Metal (ferrous) – non-packaging (low density)	4.1	0.4%	4.3	0.5%	0.2	0.1%
Metal (ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Metal (non-ferrous) – packaging	1.2	0.1%	2.6	0.3%	1.4	0.8%
Metal (non-ferrous) – non-packaging (low density)	1.3	0.1%	1.8	0.2%	0.4	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Paper – office	2.7	0.3%	8.6	0.9%	5.9	3.3%
Paper – other	3.2	0.3%	26.5	2.8%	23.3	13.1%
Paper – packaging	4.9	0.5%	9.0	0.9%	4.1	2.3%
Plastic – EPS foam	0.9	0.1%	1.1	0.1%	0.2	0.1%
Plastic – film packaging	14.2	1.5%	37.5	4%	23.3	13.1%
Plastic – other	18.7	2%	22.1	2.3%	3.4	1.9%
Plastic – rigid packaging	1.8	0.2%	12.3	1.3%	10.6	5.9%
Rubber	3.5	0.4%	5.1	0.5%	1.6	0.9%
Textiles and leather	7.8	0.8%	12.5	1.3%	4.8	2.7%
Textiles – carpet and underlay	8.4	0.9%	8.5	0.9%	0.0	0%
Textiles – mattresses	1.4	0.2%	1.4	0.2%	0.0	0%
Textiles – covered furniture	2.1	0.2%	2.1	0.2%	0.0	0%
Wood – treated/painted	73.9	7.8%	74.1	7.8%	0.2	0.1%
Wood – treated/painted – pallets	8.4	0.9%	8.4	0.9%	0.0	0%
Wood – untreated	8.1	0.9%	8.1	0.9%	0.0	0%
Wood – untreated – pallets	5.6	0.6%	5.6	0.6%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	5.4	0.6%	5.4	3%
Other (including fines <10 mm)	277.6	29.3%	279.4	29.5%	1.8	1%
<b>Total</b>	<b>948.0</b>	<b>100%</b>	<b>948.0</b>	<b>100%</b>	<b>178.2</b>	<b>100%</b>

**Table AF56: Hunter Councils Inc. - mixed loads - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	5.4	1.1%	10.4	2.2%	5.0	3.1%
Cardboard dry – compacted	7.4	1.5%	7.4	1.5%	0.0	0%
Cardboard – wet strength/waxed – loose	1.4	0.3%	6.4	1.3%	5.0	3.1%
Cardboard – wet strength/waxed – compacted	3.3	0.7%	3.3	0.7%	0.0	0%
Electrical – computers and peripherals	0.1	0%	0.1	0%	0.0	0%
Electrical – other	0.3	0.1%	0.6	0.1%	0.3	0.2%
Electrical – TVs	0.2	0%	0.2	0%	0.0	0%
Electrical – whitegoods	0.0	0%	0.0	0%	0.0	0%
Food organics – packaged	0.3	0.1%	4.5	0.9%	4.2	2.6%
Food organics – unpackaged	7.5	1.6%	65.4	13.6%	57.9	35.8%
Garbage bags	161.5	33.6%	0.0	0%	0.0	0%
Garden organics	13.6	2.8%	14.9	3.1%	1.2	0.7%
Glass – non-packaging	1.4	0.3%	1.4	0.3%	0.1	0%
Glass – packaging	1.7	0.3%	8.4	1.7%	6.7	4.2%
Masonry materials – concrete/bricks	74.3	15.4%	74.3	15.4%	0.0	0%
Masonry materials – other	34.7	7.2%	35.1	7.3%	0.5	0.3%
Metal (ferrous) – packaging	6.1	1.3%	8.0	1.7%	1.9	1.2%
Metal (ferrous) – non-packaging (low density)	3.9	0.8%	4.1	0.9%	0.2	0.1%
Metal (ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Metal (non-ferrous) – packaging	1.2	0.2%	2.5	0.5%	1.3	0.8%
Metal (non-ferrous) – non-packaging (low density)	1.3	0.3%	1.7	0.4%	0.4	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Paper – office	2.6	0.5%	8.0	1.7%	5.4	3.3%
Paper – other	3.1	0.7%	24.4	5.1%	21.2	13.1%
Paper – packaging	4.9	1%	8.6	1.8%	3.7	2.3%
Plastic – EPS foam	0.9	0.2%	1.0	0.2%	0.2	0.1%
Plastic – film packaging	14.2	2.9%	35.3	7.3%	21.1	13.1%
Plastic – other	16.7	3.5%	19.8	4.1%	3.1	1.9%
Plastic – rigid packaging	1.7	0.4%	11.3	2.3%	9.5	5.9%
Rubber	3.5	0.7%	5.0	1%	1.5	0.9%
Textiles and leather	7.6	1.6%	12.0	2.5%	4.3	2.7%
Textiles – carpet and underlay	6.6	1.4%	6.6	1.4%	0.0	0%
Textiles – mattresses	1.1	0.2%	1.1	0.2%	0.0	0%
Textiles – covered furniture	1.2	0.2%	1.2	0.2%	0.0	0%
Wood – treated/painted	57.3	11.9%	57.5	11.9%	0.2	0.1%
Wood – treated/painted – pallets	6.6	1.4%	6.6	1.4%	0.0	0%
Wood – untreated	7.6	1.6%	7.6	1.6%	0.0	0%
Wood – untreated – pallets	3.2	0.7%	3.2	0.7%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	5.1	1.1%	5.1	3.1%
Other (including fines <10 mm)	16.9	3.5%	18.5	3.8%	1.6	1%
<b>Total</b>	<b>481.3</b>	<b>100%</b>	<b>481.3</b>	<b>100%</b>	<b>161.5</b>	<b>100%</b>

**Table AF57: Hunter Councils Inc. - single-material loads - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	0.1	0%	0.6	0.1%	0.5	3.1%
Cardboard dry – compacted	0.0	0%	0.0	0%	0.0	0%
Cardboard – wet strength/waxed – loose	0.2	0%	0.8	0.2%	0.6	3.5%
Cardboard – wet strength/waxed – compacted	0.0	0%	0.0	0%	0.0	0%
Electrical – computers and peripherals	0.0	0%	0.0	0%	0.0	0%
Electrical – other	0.0	0%	0.0	0%	0.0	0%
Electrical – TVs	0.0	0%	0.0	0%	0.0	0%
Electrical – whitegoods	0.0	0%	0.0	0%	0.0	0%
Food organics – packaged	0.0	0%	0.4	0.1%	0.4	2.6%
Food organics – unpackaged	0.0	0%	6.2	1.3%	6.2	37.1%
Garbage bags	16.7	3.6%	0.0	0%	0.0	0%
Garden organics	4.1	0.9%	4.2	0.9%	0.1	0.6%
Glass – non-packaging	0.3	0.1%	0.3	0.1%	0.0	0%
Glass – packaging	0.0	0%	0.7	0.2%	0.7	4.2%
Masonry materials – concrete/bricks	151.2	32.4%	151.2	32.4%	0.0	0%
Masonry materials – other	6.2	1.3%	6.2	1.3%	0.0	0.3%
Metal (ferrous) – packaging	0.0	0%	0.2	0%	0.2	1.2%
Metal (ferrous) – non-packaging (low density)	0.2	0%	0.2	0%	0.0	0.1%
Metal (ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Metal (non-ferrous) – packaging	0.0	0%	0.2	0%	0.1	0.9%
Metal (non-ferrous) – non-packaging (low density)	0.0	0%	0.0	0%	0.0	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Paper – office	0.1	0%	0.6	0.1%	0.5	3.1%
Paper – other	0.0	0%	2.1	0.5%	2.1	12.6%
Paper – packaging	0.0	0%	0.4	0.1%	0.4	2.5%
Plastic – EPS foam	0.0	0%	0.0	0%	0.0	0.1%
Plastic – film packaging	0.0	0%	2.3	0.5%	2.2	13.4%
Plastic – other	2.1	0.4%	2.4	0.5%	0.3	1.8%
Plastic – rigid packaging	0.0	0%	1.0	0.2%	1.0	6.2%
Rubber	0.0	0%	0.1	0%	0.1	0.8%
Textiles and leather	0.1	0%	0.6	0.1%	0.5	2.7%
Textiles – carpet and underlay	1.9	0.4%	1.9	0.4%	0.0	0%
Textiles – mattresses	0.3	0.1%	0.3	0.1%	0.0	0%
Textiles – covered furniture	1.0	0.2%	1.0	0.2%	0.0	0%
Wood – treated/painted	16.6	3.6%	16.6	3.6%	0.0	0.1%
Wood – treated/painted – pallets	1.9	0.4%	1.9	0.4%	0.0	0%
Wood – untreated	0.5	0.1%	0.5	0.1%	0.0	0%
Wood – untreated – pallets	2.5	0.5%	2.5	0.5%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	0.4	0.1%	0.4	2.1%
Other (including fines <10 mm)	260.7	55.9%	260.8	55.9%	0.1	0.9%
<b>Total</b>	<b>466.7</b>	<b>100%</b>	<b>466.7</b>	<b>100%</b>	<b>16.7</b>	<b>100%</b>

## MIDWASTE

**Table AF58: MIDWASTE - mixed loads - bags as a category - consolidated composition**

Material	Tonnes audited	% of waste stream
Cardboard	8	4.9%
Electrical	1	0.3%
Food	4	2.6%
Garbage bags	52	32.4%
Garden organics	3	1.9%
Glass	1	0.8%
Masonry	20	12.5%
Metals	3	2%
Paper	7	4.5%
Plastic	17	10.6%
Rubber	1	0.6%
Textiles	8	4.7%
Wood	29	18.1%
Other	7	4.1%
<b>Total</b>	<b>162</b>	<b>100%</b>

**Table AF59: MIDWASTE - mixed loads - bags distributed - consolidated composition**

Material	Tonnes audited	% of waste stream
Cardboard	10	6.2%
Electrical	1	0.4%
Food	21	13.2%
Garden organics	3	2%
Glass	4	2.3%
Masonry	20	12.7%
Metals	5	2.9%
Paper	19	11.6%
Plastic	28	17.6%
Rubber	1	0.7%
Textiles	10	5.9%
Wood	29	18.1%
Other	10	6.5%
<b>Total</b>	<b>162</b>	<b>100%</b>

**Table AF60: MIDWASTE - single-material loads - consolidated composition**

<b>Material</b>	<b>Tonnes audited</b>	<b>% of waste stream</b>
Cardboard	2	7.4%
Electrical	0	0%
Food	0	0%
Garbage bags	6	24.5%
Garden organics	0	0%
Glass	0	0%
Masonry	3	13.8%
Metals	0	0.2%
Paper	0	0%
Plastic	0	0.1%
Rubber	0	0%
Textiles	0	0.6%
Wood	0	1%
Other	12	52.3%
<b>Total</b>	<b>24</b>	<b>100%</b>

**Table AF61: MIDWASTE - all load types - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	2.5	1.3%	4.3	2.3%	1.8	3%
Cardboard dry – compacted	4.6	2.5%	4.6	2.5%	0.0	0%
Cardboard – wet strength/waxed – loose	0.2	0.1%	0.8	0.4%	0.6	1.1%
Cardboard – wet strength/waxed – compacted	2.4	1.3%	2.4	1.3%	0.0	0%
Electrical – computers and peripherals	0.0	0%	0.1	0%	0.0	0.1%
Electrical – other	0.3	0.2%	0.3	0.2%	0.0	0%
Electrical – TVs	0.1	0%	0.1	0%	0.0	0%
Electrical – whitegoods	0.1	0.1%	0.1	0.1%	0.0	0%
Food organics – packaged	0.8	0.4%	1.5	0.8%	0.8	1.3%
Food organics – unpackaged	3.5	1.9%	21.7	11.7%	18.2	31.3%
Garbage bags	58.2	31.4%	0.0	0%	0.0	0%
Garden organics	3.1	1.7%	3.3	1.8%	0.2	0.3%
Glass – non-packaging	0.4	0.2%	0.4	0.2%	0.0	0.1%
Glass – packaging	1.0	0.5%	3.6	1.9%	2.6	4.4%
Masonry materials – concrete/bricks	10.5	5.7%	10.5	5.7%	0.0	0%
Masonry materials – other	12.9	6.9%	13.2	7.1%	0.4	0.6%
Metal (ferrous) – packaging	0.8	0.4%	1.9	1%	1.1	1.9%
Metal (ferrous) – non-packaging (low density)	1.0	0.6%	1.2	0.6%	0.1	0.2%
Metal (ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Metal (non-ferrous) – packaging	0.6	0.3%	0.8	0.4%	0.2	0.4%
Metal (non-ferrous) – non-packaging (low density)	0.9	0.5%	1.0	0.5%	0.1	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Paper – office	1.4	0.8%	3.4	1.8%	2.0	3.4%
Paper – other	1.3	0.7%	11.1	6%	9.8	16.8%
Paper – packaging	4.5	2.4%	5.6	3%	1.1	1.9%
Plastic – EPS foam	0.9	0.5%	1.0	0.5%	0.1	0.2%
Plastic – film packaging	4.2	2.3%	11.0	5.9%	6.8	11.7%
Plastic – other	11.4	6.2%	13.2	7.1%	1.8	3.1%
Plastic – rigid packaging	0.7	0.4%	4.4	2.4%	3.7	6.4%
Rubber	0.9	0.5%	1.2	0.7%	0.3	0.5%
Textiles and leather	2.0	1.1%	3.8	2%	1.8	3%
Textiles – carpet and underlay	2.4	1.3%	2.9	1.5%	0.4	0.7%
Textiles – mattresses	0.1	0%	0.1	0%	0.0	0%
Textiles – covered furniture	3.2	1.7%	3.2	1.7%	0.0	0%
Wood – treated/painted	19.4	10.5%	19.4	10.5%	0.0	0%
Wood – treated/painted – pallets	4.4	2.4%	4.4	2.4%	0.0	0%
Wood – untreated	1.4	0.8%	1.4	0.8%	0.0	0%
Wood – untreated – pallets	4.3	2.3%	4.3	2.3%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	2.8	1.5%	2.8	4.9%
Other (including fines <10 mm)	19.1	10.3%	20.4	11%	1.3	2.3%
<b>Total</b>	<b>185.4</b>	<b>100%</b>	<b>185.4</b>	<b>100%</b>	<b>58.2</b>	<b>100%</b>

**Table AF62: MIDWASTE - mixed loads - detailed categories**

Material	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	0.7	0.5%	2.3	1.4%	1.6	3%
Cardboard dry – compacted	4.6	2.9%	4.6	2.9%	0.0	0%
Cardboard – wet strength/waxed – loose	0.2	0.1%	0.7	0.5%	0.6	1.1%
Cardboard – wet strength/waxed – compacted	2.4	1.5%	2.4	1.5%	0.0	0%
Electrical – computers and peripherals	0.0	0%	0.1	0%	0.0	0.1%
Electrical – other	0.3	0.2%	0.3	0.2%	0.0	0%
Electrical – TVs	0.1	0%	0.1	0%	0.0	0%
Electrical – whitegoods	0.1	0.1%	0.1	0.1%	0.0	0%
Food organics – packaged	0.8	0.5%	1.5	0.9%	0.7	1.3%
Food organics – unpackaged	3.5	2.1%	19.9	12.3%	16.4	31.3%
Garbage bags	52.4	32.4%	0.0	0%	0.0	0%
Garden organics	3.1	1.9%	3.3	2%	0.1	0.3%
Glass – non-packaging	0.4	0.2%	0.4	0.2%	0.0	0.1%
Glass – packaging	1.0	0.6%	3.3	2.1%	2.3	4.4%
Masonry materials – concrete/bricks	7.7	4.8%	7.7	4.8%	0.0	0%
Masonry materials – other	12.4	7.7%	12.8	7.9%	0.3	0.6%
Metal (ferrous) – packaging	0.8	0.5%	1.8	1.1%	1.0	1.9%
Metal (ferrous) – non-packaging (low density)	1.0	0.6%	1.1	0.7%	0.1	0.2%
Metal (ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Metal (non-ferrous) – packaging	0.6	0.4%	0.8	0.5%	0.2	0.4%
Metal (non-ferrous) – non-packaging (low density)	0.9	0.5%	1.0	0.6%	0.1	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Paper – office	1.4	0.9%	3.2	2%	1.8	3.4%
Paper – other	1.3	0.8%	10.1	6.3%	8.8	16.8%
Paper – packaging	4.5	2.8%	5.4	3.4%	1.0	1.9%
Plastic – EPS foam	0.9	0.5%	1.0	0.6%	0.1	0.2%
Plastic – film packaging	4.2	2.6%	10.3	6.4%	6.1	11.7%
Plastic – other	11.4	7.1%	13.0	8.1%	1.6	3.1%
Plastic – rigid packaging	0.7	0.4%	4.0	2.5%	3.4	6.4%
Rubber	0.9	0.6%	1.2	0.7%	0.3	0.5%
Textiles and leather	2.0	1.2%	3.6	2.2%	1.6	3%
Textiles – carpet and underlay	2.3	1.4%	2.7	1.7%	0.4	0.7%
Textiles – mattresses	0.1	0.1%	0.1	0.1%	0.0	0%
Textiles – covered furniture	3.2	2%	3.2	2%	0.0	0%
Wood – treated/painted	19.3	11.9%	19.3	11.9%	0.0	0%
Wood – treated/painted – pallets	4.3	2.6%	4.3	2.6%	0.0	0%
Wood – untreated	1.4	0.8%	1.4	0.9%	0.0	0%
Wood – untreated – pallets	4.3	2.7%	4.3	2.7%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	2.5	1.6%	2.5	4.9%
Other (including fines <10 mm)	6.7	4.1%	7.9	4.9%	1.2	2.3%
<b>Total</b>	<b>161.7</b>	<b>100%</b>	<b>161.7</b>	<b>100%</b>	<b>52.4</b>	<b>100%</b>

**Table AF63: MIDWASTE - single-material loads - detailed categories**

Materials	Bags separate		Bags distributed		Bags only	
	tonnes assessed	% by weight	tonnes assessed	% by weight	tonnes assessed	% by weight
Cardboard dry – loose	1.8	7.4%	1.9	8.2%	0.2	3%
Cardboard dry – compacted	0.0	0%	0.0	0%	0.0	0%
Cardboard – wet strength/waxed – loose	0.0	0%	0.1	0.3%	0.1	1.1%
Cardboard – wet strength/waxed – compacted	0.0	0%	0.0	0%	0.0	0%
Electrical – computers and peripherals	0.0	0%	0.0	0%	0.0	0.1%
Electrical – other	0.0	0%	0.0	0%	0.0	0%
Electrical – TVs	0.0	0%	0.0	0%	0.0	0%
Electrical – white goods	0.0	0%	0.0	0%	0.0	0%
Food organics – packaged	0.0	0%	0.1	0.3%	0.1	1.3%
Food organics – unpackaged	0.0	0%	1.8	7.7%	1.8	31.3%
Garbage bags	5.8	24.5%	0.0	0%	0.0	0%
Garden organics	0.0	0%	0.0	0.1%	0.0	0.3%
Glass – non-packaging	0.0	0%	0.0	0%	0.0	0.1%
Glass – packaging	0.0	0%	0.3	1.1%	0.3	4.4%
Masonry materials – concrete/bricks	2.8	12%	2.8	12%	0.0	0%
Masonry materials – other	0.4	1.8%	0.5	2%	0.0	0.6%
Metal (ferrous) – packaging	0.0	0.1%	0.1	0.5%	0.1	1.9%
Metal (ferrous) – non-packaging (low density)	0.0	0.2%	0.1	0.2%	0.0	0.2%
Metal (ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Metal (non-ferrous) – packaging	0.0	0%	0.0	0.1%	0.0	0.4%
Metal (non-ferrous) – non-packaging (low density)	0.0	0%	0.0	0%	0.0	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0.0	0%	0.0	0%	0.0	0%
Paper – office	0.0	0%	0.2	0.8%	0.2	3.4%
Paper – other	0.0	0%	1.0	4.1%	1.0	16.8%
Paper – packaging	0.0	0%	0.1	0.5%	0.1	1.9%
Plastic – EPS foam	0.0	0%	0.0	0.1%	0.0	0.2%
Plastic – film packaging	0.0	0.1%	0.7	2.9%	0.7	11.7%
Plastic – other	0.0	0%	0.2	0.8%	0.2	3.1%
Plastic – rigid packaging	0.0	0%	0.4	1.6%	0.4	6.4%
Rubber	0.0	0%	0.0	0.1%	0.0	0.5%
Textiles and leather	0.0	0.1%	0.2	0.8%	0.2	3%
Textiles – carpet and underlay	0.1	0.5%	0.2	0.7%	0.0	0.7%
Textiles – mattresses	0.0	0%	0.0	0%	0.0	0%
Textiles – covered furniture	0.0	0%	0.0	0%	0.0	0%
Wood – treated/painted	0.1	0.5%	0.1	0.5%	0.0	0%
Wood – treated/painted – pallets	0.1	0.4%	0.1	0.4%	0.0	0%
Wood – untreated	0.0	0.1%	0.0	0.1%	0.0	0%
Wood – untreated – pallets	0.0	0%	0.0	0%	0.0	0%
Other – batteries	0.0	0%	0.0	0%	0.0	0%
Other – gas bottles	0.0	0%	0.0	0%	0.0	0%
Other – nappies	0.0	0%	0.3	1.2%	0.3	4.9%
Other (including fines <10 mm)	12.4	52.3%	12.5	52.9%	0.1	2.3%
<b>Total</b>	<b>23.7</b>	<b>100%</b>	<b>23.7</b>	<b>100%</b>	<b>5.8</b>	<b>100%</b>

## C&amp;I disposal, composition and potential recovery by industry sector

Code	Sector
M	Manufacturing
MF	Food product
R	Retail trade
RF	Food retailing
R0	Other store-based
H	Accommodation, cafes and restaurants
HA	Accommodation
HF	Food and beverage services
W	Wholesale trade
E	Education and training
A	Arts and recreation services
T	Transport, post and warehousing
C	Healthcare and social assistance (charity)
X	Mixed small businesses
S	Shopping centres
O	Offices
U	Unknown
Z	Other

## C&amp;I composition by industry sector, overall region

Table AF64: Composition by industry sector, all load types (tonnes per year, scaled) - detailed categories

Material	M	MF	R	RF	R0	H	HA	HF	W	E	A	T	C	X	S	O	Z	U
Cardboard dry – loose	3894	909	952	1217	974	179	4	622	232	763	581	2194	1683	4870	912	407	500	6224
Cardboard dry – compacted	8602	1404	3133	2856	0	436	64	1679	0	1606	80	555	1075	1595	2234	332	83	831
Cardboard – wet strength/waxed – loose	381	0	210	704	0	9	0	151	0	170	64	14	89	156	129	0	112	67
Cardboard – wet strength/waxed – compacted	2185	207	1329	1243	133	257	42	837	0	1367	0	49	787	1056	2548	0	33	285
Electrical – computers and peripherals	319	0	47	13	0	3	0	4	4	23	0	204	136	145	8	11	21	97
Electrical – other	681	14	128	18	49	58	1	35	5	174	19	60	332	843	137	17	26	340
Electrical – TVs	72	0	22	0	0	0	0	0	0	18	28	21	205	188	24	3	14	14
Electrical – whitegoods	21	14	0	4	0	0	0	0	0	0	0	0	180	9	0	0	43	25
Food organics – packaged	15	12,345	76	531	98	106	0	169	2656	148	0	179	5	183	182	0	0	2191
Food organics – unpackaged	955	1374	902	2424	124	532	4	1546	0	1265	42	227	1389	989	7462	0	204	388
Garbage bags	82,556	28,259	50,164	59,557	3539	10,202	789	44,236	135	47,129	2752	1192	45,341	55,585	42,144	1904	2733	25,093
Garden organics	7865	115	3376	2421	255	587	22	2078	15	4925	5338	355	3186	12,072	3028	95	2217	20,016
Glass – non-packaging	3255	0	220	24	0	31	0	69	9	58	219	112	732	3083	141	151	85	374
Glass –	553	0	118	502	0	249	52	1657	0	147	15	75	48	173	355	13	7	58

Disposal-based audit – Main Report

packaging																		
Masonry materials – concrete/bricks	11,478	2165	1659	1342	134	308	0	2813	205	1455	27,943	7709	3551	42,540	52	8373	17,827	15,590
Masonry materials – other	11,207	408	2989	2794	539	145	161	533	609	2122	515	751	1638	30,170	1632	4196	2808	4668
Metal (ferrous) – packaging	1151	102	815	1857	15	92	11	340	3	313	19	147	272	670	554	36	74	222
Metal (ferrous) – non-packaging (low density)	1857	718	698	265	44	81	0	233	58	1119	257	556	2885	3719	438	52	277	442
Metal (ferrous) – non-packaging (high density)	45	0	0	0	0	0	0	0	0	0	1	58	0	130	6	20	0	77
Metal (non-ferrous) – packaging	785	12	254	266	10	61	11	93	21	138	30	69	179	245	215	14	58	59
Metal (non-ferrous) – non-packaging (low density)	1217	44	225	219	8	25	0	123	0	82	96	270	592	1848	141	57	166	177
Metal (non-ferrous) – non-packaging (high density)	31	0	103	0	0	0	0	0	0	0	222	0	1	7	27	13	0	88
Paper – office	2891	276	840	879	41	102	0	441	3	1026	33	360	787	1567	371	91	304	916
Paper – other	4202	165	742	1897	7	312	0	846	1	910	170	88	1258	1954	1428	55	129	844
Paper – packaging	10,953	1556	1965	1621	12	247	0	884	7	1695	0	504	834	3325	1356	303	150	1818
Plastic – EPS foam	1089	49	410	610	114	67	7	264	48	146	11	132	277	3027	403	57	49	184
Plastic – film packaging	13,714	1122	5059	3496	378	439	9	1926	303	2569	376	682	2281	7399	2633	486	461	1807
Plastic – other	18,376	1237	4270	3349	135	767	37	1980	221	2111	614	2883	6848	13,101	2744	757	1514	4384

Disposal-based audit – Main Report

Plastic – rigid packaging	1224	762	489	552	3	96	9	213	5	270	26	236	256	927	352	21	114	138
Rubber	3101	2	275	186	6	4	5	209	47	284	373	338	301	1170	165	1	383	247
Textiles and leather	5317	558	1954	1345	143	110	5	351	3	660	60	234	3388	4406	686	546	790	954
Textiles – carpet and underlay	2065	56	1610	408	1130	100	6	545	0	978	246	133	1645	16,294	619	2596	981	4537
Textiles – mattresses	67	0	27	88	8	0	122	0	0	6	15	58	523	325	71	15	243	2781
Textiles – covered furniture	2283	13	393	252	223	0	0	512	2	339	734	271	2630	3548	1000	214	3751	1423
Wood – treated/painted	36,215	2441	11,148	4645	727	805	124	2362	2313	4846	2824	8689	20,814	58,599	6050	4144	6746	16,740
Wood – treated/painted – pallets	6487	788	2043	1801	2207	316	0	561	1142	15	283	3164	585	2628	445	15	837	3266
Wood – untreated	3788	426	1200	683	109	197	8	1084	58	392	682	199	1397	9671	982	573	888	1617
Wood – untreated – pallets	2721	891	493	363	978	540	0	232	335	154	507	260	301	1645	168	0	1915	759
Other – batteries	0	0	88	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0
Other – gas bottles	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
Other – nappies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other (including fines <10 mm)	122,597	387	935	2829	310	105	0	434	942	854	3059	7369	7781	7266	695	365	44,158	122,868
<b>Total</b>	<b>376,216</b>	<b>58,819</b>	<b>101,360</b>	<b>103,259</b>	<b>12,453</b>	<b>17,568</b>	<b>1492</b>	<b>70,064</b>	<b>9382</b>	<b>80,275</b>	<b>48,236</b>	<b>40,395</b>	<b>116,216</b>	<b>297,126</b>	<b>82,536</b>	<b>25,932</b>	<b>90,705</b>	<b>242,609</b>

**Table AF65: Composition by industry sector - mixed loads - (tonnes per year, scaled) - detailed categories**

Material	M	MF	R	RF	R0	H	HA	HF	W	E	A	T	C	X	S	O	Z	U
Cardboard dry – loose	2704	696	910	1172	973	179	4	622	227	739	580	1888	1617	4599	899	256	497	6097
Cardboard dry – compacted	8587	1404	3133	2753	0	436	64	1308	0	1594	80	555	1075	1543	2167	332	83	825
Cardboard – wet strength/waxed – loose	381	0	210	651	0	9	0	151	0	164	64	0	89	156	129	0	112	67
Cardboard – wet strength/waxed – compacted	2140	207	1329	1234	133	257	42	563	0	1334	0	49	787	993	1543	0	33	276
Electrical – computers and peripherals	319	0	47	13	0	3	0	4	4	23	0	204	136	145	8	11	21	96
Electrical – other	674	14	124	16	49	58	1	35	5	171	19	60	298	834	136	11	26	338
Electrical – TVs	72	0	22	0	0	0	0	0	0	15	28	21	205	188	24	0	14	14
Electrical – whitegoods	21	14	0	4	0	0	0	0	0	0	0	0	180	9	0	0	43	25
Food organics – packaged	15	55	67	531	98	106	0	169	983	148	0	179	5	183	88	0	0	2191
Food organics – unpackaged	955	235	902	2169	124	532	4	1542	0	1264	0	86	1384	962	7462	0	204	388
Garbage bags	78,679	8867	50,071	45,002	3539	10,130	679	31,116	132	42,697	2676	1130	32,099	42,733	35,740	1724	716	17,503
Garden organics	7865	115	3376	2410	152	587	22	2078	15	4840	3212	355	2895	7471	3028	73	2036	11,733
Glass – non-packaging	1769	0	220	24	0	31	0	69	3	58	219	112	663	2493	141	103	85	262
Glass – packaging	553	0	118	427	0	249	52	1588	0	146	15	75	48	154	328	13	7	58
Masonry materials – concrete/bricks	10,963	134	1659	846	134	308	0	2813	205	1455	4449	7709	3551	32,664	52	996	7557	11,081
Masonry materials – other	11,114	408	2989	2771	539	145	161	233	609	2122	515	546	1638	26,436	1632	1231	2808	4602

Disposal-based audit – Main Report

Metal (ferrous) – packaging	1072	102	815	1746	15	92	11	291	3	308	19	147	272	609	549	33	69	221
Metal (ferrous) – non-packaging (low density)	1831	718	626	262	44	80	0	227	58	1117	257	556	1771	3462	406	38	262	428
Metal (ferrous) – non-packaging (high density)	45	0	0	0	0	0	0	0	0	0	0	58	0	116	6	20	0	77
Metal (non-ferrous) – packaging	782	11	253	222	10	61	11	76	21	133	30	69	179	237	215	14	58	56
Metal (non-ferrous) – non-packaging (low density)	1217	44	220	219	8	25	0	123	0	82	96	270	592	1326	141	52	166	177
Metal (non-ferrous) – non-packaging (high density)	31	0	103	0	0	0	0	0	0	0	222	0	1	7	27	13	0	88
Paper – office	2852	276	840	839	41	102	0	400	3	1002	33	360	785	1564	361	91	304	916
Paper – other	4200	155	742	1888	7	312	0	805	0	910	170	85	1254	1943	1410	54	129	830
Paper – packaging	10,923	1504	1965	1506	12	247	0	849	7	1691	0	504	829	3138	1354	291	150	1809
Plastic – EPS foam	1073	46	408	521	114	67	7	249	47	143	11	126	277	617	398	47	49	166
Plastic – film packaging	13,646	804	5056	3429	377	439	9	1889	302	2525	376	669	2190	7059	2600	411	459	1763
Plastic – other	16,425	1157	4270	3183	134	757	37	1887	213	2094	571	2808	6607	12,226	2701	663	1514	4247
Plastic – rigid packaging	1203	672	489	484	3	96	9	192	5	258	26	236	246	879	345	20	83	115
Rubber	3095	2	275	186	6	4	5	209	46	284	373	338	301	1118	154	1	383	206
Textiles and leather	3307	558	1951	1323	143	110	1	307	0	656	60	234	3150	3876	662	546	790	617
Textiles – carpet and underlay	2065	56	1610	408	712	100	6	545	0	978	246	133	1056	9238	583	892	932	3829
Textiles – mattresses	67	0	27	88	8	0	0	0	0	6	15	58	523	325	71	15	243	204

Disposal-based audit – Main Report

Textiles – covered furniture	1169	0	187	252	223	0	0	512	2	339	734	271	2564	2730	997	186	3751	1220
Wood – treated/painted	29,262	1341	9596	4619	724	485	124	2362	1221	4506	2824	5036	13,217	43,602	4356	2491	6694	12,487
Wood – treated/painted – pallets	5806	665	2043	1801	2207	316	0	561	646	15	283	823	583	2428	445	15	798	2417
Wood – untreated	3788	426	1200	683	109	197	8	1055	58	392	651	196	1390	8509	982	318	789	633
Wood – untreated – pallets	2006	838	493	346	978	540	0	232	335	154	507	260	301	1341	168	0	918	759
Other – batteries	0	0	88	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
Other – gas bottles	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
Other – nappies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other (including fines <10 mm)	12,698	2	935	1753	0	105	0	434	243	854	2367	6032	1941	6438	509	201	1156	1977
<b>Total</b>	<b>245,375</b>	<b>21,525</b>	<b>99,367</b>	<b>85,781</b>	<b>11,616</b>	<b>17,163</b>	<b>1256</b>	<b>55,496</b>	<b>5394</b>	<b>75,218</b>	<b>21,729</b>	<b>32,236</b>	<b>86,702</b>	<b>234,352</b>	<b>72,815</b>	<b>11,164</b>	<b>33,940</b>	<b>90,797</b>

**Table AF66: Composition by industry sector - single-material loads - (tonnes per year, scaled) - detailed categories**

Material	M	MF	R	RF	R0	H	HA	HF	W	E	A	T	C	X	S	O	Z	U
Cardboard dry – loose	1190	213	42	45	1	0	0	0	5	24	0	306	66	271	13	151	3	127
Cardboard dry – compacted	15	0	0	102	0	0	0	370	0	12	0	0	0	52	67	0	0	6
Cardboard – wet strength/waxed – loose	0	0	0	53	0	0	0	0	0	7	0	14	0	0	0	0	0	0
Cardboard – wet strength/waxed – compacted	45	0	0	9	0	0	0	275	0	32	0	0	0	63	1004	0	0	10
Electrical – computers and peripherals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Electrical – other	7	0	4	2	0	0	0	0	0	3	0	0	34	9	1	6	0	2
Electrical – TVs	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0	0
Electrical – whitegoods	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Food organics – packaged	0	12,291	10	0	0	0	0	0	1673	0	0	0	0	0	94	0	0	0
Food organics – unpackaged	0	1139	0	256	0	0	0	3	0	1	42	141	6	28	1	0	0	0
Garbage bags	3877	19,392	93	14,555	0	72	109	13,120	2	4432	77	62	13,241	12,851	6404	179	2017	7590
Garden organics	0	0	0	10	103	0	0	0	0	85	2127	0	292	4601	0	21	181	8283
Glass – non-packaging	1486	0	0	0	0	0	0	0	6	0	0	0	69	590	0	48	0	111
Glass – packaging	0	0	0	75	0	1	0	69	0	1	0	0	0	18	27	0	0	0
Masonry materials – concrete/bricks	515	2031	0	496	0	0	0	0	0	0	23,495	0	0	9875	0	7376	10,269	4509
Masonry materials – other	93	0	0	22	0	0	0	300	0	0	0	205	0	3733	0	2965	0	66
Metal (ferrous) –	79	0	0	111	0	0	0	48	0	4	0	0	0	61	5	2	5	1

Disposal-based audit – Main Report

packaging																		
Metal (ferrous) – non-packaging (low density)	26	0	71	3	0	1	0	6	0	2	0	0	1114	257	32	14	15	14
Metal (ferrous) – non-packaging (high density)	0	0	0	0	0	0	0	0	0	0	1	0	0	14	0	0	0	0
Metal (non-ferrous) – packaging	3	1	1	44	0	0	0	17	0	5	0	0	0	8	0	0	0	3
Metal (non-ferrous) – non-packaging (low density)	0	0	5	0	0	0	0	0	0	0	0	0	0	523	0	5	0	0
Metal (non-ferrous) – non-packaging (high density)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paper – office	39	0	0	40	0	0	0	42	0	24	0	0	2	3	10	0	0	0
Paper – other	1	10	0	9	0	0	0	42	1	0	0	4	4	11	19	1	0	14
Paper – packaging	30	52	0	115	0	0	0	36	0	4	0	0	4	187	2	12	0	9
Plastic – EPS foam	16	3	2	89	0	0	0	15	1	3	0	6	1	2410	5	9	0	18
Plastic – film packaging	67	318	3	67	1	0	0	38	1	44	0	13	91	340	34	74	3	44
Plastic – other	1952	81	0	166	1	10	0	94	7	17	42	75	241	875	43	93	0	137
Plastic – rigid packaging	21	90	0	68	0	0	0	20	0	11	0	0	10	48	8	0	31	24
Rubber	7	0	0	0	0	0	0	0	1	0	0	0	0	52	11	0	0	41
Textiles and leather	2010	0	3	22	0	0	5	44	3	4	0	0	238	530	24	0	0	336
Textiles – carpet and underlay	1	0	0	0	418	0	0	0	0	0	0	0	589	7056	36	1704	49	708
Textiles – mattresses	0	0	0	0	0	0	122	0	0	0	0	0	0	0	0	0	0	2578
Textiles – covered furniture	1115	13	207	0	0	0	0	0	0	0	0	0	67	818	3	28	0	203
Wood – treated/painted	6953	1100	1552	26	3	321	0	0	1092	340	0	3653	7597	14,998	1694	1653	52	4253

Disposal-based audit – Main Report

Wood – treated/painted – pallets	682	124	0	0	0	0	0	0	496	0	0	2341	2	200	0	0	39	849
Wood – untreated	0	0	0	0	0	0	0	29	0	0	30	3	7	1161	0	256	100	984
Wood – untreated – pallets	715	54	0	17	0	0	0	0	0	0	0	0	0	303	0	0	998	0
Other – batteries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Other – gas bottles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other – nappies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other (including fines <10 mm)	109,899	384	0	1075	310	0	0	0	699	0	692	1337	5841	827	186	164	43,002	120,891
<b>Total</b>	<b>130,841</b>	<b>37,294</b>	<b>1993</b>	<b>17,478</b>	<b>837</b>	<b>406</b>	<b>236</b>	<b>14,568</b>	<b>3988</b>	<b>5058</b>	<b>26,508</b>	<b>8159</b>	<b>29,514</b>	<b>62,775</b>	<b>9722</b>	<b>14,768</b>	<b>56,765</b>	<b>151,813</b>

## C&amp;I generation by industry sector, showing regions

Table AF67: C&amp;I generation by industry sector, mixed loads, by region

Industry	SMA		RRA		ERA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Manufacturing	211,151	22.9%	20,307	21.7%	35,442	19.2%	266,900	22.2%
Mixed SMEs (Other)	191,202	20.7%	2489	2.7%	40,660	22%	234,352	19.5%
Trade	155,773	16.9%	9800	10.5%	31,191	16.9%	196,765	16.4%
Unknown	79,978	8.7%	6344	6.8%	4475	2.4%	90,797	7.6%
Health Care And Social Assistance	66,820	7.2%	6628	7.1%	13,254	7.2%	86,702	7.2%
Education And Training	62,483	6.8%	0	0%	12,735	6.9%	75,218	6.3%
Accommodation And Food Services	41,796	4.5%	27,424	29.4%	4695	2.5%	73,915	6.1%
Shopping Centres	45,256	4.9%	4709	5%	22,850	12.4%	72,815	6.1%
Other	15,987	1.7%	13,866	14.9%	4086	2.2%	33,940	2.8%
Transport Postal And Warehousing	19,395	2.1%	0	0%	12,841	6.9%	32,236	2.7%
Arts And Recreation Services	17,340	1.9%	1805	1.9%	2583	1.4%	21,729	1.8%
Offices	11,164	1.2%	0	0%	0	0%	11,164	0.9%
Wholesale Trade	5267	0.6%	0	0%	127	0.1%	5394	0.4%
<b>Total</b>	<b>923,615</b>	<b>100%</b>	<b>93,372</b>	<b>100%</b>	<b>184,938</b>	<b>100%</b>	<b>1,201,925</b>	<b>100%</b>

**Table AF68: C&I generation by industry sector, mixed loads, by Regional Grouping of Councils**

Industry	SSROC		WSROC		NSROC		Hunter Councils Inc		MIDWASTE	
	Tonnes assessed	% of waste stream	Tonnes assessed	% of waste stream	Tonnes assessed	% of waste stream	Tonnes assessed	% of waste stream	Tonnes assessed	% of waste stream
Manufacturing	67.60	12.5%	298.96	30.8%	13.64	13.7%	62.58	13%	49.68	30.7%
Trade	134.20	24.9%	121.54	12.5%	0.10	0.1%	100.52	20.9%	23.88	14.8%
Accommodation And Food Services	26.32	4.9%	72.14	7.4%	7.46	7.5%	9.98	2.1%	26.78	16.6%
Wholesale Trade	2.88	0.5%	7.32	0.8%	0.00	0%	0.00	0%	0.00	0%
Transport Postal And Warehousing	12.88	2.4%	22.48	2.3%	3.86	3.9%	37.32	7.8%	0.00	0%
Education And Training	46.00	8.5%	53.62	5.5%	6.44	6.5%	34.76	7.2%	0.00	0%
Health Care And Social Assistance	28.74	5.3%	70.92	7.3%	29.00	29.2%	44.14	9.2%	15.76	9.7%
Arts And Recreation Services	0.94	0.2%	23.28	2.4%	3.82	3.8%	0.00	0%	2.06	1.3%
Mixed SMEs (Other)	173.41	32.2%	137.12	14.1%	25.42	25.6%	125.68	26.1%	2.64	1.6%
Offices	9.48	1.8%	9.86	1%	2.28	2.3%	0.00	0%	0.00	0%
Shopping Centres	7.04	1.3%	81.52	8.4%	1.00	1%	50.28	10.4%	9.38	5.8%
Other	0.46	0.1%	35.74	3.7%	0.20	0.2%	13.34	2.8%	20.86	12.9%
Unknown	28.82	5.3%	37.14	3.8%	6.14	6.2%	2.68	0.6%	10.70	6.6%
<b>Total</b>	<b>538.7</b>	<b>100%</b>	<b>971.64</b>	<b>100%</b>	<b>99.36</b>	<b>100%</b>	<b>481.28</b>	<b>100%</b>	<b>161.74</b>	<b>100%</b>

**Table AF69: C&I generation by industry sector, single-material loads, by region**

Industry	SMA		RRA		ERA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Manufacturing	162,331	33%	675	5.1%	5129	7.6%	168,135	29.4%
Unknown	143,757	29.2%	4562	34.7%	3493	5.2%	151,813	26.5%
Mixed SMEs (Other)	52,238	10.6%	1513	11.5%	9024	13.3%	62,775	11%
Other	37,139	7.5%	5685	43.2%	13,942	20.6%	56,765	9.9%
Health Care And Social Assistance	28,928	5.9%	390	3%	196	0.3%	29,514	5.2%
Arts And Recreation Services	2737	0.6%	0	0%	23,771	35.2%	26,508	4.6%
Trade	16,958	3.4%	41	0.3%	3308	4.9%	20,307	3.5%
Accommodation And Food Services	14,882	3%	301	2.3%	26	0%	15,210	2.7%
Offices	12,042	2.4%	0	0%	2726	4%	14,768	2.6%
Shopping Centres	8531	1.7%	0	0%	1191	1.8%	9722	1.7%
Transport Postal And Warehousing	8159	1.7%	0	0%	0	0%	8159	1.4%
Education And Training	1580	0.3%	0	0%	3477	5.1%	5058	0.9%
Wholesale Trade	2665	0.5%	0	0%	1323	2%	3988	0.7%
<b>Total</b>	<b>491,946</b>	<b>100%</b>	<b>13,167</b>	<b>100%</b>	<b>67,607</b>	<b>100%</b>	<b>572,720</b>	<b>100%</b>

**Table AF70: C&I generation by industry sector, single-material loads, by Regional Grouping of Councils**

Industry	SSROC		WSROC		NSROC		Hunter Councils Inc		MIDWASTE	
	Tonnes assessed	% of waste stream	Tonnes assessed	% of waste stream	Tonnes assessed	% of waste stream	Tonnes assessed	% of waste stream	Tonnes assessed	% of waste stream
Manufacturing	40.56	19.5%	76.78	28.9%	9.88	21.5%	155.00	33.2%	51.34	27.7%
Trade	15.56	7.5%	16.32	6.1%	0.96	2.1%	12.50	2.7%	23.98	12.9%
Accommodation And Food Services	15.62	7.5%	13.48	5.1%	0.00	0%	0.30	0.1%	26.94	14.5%
Wholesale Trade	1.36	0.7%	0.00	0%	0.56	1.2%	5.00	1.1%	0.00	0%
Transport Postal And Warehousing	1.40	0.7%	14.40	5.4%	0.00	0%	0.00	0%	0.00	0%
Education And Training	0.66	0.3%	2.28	0.9%	0.00	0%	5.96	1.3%	0.00	0%
Health Care And Social Assistance	8.50	4.1%	17.28	6.5%	19.22	41.9%	0.56	0.1%	16.48	8.9%
Arts And Recreation Services	5.30	2.5%	0.00	0%	0.00	0%	87.08	18.7%	2.06	1.1%
Mixed SMEs (Other)	46.28	22.3%	41.22	15.5%	8.76	19.1%	30.60	6.6%	3.16	1.7%
Offices	20.14	9.7%	1.96	0.7%	1.22	2.7%	5.70	1.2%	0.00	0%
Shopping Centres	7.74	3.7%	6.48	2.4%	1.34	2.9%	4.86	1%	9.38	5.1%
Other	0.00	0%	72.28	27.2%	0.00	0%	55.78	12%	31.38	16.9%
Unknown	44.78	21.5%	3.20	1.2%	3.92	8.5%	103.36	22.1%	20.72	11.2%
<b>Total</b>	<b>207.90</b>	<b>100%</b>	<b>265.68</b>	<b>100%</b>	<b>45.86</b>	<b>100%</b>	<b>466.70</b>	<b>100%</b>	<b>185.44</b>	<b>100%</b>

## Industry sector: Manufacturing

Table AF71: Composition of overall C&amp;I waste from manufacturing sector, garbage bags separate, showing all regions

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	14,679	3.9%	1411	3.5%	1491	7.1%	17,582	4%
Electrical	1008	0.3%	49	0.1%	65	0.3%	1122	0.3%
Food	13,197	3.5%	1331	3.3%	162	0.8%	14,690	3.4%
Garbage bags	89,841	24.1%	15,337	37.8%	5638	26.9%	110,816	25.5%
Garden organics	6864	1.8%	754	1.9%	361	1.7%	7979	1.8%
Glass	3496	0.9%	213	0.5%	99	0.5%	3808	0.9%
Masonry	20,867	5.6%	2338	5.8%	2053	9.8%	25,258	5.8%
Metals	5143	1.4%	440	1.1%	380	1.8%	5963	1.4%
Paper	15,744	4.2%	2784	6.9%	1514	7.2%	20,042	4.6%
Plastic	30,545	8.2%	3597	8.9%	3430	16.3%	37,572	8.6%
Rubber	2680	0.7%	387	1%	37	0.2%	3103	0.7%
Textiles	8894	2.4%	706	1.7%	760	3.6%	10,359	2.4%
Wood	43,942	11.8%	6770	16.7%	3045	14.5%	53,757	12.4%
Other	116,583	31.2%	4452	11%	1948	9.3%	122,984	28.3%
<b>Total</b>	<b>373,482</b>	<b>100%</b>	<b>40,571</b>	<b>100%</b>	<b>20,983</b>	<b>100%</b>	<b>435,035</b>	<b>100%</b>

**Table AF72: Composition of overall C&I waste from manufacturing sector, garbage bags distributed, showing all regions**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	20,294	5.4%	2211	5.5%	1724	8.2%	24,230	5.6%
Electrical	1588	0.4%	87	0.2%	72	0.3%	1747	0.4%
Food	33,135	8.9%	7069	17.4%	2001	9.5%	42,206	9.7%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	10,721	2.9%	1277	3.1%	376	1.8%	12,374	2.8%
Glass	5226	1.4%	763	1.9%	353	1.7%	6341	1.5%
Masonry	21,987	5.9%	2377	5.9%	2089	10%	26,453	6.1%
Metals	8129	2.2%	806	2%	531	2.5%	9467	2.2%
Paper	41,093	11%	5933	14.6%	2761	13.2%	49,787	11.4%
Plastic	49,421	13.2%	6492	16%	4637	22.1%	60,551	13.9%
Rubber	3219	0.9%	536	1.3%	67	0.3%	3822	0.9%
Textiles	12,259	3.3%	1052	2.6%	971	4.6%	14,281	3.3%
Wood	44,628	11.9%	6824	16.8%	3047	14.5%	54,499	12.5%
Other	121,782	32.6%	5143	12.7%	2353	11.2%	129,278	29.7%
<b>Total</b>	<b>373,482</b>	<b>100%</b>	<b>40,571</b>	<b>100%</b>	<b>20,983</b>	<b>100%</b>	<b>435,035</b>	<b>100%</b>

**Table AF73: Composition of mixed C&I loads from manufacturing sector, garbage bags separate, by region**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	3191	1.5%	205	0.6%	4	0%	3400	1.3%
Cardboard dry – compacted	8502	4%	947	2.7%	541	2.7%	9991	3.7%
Cardboard – wet strength/waxed – loose	364	0.2%	17	0%	0	0%	381	0.1%
Cardboard – wet strength/waxed – compacted	1835	0.9%	242	0.7%	270	1.3%	2347	0.9%
Electrical – computers and peripherals	288	0.1%	24	0.1%	7	0%	319	0.1%
Electrical – other	615	0.3%	14	0%	58	0.3%	688	0.3%
Electrical – TVs	63	0%	9	0%	0	0%	72	0%
Electrical – whitegoods	36	0%	0	0%	0	0%	36	0%
Food organics – packaged	68	0%	0	0%	1	0%	70	0%
Food organics – unpackaged	990	0.5%	39	0.1%	161	0.8%	1190	0.4%
Garbage bags	66,699	31.6%	15,210	42.9%	5638	27.8%	87,546	32.8%
Garden organics	6864	3.3%	754	2.1%	361	1.8%	7979	3%
Glass – non-packaging	1665	0.8%	32	0.1%	72	0.4%	1769	0.7%
Glass – packaging	345	0.2%	182	0.5%	27	0.1%	553	0.2%
Masonry materials – concrete/bricks	10,741	5.1%	340	1%	16	0.1%	11,097	4.2%
Masonry materials – other	7487	3.5%	1998	5.6%	2037	10%	11,522	4.3%
Metal (ferrous) – packaging	970	0.5%	152	0.4%	53	0.3%	1175	0.4%
Metal (ferrous) – non-packaging (low density)	2290	1.1%	124	0.3%	135	0.7%	2548	1%
Metal (ferrous) – non-packaging (high density)	45	0%	0	0%	0	0%	45	0%
Metal (non-ferrous) – packaging	703	0.3%	44	0.1%	46	0.2%	793	0.3%
Metal (non-ferrous) – non-packaging (low density)	996	0.5%	119	0.3%	147	0.7%	1261	0.5%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	31	0%	0	0%	0	0%	31	0%
Paper – office	2668	1.3%	223	0.6%	237	1.2%	3127	1.2%
Paper – other	3669	1.7%	476	1.3%	210	1%	4355	1.6%
Paper – packaging	9276	4.4%	2084	5.9%	1067	5.3%	12,427	4.7%
Plastic – EPS foam	900	0.4%	80	0.2%	138	0.7%	1119	0.4%
Plastic – film packaging	11,859	5.6%	1738	4.9%	854	4.2%	14,451	5.4%
Plastic – other	13,865	6.6%	1374	3.9%	2343	11.5%	17,581	6.6%
Plastic – rigid packaging	1651	0.8%	129	0.4%	95	0.5%	1875	0.7%
Rubber	2673	1.3%	387	1.1%	37	0.2%	3097	1.2%
Textiles and leather	3485	1.7%	197	0.6%	183	0.9%	3864	1.4%
Textiles – carpet and underlay	1639	0.8%	435	1.2%	47	0.2%	2120	0.8%
Textiles – mattresses	42	0%	0	0%	26	0.1%	67	0%
Textiles – covered furniture	591	0.3%	73	0.2%	505	2.5%	1169	0.4%
Wood – treated/painted	24,156	11.4%	4052	11.4%	2395	11.8%	30,603	11.5%
Wood – treated/painted – pallets	5344	2.5%	707	2%	419	2.1%	6470	2.4%
Wood – untreated	3806	1.8%	370	1%	38	0.2%	4214	1.6%
Wood – untreated – pallets	2182	1%	469	1.3%	192	0.9%	2843	1.1%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	8559	4.1%	2194	6.2%	1948	9.6%	12,701	4.8%
<b>Total</b>	<b>211,151</b>	<b>100%</b>	<b>35,442</b>	<b>100%</b>	<b>20,307</b>	<b>100%</b>	<b>266,900</b>	<b>100%</b>

**Table AF74: Composition of single-material C&I loads from manufacturing sector, garbage bags separate, by region**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	727	0.4%	0	0%	675	100%	1402	0.8%
Cardboard dry – compacted	15	0%	0	0%	0	0%	15	0%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – compacted	45	0%	0	0%	0	0%	45	0%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	6	0%	1	0%	0	0%	7	0%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	10,999	6.8%	1291	25.2%	0	0%	12,291	7.3%
Food organics – unpackaged	1139	0.7%	0	0%	0	0%	1139	0.7%
Garbage bags	23,143	14.3%	126	2.5%	0	0%	23,269	13.8%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass – non-packaging	1486	0.9%	0	0%	0	0%	1486	0.9%
Glass – packaging	0	0%	0	0%	0	0%	0	0%
Masonry materials – concrete/bricks	2546	1.6%	0	0%	0	0%	2546	1.5%
Masonry materials – other	93	0.1%	0	0%	0	0%	93	0.1%
Metal (ferrous) – packaging	79	0%	0	0%	0	0%	79	0%
Metal (ferrous) – non-packaging (low density)	25	0%	1	0%	0	0%	26	0%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	4	0%	0	0%	0	0%	4	0%
Metal (non-ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	39	0%	0	0%	0	0%	39	0%
Paper – other	10	0%	1	0%	0	0%	11	0%
Paper – packaging	82	0.1%	0	0%	0	0%	82	0%
Plastic – EPS foam	18	0%	1	0%	0	0%	18	0%
Plastic – film packaging	383	0.2%	2	0%	0	0%	385	0.2%
Plastic – other	1759	1.1%	273	5.3%	0	0%	2032	1.2%
Plastic – rigid packaging	111	0.1%	0	0%	0	0%	111	0.1%
Rubber	7	0%	0	0%	0	0%	7	0%
Textiles and leather	2010	1.2%	0	0%	0	0%	2010	1.2%
Textiles – carpet and underlay	0	0%	1	0%	0	0%	1	0%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	1127	0.7%	0	0%	0	0%	1127	0.7%
Wood – treated/painted	6881	4.2%	1172	22.9%	0	0%	8053	4.8%
Wood – treated/painted – pallets	805	0.5%	0	0%	0	0%	805	0.5%
Wood – untreated	0	0%	0	0%	0	0%	0	0%
Wood – untreated – pallets	769	0.5%	0	0%	0	0%	769	0.5%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	108,025	66.5%	2259	44%	0	0%	110,283	65.6%
<b>Total</b>	<b>162,331</b>	<b>100%</b>	<b>5129</b>	<b>100%</b>	<b>675</b>	<b>100%</b>	<b>168,135</b>	<b>100%</b>

**Table AF75: Composition of mixed C&I loads from manufacturing sector, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0.6%	1.6%	1%	5.9%	0%	0.3%	0.7%	0%	0.6%	0%	1.2%
Cardboard dry – compacted	6.5%	3.7%	2.3%	0.6%	8.9%	3.3%	2.9%	2.7%	0.9%	0%	3.6%
Cardboard – wet strength/waxed – loose	0%	0.2%	0%	0%	0%	0%	0%	0%	0.2%	0%	0.1%
Cardboard – wet strength/waxed – compacted	1.3%	0.9%	0%	0.6%	0%	0.9%	0.7%	1.3%	0.2%	0%	0.9%
Electrical – computers and peripherals	0.1%	0.2%	0%	0%	0%	0%	0%	0%	0.3%	0%	0.1%
Electrical – other	0.3%	0.2%	0%	3.5%	0.1%	0.1%	0%	0.3%	0%	0%	0.2%
Electrical – TVs	0.1%	0%	0.1%	0%	0%	0.1%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0.1%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	0%	0.6%	0%	0.7%	0%	0%	0%	0.8%	0.4%	0%	0.4%
Garbage bags	33.2%	32.2%	9.4%	26.3%	66.3%	31.4%	52.1%	27.9%	33.1%	0%	33.8%
Garden organics	3.1%	3.4%	1.7%	4.1%	4.3%	2.9%	1.9%	1.8%	1%	0%	2.9%
Glass – non-packaging	0.1%	1%	1.8%	0%	0%	0.1%	0.1%	0.4%	0%	0%	0.6%
Glass – packaging	0.1%	0.1%	0%	0%	0%	1.3%	0.1%	0.1%	0.7%	0%	0.2%
Masonry materials – concrete/bricks	3.4%	5.3%	0.4%	18.3%	0%	0%	2.1%	0.1%	0%	0%	3.7%
Masonry materials – other	2.4%	3.8%	11.2%	0%	0%	10.6%	4.5%	10.1%	0%	0%	4.6%
Metal (ferrous) – packaging	0.9%	0.3%	0.2%	1.5%	0.9%	0.6%	0.5%	0.3%	0.1%	0%	0.4%
Metal (ferrous) – non-packaging (low density)	0.9%	1.2%	0.9%	0%	0%	0.7%	0.3%	0.7%	0%	0%	0.9%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	1%	0.2%	0%	1.1%	0%	0.3%	0.1%	0.2%	0.1%	0%	0.3%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0.4%	0.6%	0.2%	0%	0%	0.2%	0.5%	0.7%	0%	0%	0.5%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	2.6%	1%	0%	2.7%	0%	0.6%	0.6%	1.2%	0.6%	0%	1.1%
Paper – other	3.4%	1.6%	0%	0.1%	0.6%	2.7%	0.8%	1%	0.3%	0%	1.6%
Paper – packaging	3.7%	5.1%	0%	1.5%	1.7%	4.9%	2.4%	5.3%	12.8%	0%	4.8%
Plastic – EPS foam	0.7%	0.4%	0.8%	0.4%	0.3%	0.4%	0.2%	0.7%	0%	0%	0.4%
Plastic – film packaging	7.9%	5.3%	8.1%	3.9%	2.4%	6.1%	4.8%	4.2%	2.4%	0%	5.3%
Plastic – other	6.3%	5.6%	13%	12.6%	0.7%	10%	2.7%	11.6%	4%	0%	6.4%
Plastic – rigid packaging	0.2%	1%	0%	0%	0.5%	0.6%	0.4%	0.5%	0.4%	0%	0.7%
Rubber	0.1%	0.3%	0.7%	4%	0%	8.2%	2.1%	0.2%	0%	0%	1.1%
Textiles and leather	3.2%	1.5%	0%	0.5%	0%	1%	0.5%	0.9%	0%	0%	1.3%
Textiles – carpet and underlay	0%	0.4%	14%	0%	0%	3.1%	0.4%	0.2%	0%	0%	0.8%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0.1%	0%	0%	0%
Textiles – covered furniture	0.1%	0.4%	0%	0%	0%	0.6%	0%	2.5%	0.1%	0%	0.4%
Wood – treated/painted	10.9%	12.2%	13.7%	4.7%	4.3%	3.6%	7.3%	11.6%	27.7%	0%	11.5%
Wood – treated/painted – pallets	1.4%	2.9%	6.5%	0%	0%	0.3%	2.7%	1.8%	2.6%	0%	2.4%
Wood – untreated	2%	1.6%	5.1%	0%	7.8%	2.7%	0.1%	0.2%	0.4%	0%	1.5%
Wood – untreated – pallets	1.7%	1%	0%	0.6%	0%	0.7%	1.8%	1%	1.3%	0%	1.1%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	1.5%	4.5%	8.8%	6.3%	1.3%	1.7%	6.7%	9.6%	10.1%	0%	5%
<b>Total</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>								

**Table AF76: Composition of single-material C&I loads from manufacturing sector, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0.1%	1.6%	0.3%	0%	0%	0%	0%	100%	0%	0%	0.9%
Cardboard dry – compacted	0%	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – compacted	0%	0%	0.3%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – computers and peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	3.3%	61.3%	0%	0%	0%	0%	0%	100%	0%	7.8%
Food organics – unpackaged	0%	2.9%	0%	0%	0%	0%	0%	0%	0%	0%	0.7%
Garbage bags	0%	50.3%	20.2%	0.1%	0%	0%	0.3%	0%	0%	0%	13.5%
Garden organics	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Glass – non-packaging	7.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.9%
Glass – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – concrete/bricks	0%	6.4%	0%	0%	0%	0%	0%	0%	0%	0%	1.5%
Masonry materials – other	0%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Metal (ferrous) – packaging	0%	0.2%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (low density)	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – packaging	0%	0.1%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%
Plastic – EPS foam	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Plastic – film packaging	0.1%	0.7%	0.3%	0.6%	0%	0%	0%	0%	0%	0%	0.2%
Plastic – other	0%	4.3%	0.4%	0.1%	0%	0%	0.7%	0%	0%	0%	1.3%
Plastic – rigid packaging	0%	0.2%	0.1%	0%	0%	0%	0%	0%	0%	0%	0.1%
Rubber	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles and leather	9.5%	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	1.2%
Textiles – carpet and underlay	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	5.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.7%
Wood – treated/painted	0.5%	16.3%	0%	5.8%	0%	0%	2.9%	0%	0%	0%	5.3%
Wood – treated/painted – pallets	0%	1.1%	0%	0%	0%	0%	0%	0%	0%	4.2%	0.5%
Wood – untreated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated – pallets	0%	1.9%	0%	0%	0%	0%	0%	0%	0%	0%	0.4%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	77.4%	10%	16.3%	93.3%	0%	0%	96.2%	0%	0%	95.8%	64.9%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Table AF77: Manufacturing: C&I currently disposed that could be recycled - if bag contents *not* accessible - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Recoverable	80,048	21.4%	9824	24.2%	6344	30.2%	96,215	22.1%
Potentially Recoverable	108,088	28.9%	14,670	36.2%	8851	42.2%	131,609	30.3%
Non-recoverable	185,346	49.6%	16,077	39.6%	5788	27.6%	207,210	47.6%

**Table AF78: Manufacturing: C&I currently disposed that could be recycled - if bag contents *are* accessible - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Recoverable	152,216	40.8%	22,666	55.9%	10,985	52.4%	185,867	42.7%
Potentially Recoverable	123,674	33.1%	17,030	42%	9716	46.3%	150,420	34.6%
Non-recoverable	97,592	26.1%	874	2.2%	282	1.3%	98,748	22.7%

**Table AF79: Manufacturing: C&I currently disposed that could be recycled - recoverable *now* - bag contents *not* accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	12,435	3.3%	1152	2.8%	1221	5.8%	14,808	3.4%
Electrical	387	0.1%	33	0.1%	7	0%	427	0.1%
Food	2129	0.6%	39	0.1%	161	0.8%	2329	0.5%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	6864	1.8%	754	1.9%	361	1.7%	7979	1.8%
Glass	345	0.1%	182	0.4%	27	0.1%	553	0.1%
Masonry	13,287	3.6%	340	0.8%	16	0.1%	13,643	3.1%
Metals	5143	1.4%	440	1.1%	380	1.8%	5963	1.4%
Paper	15,744	4.2%	2784	6.9%	1514	7.2%	20,042	4.6%
Plastic	14,921	4%	1950	4.8%	1088	5.2%	17,959	4.1%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles	42	0%	0	0%	26	0.1%	67	0%
Wood	6756	1.8%	839	2.1%	231	1.1%	7826	1.8%
Other	1994	0.5%	1310	3.2%	1314	6.3%	4618	1.1%
<b>Total</b>	<b>80,048</b>	<b>21.4%</b>	<b>9824</b>	<b>24.2%</b>	<b>6344</b>	<b>30.2%</b>	<b>96,215</b>	<b>22.1%</b>

**Table AF80: Manufacturing: C&I currently disposed that could be recycled - recoverable in the *future* - bag contents *not* accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	2244	0.6%	259	0.6%	270	1.3%	2773	0.6%
Electrical	621	0.2%	16	0%	58	0.3%	695	0.2%
Food	11,068	3%	1292	3.2%	1	0%	12,360	2.8%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%
Masonry	7579	2%	1998	4.9%	2037	9.7%	11,615	2.7%
Metals	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%
Plastic	15,624	4.2%	1647	4.1%	2343	11.2%	19,613	4.5%
Rubber	2680	0.7%	387	1%	37	0.2%	3103	0.7%
Textiles	8852	2.4%	706	1.7%	734	3.5%	10,292	2.4%
Wood	37,186	10%	5932	14.6%	2814	13.4%	45,931	10.6%
Other	22,236	6%	2434	6%	556	2.7%	25,226	5.8%
<b>Total</b>	<b>108,088</b>	<b>28.9%</b>	<b>14,670</b>	<b>36.2%</b>	<b>8851</b>	<b>42.2%</b>	<b>131,609</b>	<b>30.3%</b>

**Table AF81: Manufacturing: C&I currently disposed that could be recycled - recoverable *now* - bag contents *accessible* - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	16,580	4.4%	1596	3.9%	1393	6.6%	19,568	4.5%
Electrical	477	0.1%	33	0.1%	11	0.1%	522	0.1%
Food	20,058	5.4%	5283	13%	1926	9.2%	27,267	6.3%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	10,721	2.9%	1277	3.1%	376	1.8%	12,374	2.8%
Glass	2056	0.6%	727	1.8%	277	1.3%	3060	0.7%
Masonry	13,309	3.6%	340	0.8%	16	0.1%	13,665	3.1%
Metals	8129	2.2%	806	2%	531	2.5%	9467	2.2%
Paper	41,093	11%	5933	14.6%	2761	13.2%	49,787	11.4%
Plastic	30,580	8.2%	4520	11.1%	2119	10.1%	37,220	8.6%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles	42	0%	0	0%	26	0.1%	67	0%
Wood	7151	1.9%	839	2.1%	232	1.1%	8222	1.9%
Other	2020	0.5%	1311	3.2%	1316	6.3%	4648	1.1%
<b>Total</b>	<b>152,216</b>	<b>40.8%</b>	<b>22,666</b>	<b>55.9%</b>	<b>10,985</b>	<b>52.4%</b>	<b>185,867</b>	<b>42.7%</b>

**Table AF82: Manufacturing: C&I currently disposed that could be recycled - recoverable in the future - bag contents accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	3714	1%	616	1.5%	332	1.6%	4662	1.1%
Electrical	1111	0.3%	53	0.1%	61	0.3%	1225	0.3%
Food	13,078	3.5%	1787	4.4%	75	0.4%	14,939	3.4%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%
Masonry	8678	2.3%	2037	5%	2073	9.9%	12,788	2.9%
Metals	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%
Plastic	18,841	5%	1972	4.9%	2518	12%	23,331	5.4%
Rubber	3219	0.9%	536	1.3%	67	0.3%	3822	0.9%
Textiles	12,217	3.3%	1052	2.6%	945	4.5%	14,214	3.3%
Wood	37,477	10%	5985	14.8%	2814	13.4%	46,277	10.6%
Other	25,340	6.8%	2992	7.4%	830	4%	29,162	6.7%
<b>Total</b>	<b>123,674</b>	<b>33.1%</b>	<b>17,030</b>	<b>42%</b>	<b>9716</b>	<b>46.3%</b>	<b>150,420</b>	<b>34.6%</b>

## Industry sector: Mixed small businesses

Table AF83: Composition of overall C&amp;I waste from mixed small businesses, garbage bags separate, showing all regions

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	6733	2.8%	867	1.7%	77	1.9%	7676	2.6%
Electrical	1110	0.5%	40	0.1%	34	0.9%	1185	0.4%
Food	1010	0.4%	160	0.3%	2	0.1%	1172	0.4%
Garbage bags	53,458	22%	1964	4%	163	4.1%	55,585	18.7%
Garden organics	10,030	4.1%	737	1.5%	1305	32.6%	12,072	4.1%
Glass	2820	1.2%	420	0.8%	15	0.4%	3255	1.1%
Masonry	47,767	19.6%	23,882	48.1%	1061	26.5%	72,709	24.5%
Metals	5527	2.3%	998	2%	94	2.3%	6619	2.2%
Paper	6361	2.6%	452	0.9%	33	0.8%	6846	2.3%
Plastic	20,299	8.3%	4013	8.1%	143	3.6%	24,454	8.2%
Rubber	918	0.4%	250	0.5%	1	0%	1170	0.4%
Textiles	22,292	9.2%	2040	4.1%	241	6%	24,573	8.3%
Wood	58,780	24.1%	13,116	26.4%	647	16.2%	72,542	24.4%
Other	6336	2.6%	746	1.5%	185	4.6%	7267	2.4%
<b>Total</b>	<b>243,440</b>	<b>100%</b>	<b>49,685</b>	<b>100%</b>	<b>4001</b>	<b>100%</b>	<b>297,126</b>	<b>100%</b>

**Table AF84: Composition of overall C&I waste from mixed small businesses, garbage bags distributed, showing all regions**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	10,039	4.1%	952	1.9%	84	2.1%	11,075	3.7%
Electrical	1369	0.6%	43	0.1%	35	0.9%	1447	0.5%
Food	12,990	5.3%	898	1.8%	56	1.4%	13,944	4.7%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	12,759	5.2%	862	1.7%	1306	32.6%	14,927	5%
Glass	4070	1.7%	478	1%	22	0.6%	4571	1.5%
Masonry	48,560	19.9%	23,886	48.1%	1062	26.5%	73,507	24.7%
Metals	7432	3.1%	1048	2.1%	98	2.4%	8578	2.9%
Paper	19,637	8.1%	885	1.8%	69	1.7%	20,591	6.9%
Plastic	31,331	12.9%	4346	8.7%	178	4.4%	35,854	12.1%
Rubber	1322	0.5%	268	0.5%	2	0%	1591	0.5%
Textiles	24,196	9.9%	2076	4.2%	247	6.2%	26,519	8.9%
Wood	59,260	24.3%	13,128	26.4%	647	16.2%	73,035	24.6%
Other	10,476	4.3%	815	1.6%	197	4.9%	11,488	3.9%
<b>Total</b>	<b>243,440</b>	<b>100%</b>	<b>49,685</b>	<b>100%</b>	<b>4001</b>	<b>100%</b>	<b>297,126</b>	<b>100%</b>

**Table AF85: Composition of mixed C&I loads from mixed small businesses, garbage bags separate, by region**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	3694	1.9%	828	2%	77	3.1%	4599	2%
Cardboard dry – compacted	1527	0.8%	16	0%	0	0%	1543	0.7%
Cardboard – wet strength/waxed – loose	140	0.1%	16	0%	0	0%	156	0.1%
Cardboard – wet strength/waxed – compacted	993	0.5%	0	0%	0	0%	993	0.4%
Electrical – computers and peripherals	130	0.1%	0	0%	15	0.6%	145	0.1%
Electrical – other	800	0.4%	20	0%	14	0.6%	834	0.4%
Electrical – TVs	168	0.1%	20	0.1%	0	0%	188	0.1%
Electrical – whitegoods	3	0%	0	0%	6	0.2%	9	0%
Food organics – packaged	183	0.1%	0	0%	0	0%	183	0.1%
Food organics – unpackaged	799	0.4%	160	0.4%	2	0.1%	962	0.4%
Garbage bags	40,654	21.3%	1949	4.8%	131	5.3%	42,733	18.2%
Garden organics	6497	3.4%	551	1.4%	423	17%	7471	3.2%
Glass – non-packaging	2142	1.1%	337	0.8%	14	0.5%	2493	1.1%
Glass – packaging	137	0.1%	17	0%	1	0.1%	154	0.1%
Masonry materials – concrete/bricks	22,863	12%	9582	23.6%	219	8.8%	32,664	13.9%
Masonry materials – other	17,906	9.4%	7876	19.4%	654	26.3%	26,436	11.3%
Metal (ferrous) – packaging	572	0.3%	33	0.1%	4	0.2%	609	0.3%
Metal (ferrous) – non-packaging (low density)	2683	1.4%	718	1.8%	61	2.4%	3462	1.5%
Metal (ferrous) – non-packaging (high density)	101	0.1%	3	0%	12	0.5%	116	0%
Metal (non-ferrous) – packaging	178	0.1%	51	0.1%	7	0.3%	237	0.1%
Metal (non-ferrous) – non-packaging (low density)	1136	0.6%	181	0.4%	9	0.4%	1326	0.6%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	7	0%	0	0%	0	0%	7	0%
Paper – office	1543	0.8%	20	0%	1	0%	1564	0.7%
Paper – other	1759	0.9%	166	0.4%	19	0.7%	1943	0.8%
Paper – packaging	2858	1.5%	266	0.7%	13	0.5%	3138	1.3%
Plastic – EPS foam	542	0.3%	71	0.2%	3	0.1%	617	0.3%
Plastic – film packaging	5236	2.7%	1777	4.4%	47	1.9%	7059	3%
Plastic – other	10,365	5.4%	1801	4.4%	60	2.4%	12,226	5.2%
Plastic – rigid packaging	756	0.4%	115	0.3%	8	0.3%	879	0.4%
Rubber	866	0.5%	250	0.6%	1	0%	1118	0.5%
Textiles and leather	3098	1.6%	763	1.9%	15	0.6%	3876	1.7%
Textiles – carpet and underlay	8727	4.6%	465	1.1%	46	1.9%	9238	3.9%
Textiles – mattresses	231	0.1%	95	0.2%	0	0%	325	0.1%
Textiles – covered furniture	2613	1.4%	83	0.2%	33	1.3%	2730	1.2%
Wood – treated/painted	33,296	17.4%	9798	24.1%	508	20.4%	43,602	18.6%
Wood – treated/painted – pallets	2049	1.1%	361	0.9%	18	0.7%	2428	1%
Wood – untreated	7144	3.7%	1359	3.3%	6	0.3%	8509	3.6%
Wood – untreated – pallets	1164	0.6%	177	0.4%	0	0%	1341	0.6%
Other – batteries	2	0%	0	0%	0	0%	2	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	5642	3%	737	1.8%	59	2.4%	6438	2.7%
<b>Total</b>	<b>191,202</b>	<b>100%</b>	<b>40,660</b>	<b>100%</b>	<b>2489</b>	<b>100%</b>	<b>234,352</b>	<b>100%</b>

**Table AF86: Composition of single-material C&I loads from mixed small businesses, garbage bags separate, by region**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	265	0.5%	6	0.1%	0	0%	271	0.4%
Cardboard dry – compacted	52	0.1%	0	0%	0	0%	52	0.1%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – compacted	63	0.1%	0	0%	0	0%	63	0.1%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	9	0%	0	0%	0	0%	9	0%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	0	0%	0	0%	0	0%	0	0%
Food organics – unpackaged	28	0.1%	0	0%	0	0%	28	0%
Garbage bags	12,804	24.5%	15	0.2%	33	2.2%	12,851	20.5%
Garden organics	3533	6.8%	186	2.1%	882	58.3%	4601	7.3%
Glass – non-packaging	523	1%	66	0.7%	0	0%	590	0.9%
Glass – packaging	18	0%	0	0%	0	0%	18	0%
Masonry materials – concrete/bricks	5153	9.9%	4535	50.3%	187	12.4%	9875	15.7%
Masonry materials – other	1844	3.5%	1889	20.9%	0	0%	3733	5.9%
Metal (ferrous) – packaging	61	0.1%	0	0%	0	0%	61	0.1%
Metal (ferrous) – non-packaging (low density)	245	0.5%	13	0.1%	0	0%	257	0.4%
Metal (ferrous) – non-packaging (high density)	14	0%	0	0%	0	0%	14	0%
Metal (non-ferrous) – packaging	8	0%	0	0%	0	0%	8	0%
Metal (non-ferrous) – non-packaging (low density)	523	1%	0	0%	0	0%	523	0.8%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	3	0%	0	0%	0	0%	3	0%
Paper – other	11	0%	0	0%	0	0%	11	0%
Paper – packaging	187	0.4%	0	0%	0	0%	187	0.3%
Plastic – EPS foam	2410	4.6%	0	0%	0	0%	2410	3.8%
Plastic – film packaging	328	0.6%	9	0.1%	2	0.1%	340	0.5%
Plastic – other	613	1.2%	239	2.7%	22	1.5%	875	1.4%
Plastic – rigid packaging	48	0.1%	0	0%	0	0%	48	0.1%
Rubber	52	0.1%	0	0%	0	0%	52	0.1%
Textiles and leather	524	1%	6	0.1%	0	0%	530	0.8%
Textiles – carpet and underlay	6731	12.9%	179	2%	146	9.7%	7056	11.2%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	368	0.7%	450	5%	0	0%	818	1.3%
Wood – treated/painted	13,590	26%	1342	14.9%	65	4.3%	14,998	23.9%
Wood – treated/painted – pallets	200	0.4%	0	0%	0	0%	200	0.3%
Wood – untreated	1034	2%	79	0.9%	49	3.2%	1161	1.9%
Wood – untreated – pallets	303	0.6%	0	0%	0	0%	303	0.5%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	692	1.3%	9	0.1%	126	8.3%	827	1.3%
<b>Total</b>	<b>52,238</b>	<b>100%</b>	<b>9024</b>	<b>100%</b>	<b>1513</b>	<b>100%</b>	<b>62,775</b>	<b>100%</b>

**Table AF87: Composition of mixed C&I loads from mixed small businesses, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	1.7%	2%	3.8%	2%	0.5%	1.3%	1.5%	0.3%	12.8%	3.2%	2%
Cardboard dry – compacted	0.4%	0.7%	2.2%	0.3%	3.5%	0.2%	0%	0%	0%	2.9%	0.6%
Cardboard – wet strength/waxed – loose	0%	0.1%	0%	0.3%	0%	0%	0%	0%	0.2%	0%	0.1%
Cardboard – wet strength/waxed – compacted	0.4%	0.5%	0%	0%	0%	0%	0%	0%	0%	4.1%	0.4%
Electrical – computers and peripherals	0.1%	0.1%	0%	0.1%	0.1%	0%	0%	0%	0%	0%	0.1%
Electrical – other	0.6%	0.1%	0%	0.6%	0.5%	0.1%	0.1%	0.2%	0.1%	0%	0.3%
Electrical – TVs	0.1%	0.1%	0%	0%	0.1%	0%	0%	0%	0.2%	0%	0.1%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Food organics – unpackaged	0.4%	0.4%	0%	0%	0%	0.7%	0.4%	0%	0%	2.4%	0.4%
Garbage bags	16.6%	22.5%	57.5%	15.6%	49.7%	24.5%	2.5%	0.2%	5.4%	10.9%	16.3%
Garden organics	2.8%	4.2%	1.6%	4.3%	3.7%	2.8%	1.9%	0%	1.6%	1.1%	3%
Glass – non-packaging	1.1%	1.5%	0%	0.9%	0%	0.7%	0.6%	0%	4.5%	0%	1%
Glass – packaging	0.1%	0.1%	0%	0%	0%	0%	0%	0.1%	0.3%	0.4%	0.1%
Masonry materials – concrete/bricks	15.5%	9%	0%	18.1%	1.9%	5%	27%	53.7%	2.8%	3.9%	15.3%
Masonry materials – other	10%	8%	1.9%	10.9%	3.8%	18.8%	21%	19%	8%	25.1%	12.5%
Metal (ferrous) – packaging	0.3%	0.2%	0%	0.6%	1%	0.1%	0.1%	0%	0.4%	0%	0.2%
Metal (ferrous) – non-packaging (low density)	1.4%	1.5%	0%	1.9%	0.4%	0.5%	2.1%	0.1%	1.4%	1.8%	1.5%
Metal (ferrous) – non-packaging (high density)	0%	0.1%	0%	0%	0%	0.2%	0%	1.1%	0%	0%	0%
Metal (non-ferrous) – packaging	0.1%	0.1%	0%	0.1%	0.1%	0.2%	0.1%	0%	0.2%	0.1%	0.1%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0.6%	0.8%	0%	0.3%	0%	0.1%	0.5%	0.3%	0.1%	0.2%	0.5%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0.4%	1.2%	0%	0.3%	2.5%	0%	0.1%	0%	0%	0.3%	0.6%
Paper – other	0.6%	1.6%	0%	0%	0.6%	0.3%	0.4%	0.1%	1.1%	0.8%	0.8%
Paper – packaging	1%	2%	0%	1%	3.8%	0.2%	0.3%	0.1%	6.5%	0.2%	1.2%
Plastic – EPS foam	0.3%	0.3%	0.4%	0.1%	0.4%	0.1%	0.1%	0.1%	1.2%	0%	0.3%
Plastic – film packaging	2%	3.6%	16.7%	1.7%	0.6%	23.3%	1.2%	0.2%	8.4%	5%	3.2%
Plastic – other	5.8%	5.2%	5.7%	4.5%	5.6%	3.3%	3.4%	1%	8.2%	12.1%	5.1%
Plastic – rigid packaging	0.1%	0.6%	0%	0.4%	1.8%	0.2%	0.2%	0.1%	2.3%	0.1%	0.4%
Rubber	0.9%	0.4%	0%	0.1%	0%	0.3%	0.4%	0.1%	0%	0%	0.5%
Textiles and leather	2.5%	1.3%	0%	1.3%	0%	8.8%	0.8%	3.4%	0%	0.1%	1.7%
Textiles – carpet and underlay	5.4%	5.4%	0%	1.9%	0%	0.4%	1%	3%	1.7%	0.9%	3.5%
Textiles – mattresses	0.1%	0.2%	0%	0.3%	0%	0%	0.3%	0%	0%	0%	0.2%
Textiles – covered furniture	1%	1.7%	4.1%	2.1%	0%	0%	0.3%	0%	0%	0%	1%
Wood – treated/painted	17.7%	17.2%	2.6%	23.6%	14.7%	5.8%	26.9%	15.1%	22.7%	16.1%	19.4%
Wood – treated/painted – pallets	1.1%	1.2%	0%	1.9%	0.5%	0.6%	1%	0.1%	0.3%	0%	1%
Wood – untreated	5.3%	2.3%	0%	2%	0.2%	1%	3.7%	0.2%	3.3%	5.9%	3.6%
Wood – untreated – pallets	0.9%	0.2%	3.4%	0.2%	0%	0.2%	0.5%	0%	0%	1.3%	0.6%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	2.6%	3.7%	0%	2.5%	4%	0.2%	1.8%	1.3%	6.3%	0.9%	2.6%
<b>Total</b>	<b>100%</b>										

**Table AF88: Composition of single-material C&I loads from mixed small businesses, garbage bags separate, by regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0.3%	0.9%	0%	0.3%	0%	0.2%	0%	0.3%	0%	0.3%	0.4%
Cardboard dry – compacted	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – compacted	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Electrical – computers and peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garbage bags	24.5%	27%	0%	22%	0.3%	0%	0.2%	15.4%	0%	24.7%	17.9%
Garden organics	9.5%	6%	0%	0%	0%	0%	9.4%	0%	0%	0%	7%
Glass – non-packaging	0.5%	1.8%	0%	0%	2.5%	0.2%	0%	0%	6.4%	0%	0.9%
Glass – packaging	0%	0%	0%	0.1%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – concrete/bricks	9.2%	11.4%	0%	17.2%	0%	33%	46.3%	0%	63.6%	0%	19.8%
Masonry materials – other	6.5%	0.9%	0%	2.5%	0.7%	27.5%	20%	83.6%	4.6%	0%	7.7%
Metal (ferrous) – packaging	0.1%	0.1%	0%	0.4%	0%	0%	0%	0%	0%	0%	0.1%
Metal (ferrous) – non-packaging (low density)	0.3%	0.7%	0%	0.5%	0%	0.9%	0.1%	0%	0%	0%	0.4%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0.3%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	2.4%	0%	0%	0%	0%	0%	0%	0%	0%	0.7%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – packaging	0.7%	0.1%	0%	0.1%	0%	0%	0%	0%	0%	0%	0.3%
Plastic – EPS foam	0.4%	0.6%	99.1%	0%	0%	0%	0%	0%	0%	0%	3.4%
Plastic – film packaging	0.5%	0.5%	0%	2.2%	0.1%	0%	0%	0%	0.9%	0%	0.5%
Plastic – other	1.6%	1%	0%	0.6%	0.5%	0%	2.8%	0%	1%	0%	1.5%
Plastic – rigid packaging	0.2%	0%	0%	0%	0.2%	0%	0%	0%	0%	0%	0.1%
Rubber	0%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Textiles and leather	0%	1.1%	0%	6.2%	0%	0%	0.1%	0%	0%	0%	0.7%
Textiles – carpet and underlay	12.5%	16.4%	0.9%	8.5%	0%	33.6%	0.8%	0%	0%	0%	10.1%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	0.2%	1.5%	0%	0%	0%	0%	3.2%	0%	18.6%	0%	1.7%
Wood – treated/painted	30.7%	19.9%	0%	36.1%	95.7%	4.5%	14.6%	0%	5%	59.7%	22.7%
Wood – treated/painted – pallets	0%	0.9%	0%	0%	0%	0%	0%	0%	0%	0%	0.3%
Wood – untreated	0.1%	4.3%	0%	2.1%	0%	0.1%	1.3%	0.7%	0%	0%	1.7%
Wood – untreated – pallets	1.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.4%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0.3%	2.1%	0%	0.9%	0%	0%	1.1%	0%	0%	15.3%	1.2%
<b>Total</b>	<b>100%</b>										

**Table AF89: Mixed small businesses: C&I currently disposed that could be recycled - if bag contents *not* accessible - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Recoverable	76,624	31.5%	21,041	42.3%	2076	51.9%	99,741	33.6%
Potentially Recoverable	105,862	43.5%	26,000	52.3%	1592	39.8%	133,454	44.9%
Non-recoverable	60,954	25%	2644	5.3%	333	8.3%	63,931	21.5%

**Table AF90: Mixed small businesses: C&I currently disposed that could be recycled - if bag contents *are* accessible - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Recoverable	118,803	48.8%	22,709	45.7%	2211	55.3%	143,722	48.4%
Potentially Recoverable	115,799	47.6%	26,285	52.9%	1617	40.4%	143,700	48.4%
Non-recoverable	8839	3.6%	692	1.4%	173	4.3%	9704	3.3%

**Table AF91: Mixed small businesses: C&I currently disposed that could be recycled - recoverable now - bag contents not accessible  
- by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	5538	2.3%	850	1.7%	77	1.9%	6465	2.2%
Electrical	301	0.1%	20	0%	21	0.5%	342	0.1%
Food	827	0.3%	160	0.3%	2	0.1%	989	0.3%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	10,030	4.1%	737	1.5%	1305	32.6%	12,072	4.1%
Glass	155	0.1%	17	0%	1	0%	173	0.1%
Masonry	28,016	11.5%	14,117	28.4%	406	10.2%	42,540	14.3%
Metals	5527	2.3%	998	2%	94	2.3%	6619	2.2%
Paper	6361	2.6%	452	0.9%	33	0.8%	6846	2.3%
Plastic	9321	3.8%	1972	4%	61	1.5%	11,353	3.8%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles	231	0.1%	95	0.2%	0	0%	325	0.1%
Wood	9645	4%	1615	3.3%	55	1.4%	11,315	3.8%
Other	673	0.3%	7	0%	21	0.5%	701	0.2%
<b>Total</b>	<b>76,624</b>	<b>31.5%</b>	<b>21,041</b>	<b>42.3%</b>	<b>2076</b>	<b>51.9%</b>	<b>99,741</b>	<b>33.6%</b>

**Table AF92: Mixed small businesses: C&I currently disposed that could be recycled - recoverable in the *future* - bag contents *not* accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	1195	0.5%	16	0%	0	0%	1211	0.4%
Electrical	809	0.3%	20	0%	14	0.3%	843	0.3%
Food	183	0.1%	0	0%	0	0%	183	0.1%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%
Masonry	19,751	8.1%	9765	19.7%	654	16.4%	30,170	10.2%
Metals	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%
Plastic	10,978	4.5%	2041	4.1%	82	2%	13,101	4.4%
Rubber	918	0.4%	250	0.5%	1	0%	1170	0.4%
Textiles	22,061	9.1%	1945	3.9%	241	6%	24,247	8.2%
Wood	49,135	20.2%	11,501	23.1%	592	14.8%	61,227	20.6%
Other	832	0.3%	463	0.9%	8	0.2%	1302	0.4%
<b>Total</b>	<b>105,862</b>	<b>43.5%</b>	<b>26,000</b>	<b>52.3%</b>	<b>1592</b>	<b>39.8%</b>	<b>133,454</b>	<b>44.9%</b>

**Table AF93: Mixed small businesses: C&I currently disposed that could be recycled - recoverable *now* - bag contents *are* accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	7829	3.2%	902	1.8%	82	2%	8813	3%
Electrical	325	0.1%	20	0%	21	0.5%	366	0.1%
Food	11,750	4.8%	821	1.7%	54	1.3%	12,625	4.2%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	12,759	5.2%	862	1.7%	1306	32.6%	14,927	5%
Glass	1392	0.6%	74	0.1%	9	0.2%	1474	0.5%
Masonry	28,031	11.5%	14,117	28.4%	406	10.2%	42,555	14.3%
Metals	7432	3.1%	1048	2.1%	98	2.4%	8578	2.9%
Paper	19,637	8.1%	885	1.8%	69	1.7%	20,591	6.9%
Plastic	18,813	7.7%	2261	4.5%	91	2.3%	21,164	7.1%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles	231	0.1%	95	0.2%	0	0%	325	0.1%
Wood	9924	4.1%	1615	3.3%	55	1.4%	11,594	3.9%
Other	680	0.3%	7	0%	21	0.5%	708	0.2%
<b>Total</b>	<b>118,803</b>	<b>48.8%</b>	<b>22,709</b>	<b>45.7%</b>	<b>2211</b>	<b>55.3%</b>	<b>143,722</b>	<b>48.4%</b>

**Table AF94: Mixed small businesses: C&I currently disposed that could be recycled - recoverable in the *future* - bag contents *are* accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	2210	0.9%	50	0.1%	2	0%	2262	0.8%
Electrical	1044	0.4%	22	0%	14	0.3%	1080	0.4%
Food	1239	0.5%	77	0.2%	2	0.1%	1319	0.4%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%
Masonry	20,528	8.4%	9768	19.7%	655	16.4%	30,952	10.4%
Metals	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%
Plastic	12,517	5.1%	2085	4.2%	87	2.2%	14,689	4.9%
Rubber	1322	0.5%	268	0.5%	2	0%	1591	0.5%
Textiles	23,965	9.8%	1981	4%	247	6.2%	26,194	8.8%
Wood	49,337	20.3%	11,513	23.2%	592	14.8%	61,441	20.7%
Other	3636	1.5%	520	1%	16	0.4%	4172	1.4%
<b>Total</b>	<b>115,799</b>	<b>47.6%</b>	<b>26,285</b>	<b>52.9%</b>	<b>1617</b>	<b>40.4%</b>	<b>143,700</b>	<b>48.4%</b>

## Industry sector: Retail

Table AF95: Composition of C&amp;I waste from the retail sector, garbage bags separate, showing all regions

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	10,463	6.1%	1784	5.2%	502	5.1%	12,749	5.9%
Electrical	223	0.1%	30	0.1%	28	0.3%	281	0.1%
Food	3106	1.8%	430	1.2%	619	6.3%	4155	1.9%
Garbage bags	92,777	53.7%	17,465	50.6%	3018	30.7%	113,260	52.2%
Garden organics	5149	3%	847	2.5%	56	0.6%	6052	2.8%
Glass	437	0.3%	294	0.9%	133	1.3%	864	0.4%
Masonry	7630	4.4%	1828	5.3%	0	0%	9458	4.4%
Metals	2678	1.6%	1838	5.3%	262	2.7%	4778	2.2%
Paper	6881	4%	884	2.6%	240	2.4%	8004	3.7%
Plastic	15,363	8.9%	2693	7.8%	809	8.2%	18,866	8.7%
Rubber	254	0.1%	80	0.2%	133	1.4%	467	0.2%
Textiles	4786	2.8%	2184	6.3%	611	6.2%	7581	3.5%
Wood	19,484	11.3%	3483	10.1%	3430	34.9%	26,396	12.2%
Other	3501	2%	660	1.9%	0	0%	4161	1.9%
<b>Total</b>	<b>172,731</b>	<b>100%</b>	<b>34,499</b>	<b>100%</b>	<b>9841</b>	<b>100%</b>	<b>217,071</b>	<b>100%</b>

**Table AF96: Composition of C&I waste from the retail sector, garbage bags distributed, showing all regions**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	16,157	9.4%	2918	8.5%	627	6.4%	19,702	9.1%
Electrical	734	0.4%	42	0.1%	32	0.3%	808	0.4%
Food	26,569	15.4%	7324	21.2%	1604	16.3%	35,497	16.4%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	7740	4.5%	955	2.8%	64	0.7%	8759	4%
Glass	2862	1.7%	1035	3%	269	2.7%	4166	1.9%
Masonry	8516	4.9%	1873	5.4%	19	0.2%	10,408	4.8%
Metals	5998	3.5%	2257	6.5%	343	3.5%	8597	4%
Paper	30,957	17.9%	4073	11.8%	907	9.2%	35,937	16.6%
Plastic	35,200	20.4%	6420	18.6%	1455	14.8%	43,075	19.8%
Rubber	1106	0.6%	225	0.7%	149	1.5%	1481	0.7%
Textiles	7886	4.6%	2655	7.7%	724	7.4%	11,265	5.2%
Wood	20,121	11.6%	3501	10.1%	3431	34.9%	27,052	12.5%
Other	8883	5.1%	1222	3.5%	217	2.2%	10,323	4.8%
<b>Total</b>	<b>172,731</b>	<b>100%</b>	<b>34,499</b>	<b>100%</b>	<b>9841</b>	<b>100%</b>	<b>217,071</b>	<b>100%</b>

**Table AF97: Composition of mixed C&I loads from the retail sector, garbage bags separate, showing by region**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	2651	1.7%	334	1.1%	70	0.7%	3055	1.6%
Cardboard dry – compacted	4846	3.1%	803	2.6%	237	2.4%	5886	3%
Cardboard – wet strength/waxed – loose	623	0.4%	237	0.8%	0	0%	860	0.4%
Cardboard – wet strength/waxed – compacted	2197	1.4%	341	1.1%	157	1.6%	2695	1.4%
Electrical – computers and peripherals	49	0%	6	0%	6	0.1%	61	0%
Electrical – other	157	0.1%	24	0.1%	7	0.1%	188	0.1%
Electrical – TVs	6	0%	0	0%	15	0.2%	22	0%
Electrical – whitegoods	4	0%	0	0%	0	0%	4	0%
Food organics – packaged	519	0.3%	1	0%	175	1.8%	696	0.4%
Food organics – unpackaged	2321	1.5%	429	1.4%	444	4.5%	3194	1.6%
Garbage bags	80,850	51.9%	14,744	47.3%	3018	30.8%	98,612	50.1%
Garden organics	5035	3.2%	847	2.7%	56	0.6%	5938	3%
Glass – non-packaging	216	0.1%	28	0.1%	0	0%	244	0.1%
Glass – packaging	146	0.1%	266	0.9%	133	1.4%	545	0.3%
Masonry materials – concrete/bricks	1904	1.2%	736	2.4%	0	0%	2640	1.3%
Masonry materials – other	5230	3.4%	1070	3.4%	0	0%	6300	3.2%
Metal (ferrous) – packaging	1122	0.7%	1372	4.4%	83	0.8%	2577	1.3%
Metal (ferrous) – non-packaging (low density)	672	0.4%	192	0.6%	68	0.7%	932	0.5%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	355	0.2%	79	0.3%	51	0.5%	485	0.2%
Metal (non-ferrous) – non-packaging (low density)	191	0.1%	196	0.6%	60	0.6%	447	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	103	0.1%	0	0%	0	0%	103	0.1%
Paper – office	1515	1%	178	0.6%	28	0.3%	1721	0.9%
Paper – other	2403	1.5%	164	0.5%	70	0.7%	2637	1.3%
Paper – packaging	2815	1.8%	527	1.7%	142	1.4%	3484	1.8%
Plastic – EPS foam	889	0.6%	73	0.2%	81	0.8%	1044	0.5%
Plastic – film packaging	7328	4.7%	1264	4.1%	271	2.8%	8863	4.5%
Plastic – other	6000	3.9%	1180	3.8%	407	4.2%	7587	3.9%
Plastic – rigid packaging	789	0.5%	142	0.5%	46	0.5%	976	0.5%
Rubber	254	0.2%	80	0.3%	133	1.4%	467	0.2%
Textiles and leather	2466	1.6%	776	2.5%	174	1.8%	3417	1.7%
Textiles – carpet and underlay	1498	1%	795	2.5%	436	4.5%	2730	1.4%
Textiles – mattresses	34	0%	90	0.3%	0	0%	123	0.1%
Textiles – covered furniture	566	0.4%	96	0.3%	0	0%	662	0.3%
Wood – treated/painted	10,648	6.8%	2308	7.4%	1983	20.2%	14,939	7.6%
Wood – treated/painted – pallets	4615	3%	572	1.8%	864	8.8%	6051	3.1%
Wood – untreated	1427	0.9%	486	1.6%	78	0.8%	1991	1%
Wood – untreated – pallets	1213	0.8%	99	0.3%	505	5.2%	1817	0.9%
Other – batteries	88	0.1%	0	0%	0	0%	88	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	2029	1.3%	660	2.1%	0	0%	2688	1.4%
<b>Total</b>	<b>155,773</b>	<b>100%</b>	<b>31,191</b>	<b>100%</b>	<b>9800</b>	<b>100%</b>	<b>196,765</b>	<b>100%</b>

**Table AF98: Composition of single-material C&I loads from the retail sector, garbage bags separate, by region**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	35	0.2%	16	0.5%	37	91.5%	88	0.4%
Cardboard dry – compacted	102	0.6%	0	0%	0	0%	102	0.5%
Cardboard – wet strength/waxed – loose	0	0%	53	1.6%	0	0%	53	0.3%
Cardboard – wet strength/waxed – compacted	9	0.1%	0	0%	0	0%	9	0%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	6	0%	0	0%	0	0%	6	0%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	10	0.1%	0	0%	0	0%	10	0%
Food organics – unpackaged	255	1.5%	0	0%	0	0%	256	1.3%
Garbage bags	11,927	70.3%	2721	82.2%	0	0%	14,648	72.1%
Garden organics	114	0.7%	0	0%	0	0%	114	0.6%
Glass – non-packaging	0	0%	0	0%	0	0%	0	0%
Glass – packaging	75	0.4%	0	0%	0	0%	75	0.4%
Masonry materials – concrete/bricks	496	2.9%	0	0%	0	0%	496	2.4%
Masonry materials – other	0	0%	22	0.7%	0	0%	22	0.1%
Metal (ferrous) – packaging	111	0.7%	0	0%	0	0%	111	0.5%
Metal (ferrous) – non-packaging (low density)	74	0.4%	0	0%	0	0%	74	0.4%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	45	0.3%	0	0%	0	0%	45	0.2%
Metal (non-ferrous) – non-packaging (low density)	5	0%	0	0%	0	0%	5	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	24	0.1%	16	0.5%	0	0%	40	0.2%
Paper – other	9	0.1%	0	0%	0	0%	9	0%
Paper – packaging	115	0.7%	0	0%	0	0%	115	0.6%
Plastic – EPS foam	86	0.5%	4	0.1%	1	2.2%	91	0.4%
Plastic – film packaging	67	0.4%	1	0%	3	6.2%	70	0.3%
Plastic – other	141	0.8%	26	0.8%	0	0%	167	0.8%
Plastic – rigid packaging	64	0.4%	4	0.1%	0	0%	68	0.3%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles and leather	16	0.1%	8	0.3%	0	0%	25	0.1%
Textiles – carpet and underlay	0	0%	418	12.6%	0	0%	418	2.1%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	207	1.2%	0	0%	0	0%	207	1%
Wood – treated/painted	1563	9.2%	18	0.5%	0	0%	1581	7.8%
Wood – treated/painted – pallets	0	0%	0	0%	0	0%	0	0%
Wood – untreated	0	0%	0	0%	0	0%	0	0%
Wood – untreated – pallets	17	0.1%	0	0%	0	0%	17	0.1%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	1385	8.2%	0	0%	0	0%	1385	6.8%
<b>Total</b>	<b>16,958</b>	<b>100%</b>	<b>3308</b>	<b>100%</b>	<b>41</b>	<b>100%</b>	<b>20,307</b>	<b>100%</b>

**Table AF99: Composition of mixed C&I loads from the retail sector, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	1.1%	2.8%	1.3%	9.1%	0.2%	1.3%	1.2%	0.4%	0%	0%	1.5%
Cardboard dry – compacted	4.2%	2.7%	0%	0%	1.8%	0%	2.8%	2.4%	2.2%	0%	2.9%
Cardboard – wet strength/waxed – loose	0.6%	0.3%	0%	0%	0.3%	0%	0.9%	0%	0%	0%	0.5%
Cardboard – wet strength/waxed – compacted	1.8%	1%	0%	0%	3%	0%	1.1%	1.6%	1.9%	0%	1.3%
Electrical – computers and peripherals	0%	0.1%	0%	0%	0%	0%	0%	0.1%	0%	0%	0%
Electrical – other	0.1%	0.1%	0%	0%	0%	0.7%	0%	0.1%	0%	0%	0.1%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0.5%	0.2%	0%	0%	0%	0%	0%	1.8%	0%	0%	0.3%
Food organics – unpackaged	1.7%	1.6%	1.3%	0%	0%	0%	1.6%	4.6%	0%	0%	1.6%
Garbage bags	52.7%	47.3%	48%	0%	76.3%	0.7%	50.6%	31.1%	46.4%	0%	49.5%
Garden organics	4.5%	1.2%	8.9%	0%	1.2%	0%	3%	0.6%	2.1%	0%	3%
Glass – non-packaging	0.1%	0.2%	0.2%	0%	0%	0.6%	0.1%	0%	0%	0%	0.1%
Glass – packaging	0.1%	0.1%	0%	0%	0%	0%	1%	1.4%	0%	0%	0.4%
Masonry materials – concrete/bricks	0.6%	2.3%	0%	0%	0%	9.7%	2%	0%	0%	0%	1.5%
Masonry materials – other	4.5%	1.2%	11.7%	0%	0%	38.4%	1%	0%	0%	0%	3.2%
Metal (ferrous) – packaging	0.8%	0.7%	0%	0%	0.6%	0%	5.1%	0.9%	0.6%	0%	1.7%
Metal (ferrous) – non-packaging (low density)	0.4%	0.6%	0%	4.7%	0%	6.5%	0.2%	0.7%	0%	0%	0.5%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0.3%	0.3%	0%	0%	0.1%	0%	0.2%	0.5%	0.5%	0%	0.3%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0.1%	0.1%	0.2%	0%	0%	8.2%	0.1%	0.6%	0%	0%	0.3%
Metal (non-ferrous) – non-packaging (high density)	0%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	1.1%	1%	0%	0%	0.6%	0%	0.7%	0.3%	0%	0%	0.8%
Paper – other	1.2%	1.6%	5.2%	0%	0%	0%	0.5%	0.7%	1.4%	0%	1.2%
Paper – packaging	1.4%	1.7%	5.6%	0%	1.4%	1.4%	1.7%	1.4%	2.2%	0%	1.8%
Plastic – EPS foam	0.6%	0.6%	0.2%	0%	0.6%	0.1%	0.2%	0.8%	0.3%	0%	0.5%
Plastic – film packaging	5.9%	4.2%	3.5%	0%	1.5%	0.4%	4.5%	2.8%	2.4%	0%	4.4%
Plastic – other	4.2%	3.9%	2.8%	67.2%	2.4%	5.8%	3.6%	3.9%	4.3%	0%	3.9%
Plastic – rigid packaging	0.7%	0.3%	0%	0%	0.6%	0%	0.5%	0.5%	0.3%	0%	0.5%
Rubber	0.3%	0.1%	0%	0%	0%	0%	0.3%	1.4%	0%	0%	0.3%
Textiles and leather	2.5%	0.9%	0%	0%	1.3%	0.3%	2.8%	1.8%	1.1%	0%	1.8%
Textiles – carpet and underlay	1.8%	0.3%	0.5%	0%	0%	0.9%	2.1%	4.5%	8.3%	0%	1.6%
Textiles – mattresses	0%	0%	0.1%	0%	0%	0%	0.3%	0%	0%	0%	0.1%
Textiles – covered furniture	0.4%	0.4%	0.4%	0%	0.2%	0%	0.4%	0%	0%	0%	0.3%
Wood – treated/painted	3.8%	10.3%	3.9%	0%	7.8%	17.4%	7%	20.4%	5%	0%	7.7%
Wood – treated/painted – pallets	0.8%	5.4%	4.8%	0%	0%	0%	2.3%	8.9%	1.5%	0%	3%
Wood – untreated	0.6%	1.6%	0.1%	19%	0%	2.2%	1.1%	0.8%	5.1%	0%	1.1%
Wood – untreated – pallets	0.4%	1.5%	0.1%	0%	0%	0%	0.3%	5.2%	1.1%	0%	0.9%
Other – batteries	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0.2%	2.8%	1.2%	0%	0%	5.5%	0.7%	0%	13.3%	0%	1.4%
<b>Total</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>								

**Table AF100: Composition of single-material C&I loads from the retail sector, garbage bags separate, by regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0.2%	0.1%	0%	1%	0%	0%	0.5%	91.5%	0%	0%	0.5%
Cardboard dry – compacted	0.5%	0.7%	0%	0%	0%	0%	0%	0%	0%	0%	0.4%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	1.6%	0%	0%	0%	0.4%
Cardboard – wet strength/waxed – compacted	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – computers and peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0%	0%	0.4%	0%	0%	0%	0%	0%	0%	0%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	1.9%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	3.2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1.1%
Garbage bags	83.1%	62.3%	0%	0%	0%	0%	82.2%	0%	0%	0%	73.5%
Garden organics	1.4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.5%
Glass – non-packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Glass – packaging	0%	0.9%	0%	0%	0%	0%	0%	0%	0%	0%	0.3%
Masonry materials – concrete/bricks	0%	5.9%	0%	0%	0%	0%	0%	0%	0%	0%	2.1%
Masonry materials – other	0%	0%	0%	0%	0%	0%	0.7%	0%	0%	0%	0.2%
Metal (ferrous) – packaging	0.6%	0.7%	0%	0%	0%	0%	0%	0%	0%	0%	0.5%
Metal (ferrous) – non-packaging (low density)	0%	0.8%	0%	0.5%	0%	0%	0%	0%	0%	0%	0.3%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0.5%	0%	0.3%	0%	0%	0%	0%	0%	0%	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0.3%	0%	0%	0%	0%	0%	0.5%	0%	0%	0%	0.2%
Paper – other	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – packaging	1.2%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0.5%
Plastic – EPS foam	0.2%	0.9%	0%	0.1%	0%	0%	0.1%	2.2%	0%	0%	0.4%
Plastic – film packaging	0.3%	0.6%	0%	0%	0%	0%	0%	6.2%	0%	0%	0.3%
Plastic – other	1.6%	0.2%	0%	0%	0%	0%	0.8%	0%	0%	0%	0.8%
Plastic – rigid packaging	0.3%	0.5%	0%	0%	0%	0%	0.1%	0%	0%	0%	0.3%
Rubber	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles and leather	0%	0.2%	0%	0.5%	0%	0%	0.3%	0%	0%	0%	0.1%
Textiles – carpet and underlay	0%	0%	0%	0%	0%	0%	12.6%	0%	0%	0%	3.5%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	2.6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.9%
Wood – treated/painted	4.4%	8.8%	0%	94.2%	0%	0%	0.5%	0%	0%	0%	6.8%
Wood – treated/painted – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated – pallets	0%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0%	16.4%	0%	0%	0%	0%	0%	0%	0%	0%	5.9%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>

**Table AF101: Retail: C&I currently disposed that could be recycled - if bag contents not accessible - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Recoverable	39,964	23.1%	8771	25.4%	2484	25.2%	51,219	23.6%
Potentially Recoverable	37,093	21.5%	8140	23.6%	4338	44.1%	49,572	22.8%
Non-recoverable	95,675	55.4%	17,588	51%	3018	30.7%	116,280	53.6%

**Table AF102: Retail: C&I currently disposed that could be recycled - if bag contents *are* accessible - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Recoverable	114,301	66.2%	23,614	68.4%	4969	50.5%	142,883	65.8%
Potentially Recoverable	53,983	31.3%	10,602	30.7%	4801	48.8%	69,385	32%
Non-recoverable	4448	2.6%	284	0.8%	71	0.7%	4803	2.2%

**Table AF103: Retail: C&I currently disposed that could be recycled - recoverable *now* - bag contents *not* accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	7634	4.4%	1153	3.3%	344	3.5%	9131	4.2%
Electrical	60	0%	6	0%	21	0.2%	87	0%
Food	2577	1.5%	429	1.2%	444	4.5%	3450	1.6%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	5149	3%	847	2.5%	56	0.6%	6052	2.8%
Glass	221	0.1%	266	0.8%	133	1.3%	620	0.3%
Masonry	2399	1.4%	736	2.1%	0	0%	3135	1.4%
Metals	2678	1.6%	1838	5.3%	262	2.7%	4778	2.2%
Paper	6881	4%	884	2.6%	240	2.4%	8004	3.7%
Plastic	9223	5.3%	1487	4.3%	402	4.1%	11,111	5.1%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles	34	0%	90	0.3%	0	0%	123	0.1%
Wood	2657	1.5%	585	1.7%	583	5.9%	3825	1.8%
Other	451	0.3%	452	1.3%	0	0%	903	0.4%
<b>Total</b>	<b>39,964</b>	<b>23.1%</b>	<b>8771</b>	<b>25.4%</b>	<b>2484</b>	<b>25.2%</b>	<b>51,219</b>	<b>23.6%</b>

**Table AF104: Retail: C&I currently disposed that could be recycled - recoverable in the future - bag contents not accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	2829	1.6%	631	1.8%	157	1.6%	3618	1.7%
Electrical	163	0.1%	24	0.1%	7	0.1%	194	0.1%
Food	529	0.3%	1	0%	175	1.8%	705	0.3%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%
Masonry	5230	3%	1092	3.2%	0	0%	6322	2.9%
Metals	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%
Plastic	6141	3.6%	1207	3.5%	407	4.1%	7755	3.6%
Rubber	254	0.1%	80	0.2%	133	1.4%	467	0.2%
Textiles	4753	2.8%	2094	6.1%	611	6.2%	7458	3.4%
Wood	16,826	9.7%	2898	8.4%	2847	28.9%	22,571	10.4%
Other	368	0.2%	114	0.3%	0	0%	481	0.2%
<b>Total</b>	<b>37,093</b>	<b>21.5%</b>	<b>8140</b>	<b>23.6%</b>	<b>4338</b>	<b>44.1%</b>	<b>49,572</b>	<b>22.8%</b>

**Table AF105: Retail: C&I currently disposed that could be recycled - recoverable *now* - bag contents *are* accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	11,534	6.7%	1693	4.9%	436	4.4%	13,664	6.3%
Electrical	140	0.1%	6	0%	23	0.2%	169	0.1%
Food	23,654	13.7%	6868	19.9%	1389	14.1%	31,911	14.7%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	7740	4.5%	955	2.8%	64	0.7%	8759	4%
Glass	2625	1.5%	1001	2.9%	267	2.7%	3892	1.8%
Masonry	2414	1.4%	736	2.1%	0	0%	3150	1.5%
Metals	5998	3.5%	2257	6.5%	343	3.5%	8597	4%
Paper	30,957	17.9%	4073	11.8%	907	9.2%	35,937	16.6%
Plastic	25,813	14.9%	4898	14.2%	954	9.7%	31,665	14.6%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles	34	0%	90	0.3%	0	0%	123	0.1%
Wood	2919	1.7%	585	1.7%	584	5.9%	4088	1.9%
Other	473	0.3%	453	1.3%	1	0%	927	0.4%
<b>Total</b>	<b>114,301</b>	<b>66.2%</b>	<b>23,614</b>	<b>68.4%</b>	<b>4969</b>	<b>50.5%</b>	<b>142,883</b>	<b>65.8%</b>

**Table AF106: Retail: C&I currently disposed that could be recycled - recoverable in the *future* - bag contents *are* accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	4623	2.7%	1225	3.6%	190	1.9%	6038	2.8%
Electrical	595	0.3%	36	0.1%	8	0.1%	639	0.3%
Food	2915	1.7%	456	1.3%	215	2.2%	3586	1.7%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%
Masonry	6102	3.5%	1137	3.3%	19	0.2%	7259	3.3%
Metals	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%
Plastic	9387	5.4%	1522	4.4%	501	5.1%	11,411	5.3%
Rubber	1106	0.6%	225	0.7%	149	1.5%	1481	0.7%
Textiles	7852	4.5%	2566	7.4%	724	7.4%	11,142	5.1%
Wood	17,202	10%	2915	8.5%	2847	28.9%	22,965	10.6%
Other	4199	2.4%	520	1.5%	147	1.5%	4866	2.2%
<b>Total</b>	<b>53,983</b>	<b>31.3%</b>	<b>10,602</b>	<b>30.7%</b>	<b>4801</b>	<b>48.8%</b>	<b>69,385</b>	<b>32%</b>

## Industry sector: Healthcare and social assistance

Table AF107: Composition of C&amp;I waste from healthcare/social assistance, garbage bags separate, showing all regions

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	2804	2.9%	627	4.7%	204	2.9%	3634	3.1%
Electrical	725	0.8%	74	0.6%	53	0.8%	852	0.7%
Food	972	1%	422	3.1%	0	0%	1394	1.2%
Garbage bags	36,451	38.1%	5763	42.8%	3127	44.6%	45,341	39%
Garden organics	2946	3.1%	213	1.6%	27	0.4%	3186	2.7%
Glass	649	0.7%	123	0.9%	7	0.1%	780	0.7%
Masonry	3663	3.8%	978	7.3%	548	7.8%	5189	4.5%
Metals	3534	3.7%	281	2.1%	113	1.6%	3929	3.4%
Paper	2175	2.3%	524	3.9%	179	2.6%	2879	2.5%
Plastic	7615	8%	1606	11.9%	441	6.3%	9662	8.3%
Rubber	233	0.2%	40	0.3%	28	0.4%	301	0.3%
Textiles	6096	6.4%	1092	8.1%	999	14.2%	8186	7%
Wood	20,357	21.3%	1484	11%	1257	17.9%	23,098	19.9%
Other	7528	7.9%	223	1.7%	35	0.5%	7786	6.7%
<b>Total</b>	<b>95,748</b>	<b>100%</b>	<b>13,449</b>	<b>100%</b>	<b>7019</b>	<b>100%</b>	<b>116,216</b>	<b>100%</b>

**Table AF108: Composition of C&I waste from healthcare/social assistance, garbage bags distributed, showing all regions**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	5149	5.4%	936	7%	333	4.7%	6419	5.5%
Electrical	934	1%	97	0.7%	57	0.8%	1087	0.9%
Food	9810	10.2%	2529	18.8%	1021	14.5%	13,360	11.5%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	4328	4.5%	345	2.6%	36	0.5%	4709	4.1%
Glass	1480	1.5%	342	2.5%	148	2.1%	1971	1.7%
Masonry	4107	4.3%	995	7.4%	568	8.1%	5670	4.9%
Metals	4,739	4.9%	412	3.1%	197	2.8%	5348	4.6%
Paper	11,777	12.3%	1690	12.6%	871	12.4%	14,338	12.3%
Plastic	15,301	16%	2722	20.2%	1111	15.8%	19,134	16.5%
Rubber	508	0.5%	103	0.8%	45	0.6%	656	0.6%
Textiles	7311	7.6%	1230	9.1%	1115	15.9%	9657	8.3%
Wood	20,627	21.5%	1498	11.1%	1258	17.9%	23,383	20.1%
Other	9678	10.1%	548	4.1%	260	3.7%	10,486	9%
<b>Total</b>	<b>95,748</b>	<b>100%</b>	<b>13,449</b>	<b>100%</b>	<b>7019</b>	<b>100%</b>	<b>116,216</b>	<b>100%</b>

**Table AF109: Composition of mixed C&I loads from healthcare/social assistance, garbage bags separate, showing by region**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	1412	2.1%	135	1%	70	1.1%	1617	1.9%
Cardboard dry – compacted	686	1%	272	2.1%	116	1.8%	1075	1.2%
Cardboard – wet strength/waxed – loose	18	0%	55	0.4%	17	0.3%	89	0.1%
Cardboard – wet strength/waxed – compacted	622	0.9%	165	1.2%	0	0%	787	0.9%
Electrical – computers and peripherals	134	0.2%	1	0%	1	0%	136	0.2%
Electrical – other	232	0.3%	36	0.3%	31	0.5%	298	0.3%
Electrical – TVs	165	0.2%	23	0.2%	17	0.3%	205	0.2%
Electrical – whitegoods	162	0.2%	14	0.1%	3	0%	180	0.2%
Food organics – packaged	5	0%	0	0%	0	0%	5	0%
Food organics – unpackaged	961	1.4%	422	3.2%	0	0%	1384	1.6%
Garbage bags	23,493	35.2%	5763	43.5%	2843	42.9%	32,099	37%
Garden organics	2655	4%	213	1.6%	27	0.4%	2895	3.3%
Glass – non-packaging	615	0.9%	45	0.3%	4	0.1%	663	0.8%
Glass – packaging	34	0.1%	10	0.1%	4	0.1%	48	0.1%
Masonry materials – concrete/bricks	2518	3.8%	782	5.9%	251	3.8%	3551	4.1%
Masonry materials – other	1145	1.7%	196	1.5%	297	4.5%	1638	1.9%
Metal (ferrous) – packaging	220	0.3%	35	0.3%	17	0.3%	272	0.3%
Metal (ferrous) – non-packaging (low density)	1577	2.4%	130	1%	64	1%	1771	2%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	98	0.1%	74	0.6%	7	0.1%	179	0.2%
Metal (non-ferrous) – non-packaging (low density)	526	0.8%	42	0.3%	24	0.4%	592	0.7%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	1	0%	0	0%	0	0%	1	0%
Paper – office	456	0.7%	205	1.5%	124	1.9%	785	0.9%
Paper – other	1002	1.5%	212	1.6%	40	0.6%	1254	1.4%
Paper – packaging	708	1.1%	106	0.8%	15	0.2%	829	1%
Plastic – EPS foam	206	0.3%	41	0.3%	29	0.4%	277	0.3%
Plastic – film packaging	1821	2.7%	322	2.4%	47	0.7%	2190	2.5%
Plastic – other	5088	7.6%	1168	8.8%	350	5.3%	6607	7.6%
Plastic – rigid packaging	161	0.2%	71	0.5%	14	0.2%	246	0.3%
Rubber	233	0.3%	40	0.3%	28	0.4%	301	0.3%
Textiles and leather	2290	3.4%	563	4.2%	297	4.5%	3150	3.6%
Textiles – carpet and underlay	732	1.1%	244	1.8%	81	1.2%	1056	1.2%
Textiles – mattresses	392	0.6%	120	0.9%	11	0.2%	523	0.6%
Textiles – covered furniture	1894	2.8%	166	1.3%	504	7.6%	2564	3%
Wood – treated/painted	10,879	16.3%	1129	8.5%	1209	18.2%	13,217	15.2%
Wood – treated/painted – pallets	516	0.8%	37	0.3%	30	0.5%	583	0.7%
Wood – untreated	1220	1.8%	152	1.1%	18	0.3%	1390	1.6%
Wood – untreated – pallets	257	0.4%	44	0.3%	0	0%	301	0.3%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	5	0%	0	0%	0	0%	5	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	1682	2.5%	223	1.7%	35	0.5%	1941	2.2%
<b>Total</b>	<b>66,820</b>	<b>100%</b>	<b>13,254</b>	<b>100%</b>	<b>6628</b>	<b>100%</b>	<b>86,702</b>	<b>100%</b>

**Table AF110: Composition of single-material C&I loads from the healthcare/social assistance, garbage bags separate, by region**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	65	0.2%	0	0%	0	0.1%	66	0.2%
Cardboard dry – compacted	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – compacted	0	0%	0	0%	0	0%	0	0%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	32	0.1%	2	0.8%	0	0.1%	34	0.1%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	0	0%	0	0%	0	0%	0	0%
Food organics – unpackaged	6	0%	0	0%	0	0%	6	0%
Garbage bags	12,958	44.8%	0	0%	284	72.7%	13,241	44.9%
Garden organics	292	1%	0	0%	0	0%	292	1%
Glass – non-packaging	0	0%	69	35.1%	0	0%	69	0.2%
Glass – packaging	0	0%	0	0%	0	0%	0	0%
Masonry materials – concrete/bricks	0	0%	0	0%	0	0%	0	0%
Masonry materials – other	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – packaging	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – non-packaging (low density)	1113	3.8%	1	0.4%	0	0%	1114	3.8%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	2	0%	0	0%	0	0%	2	0%
Paper – other	3	0%	0	0%	0	0.1%	4	0%
Paper – packaging	4	0%	0	0%	0	0%	4	0%
Plastic – EPS foam	1	0%	0	0%	0	0%	1	0%
Plastic – film packaging	91	0.3%	0	0%	0	0%	91	0.3%
Plastic – other	238	0.8%	3	1.7%	0	0%	241	0.8%
Plastic – rigid packaging	10	0%	0	0%	0	0%	10	0%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles and leather	199	0.7%	0	0%	39	10%	238	0.8%
Textiles – carpet and underlay	589	2%	0	0%	0	0%	589	2%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	0	0%	0	0%	67	17.1%	67	0.2%
Wood – treated/painted	7478	25.8%	119	60.9%	0	0%	7597	25.7%
Wood – treated/painted – pallets	0	0%	2	1%	0	0%	2	0%
Wood – untreated	7	0%	0	0%	0	0%	7	0%
Wood – untreated – pallets	0	0%	0	0%	0	0%	0	0%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	5841	20.2%	0	0%	0	0%	5841	19.8%
<b>Total</b>	<b>28,928</b>	<b>100%</b>	<b>196</b>	<b>100%</b>	<b>390</b>	<b>100%</b>	<b>29,514</b>	<b>100%</b>

**Table AF111: Composition of mixed C&I loads from healthcare/social assistance, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	3.1%	1.8%	34.2%	0.8%	0%	0%	1%	0.6%	4.5%	0%	1.7%
Cardboard dry – compacted	0.5%	1.6%	0%	0.3%	0%	2.8%	2.1%	1.8%	0%	0%	1.4%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0.1%	0%	0%	0.5%	0.3%	0%	0%	0.1%
Cardboard – wet strength/waxed – compacted	1.2%	1.1%	0%	0.2%	0%	2.2%	1.2%	0%	0%	0%	0.9%
Electrical – computers and peripherals	0.3%	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Electrical – other	0.3%	0.4%	0%	0.4%	0%	0%	0.2%	0.4%	1.6%	0%	0.3%
Electrical – TVs	0.5%	0.2%	0%	0.1%	0%	0%	0.2%	0.3%	0%	0%	0.2%
Electrical – whitegoods	0.3%	0.3%	0%	0.1%	0%	0.7%	0.1%	0.1%	0%	0%	0.2%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	3.1%	1.1%	0%	0.6%	0%	0%	3.6%	0%	0%	0%	1.8%
Garbage bags	30.6%	45%	0%	16.5%	0%	74.2%	43.5%	44.2%	1.4%	0%	37.9%
Garden organics	1.8%	2.5%	0%	9.8%	0%	0%	1.8%	0.4%	0%	0%	3.1%
Glass – non-packaging	1.1%	1.2%	0%	0.1%	0%	0%	0.3%	0.1%	1.1%	0%	0.7%
Glass – packaging	0%	0.1%	0%	0.1%	0%	0.6%	0%	0.1%	0%	0%	0.1%
Masonry materials – concrete/bricks	0.4%	3.4%	0%	8.2%	0%	0%	6.7%	3.9%	0%	0%	4.3%
Masonry materials – other	3%	1%	0%	2.2%	0%	0%	1.7%	4.6%	0%	0%	1.9%
Metal (ferrous) – packaging	0.3%	0.4%	0%	0.3%	0%	0.5%	0.3%	0.3%	0%	0%	0.3%
Metal (ferrous) – non-packaging (low density)	2.4%	1.8%	6.5%	3.5%	0%	0%	1%	0.9%	2.7%	0%	1.9%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0.1%	0.2%	0%	0%	0%	0%	0.6%	0.1%	0%	0%	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0.4%	1.2%	1.3%	0.1%	0%	0%	0.2%	0.4%	2.7%	0%	0.6%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	2.1%	0.3%	0%	0.1%	0%	0%	1.3%	1.9%	7.3%	0%	1%
Paper – other	0.4%	2.6%	0%	0.1%	0%	1.6%	1.7%	0.3%	0%	0%	1.5%
Paper – packaging	0.1%	1.7%	0%	0.4%	0%	0%	0.9%	0.2%	0%	0%	0.9%
Plastic – EPS foam	0.1%	0.4%	2%	0.2%	0%	0.5%	0.3%	0.5%	0%	0%	0.3%
Plastic – film packaging	0.5%	4.2%	4.6%	1.2%	0%	0%	2.8%	0.7%	0%	0%	2.5%
Plastic – other	4.9%	8.1%	16.9%	9.5%	0%	2.7%	7.2%	4.1%	42.9%	0%	7.7%
Plastic – rigid packaging	0.2%	0.3%	0%	0%	0%	0.6%	0.5%	0.2%	0.2%	0%	0.3%
Rubber	0.6%	0.4%	0%	0%	0%	0%	0%	0.4%	5.7%	0%	0.3%
Textiles and leather	8.9%	2.5%	0%	0.6%	0%	0%	4.3%	4.1%	8.3%	0%	3.7%
Textiles – carpet and underlay	1.7%	0.7%	0%	1.6%	0%	2.6%	1.9%	1.3%	0%	0%	1.3%
Textiles – mattresses	0.8%	0.7%	0%	0%	0%	0%	0.5%	0.2%	8.6%	0%	0.6%
Textiles – covered furniture	4.2%	2.8%	22.7%	0.8%	0%	3.4%	0.9%	7.9%	4.5%	0%	2.8%
Wood – treated/painted	19%	9.9%	0%	29.6%	0%	7.5%	8.8%	18.7%	5.2%	0%	14.5%
Wood – treated/painted – pallets	2%	0.5%	0%	0.3%	0%	0%	0.3%	0.5%	0%	0%	0.6%
Wood – untreated	0.9%	0.6%	11.9%	5.2%	0%	0%	1.1%	0.3%	3.2%	0%	1.5%
Wood – untreated – pallets	0.6%	0.5%	0%	0%	0%	0%	0.4%	0%	0%	0%	0.3%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	3.5%	0.3%	0%	7%	0%	0%	2%	0.4%	0%	0%	2.1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>

**Table AF112: Composition of single-material C&I loads from healthcare/social assistance, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0%	0.7%	0%	0.1%	0%	0%	0.1%	0%	0%	0%	0.2%
Cardboard dry – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – computers and peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0%	0%	0.3%	0%	0%	1.3%	0%	0%	0%	0.1%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garbage bags	81%	91.7%	0%	12.3%	0%	0%	0.1%	96.8%	0%	0%	44.7%
Garden organics	0%	2.9%	0%	0.3%	0%	0%	0%	0%	0%	0%	1%
Glass – non-packaging	0%	0%	0%	0%	0%	0%	46.4%	0%	0%	0%	0.5%
Glass – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – concrete/bricks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (low density)	0%	0%	0%	11.2%	0%	0%	0%	0%	1.1%	0%	3.7%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – other	0%	0%	0%	0%	0%	0%	0.1%	0%	0%	0%	0%
Paper – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Plastic – EPS foam	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Plastic – film packaging	1.3%	0.4%	0%	0%	0%	0%	0%	0%	0%	0%	0.3%
Plastic – other	3.4%	0.9%	0%	0.1%	0%	0%	2.3%	0%	0%	0%	0.8%
Plastic – rigid packaging	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rubber	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles and leather	2%	0.8%	0%	0.3%	0%	0%	13%	3.2%	0%	0%	0.8%
Textiles – carpet and underlay	9.9%	0.3%	0%	1.3%	0%	0%	0%	0%	0%	0%	2%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	0%	0.9%	0%	0%	0%	0%	0.7%	0%	0%	0%	0.3%
Wood – treated/painted	2.4%	1%	0%	73.4%	0%	0%	36%	0%	96%	0%	25.9%
Wood – treated/painted – pallets	0%	0%	0%	0%	0%	0%	0%	0%	2.9%	0%	0%
Wood – untreated	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0%	0%	0%	0.7%	0%	100%	0%	0%	0%	0%	19.6%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>

**Table AF113: Healthcare/social assistance: C&I currently disposed that could be recycled - if bag contents *not* accessible - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Recoverable	18,971	19.8%	3426	25.5%	903	12.9%	23,299	20%
Potentially Recoverable	32,362	33.8%	3924	29.2%	2961	42.2%	39,247	33.8%
Non-recoverable	44,416	46.4%	6100	45.4%	3155	44.9%	53,670	46.2%

**Table AF114: Healthcare/social assistance: C&I currently disposed that could be recycled - if bag contents *are* accessible - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Recoverable	48,203	50.3%	8178	60.8%	3477	49.5%	59,858	51.5%
Potentially Recoverable	38,779	40.5%	4874	36.2%	3441	49%	47,094	40.5%
Non-recoverable	8766	9.2%	397	3%	101	1.4%	9265	8%

**Table AF115: Healthcare/social assistance: C&I currently disposed that could be recycled - recoverable *now* - bag contents *not* accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	2164	2.3%	407	3%	187	2.7%	2758	2.4%
Electrical	462	0.5%	37	0.3%	21	0.3%	520	0.4%
Food	967	1%	422	3.1%	0	0%	1389	1.2%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	2946	3.1%	213	1.6%	27	0.4%	3186	2.7%
Glass	34	0%	10	0.1%	4	0.1%	48	0%
Masonry	2518	2.6%	782	5.8%	251	3.6%	3551	3.1%
Metals	3534	3.7%	281	2.1%	113	1.6%	3929	3.4%
Paper	2175	2.3%	524	3.9%	179	2.6%	2879	2.5%
Plastic	2290	2.4%	434	3.2%	91	1.3%	2814	2.4%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles	392	0.4%	120	0.9%	11	0.2%	523	0.4%
Wood	1484	1.5%	196	1.5%	18	0.3%	1698	1.5%
Other	5	0%	0	0%	0	0%	5	0%
<b>Total</b>	<b>18,971</b>	<b>19.8%</b>	<b>3426</b>	<b>25.5%</b>	<b>903</b>	<b>12.9%</b>	<b>23,299</b>	<b>20%</b>

**Table AF116: Healthcare/social assistance: C&I currently disposed that could be recycled - recoverable in the *future* - bag contents *not* accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	640	0.7%	220	1.6%	17	0.2%	876	0.8%
Electrical	264	0.3%	37	0.3%	31	0.4%	332	0.3%
Food	5	0%	0	0%	0	0%	5	0%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%
Masonry	1145	1.2%	196	1.5%	297	4.2%	1638	1.4%
Metals	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%
Plastic	5325	5.6%	1172	8.7%	350	5%	6848	5.9%
Rubber	233	0.2%	40	0.3%	28	0.4%	301	0.3%
Textiles	5704	6%	972	7.2%	987	14.1%	7664	6.6%
Wood	18,873	19.7%	1288	9.6%	1239	17.7%	21400	18.4%
Other	173	0.2%	0	0%	11	0.2%	184	0.2%
<b>Total</b>	<b>32,362</b>	<b>33.8%</b>	<b>3924</b>	<b>29.2%</b>	<b>2961</b>	<b>42.2%</b>	<b>39,247</b>	<b>33.8%</b>

**Table AF117: Healthcare/social assistance: C&I currently disposed that could be recycled - recoverable *now* - bag contents *are* accessible - by material - by region**

Material	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	3722	3.9%	580	4.3%	282	4%	4583	3.9%
Electrical	493	0.5%	37	0.3%	24	0.3%	554	0.5%
Food	9015	9.4%	2360	17.5%	980	14%	12,355	10.6%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	4328	4.5%	345	2.6%	36	0.5%	4709	4.1%
Glass	851	0.9%	227	1.7%	143	2%	1221	1.1%
Masonry	2526	2.6%	782	5.8%	251	3.6%	3558	3.1%
Metals	4739	4.9%	412	3.1%	197	2.8%	5348	4.6%
Paper	11,777	12.3%	1690	12.6%	871	12.4%	14,338	12.3%
Plastic	8724	9.1%	1428	10.6%	663	9.4%	10,815	9.3%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles	392	0.4%	120	0.9%	11	0.2%	523	0.4%
Wood	1623	1.7%	196	1.5%	19	0.3%	1838	1.6%
Other	14	0%	1	0%	1	0%	16	0%
<b>Total</b>	<b>48,203</b>	<b>50.3%</b>	<b>8178</b>	<b>60.8%</b>	<b>3477</b>	<b>49.5%</b>	<b>59,858</b>	<b>51.5%</b>

**Table AF118: Healthcare/social assistance: C&I currently disposed that could be recycled - recoverable in the *future* - bag contents *are* accessible - by material - by region**

Material category	SMA		ERA		RRA		Total	
	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream	Tonnes per year	% of waste stream
Cardboard	1428	1.5%	357	2.7%	51	0.7%	1835	1.6%
Electrical	441	0.5%	60	0.4%	33	0.5%	533	0.5%
Food	794	0.8%	170	1.3%	41	0.6%	1005	0.9%
Garbage bags	0	0%	0	0%	0	0%	0	0%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass	0	0%	0	0%	0	0%	0	0%
Masonry	1581	1.7%	213	1.6%	317	4.5%	2111	1.8%
Metals	0	0%	0	0%	0	0%	0	0%
Paper	0	0%	0	0%	0	0%	0	0%
Plastic	6577	6.9%	1295	9.6%	448	6.4%	8319	7.2%
Rubber	508	0.5%	103	0.8%	45	0.6%	656	0.6%
Textiles	6919	7.2%	1111	8.3%	1104	15.7%	9134	7.9%
Wood	19,004	19.8%	1301	9.7%	1239	17.7%	21,545	18.5%
Other	1527	1.6%	265	2%	163	2.3%	1955	1.7%
<b>Total</b>	<b>38,779</b>	<b>40.5%</b>	<b>4874</b>	<b>36.2%</b>	<b>3441</b>	<b>49%</b>	<b>47,094</b>	<b>40.5%</b>

## Industry sector: Accommodation and food services

Table AF119: Composition of overall C&amp;I waste from accommodation/food services, garbage bags separate, by region

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	2300	4.1%	126	2.7%	1854	6.7%	4280	4.8%
Electrical	81	0.1%	6	0.1%	15	0.1%	101	0.1%
Food	382	0.7%	5	0.1%	1970	7.1%	2357	2.6%
Garbage bags	38,128	67.3%	404	8.6%	16,695	60.2%	55,227	62%
Garden organics	1813	3.2%	262	5.5%	612	2.2%	2687	3%
Glass	1269	2.2%	227	4.8%	563	2%	2059	2.3%
Masonry	3069	5.4%	583	12.3%	308	1.1%	3960	4.4%
Metals	271	0.5%	323	6.8%	477	1.7%	1071	1.2%
Paper	1456	2.6%	151	3.2%	1225	4.4%	2832	3.2%
Plastic	3549	6.3%	503	10.6%	1762	6.4%	5813	6.5%
Rubber	31	0.1%	57	1.2%	130	0.5%	218	0.2%
Textiles	973	1.7%	301	6.4%	478	1.7%	1752	2%
Wood	2923	5.2%	1774	37.6%	1533	5.5%	6229	7%
Other	434	0.8%	0	0%	105	0.4%	538	0.6%
<b>Total</b>	<b>56,679</b>	<b>100%</b>	<b>4721</b>	<b>100%</b>	<b>27,725</b>	<b>100%</b>	<b>89,124</b>	<b>100%</b>

**Table AF120: Composition of overall C&I waste from accommodation/food services, garbage bags distributed, by region**

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	4652	8.2%	139	2.9%	2545	9.2%	7335	8.2%
Electrical	274	0.5%	6	0.1%	35	0.1%	315	0.4%
Food	11,050	19.5%	155	3.3%	7418	26.8%	18,623	20.9%
Garden organics	2120	3.7%	303	6.4%	657	2.4%	3080	3.5%
Glass	2438	4.3%	235	5%	1315	4.7%	3988	4.5%
Masonry	3263	5.8%	583	12.4%	414	1.5%	4261	4.8%
Metals	1699	3%	334	7.1%	925	3.3%	2958	3.3%
Paper	11,081	19.6%	250	5.3%	4917	17.7%	16,248	18.2%
Plastic	11,962	21.1%	560	11.9%	5336	19.2%	17,859	20%
Rubber	462	0.8%	60	1.3%	219	0.8%	741	0.8%
Textiles	2114	3.7%	306	6.5%	1102	4%	3522	4%
Wood	3141	5.5%	1778	37.7%	1538	5.5%	6456	7.2%
Other	2422	4.3%	12	0.2%	1305	4.7%	3738	4.2%
<b>Total</b>	<b>56,679</b>	<b>100%</b>	<b>4721</b>	<b>100%</b>	<b>27,725</b>	<b>100%</b>	<b>89,124</b>	<b>100%</b>

**Table AF121: Composition of mixed C&I loads from accommodation/food services, garbage bags separate, by region**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	681	1.6%	16	0.3%	107	0.4%	805	1.1%
Cardboard dry – compacted	595	1.4%	62	1.3%	1151	4.2%	1809	2.4%
Cardboard – wet strength/waxed – loose	151	0.4%	0	0%	9	0%	159	0.2%
Cardboard – wet strength/waxed – compacted	227	0.5%	47	1%	587	2.1%	861	1.2%
Electrical – computers and peripherals	0	0%	4	0.1%	3	0%	7	0%
Electrical – other	81	0.2%	1	0%	12	0%	94	0.1%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	2	0%	0	0%	273	1%	275	0.4%
Food organics – unpackaged	376	0.9%	5	0.1%	1697	6.2%	2079	2.8%
Garbage bags	25,024	59.9%	378	8%	16,524	60.3%	41,925	56.7%
Garden organics	1813	4.3%	262	5.6%	612	2.2%	2687	3.6%
Glass – non-packaging	0	0%	62	1.3%	39	0.1%	101	0.1%
Glass – packaging	1200	2.9%	165	3.5%	524	1.9%	1888	2.6%
Masonry materials – concrete/bricks	2588	6.2%	225	4.8%	308	1.1%	3121	4.2%
Masonry materials – other	182	0.4%	357	7.6%	0	0%	539	0.7%
Metal (ferrous) – packaging	120	0.3%	11	0.2%	264	1%	395	0.5%
Metal (ferrous) – non-packaging (low density)	23	0.1%	183	3.9%	101	0.4%	307	0.4%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	39	0.1%	22	0.5%	87	0.3%	148	0.2%
Metal (non-ferrous) – non-packaging (low density)	15	0%	107	2.3%	25	0.1%	148	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	289	0.7%	61	1.3%	151	0.6%	501	0.7%
Paper – other	485	1.2%	31	0.7%	600	2.2%	1116	1.5%
Paper – packaging	563	1.3%	59	1.3%	473	1.7%	1095	1.5%
Plastic – EPS foam	213	0.5%	20	0.4%	90	0.3%	323	0.4%
Plastic – film packaging	1712	4.1%	65	1.4%	559	2%	2336	3.2%
Plastic – other	1356	3.2%	380	8.1%	945	3.4%	2681	3.6%
Plastic – rigid packaging	94	0.2%	38	0.8%	166	0.6%	297	0.4%
Rubber	31	0.1%	57	1.2%	130	0.5%	218	0.3%
Textiles and leather	146	0.3%	82	1.7%	190	0.7%	418	0.6%
Textiles – carpet and underlay	332	0.8%	159	3.4%	161	0.6%	652	0.9%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	451	1.1%	61	1.3%	0	0%	512	0.7%
Wood – treated/painted	1579	3.8%	911	19.4%	481	1.8%	2970	4%
Wood – treated/painted – pallets	528	1.3%	63	1.3%	286	1%	877	1.2%
Wood – untreated	335	0.8%	699	14.9%	226	0.8%	1259	1.7%
Wood – untreated – pallets	131	0.3%	101	2.2%	540	2%	773	1%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	434	1%	0	0%	105	0.4%	538	0.7%
<b>Total</b>	<b>41,796</b>	<b>100%</b>	<b>4695</b>	<b>100%</b>	<b>27,424</b>	<b>100%</b>	<b>73,915</b>	<b>100%</b>

**Table AF122: Composition of single-material C&I loads from accommodation/food services, garbage bags separate, by region**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	0	0%	0	0%	0	0%	0	0%
Cardboard dry – compacted	370	2.5%	0	0%	0	0%	370	2.4%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – compacted	275	1.8%	0	0%	0	0%	275	1.8%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	0	0%	0	0%	0	0%	0	0%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	0	0%	0	0%	0	0%	0	0%
Food organics – unpackaged	3	0%	0	0%	0	0%	3	0%
Garbage bags	13,104	88.1%	26	100%	171	56.9%	13,302	87.5%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass – non-packaging	0	0%	0	0%	0	0%	0	0%
Glass – packaging	69	0.5%	0	0%	1	0.3%	70	0.5%
Masonry materials – concrete/bricks	0	0%	0	0%	0	0%	0	0%
Masonry materials – other	300	2%	0	0%	0	0%	300	2%
Metal (ferrous) – packaging	48	0.3%	0	0%	0	0%	48	0.3%
Metal (ferrous) – non-packaging (low density)	8	0.1%	0	0%	0	0%	8	0%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	17	0.1%	0	0%	0	0.1%	18	0.1%
Metal (non-ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	42	0.3%	0	0%	0	0%	42	0.3%
Paper – other	42	0.3%	0	0%	0	0.1%	42	0.3%
Paper – packaging	36	0.2%	0	0%	0	0%	36	0.2%
Plastic – EPS foam	15	0.1%	0	0%	0	0%	15	0.1%
Plastic – film packaging	38	0.3%	0	0%	0	0.1%	38	0.2%
Plastic – other	102	0.7%	0	0%	1	0.5%	104	0.7%
Plastic – rigid packaging	20	0.1%	0	0%	0	0%	20	0.1%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles and leather	44	0.3%	0	0%	5	1.6%	48	0.3%
Textiles – carpet and underlay	0	0%	0	0%	0	0%	0	0%
Textiles – mattresses	0	0%	0	0%	122	40.5%	122	0.8%
Textiles – covered furniture	0	0%	0	0%	0	0%	0	0%
Wood – treated/painted	321	2.2%	0	0%	0	0%	321	2.1%
Wood – treated/painted – pallets	0	0%	0	0%	0	0%	0	0%
Wood – untreated	29	0.2%	0	0%	0	0%	29	0.2%
Wood – untreated – pallets	0	0%	0	0%	0	0%	0	0%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	0	0%	0	0%	0	0%	0	0%
<b>Total</b>	<b>14,882</b>	<b>100%</b>	<b>26</b>	<b>100%</b>	<b>301</b>	<b>100%</b>	<b>15,210</b>	<b>100%</b>

**Table AF123: Composition of mixed C&I loads from accommodation/food services, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	2.5%	0.8%	0.5%	0.5%	0%	0.1%	2.2%	0.2%	0%	0%	1%
Cardboard dry – compacted	2.2%	3%	0%	2.5%	0%	1.8%	0%	4%	0%	0%	2.5%
Cardboard – wet strength/waxed – loose	1%	0%	0.3%	0%	0%	0%	0%	0%	0%	0%	0.2%
Cardboard – wet strength/waxed – compacted	1.7%	1.1%	0%	0%	0%	1.4%	0%	2.4%	0%	0%	1.2%
Electrical – computers and peripherals	0%	0%	0%	0%	0%	0%	0.2%	0%	0%	0%	0%
Electrical – other	0.2%	0.2%	0%	0.1%	0%	0%	0%	0.1%	0%	0%	0.1%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0.6%	0%	0%	0%	0%	0%	1%	0%	0%	0.4%
Food organics – unpackaged	2.7%	4%	0%	0%	0%	0.1%	3.6%	3.5%	0%	0%	3%
Garbage bags	59.2%	57.9%	69.8%	78.4%	0%	9.7%	42.5%	54.8%	0%	0%	54.5%
Garden organics	7.8%	2.1%	4.4%	0%	0%	7.5%	2.7%	2.7%	0%	0%	3.6%
Glass – non-packaging	0%	0%	0%	0%	0%	0%	2.3%	0.3%	0%	0%	0.2%
Glass – packaging	8.8%	1%	0%	0%	0%	4.2%	0.7%	2.2%	0%	0%	2.5%
Masonry materials – concrete/bricks	0%	6.8%	0%	1.5%	0%	0%	8.5%	2.8%	0%	0%	4%
Masonry materials – other	0%	0.1%	0%	3.8%	0%	0%	13.5%	0%	0%	0%	1%
Metal (ferrous) – packaging	0.5%	0.7%	0%	0.1%	0%	0.3%	0%	0.8%	0%	0%	0.6%
Metal (ferrous) – non-packaging (low density)	0%	0.1%	0%	0.2%	0%	4.2%	2.6%	0.2%	0%	0%	0.6%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0.1%	0.1%	0%	0.3%	0%	0.6%	0%	0.5%	0%	0%	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	2.7%	0.5%	0.2%	0%	0%	0.3%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0.6%	0.7%	0.6%	0%	0%	1.8%	0.7%	0.6%	0%	0%	0.7%
Paper – other	1%	1.9%	1.7%	0.9%	0%	0.9%	1.1%	1.6%	0%	0%	1.5%
Paper – packaging	0.5%	2.2%	0%	1.2%	0%	1.3%	0.9%	1.5%	0%	0%	1.5%
Plastic – EPS foam	0.4%	0.5%	0.3%	0.1%	0%	0.5%	0.1%	0.4%	0%	0%	0.4%
Plastic – film packaging	3.1%	4.1%	1.8%	3.2%	0%	1.4%	1.2%	1.7%	0%	0%	3%
Plastic – other	1.9%	4%	4.4%	0.7%	0%	10.1%	1.1%	4.1%	0%	0%	3.8%
Plastic – rigid packaging	0.3%	0.4%	0.5%	0%	0%	0.7%	0.5%	0.6%	0%	0%	0.4%
Rubber	0.1%	0.5%	0%	0%	0%	1.6%	0%	0%	0%	0%	0.4%
Textiles and leather	0.7%	0.3%	0.4%	0.4%	0%	2.3%	0.4%	0.8%	0%	0%	0.6%
Textiles – carpet and underlay	1.1%	0.2%	3.4%	0%	0%	4.2%	0.4%	0.9%	0%	0%	1%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	0.8%	0.2%	5.1%	0%	0%	1.7%	0%	0%	0%	0%	0.7%
Wood – treated/painted	2.2%	3.6%	2.6%	4%	0%	19.7%	8.5%	1.9%	0%	0%	4.6%
Wood – treated/painted – pallets	0%	1.2%	0%	2%	0%	1.8%	0%	2.6%	0%	0%	1.2%
Wood – untreated	0.4%	0.8%	0%	0%	0%	19.4%	0.8%	1.8%	0%	0%	2.3%
Wood – untreated – pallets	0%	0.4%	0%	0%	0%	0%	3.8%	5%	0%	0%	1.2%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0%	0.6%	4.3%	0%	0%	0%	1.2%	0.5%	0%	0%	0.7%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>

**Table AF124: Composition of single-material C&I loads from accommodation/food services, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard dry – compacted	2.1%	2.9%	0%	0%	0%	0%	0%	0%	0%	0%	2.4%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – compacted	3.4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1.8%
Electrical – computers and peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garbage bags	85.1%	91.7%	0%	0%	0%	100%	0%	95.4%	0%	0%	87.3%
Garden organics	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Glass – non-packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Glass – packaging	0.5%	0.4%	0%	0%	0%	0%	0%	1.2%	0%	0%	0.5%
Masonry materials – concrete/bricks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – other	3.7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%
Metal (ferrous) – packaging	0.3%	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0.3%
Metal (ferrous) – non-packaging (low density)	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0.1%	0.1%	0%	0%	0%	0%	0%	0.6%	0%	0%	0.1%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0.6%	0%	0%	0%	0%	0%	0%	0%	0%	0.3%
Paper – other	0%	0.6%	0%	0%	0%	0%	0%	0.3%	0%	0%	0.3%
Paper – packaging	0%	0.5%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%
Plastic – EPS foam	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Plastic – film packaging	0%	0.5%	0%	0%	0%	0%	0%	0.3%	0%	0%	0.2%
Plastic – other	0.1%	1.3%	0%	0%	0%	0%	0%	2.2%	0%	0%	0.7%
Plastic – rigid packaging	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Rubber	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles and leather	0%	0.7%	0%	0%	0%	0%	0%	0%	0%	0%	0.3%
Textiles – carpet and underlay	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	1%
Textiles – covered furniture	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – treated/painted	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2.1%
Wood – treated/painted – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated	0.4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%
Wood – untreated – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>

## Industry sector: Wholesale trade

Table AF125: Composition of overall C&amp;I waste from wholesale trade, garbage bags separate, showing all regions

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	230	2.9%	2	0.1%	0	0%	232	2.5%
Electrical	9	0.1%	0	0%	0	0%	9	0.1%
Food	2656	33.5%	0	0%	0	0%	2656	28.3%
Garbage bags	71	0.9%	63	4.4%	0	0%	135	1.4%
Garden organics	0	0%	15	1%	0	0%	15	0.2%
Glass	6	0.1%	3	0.2%	0	0%	9	0.1%
Masonry	813	10.3%	0	0%	0	0%	813	8.7%
Metals	52	0.7%	31	2.1%	0	0%	83	0.9%
Paper	10	0.1%	0	0%	0	0%	11	0.1%
Plastic	565	7.1%	12	0.8%	0	0%	577	6.1%
Rubber	46	0.6%	1	0.1%	0	0%	47	0.5%
Textiles	2	0%	3	0.2%	0	0%	5	0.1%
Wood	2527	31.9%	1320	91%	0	0%	3848	41%
Other	942	11.9%	0	0%	0	0%	942	10%
<b>Total</b>	<b>7932</b>	<b>100%</b>	<b>1450</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>9382</b>	<b>100%</b>

Table AF126: Composition of overall C&amp;I waste from wholesale trade, garbage bags distributed, showing all regions

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	235	3%	4	0.3%	0	0%	239	2.5%
Electrical	10	0.1%	0	0%	0	0%	10	0.1%
Food	2668	33.6%	23	1.6%	0	0%	2692	28.7%
Garden organics	7	0.1%	22	1.5%	0	0%	29	0.3%
Glass	7	0.1%	4	0.3%	0	0%	11	0.1%
Masonry	815	10.3%	0	0%	0	0%	815	8.7%
Metals	54	0.7%	32	2.2%	0	0%	87	0.9%
Paper	30	0.4%	16	1.1%	0	0%	46	0.5%
Plastic	579	7.3%	21	1.4%	0	0%	599	6.4%
Rubber	47	0.6%	1	0.1%	0	0%	48	0.5%
Textiles	4	0.1%	4	0.3%	0	0%	8	0.1%
Wood	2528	31.9%	1321	91.1%	0	0%	3849	41%
Other	948	11.9%	2	0.1%	0	0%	950	10.1%
<b>Total</b>	<b>7932</b>	<b>100%</b>	<b>1450</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>9382</b>	<b>100%</b>

**Table AF127: Composition of mixed C&I loads from wholesale trade, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	225	4.3%	2	1.7%	0	0%	227	4.2%
Cardboard dry – compacted	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – compacted	0	0%	0	0%	0	0%	0	0%
Electrical – computers and peripherals	4	0.1%	0	0%	0	0%	4	0.1%
Electrical – other	5	0.1%	0	0%	0	0%	5	0.1%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	983	18.7%	0	0%	0	0%	983	18.2%
Food organics – unpackaged	0	0%	0	0%	0	0%	0	0%
Garbage bags	69	1.3%	63	49.8%	0	0%	132	2.5%
Garden organics	0	0%	15	11.6%	0	0%	15	0.3%
Glass – non-packaging	0	0%	3	2.1%	0	0%	3	0%
Glass – packaging	0	0%	0	0%	0	0%	0	0%
Masonry materials – concrete/bricks	205	3.9%	0	0%	0	0%	205	3.8%
Masonry materials – other	609	11.6%	0	0%	0	0%	609	11.3%
Metal (ferrous) – packaging	3	0%	1	0.4%	0	0%	3	0.1%
Metal (ferrous) – non-packaging (low density)	29	0.5%	30	23.3%	0	0%	58	1.1%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	21	0.4%	1	0.5%	0	0%	21	0.4%
Metal (non-ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	2	0%	0	0.4%	0	0%	3	0.1%
Paper – other	0	0%	0	0%	0	0%	0	0%
Paper – packaging	7	0.1%	0	0%	0	0%	7	0.1%
Plastic – EPS foam	47	0.9%	0	0.3%	0	0%	47	0.9%
Plastic – film packaging	300	5.7%	2	1.6%	0	0%	302	5.6%
Plastic – other	208	3.9%	6	4.3%	0	0%	213	4%
Plastic – rigid packaging	4	0.1%	0	0.2%	0	0%	5	0.1%
Rubber	46	0.9%	0	0%	0	0%	46	0.9%
Textiles and leather	0	0%	0	0%	0	0%	0	0%
Textiles – carpet and underlay	0	0%	0	0%	0	0%	0	0%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	2	0%	0	0%	0	0%	2	0%
Wood – treated/painted	1216	23.1%	5	3.7%	0	0%	1221	22.6%
Wood – treated/painted – pallets	646	12.3%	0	0%	0	0%	646	12%
Wood – untreated	58	1.1%	0	0%	0	0%	58	1.1%
Wood – untreated – pallets	335	6.4%	0	0%	0	0%	335	6.2%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	243	4.6%	0	0%	0	0%	243	4.5%
<b>Total</b>	<b>5267</b>	<b>100%</b>	<b>127</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>5394</b>	<b>100%</b>

**Table AF128: Composition of single-material C&I loads from wholesale trade, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	5	0.2%	0	0%	0	0%	5	0.1%
Cardboard dry – compacted	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – compacted	0	0%	0	0%	0	0%	0	0%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	0	0%	0	0%	0	0%	0	0%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	1673	62.8%	0	0%	0	0%	1673	42%
Food organics – unpackaged	0	0%	0	0%	0	0%	0	0%
Garbage bags	2	0.1%	0	0%	0	0%	2	0.1%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass – non-packaging	6	0.2%	0	0%	0	0%	6	0.2%
Glass – packaging	0	0%	0	0%	0	0%	0	0%
Masonry materials – concrete/bricks	0	0%	0	0%	0	0%	0	0%
Masonry materials – other	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – packaging	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	0	0%	0	0%	0	0%	0	0%
Paper – other	1	0%	0	0%	0	0%	1	0%
Paper – packaging	0	0%	0	0%	0	0%	0	0%
Plastic – EPS foam	0	0%	0	0%	0	0%	1	0%
Plastic – film packaging	1	0%	0	0%	0	0%	1	0%
Plastic – other	4	0.2%	3	0.2%	0	0%	7	0.2%
Plastic – rigid packaging	0	0%	0	0%	0	0%	0	0%
Rubber	0	0%	1	0.1%	0	0%	1	0%
Textiles and leather	0	0%	3	0.2%	0	0%	3	0.1%
Textiles – carpet and underlay	0	0%	0	0%	0	0%	0	0%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	0	0%	0	0%	0	0%	0	0%
Wood – treated/painted	272	10.2%	820	62%	0	0%	1092	27.4%
Wood – treated/painted – pallets	0	0%	496	37.5%	0	0%	496	12.4%
Wood – untreated	0	0%	0	0%	0	0%	0	0%
Wood – untreated – pallets	0	0%	0	0%	0	0%	0	0%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	699	26.2%	0	0%	0	0%	699	17.5%
<b>Total</b>	<b>2665</b>	<b>100%</b>	<b>1323</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>3988</b>	<b>100%</b>

**Table AF129: Composition of mixed C&I loads from wholesale trade, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	6.1%	3.6%	0%	0%	0%	1.7%	0%	0%	0%	0%	4.2%
Cardboard dry – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – computers and peripherals	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Electrical – other	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	26%	0%	0%	0%	0%	0%	0%	0%	0%	17.8%
Food organics – unpackaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garbage bags	0.5%	1.6%	0%	0%	0%	49.8%	0%	0%	0%	0%	3.5%
Garden organics	0%	0%	0%	0%	0%	11.6%	0%	0%	0%	0%	0.5%
Glass – non-packaging	0%	0%	0%	0%	0%	2.1%	0%	0%	0%	0%	0.1%
Glass – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – concrete/bricks	11.3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	3.7%
Masonry materials – other	39.9%	0.4%	0%	0%	0%	0%	0%	0%	0%	0%	11%
Metal (ferrous) – packaging	0%	0.1%	0%	0%	0%	0.4%	0%	0%	0%	0%	0.1%
Metal (ferrous) – non-packaging (low density)	0%	0.8%	0%	0%	0%	23.3%	0%	0%	0%	0%	1.6%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0.6%	0%	0%	0%	0.5%	0%	0%	0%	0%	0.4%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0.1%	0%	0%	0%	0.4%	0%	0%	0%	0%	0.1%
Paper – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – packaging	0%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Plastic – EPS foam	0.3%	1.1%	0%	0%	0%	0.3%	0%	0%	0%	0%	0.9%
Plastic – film packaging	0.6%	7.7%	0%	0%	0%	1.6%	0%	0%	0%	0%	5.5%
Plastic – other	7.2%	2.7%	0%	0%	0%	4.3%	0%	0%	0%	0%	4%
Plastic – rigid packaging	0%	0.1%	0%	0%	0%	0.2%	0%	0%	0%	0%	0.1%
Rubber	0%	1.2%	0%	0%	0%	0%	0%	0%	0%	0%	0.8%
Textiles and leather	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – carpet and underlay	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – treated/painted	16.9%	25.5%	0%	0%	0%	3.7%	0%	0%	0%	0%	22.2%
Wood – treated/painted – pallets	0%	17.1%	0%	0%	0%	0%	0%	0%	0%	0%	11.7%
Wood – untreated	3.9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1.1%
Wood – untreated – pallets	13.1%	3.7%	0%	0%	0%	0%	0%	0%	0%	0%	6.1%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0%	6.4%	0%	0%	0%	0%	0%	0%	0%	0%	4.4%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>

**Table AF130: Composition of single-material C&I loads from wholesale trade, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0%	0%	0%	1.8%	0%	0%	0%	0%	0%	0%	0.1%
Cardboard dry – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – computers and peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	31.9%
Food organics – unpackaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garbage bags	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garden organics	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Glass – non-packaging	0%	0%	0%	2.2%	0%	0%	0%	0%	0%	0%	0.1%
Glass – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – concrete/bricks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – other	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Plastic – EPS foam	0%	0%	0%	0.2%	0%	0%	0%	0%	0%	0%	0%
Plastic – film packaging	0%	0%	0%	0.2%	0%	0%	0%	0%	0%	0%	0%
Plastic – other	0%	0%	0%	1.4%	0%	0%	0.2%	0%	0%	0%	0.2%
Plastic – rigid packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rubber	0%	0%	0%	0%	0%	0%	0.1%	0%	0%	0%	0%
Textiles and leather	0%	0%	0%	0%	0%	0%	0.2%	0%	0%	0%	0.1%
Textiles – carpet and underlay	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – treated/painted	0%	0%	0%	94.2%	0%	0%	62%	0%	0%	0%	35.7%
Wood – treated/painted – pallets	0%	0%	0%	0%	0%	0%	37.5%	0%	0%	0%	18.4%
Wood – untreated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	99.6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13.3%
<b>Total</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>

## Industry sector: Transport, postal and warehousing

Table AF131: Composition of overall C&amp;I waste from transport/postal/warehousing, garbage bags separate, showing all regions

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	2634	9.6%	177	1.4%	0	0%	2811	7%
Electrical	281	1%	4	0%	0	0%	285	0.7%
Food	407	1.5%	0	0%	0	0%	407	1%
Garbage bags	1084	3.9%	108	0.8%	0	0%	1192	3%
Garden organics	98	0.4%	257	2%	0	0%	355	0.9%
Glass	160	0.6%	27	0.2%	0	0%	187	0.5%
Masonry	1354	4.9%	7106	55.3%	0	0%	8461	20.9%
Metals	800	2.9%	300	2.3%	0	0%	1100	2.7%
Paper	575	2.1%	377	2.9%	0	0%	952	2.4%
Plastic	3286	11.9%	646	5%	0	0%	3932	9.7%
Rubber	31	0.1%	307	2.4%	0	0%	338	0.8%
Textiles	433	1.6%	262	2%	0	0%	695	1.7%
Wood	11,171	40.5%	1141	8.9%	0	0%	12,312	30.5%
Other	5241	19%	2128	16.6%	0	0%	7369	18.2%
<b>Total</b>	<b>27,554</b>	<b>100%</b>	<b>12,841</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>40,395</b>	<b>100%</b>

**Table AF132: Composition of overall C&I waste from transport/postal/warehousing, garbage bags distributed, showing all regions**

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	2702	9.8%	182	1.4%	0	0%	2884	7.1%
Electrical	284	1%	5	0%	0	0%	290	0.7%
Food	690	2.5%	34	0.3%	0	0%	724	1.8%
Garden organics	132	0.5%	259	2%	0	0%	392	1%
Glass	196	0.7%	31	0.2%	0	0%	227	0.6%
Masonry	1363	4.9%	7107	55.3%	0	0%	8470	21%
Metals	841	3.1%	302	2.3%	0	0%	1142	2.8%
Paper	798	2.9%	401	3.1%	0	0%	1199	3%
Plastic	3499	12.7%	666	5.2%	0	0%	4165	10.3%
Rubber	41	0.1%	308	2.4%	0	0%	350	0.9%
Textiles	470	1.7%	265	2.1%	0	0%	735	1.8%
Wood	11,182	40.6%	1141	8.9%	0	0%	12,323	30.5%
Other	5355	19.4%	2140	16.7%	0	0%	7495	18.6%
<b>Total</b>	<b>27,554</b>	<b>100%</b>	<b>12,841</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>40,395</b>	<b>100%</b>

**Table AF133: Composition of mixed C&I loads from transport/postal/warehousing, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	1874	9.7%	14	0.1%	0	0%	1888	5.9%
Cardboard dry – compacted	391	2%	163	1.3%	0	0%	555	1.7%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – compacted	49	0.3%	0	0%	0	0%	49	0.2%
Electrical – computers and peripherals	204	1.1%	0	0%	0	0%	204	0.6%
Electrical – other	56	0.3%	4	0%	0	0%	60	0.2%
Electrical – TVs	21	0.1%	0	0%	0	0%	21	0.1%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	179	0.9%	0	0%	0	0%	179	0.6%
Food organics – unpackaged	86	0.4%	0	0%	0	0%	86	0.3%
Garbage bags	1022	5.3%	108	0.8%	0	0%	1130	3.5%
Garden organics	98	0.5%	257	2%	0	0%	355	1.1%
Glass – non-packaging	107	0.6%	5	0%	0	0%	112	0.3%
Glass – packaging	54	0.3%	22	0.2%	0	0%	75	0.2%
Masonry materials – concrete/bricks	1110	5.7%	6599	51.4%	0	0%	7709	23.9%
Masonry materials – other	39	0.2%	507	3.9%	0	0%	546	1.7%
Metal (ferrous) – packaging	110	0.6%	37	0.3%	0	0%	147	0.5%
Metal (ferrous) – non-packaging (low density)	385	2%	171	1.3%	0	0%	556	1.7%
Metal (ferrous) – non-packaging (high density)	58	0.3%	0	0%	0	0%	58	0.2%
Metal (non-ferrous) – packaging	21	0.1%	49	0.4%	0	0%	69	0.2%
Metal (non-ferrous) – non-packaging (low density)	226	1.2%	43	0.3%	0	0%	270	0.8%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	342	1.8%	18	0.1%	0	0%	360	1.1%
Paper – other	19	0.1%	66	0.5%	0	0%	85	0.3%
Paper – packaging	210	1.1%	293	2.3%	0	0%	504	1.6%
Plastic – EPS foam	121	0.6%	5	0%	0	0%	126	0.4%
Plastic – film packaging	335	1.7%	333	2.6%	0	0%	669	2.1%
Plastic – other	2607	13.4%	201	1.6%	0	0%	2808	8.7%
Plastic – rigid packaging	129	0.7%	107	0.8%	0	0%	236	0.7%
Rubber	31	0.2%	307	2.4%	0	0%	338	1%
Textiles and leather	132	0.7%	102	0.8%	0	0%	234	0.7%
Textiles – carpet and underlay	0	0%	133	1%	0	0%	133	0.4%
Textiles – mattresses	30	0.2%	28	0.2%	0	0%	58	0.2%
Textiles – covered furniture	271	1.4%	0	0%	0	0%	271	0.8%
Wood – treated/painted	4178	21.5%	858	6.7%	0	0%	5036	15.6%
Wood – treated/painted – pallets	798	4.1%	25	0.2%	0	0%	823	2.6%
Wood – untreated	31	0.2%	165	1.3%	0	0%	196	0.6%
Wood – untreated – pallets	168	0.9%	92	0.7%	0	0%	260	0.8%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	3904	20.1%	2128	16.6%	0	0%	6032	18.7%
<b>Total</b>	<b>19,395</b>	<b>100%</b>	<b>12,841</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>32,236</b>	<b>100%</b>

**Table AF134: Composition of single-material C&I loads from transport/postal/warehousing, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	306	3.8%	0	0%	0	0%	306	3.8%
Cardboard dry – compacted	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – loose	14	0.2%	0	0%	0	0%	14	0.2%
Cardboard – wet strength/waxed – compacted	0	0%	0	0%	0	0%	0	0%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	0	0%	0	0%	0	0%	0	0%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	0	0%	0	0%	0	0%	0	0%
Food organics – unpackaged	141	1.7%	0	0%	0	0%	141	1.7%
Garbage bags	62	0.8%	0	0%	0	0%	62	0.8%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass – non-packaging	0	0%	0	0%	0	0%	0	0%
Glass – packaging	0	0%	0	0%	0	0%	0	0%
Masonry materials – concrete/bricks	0	0%	0	0%	0	0%	0	0%
Masonry materials – other	205	2.5%	0	0%	0	0%	205	2.5%
Metal (ferrous) – packaging	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	0	0%	0	0%	0	0%	0	0%
Paper – other	4	0%	0	0%	0	0%	4	0%
Paper – packaging	0	0%	0	0%	0	0%	0	0%
Plastic – EPS foam	6	0.1%	0	0%	0	0%	6	0.1%
Plastic – film packaging	13	0.2%	0	0%	0	0%	13	0.2%
Plastic – other	75	0.9%	0	0%	0	0%	75	0.9%
Plastic – rigid packaging	0	0%	0	0%	0	0%	0	0%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles and leather	0	0%	0	0%	0	0%	0	0%
Textiles – carpet and underlay	0	0%	0	0%	0	0%	0	0%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	0	0%	0	0%	0	0%	0	0%
Wood – treated/painted	3653	44.8%	0	0%	0	0%	3653	44.8%
Wood – treated/painted – pallets	2341	28.7%	0	0%	0	0%	2341	28.7%
Wood – untreated	3	0%	0	0%	0	0%	3	0%
Wood – untreated – pallets	0	0%	0	0%	0	0%	0	0%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	1337	16.4%	0	0%	0	0%	1337	16.4%
<b>Total</b>	<b>8159</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>8159</b>	<b>100%</b>

**Table AF135: Composition of mixed C&I loads from transport/postal/warehousing, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	8%	11.2%	0%	2.2%	0%	0%	0.1%	0%	0%	0%	4.3%
Cardboard dry – compacted	0%	3.4%	0%	0%	0%	0%	0.3%	0%	5.3%	0%	1.6%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – compacted	0%	0.4%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Electrical – computers and peripherals	1.4%	0%	0%	5.7%	0%	0%	0%	0%	0%	0%	0.5%
Electrical – other	0.4%	0.1%	0%	1.1%	0%	0%	0%	0%	0%	0%	0.1%
Electrical – TVs	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	2.7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.4%
Food organics – unpackaged	0%	0.7%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%
Garbage bags	4%	3.6%	0%	16.7%	0%	0%	0.3%	0%	3.3%	0%	2.8%
Garden organics	0.5%	0.6%	0%	0%	0%	0%	1.5%	0%	4.2%	0%	1.3%
Glass – non-packaging	1.4%	0%	0%	0.4%	0%	0%	0.1%	0%	0%	0%	0.3%
Glass – packaging	0.6%	0.1%	0%	0.2%	0%	0%	0.2%	0%	0%	0%	0.2%
Masonry materials – concrete/bricks	0%	8.4%	0%	6.9%	0%	0%	61.9%	0%	19.2%	0%	31.5%
Masonry materials – other	7.1%	0%	0%	0%	0%	0%	0.3%	0%	10%	0%	2.3%
Metal (ferrous) – packaging	0%	0.9%	0%	0%	0%	0%	0.4%	0%	0%	0%	0.4%
Metal (ferrous) – non-packaging (low density)	2.3%	1.6%	0%	2.6%	0%	0%	0%	0%	6.7%	0%	1.6%
Metal (ferrous) – non-packaging (high density)	0%	0.5%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Metal (non-ferrous) – packaging	0.1%	0.1%	0%	0.2%	0%	0%	0.4%	0%	0.2%	0%	0.3%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	3.4%	0%	0%	0%	0%	0%	0.2%	0%	1.1%	0%	0.7%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	4.8%	0%	0%	1%	0%	0%	0%	0%	0.7%	0%	0.8%
Paper – other	0.2%	0%	0%	0.2%	0%	0%	0.1%	0%	2.1%	0%	0.3%
Paper – packaging	0.1%	1.7%	0%	0%	0%	0%	0.1%	0%	11.4%	0%	1.8%
Plastic – EPS foam	0.1%	0.9%	0%	0.5%	0%	0%	0%	0%	0.2%	0%	0.3%
Plastic – film packaging	0.7%	2.4%	0%	0.6%	0%	0%	1.5%	0%	7.4%	0%	2.2%
Plastic – other	14.7%	9.9%	0%	25.5%	0%	0%	1.3%	0%	2.2%	0%	6.7%
Plastic – rigid packaging	0.1%	0.9%	0%	0.6%	0%	0%	0.5%	0%	2.5%	0%	0.8%
Rubber	0%	0.3%	0%	0%	0%	0%	0.4%	0%	10.5%	0%	1.4%
Textiles and leather	0.9%	0.6%	0%	0.1%	0%	0%	0.8%	0%	0.7%	0%	0.7%
Textiles – carpet and underlay	0%	0%	0%	0%	0%	0%	0.2%	0%	4.4%	0%	0.6%
Textiles – mattresses	0.4%	0%	0%	0.1%	0%	0%	0%	0%	1.1%	0%	0.2%
Textiles – covered furniture	3.2%	0.5%	0%	0%	0%	0%	0%	0%	0%	0%	0.6%
Wood – treated/painted	22.1%	21.3%	0%	24.5%	0%	0%	5.6%	0%	6.9%	0%	13.2%
Wood – treated/painted – pallets	0.4%	6.6%	0%	0%	0%	0%	0.3%	0%	0%	0%	1.9%
Wood – untreated	2.1%	0.3%	0%	0%	0%	0%	1%	0%	0%	0%	0.8%
Wood – untreated – pallets	2%	0.3%	0%	0%	0%	0%	0.9%	0%	0%	0%	0.8%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	15.7%	22.7%	0%	10.9%	0%	0%	21.6%	0%	0%	0%	18.1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>

**Table AF136: Composition of single-material C&I loads from transport/postal/warehousing, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	2.4%	3.9%	0%	0%	0%	0%	0%	0%	0%	0%	3.8%
Cardboard dry – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – loose	1.9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%
Cardboard – wet strength/waxed – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – computers and peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	19.5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1.7%
Garbage bags	0%	0.8%	0%	0%	0%	0%	0%	0%	0%	0%	0.8%
Garden organics	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Glass – non-packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Glass – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – concrete/bricks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – other	0%	2.8%	0%	0%	0%	0%	0%	0%	0%	0%	2.5%
Metal (ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – other	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Plastic – EPS foam	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Plastic – film packaging	0.3%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%
Plastic – other	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0.9%
Plastic – rigid packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rubber	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles and leather	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – carpet and underlay	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – treated/painted	0%	49.1%	0%	0%	0%	0%	0%	0%	0%	0%	44.8%
Wood – treated/painted – pallets	75.9%	24.1%	0%	0%	0%	0%	0%	0%	0%	0%	28.7%
Wood – untreated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0%	18%	0%	0%	0%	0%	0%	0%	0%	0%	16.4%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>							

## Industry sector: Education and training

Table AF137: Composition of overall C&amp;I waste from education/training, garbage bags separate, showing all regions

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	3362	5.2%	544	3.4%	0	0%	3906	4.9%
Electrical	208	0.3%	8	0%	0	0%	216	0.3%
Food	1152	1.8%	260	1.6%	0	0%	1413	1.8%
Garbage bags	36,667	57.2%	10,461	64.5%	0	0%	47,129	58.7%
Garden organics	3673	5.7%	1252	7.7%	0	0%	4925	6.1%
Glass	132	0.2%	73	0.5%	0	0%	205	0.3%
Masonry	2777	4.3%	799	4.9%	0	0%	3576	4.5%
Metals	1525	2.4%	126	0.8%	0	0%	1651	2.1%
Paper	3148	4.9%	484	3%	0	0%	3631	4.5%
Plastic	3995	6.2%	1101	6.8%	0	0%	5096	6.3%
Rubber	83	0.1%	201	1.2%	0	0%	284	0.4%
Textiles	1337	2.1%	646	4%	0	0%	1983	2.5%
Wood	5150	8%	257	1.6%	0	0%	5407	6.7%
Other	854	1.3%	0	0%	0	0%	854	1.1%
<b>Total</b>	<b>64,063</b>	<b>100%</b>	<b>16,212</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>80,275</b>	<b>100%</b>

**Table AF138: Composition of overall C&I waste from education/training, garbage bags distributed, showing all regions**

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	5675	8.9%	1067	6.6%	0	0%	6741	8.4%
Electrical	413	0.6%	65	0.4%	0	0%	478	0.6%
Food	9428	14.7%	3951	24.4%	0	0%	13,379	16.7%
Garden organics	5602	8.7%	1531	9.4%	0	0%	7132	8.9%
Glass	934	1.5%	458	2.8%	0	0%	1392	1.7%
Masonry	3333	5.2%	834	5.1%	0	0%	4167	5.2%
Metals	2728	4.3%	356	2.2%	0	0%	3083	3.8%
Paper	12,805	20%	2671	16.5%	0	0%	15,476	19.3%
Plastic	11,559	18%	3064	18.9%	0	0%	14,623	18.2%
Rubber	337	0.5%	329	2%	0	0%	666	0.8%
Textiles	2530	3.9%	889	5.5%	0	0%	3420	4.3%
Wood	5458	8.5%	285	1.8%	0	0%	5742	7.2%
Other	3261	5.1%	714	4.4%	0	0%	3975	5%
<b>Total</b>	<b>64,063</b>	<b>100%</b>	<b>16,212</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>80,275</b>	<b>100%</b>

**Table AF139: Composition of mixed C&I loads from education/training, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	551	0.9%	188	1.5%	0	0%	739	1%
Cardboard dry – compacted	1364	2.2%	229	1.8%	0	0%	1594	2.1%
Cardboard – wet strength/waxed – loose	153	0.2%	11	0.1%	0	0%	164	0.2%
Cardboard – wet strength/waxed – compacted	1263	2%	71	0.6%	0	0%	1334	1.8%
Electrical – computers and peripherals	23	0%	0	0%	0	0%	23	0%
Electrical – other	169	0.3%	2	0%	0	0%	171	0.2%
Electrical – TVs	15	0%	0	0%	0	0%	15	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	123	0.2%	25	0.2%	0	0%	148	0.2%
Food organics – unpackaged	1030	1.6%	235	1.8%	0	0%	1264	1.7%
Garbage bags	35,464	56.8%	7233	56.8%	0	0%	42,697	56.8%
Garden organics	3673	5.9%	1167	9.2%	0	0%	4840	6.4%
Glass – non-packaging	50	0.1%	8	0.1%	0	0%	58	0.1%
Glass – packaging	82	0.1%	64	0.5%	0	0%	146	0.2%
Masonry materials – concrete/bricks	1137	1.8%	318	2.5%	0	0%	1455	1.9%
Masonry materials – other	1640	2.6%	481	3.8%	0	0%	2122	2.8%
Metal (ferrous) – packaging	284	0.5%	24	0.2%	0	0%	308	0.4%
Metal (ferrous) – non-packaging (low density)	1085	1.7%	31	0.2%	0	0%	1117	1.5%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	91	0.1%	41	0.3%	0	0%	133	0.2%
Metal (non-ferrous) – non-packaging (low density)	64	0.1%	18	0.1%	0	0%	82	0.1%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	814	1.3%	188	1.5%	0	0%	1002	1.3%
Paper – other	802	1.3%	108	0.8%	0	0%	910	1.2%
Paper – packaging	1531	2.5%	160	1.3%	0	0%	1691	2.2%
Plastic – EPS foam	124	0.2%	19	0.1%	0	0%	143	0.2%
Plastic – film packaging	2170	3.5%	355	2.8%	0	0%	2525	3.4%
Plastic – other	1507	2.4%	588	4.6%	0	0%	2094	2.8%
Plastic – rigid packaging	187	0.3%	71	0.6%	0	0%	258	0.3%
Rubber	83	0.1%	201	1.6%	0	0%	284	0.4%
Textiles and leather	424	0.7%	232	1.8%	0	0%	656	0.9%
Textiles – carpet and underlay	607	1%	370	2.9%	0	0%	978	1.3%
Textiles – mattresses	6	0%	0	0%	0	0%	6	0%
Textiles – covered furniture	299	0.5%	40	0.3%	0	0%	339	0.5%
Wood – treated/painted	4272	6.8%	233	1.8%	0	0%	4506	6%
Wood – treated/painted – pallets	15	0%	0	0%	0	0%	15	0%
Wood – untreated	369	0.6%	23	0.2%	0	0%	392	0.5%
Wood – untreated – pallets	154	0.2%	0	0%	0	0%	154	0.2%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	854	1.4%	0	0%	0	0%	854	1.1%
<b>Total</b>	<b>62,483</b>	<b>100%</b>	<b>12,735</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>75,218</b>	<b>100%</b>

**Table AF140: Composition of single-material C&I loads from education/training, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	1	0.1%	22	0.6%	0	0%	24	0.5%
Cardboard dry – compacted	0	0%	12	0.4%	0	0%	12	0.2%
Cardboard – wet strength/waxed – loose	0	0%	7	0.2%	0	0%	7	0.1%
Cardboard – wet strength/waxed – compacted	29	1.8%	3	0.1%	0	0%	32	0.6%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	0	0%	3	0.1%	0	0%	3	0.1%
Electrical – TVs	0	0%	3	0.1%	0	0%	3	0.1%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	0	0%	0	0%	0	0%	0	0%
Food organics – unpackaged	0	0%	1	0%	0	0%	1	0%
Garbage bags	1203	76.2%	3228	92.8%	0	0%	4432	87.6%
Garden organics	0	0%	85	2.4%	0	0%	85	1.7%
Glass – non-packaging	0	0%	0	0%	0	0%	0	0%
Glass – packaging	0	0%	1	0%	0	0%	1	0%
Masonry materials – concrete/bricks	0	0%	0	0%	0	0%	0	0%
Masonry materials – other	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – packaging	0	0%	4	0.1%	0	0%	4	0.1%
Metal (ferrous) – non-packaging (low density)	0	0%	2	0.1%	0	0%	2	0%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	0	0%	5	0.1%	0	0%	5	0.1%
Metal (non-ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	0	0%	24	0.7%	0	0%	24	0.5%
Paper – other	0	0%	0	0%	0	0%	0	0%
Paper – packaging	0	0%	4	0.1%	0	0%	4	0.1%
Plastic – EPS foam	0	0%	3	0.1%	0	0%	3	0.1%
Plastic – film packaging	4	0.3%	40	1.1%	0	0%	44	0.9%
Plastic – other	0	0%	17	0.5%	0	0%	17	0.3%
Plastic – rigid packaging	3	0.2%	8	0.2%	0	0%	11	0.2%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles and leather	0	0%	4	0.1%	0	0%	4	0.1%
Textiles – carpet and underlay	0	0%	0	0%	0	0%	0	0%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	0	0%	0	0%	0	0%	0	0%
Wood – treated/painted	339	21.4%	1	0%	0	0%	340	6.7%
Wood – treated/painted – pallets	0	0%	0	0%	0	0%	0	0%
Wood – untreated	0	0%	0	0%	0	0%	0	0%
Wood – untreated – pallets	0	0%	0	0%	0	0%	0	0%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	0	0%	0	0%	0	0%	0	0%
<b>Total</b>	<b>1580</b>	<b>100%</b>	<b>3477</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>5058</b>	<b>100%</b>

**Table AF141: Composition of mixed C&I loads from education/training, garbage bags separate, by regional grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	1.7%	0.3%	0%	2.1%	0%	0.2%	1.4%	0%	3.4%	0%	1.1%
Cardboard dry – compacted	0.8%	3.4%	1.7%	0%	0%	1.3%	1%	0%	6.8%	3.7%	2.1%
Cardboard – wet strength/waxed – loose	0.4%	0.2%	0%	0.6%	0%	0%	0.1%	0%	0%	0%	0.2%
Cardboard – wet strength/waxed – compacted	0%	3%	2.2%	3.2%	0%	1.3%	0.5%	0%	0%	5.4%	1.6%
Electrical – computers and peripherals	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	2.7%	0.2%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.3%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0.4%	0%	0%	0%	0%	0.3%	0%	0%	0%	0.2%
Food organics – unpackaged	1.4%	1.8%	0%	6.4%	0%	0%	2.1%	0%	2.2%	0%	1.7%
Garbage bags	55.7%	59.1%	75.7%	40.8%	0%	74.6%	51.2%	0%	67.8%	48.2%	56.8%
Garden organics	9%	4%	3.8%	0.9%	0%	3.3%	11.9%	0%	0.5%	5.8%	6.8%
Glass – non-packaging	0.1%	0.1%	0%	0%	0%	0%	0.1%	0%	0%	0%	0.1%
Glass – packaging	0%	0.3%	0%	0%	0%	1.4%	0.4%	0%	0%	0%	0.2%
Masonry materials – concrete/bricks	0.3%	3.3%	0%	4.6%	0%	0%	2.2%	0%	7%	0%	2%
Masonry materials – other	4.8%	1.6%	0%	2%	0%	2.4%	4.8%	0%	0%	0%	3%
Metal (ferrous) – packaging	0.3%	0.6%	0.5%	0.1%	0%	0.7%	0.1%	0%	0%	0.9%	0.4%
Metal (ferrous) – non-packaging (low density)	1.4%	0.2%	0%	20.7%	0%	0.3%	0.2%	0%	0.7%	0.5%	1.3%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0.2%	0.3%	0.4%	0%	0.5%	0.3%	0%	0%	0.2%	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0.2%	0%	0%	0%	0.2%	0.1%	0%	0.2%	0%	0.1%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	1.7%	0.9%	1%	0.3%	0%	1.1%	1.6%	0%	1%	2.4%	1.4%
Paper – other	1.2%	1.2%	2.9%	0.7%	0%	0%	1.1%	0%	0.5%	1.8%	1.2%
Paper – packaging	0.9%	4.1%	1%	1.1%	0%	1.4%	1.3%	0%	0.7%	2.4%	2.1%
Plastic – EPS foam	0.1%	0.2%	0.6%	0.1%	0%	0.4%	0.1%	0%	0%	0.7%	0.2%
Plastic – film packaging	2.3%	3.9%	4%	0%	0%	2.4%	3.4%	0%	0%	8.6%	3.3%
Plastic – other	1.2%	2.1%	3.9%	1.1%	0%	2.7%	5.1%	0%	4.2%	10.3%	3%
Plastic – rigid packaging	0.3%	0.3%	0.8%	0.2%	0%	0.4%	0.4%	0%	1.5%	0.2%	0.4%
Rubber	0%	0.1%	0%	1.9%	0%	0.6%	1.8%	0%	1.6%	0%	0.5%
Textiles and leather	0.4%	0.7%	1.6%	0%	0%	2%	2.1%	0%	0%	1.9%	1%
Textiles – carpet and underlay	1.9%	0.5%	0%	0.5%	0%	0%	4%	0%	0%	0%	1.5%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	0.5%	0.4%	0%	1.6%	0%	1.4%	0%	0%	0.9%	0%	0.4%
Wood – treated/painted	11.8%	3.7%	0%	10.7%	0%	1.2%	2.1%	0%	0.8%	2%	5.4%
Wood – treated/painted – pallets	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated	0.9%	0.2%	0%	0%	0%	0%	0.2%	0%	0%	1.9%	0.5%
Wood – untreated – pallets	0.1%	0.4%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0.5%	2.7%	0%	0%	0%	0%	0%	0%	0%	0%	1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Table AF142: Composition of single-material C&I loads from education/training, garbage bags separate, by regional grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0.4%	0%	0%	0%	0%	0%	0.4%	0%	0.9%	0%	0.5%
Cardboard dry – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0.7%	0%	0.3%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0.4%	0%	0.2%
Cardboard – wet strength/waxed – compacted	0%	2.5%	0%	0%	0%	0%	0%	0%	0.2%	0%	0.4%
Electrical – computers and peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0%	0%	0%	0%	0%	0%	0%	0.2%	0%	0.1%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0.2%	0%	0.1%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garbage bags	0%	96.9%	0%	0%	100%	0%	93.4%	0%	92.4%	0%	89.7%
Garden organics	0%	0%	0%	0%	0%	0%	4%	0%	1.1%	0%	2%
Glass – non-packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Glass – packaging	0%	0%	0%	0%	0%	0%	0.1%	0%	0%	0%	0%
Masonry materials – concrete/bricks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0.2%	0%	0.1%
Metal (ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0.1%	0%	0%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0%	0%	0%	0%	0%	0.3%	0%	0%	0%	0.1%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0%	0%	0%	0%	0%	0.4%	0%	1%	0%	0.6%
Paper – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – packaging	0%	0%	0%	0%	0%	0%	0.3%	0%	0%	0%	0.1%
Plastic – EPS foam	0%	0%	0%	0%	0%	0%	0.1%	0%	0.1%	0%	0.1%
Plastic – film packaging	0.1%	0.3%	0%	0%	0%	0%	0.4%	0%	1.8%	0%	1%
Plastic – other	0%	0%	0%	0%	0%	0%	0.4%	0%	0.5%	0%	0.4%
Plastic – rigid packaging	0%	0.3%	0%	0%	0%	0%	0.1%	0%	0.4%	0%	0.2%
Rubber	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles and leather	0%	0%	0%	0%	0%	0%	0%	0%	0.2%	0%	0.1%
Textiles – carpet and underlay	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – treated/painted	99.4%	0%	0%	0%	0%	0%	0.1%	0%	0%	0%	4.1%
Wood – treated/painted – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>

## Industry sector: Arts and recreation services

Table AF143: Composition of overall C&amp;I waste from arts/recreation, garbage bags separate, showing all regions

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	355	1.8%	138	0.5%	233	12.9%	725	1.5%
Electrical	14	0.1%	5	0%	28	1.5%	47	0.1%
Food	0	0%	42	0.2%	0	0%	42	0.1%
Garbage bags	1619	8.1%	130	0.5%	1003	55.6%	2752	5.7%
Garden organics	5245	26.1%	90	0.3%	3	0.2%	5338	11.1%
Glass	219	1.1%	15	0.1%	0	0%	234	0.5%
Masonry	3296	16.4%	25,162	95.5%	0	0%	28,458	59%
Metals	415	2.1%	207	0.8%	5	0.3%	626	1.3%
Paper	170	0.8%	0	0%	33	1.8%	203	0.4%
Plastic	834	4.2%	146	0.6%	47	2.6%	1027	2.1%
Rubber	311	1.5%	62	0.2%	0	0%	373	0.8%
Textiles	869	4.3%	48	0.2%	137	7.6%	1055	2.2%
Wood	3755	18.7%	229	0.9%	312	17.3%	4296	8.9%
Other	2974	14.8%	80	0.3%	5	0.3%	3059	6.3%
<b>Total</b>	<b>20,077</b>	<b>100%</b>	<b>26,354</b>	<b>100%</b>	<b>1805</b>	<b>100%</b>	<b>48,236</b>	<b>100%</b>

**Table AF144: Composition of overall C&I waste from arts/recreation, garbage bags distributed, showing all regions**

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	441	2.2%	144	0.5%	274	15.2%	860	1.8%
Electrical	27	0.1%	6	0%	29	1.6%	62	0.1%
Food	346	1.7%	91	0.3%	327	18.1%	764	1.6%
Garden organics	5270	26.2%	95	0.4%	6	0.3%	5371	11.1%
Glass	247	1.2%	19	0.1%	45	2.5%	312	0.6%
Masonry	3303	16.5%	25,162	95.5%	6	0.4%	28,472	59%
Metals	474	2.4%	210	0.8%	31	1.7%	716	1.5%
Paper	611	3%	27	0.1%	255	14.1%	893	1.9%
Plastic	1163	5.8%	170	0.6%	261	14.5%	1595	3.3%
Rubber	318	1.6%	63	0.2%	5	0.3%	386	0.8%
Textiles	995	5%	51	0.2%	175	9.7%	1221	2.5%
Wood	3768	18.8%	229	0.9%	312	17.3%	4310	8.9%
Other	3112	15.5%	85	0.3%	77	4.3%	3274	6.8%
<b>Total</b>	<b>20,077</b>	<b>100%</b>	<b>26,354</b>	<b>100%</b>	<b>1805</b>	<b>100%</b>	<b>48,236</b>	<b>100%</b>

**Table AF145: Composition of mixed C&I loads from arts/recreation, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	341	2%	71	2.7%	169	9.3%	580	2.7%
Cardboard dry – compacted	14	0.1%	67	2.6%	0	0%	80	0.4%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	64	3.6%	64	0.3%
Cardboard – wet strength/waxed – compacted	0	0%	0	0%	0	0%	0	0%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	0	0%	5	0.2%	13	0.7%	19	0.1%
Electrical – TVs	14	0.1%	0	0%	15	0.8%	28	0.1%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	0	0%	0	0%	0	0%	0	0%
Food organics – unpackaged	0	0%	0	0%	0	0%	0	0%
Garbage bags	1619	9.3%	53	2.1%	1003	55.6%	2676	12.3%
Garden organics	3200	18.5%	8	0.3%	3	0.2%	3212	14.8%
Glass – non-packaging	219	1.3%	0	0%	0	0%	219	1%
Glass – packaging	0	0%	15	0.6%	0	0%	15	0.1%
Masonry materials – concrete/bricks	3140	18.1%	1309	50.7%	0	0%	4449	20.5%
Masonry materials – other	157	0.9%	358	13.9%	0	0%	515	2.4%
Metal (ferrous) – packaging	17	0.1%	2	0.1%	0	0%	19	0.1%
Metal (ferrous) – non-packaging (low density)	111	0.6%	146	5.7%	0	0%	257	1.2%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	15	0.1%	15	0.6%	0	0%	30	0.1%
Metal (non-ferrous) – non-packaging (low density)	49	0.3%	43	1.7%	5	0.3%	96	0.4%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	222	1.3%	0	0%	0	0%	222	1%
Paper – office	0	0%	0	0%	33	1.8%	33	0.2%
Paper – other	170	1%	0	0%	0	0%	170	0.8%
Paper – packaging	0	0%	0	0%	0	0%	0	0%
Plastic – EPS foam	8	0%	3	0.1%	0	0%	11	0.1%
Plastic – film packaging	342	2%	34	1.3%	0	0%	376	1.7%
Plastic – other	470	2.7%	63	2.4%	38	2.1%	571	2.6%
Plastic – rigid packaging	14	0.1%	4	0.1%	8	0.5%	26	0.1%
Rubber	311	1.8%	62	2.4%	0	0%	373	1.7%
Textiles and leather	51	0.3%	0	0%	10	0.5%	60	0.3%
Textiles – carpet and underlay	198	1.1%	48	1.9%	0	0%	246	1.1%
Textiles – mattresses	15	0.1%	0	0%	0	0%	15	0.1%
Textiles – covered furniture	606	3.5%	0	0%	128	7.1%	734	3.4%
Wood – treated/painted	2408	13.9%	114	4.4%	303	16.8%	2824	13%
Wood – treated/painted – pallets	273	1.6%	0	0%	9	0.5%	283	1.3%
Wood – untreated	577	3.3%	75	2.9%	0	0%	651	3%
Wood – untreated – pallets	498	2.9%	9	0.4%	0	0%	507	2.3%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	2282	13.2%	80	3.1%	5	0.3%	2367	10.9%
<b>Total</b>	<b>17,340</b>	<b>100%</b>	<b>2583</b>	<b>100%</b>	<b>1805</b>	<b>100%</b>	<b>21,729</b>	<b>100%</b>

**Table AF146: Composition of single-material C&I loads from arts/recreation, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	0	0%	0	0%	0	0%	0	0%
Cardboard dry – compacted	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – compacted	0	0%	0	0%	0	0%	0	0%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	0	0%	0	0%	0	0%	0	0%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	0	0%	0	0%	0	0%	0	0%
Food organics – unpackaged	0	0%	42	0.2%	0	0%	42	0.2%
Garbage bags	0	0%	77	0.3%	0	0%	77	0.3%
Garden organics	2045	74.7%	82	0.3%	0	0%	2127	8%
Glass – non-packaging	0	0%	0	0%	0	0%	0	0%
Glass – packaging	0	0%	0	0%	0	0%	0	0%
Masonry materials – concrete/bricks	0	0%	23,495	98.8%	0	0%	23,495	88.6%
Masonry materials – other	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – packaging	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – non-packaging (high density)	0	0%	1	0%	0	0%	1	0%
Metal (non-ferrous) – packaging	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	0	0%	0	0%	0	0%	0	0%
Paper – other	0	0%	0	0%	0	0%	0	0%
Paper – packaging	0	0%	0	0%	0	0%	0	0%
Plastic – EPS foam	0	0%	0	0%	0	0%	0	0%
Plastic – film packaging	0	0%	0	0%	0	0%	0	0%
Plastic – other	0	0%	42	0.2%	0	0%	42	0.2%
Plastic – rigid packaging	0	0%	0	0%	0	0%	0	0%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles and leather	0	0%	0	0%	0	0%	0	0%
Textiles – carpet and underlay	0	0%	0	0%	0	0%	0	0%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	0	0%	0	0%	0	0%	0	0%
Wood – treated/painted	0	0%	0	0%	0	0%	0	0%
Wood – treated/painted – pallets	0	0%	0	0%	0	0%	0	0%
Wood – untreated	0	0%	30	0.1%	0	0%	30	0.1%
Wood – untreated – pallets	0	0%	0	0%	0	0%	0	0%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	692	25.3%	0	0%	0	0%	692	2.6%
<b>Total</b>	<b>2737</b>	<b>100%</b>	<b>23,771</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>26,508</b>	<b>100%</b>

**Table AF147: Composition of mixed C&I loads from arts/recreation, garbage bags separate, by regional grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0%	4%	0%	2.2%	0%	4.6%	0%	3.1%	0.2%	0%	2.8%
Cardboard dry – compacted	0%	0.1%	0%	0%	0%	4.4%	0%	0%	0%	0%	0.6%
Cardboard – wet strength/waxed –	0%	0.7%	0%	0%	0%	0%	0%	0%	0%	0%	0.3%
Cardboard – wet strength/waxed –	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – computers & peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0%	0%	0%	0%	0.4%	0%	1.2%	0%	0%	0.1%
Electrical – TVs	0%	0.1%	0%	0%	0%	0%	0%	1.7%	0%	0%	0.1%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garbage bags	0%	20.2%	0%	0%	0%	1.8%	0%	43.7%	2.4%	0%	12.1%
Garden organics	23.4%	14.4%	33.3%	0%	0%	0%	0%	0.4%	0.8%	0%	13.1%
Glass – non-packaging	0%	0.1%	5.1%	0%	0%	0%	0%	0%	0%	0%	0.9%
Glass – packaging	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0.1%
Masonry materials – concrete/bricks	0%	0%	60.7%	33.4%	0%	22.5%	0%	0%	90.6%	0%	23.1%
Masonry materials – other	0%	1.3%	0%	0%	0%	22.8%	0%	0%	1.3%	0%	3.5%
Metal (ferrous) – packaging	3.5%	0%	0%	0%	0%	0%	0%	0%	0.2%	0%	0.1%
Metal (ferrous) – non-packaging (low	15.4%	0.3%	0%	0%	0%	9.4%	0%	0%	0.3%	0%	1.6%
Metal (ferrous) – non-packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0.1%	0.1%	0%	0%	1%	0%	0%	0%	0%	0.2%
Metal (non-ferrous) – non-packaging	0%	0.2%	0%	1.1%	0%	2.8%	0%	0.5%	0%	0%	0.6%
Metal (non-ferrous) – non-packaging	0%	0%	0%	11.3%	0%	0%	0%	0%	0%	0%	0.9%

Disposal-based audit – Main Report

Paper – office	0%	0.1%	0%	0%	0%	0%	0%	2.9%	0%	0%	0.2%
Paper – other	0%	1.4%	0%	0%	0%	0%	0%	0%	0%	0%	0.7%
Paper – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Plastic – EPS foam	0%	0.1%	0%	0%	0%	0.2%	0%	0%	0%	0%	0.1%
Plastic – film packaging	0%	2.8%	0%	0%	0%	2.1%	0%	0%	0.1%	0%	1.7%
Plastic – other	2.9%	3.3%	0%	5.5%	0%	3.5%	0%	0%	0.9%	0%	2.6%
Plastic – rigid packaging	0.2%	0.2%	0%	0%	0%	0.2%	0%	0%	0%	0%	0.1%
Rubber	5.7%	2.4%	0%	0%	0%	3.6%	0%	0%	0.7%	0%	1.8%
Textiles and leather	2.5%	0.3%	0%	0%	0%	0%	0%	1.1%	0%	0%	0.3%
Textiles – carpet and underlay	0%	0%	0%	10.1%	0%	2.8%	0%	0%	0.6%	0%	1.2%
Textiles – mattresses	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Textiles – covered furniture	0%	5%	0%	0%	0%	0%	0%	15.3%	0%	0%	3.1%
Wood – treated/painted	41%	14.1%	0%	30.2%	0%	6.8%	0%	28.9%	1%	0%	12.2%
Wood – treated/painted – pallets	5.4%	2.1%	0%	0%	0%	0%	0%	1.1%	0%	0%	1.2%
Wood – untreated	0%	4.5%	0.7%	0%	0%	4.9%	0%	0%	0%	0%	2.9%
Wood – untreated – pallets	0%	4.1%	0%	0%	0%	0%	0%	0%	0.9%	0%	2.1%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0%	18%	0%	6.4%	0%	5.3%	0%	0.1%	0%	0%	9.9%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>

**Table AF148: Composition of single-material C&I loads from arts/recreation, garbage bags separate, by regional grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard dry – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – computers & peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0.2%
Garbage bags	0%	0%	0%	0%	0%	0.8%	0.3%	0%	0%	0%	0.3%
Garden organics	74.7%	0%	0%	0%	0%	0.9%	0.3%	0%	0%	0%	4.5%
Glass – non-packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Glass – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – concrete/bricks	0%	0%	0%	0%	0%	92.9%	99.2%	0%	0%	0%	93.3%
Masonry materials – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Plastic – EPS foam	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Plastic – film packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Plastic – other	0%	0%	0%	0%	0%	5.4%	0%	0%	0%	0%	0.2%
Plastic – rigid packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rubber	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles and leather	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – carpet and underlay	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – treated/painted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – treated/painted – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated	0%	0%	0%	0%	0%	0%	0.1%	0%	0%	0%	0.1%
Wood – untreated – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	25.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1.4%
<b>Total</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>

## Industry sector: Offices

Table AF149: Composition of overall C&amp;I waste from offices, garbage bags separate, showing all regions

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	739	3.2%	0	0%	0	0%	739	2.8%
Electrical	31	0.1%	0	0%	0	0%	31	0.1%
Food	0	0%	0	0%	0	0%	0	0%
Garbage bags	1903	8.2%	1	0%	0	0%	1904	7.3%
Garden organics	74	0.3%	20	0.7%	0	0%	95	0.4%
Glass	164	0.7%	0	0%	0	0%	164	0.6%
Masonry	9962	42.9%	2607	95.6%	0	0%	12,569	48.5%
Metals	193	0.8%	0	0%	0	0%	193	0.7%
Paper	448	1.9%	0	0%	0	0%	448	1.7%
Plastic	1320	5.7%	0	0%	0	0%	1320	5.1%
Rubber	1	0%	0	0%	0	0%	1	0%
Textiles	3372	14.5%	0	0%	0	0%	3372	13%
Wood	4729	20.4%	2	0.1%	0	0%	4732	18.2%
Other	270	1.2%	95	3.5%	0	0%	366	1.4%
<b>Total</b>	<b>23,206</b>	<b>100%</b>	<b>2726</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>25,932</b>	<b>100%</b>

**Table AF150: Composition of overall C&I waste from offices, garbage bags distributed, showing all regions**

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	834	3.6%	0	0%	0	0%	834	3.2%
Electrical	44	0.2%	0	0%	0	0%	44	0.2%
Food	443	1.9%	0	0%	0	0%	444	1.7%
Garden organics	87	0.4%	20	0.7%	0	0%	107	0.4%
Glass	214	0.9%	0	0%	0	0%	215	0.8%
Masonry	9965	42.9%	2607	95.6%	0	0%	12,572	48.5%
Metals	273	1.2%	0	0%	0	0%	273	1.1%
Paper	915	3.9%	0	0%	0	0%	915	3.5%
Plastic	1710	7.4%	0	0%	0	0%	1710	6.6%
Rubber	16	0.1%	0	0%	0	0%	16	0.1%
Textiles	3505	15.1%	0	0%	0	0%	3505	13.5%
Wood	4745	20.4%	2	0.1%	0	0%	4748	18.3%
Other	455	2%	95	3.5%	0	0%	551	2.1%
<b>Total</b>	<b>23,206</b>	<b>100%</b>	<b>2726</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>25,932</b>	<b>100%</b>

**Table AF151: Composition of mixed C&I loads from offices, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	256	2.3%	0	0%	0	0%	256	2.3%
Cardboard dry – compacted	332	3%	0	0%	0	0%	332	3%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – compacted	0	0%	0	0%	0	0%	0	0%
Electrical – computers and peripherals	11	0.1%	0	0%	0	0%	11	0.1%
Electrical – other	11	0.1%	0	0%	0	0%	11	0.1%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	0	0%	0	0%	0	0%	0	0%
Food organics – unpackaged	0	0%	0	0%	0	0%	0	0%
Garbage bags	1724	15.4%	0	0%	0	0%	1724	15.4%
Garden organics	73	0.7%	0	0%	0	0%	73	0.7%
Glass – non-packaging	103	0.9%	0	0%	0	0%	103	0.9%
Glass – packaging	13	0.1%	0	0%	0	0%	13	0.1%
Masonry materials – concrete/bricks	996	8.9%	0	0%	0	0%	996	8.9%
Masonry materials – other	1231	11%	0	0%	0	0%	1231	11%
Metal (ferrous) – packaging	33	0.3%	0	0%	0	0%	33	0.3%
Metal (ferrous) – non-packaging (low density)	38	0.3%	0	0%	0	0%	38	0.3%
Metal (ferrous) – non-packaging (high density)	20	0.2%	0	0%	0	0%	20	0.2%
Metal (non-ferrous) – packaging	14	0.1%	0	0%	0	0%	14	0.1%
Metal (non-ferrous) – non-packaging (low density)	52	0.5%	0	0%	0	0%	52	0.5%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	13	0.1%	0	0%	0	0%	13	0.1%
Paper – office	91	0.8%	0	0%	0	0%	91	0.8%
Paper – other	54	0.5%	0	0%	0	0%	54	0.5%
Paper – packaging	291	2.6%	0	0%	0	0%	291	2.6%
Plastic – EPS foam	47	0.4%	0	0%	0	0%	47	0.4%
Plastic – film packaging	411	3.7%	0	0%	0	0%	411	3.7%
Plastic – other	663	5.9%	0	0%	0	0%	663	5.9%
Plastic – rigid packaging	20	0.2%	0	0%	0	0%	20	0.2%
Rubber	1	0%	0	0%	0	0%	1	0%
Textiles and leather	546	4.9%	0	0%	0	0%	546	4.9%
Textiles – carpet and underlay	892	8%	0	0%	0	0%	892	8%
Textiles – mattresses	15	0.1%	0	0%	0	0%	15	0.1%
Textiles – covered furniture	186	1.7%	0	0%	0	0%	186	1.7%
Wood – treated/painted	2491	22.3%	0	0%	0	0%	2491	22.3%
Wood – treated/painted – pallets	15	0.1%	0	0%	0	0%	15	0.1%
Wood – untreated	318	2.8%	0	0%	0	0%	318	2.8%
Wood – untreated – pallets	0	0%	0	0%	0	0%	0	0%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	201	1.8%	0	0%	0	0%	201	1.8%
<b>Total</b>	<b>11,164</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>11,164</b>	<b>100%</b>

**Table AF152: Composition of single-material C&I loads from offices, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	Tonnes per year	% by weight						
Cardboard dry – loose	151	1.3%	0	0%	0	0%	151	1%
Cardboard dry – compacted	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – compacted	0	0%	0	0%	0	0%	0	0%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	6	0.1%	0	0%	0	0%	6	0%
Electrical – TVs	3	0%	0	0%	0	0%	3	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	0	0%	0	0%	0	0%	0	0%
Food organics – unpackaged	0	0%	0	0%	0	0%	0	0%
Garbage bags	178	1.5%	1	0%	0	0%	179	1.2%
Garden organics	1	0%	20	0.7%	0	0%	21	0.1%
Glass – non-packaging	48	0.4%	0	0%	0	0%	48	0.3%
Glass – packaging	0	0%	0	0%	0	0%	0	0%
Masonry materials – concrete/bricks	4770	39.6%	2607	95.6%	0	0%	7376	49.9%
Masonry materials – other	2965	24.6%	0	0%	0	0%	2965	20.1%
Metal (ferrous) – packaging	2	0%	0	0%	0	0%	2	0%
Metal (ferrous) – non-packaging (low density)	14	0.1%	0	0%	0	0%	14	0.1%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – non-packaging (low density)	5	0%	0	0%	0	0%	5	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	0	0%	0	0%	0	0%	0	0%
Paper – other	1	0%	0	0%	0	0%	1	0%
Paper – packaging	12	0.1%	0	0%	0	0%	12	0.1%
Plastic – EPS foam	9	0.1%	0	0%	0	0%	9	0.1%
Plastic – film packaging	74	0.6%	0	0%	0	0%	74	0.5%
Plastic – other	93	0.8%	0	0%	0	0%	93	0.6%
Plastic – rigid packaging	0	0%	0	0%	0	0%	0	0%
Rubber	0	0%	0	0%	0	0%	0	0%
Textiles and leather	0	0%	0	0%	0	0%	0	0%
Textiles – carpet and underlay	1704	14.2%	0	0%	0	0%	1704	11.5%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	28	0.2%	0	0%	0	0%	28	0.2%
Wood – treated/painted	1651	13.7%	2	0.1%	0	0%	1653	11.2%
Wood – treated/painted – pallets	0	0%	0	0%	0	0%	0	0%
Wood – untreated	256	2.1%	0	0%	0	0%	256	1.7%
Wood – untreated – pallets	0	0%	0	0%	0	0%	0	0%
Other – batteries	1	0%	0	0%	0	0%	1	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	69	0.6%	95	3.5%	0	0%	164	1.1%
<b>Total</b>	<b>12,042</b>	<b>100%</b>	<b>2726</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>14,768</b>	<b>100%</b>

**Table AF153: Composition of mixed C&I loads from offices, garbage bags separate, by regional grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	2.5%	1.7%	0%	4.1%	0%	0%	0%	0%	0%	0%	2.3%
Cardboard dry – compacted	0%	6.5%	0%	0%	0%	0%	0%	0%	0%	0%	3%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – computers & peripherals	0.1%	0%	0%	0.7%	0%	0%	0%	0%	0%	0%	0.1%
Electrical – other	0.1%	0%	0%	0.6%	0%	0%	0%	0%	0%	0%	0.1%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garbage bags	9.1%	24.3%	0%	3.8%	0%	0%	0%	0%	0%	0%	15.4%
Garden organics	1.5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.7%
Glass – non-packaging	1.3%	0%	0%	3.3%	0%	0%	0%	0%	0%	0%	0.9%
Glass – packaging	0%	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Masonry materials – concrete/bricks	9.9%	2.3%	0%	33.6%	0%	0%	0%	0%	0%	0%	8.9%
Masonry materials – other	17.1%	4.7%	0%	12.8%	0%	0%	0%	0%	0%	0%	11%
Metal (ferrous) – packaging	0.3%	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0.3%
Metal (ferrous) – non-packaging (low density)	0.2%	0.1%	0%	1.9%	0%	0%	0%	0%	0%	0%	0.3%
Metal (ferrous) – non-packaging (high density)	0.4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%
Metal (non-ferrous) – packaging	0.2%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0.5%	0.5%	0%	0.4%	0%	0%	0%	0%	0%	0%	0.5%
Metal (non-ferrous) – non-packaging (high density)	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Paper – office	0.1%	1.7%	0%	0.1%	0%	0%	0%	0%	0%	0%	0.8%
Paper – other	0.2%	0.8%	0%	0.3%	0%	0%	0%	0%	0%	0%	0.5%
Paper – packaging	0.2%	5.5%	0%	0%	0%	0%	0%	0%	0%	0%	2.6%
Plastic – EPS foam	0.3%	0.6%	0%	0%	0%	0%	0%	0%	0%	0%	0.4%
Plastic – film packaging	4.5%	3.7%	0%	0.1%	0%	0%	0%	0%	0%	0%	3.7%
Plastic – other	5.1%	6.8%	0%	5.8%	0%	0%	0%	0%	0%	0%	5.9%
Plastic – rigid packaging	0%	0.4%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%
Rubber	0%	0%	0%	0.1%	0%	0%	0%	0%	0%	0%	0%
Textiles and leather	0.8%	9.6%	0%	1.4%	0%	0%	0%	0%	0%	0%	4.9%
Textiles – carpet and underlay	16.7%	0.5%	0%	4.2%	0%	0%	0%	0%	0%	0%	8%
Textiles – mattresses	0%	0%	0%	1.3%	0%	0%	0%	0%	0%	0%	0.1%
Textiles – covered furniture	3.5%	0%	0%	1.1%	0%	0%	0%	0%	0%	0%	1.7%
Wood – treated/painted	18.3%	26.4%	0%	21.2%	0%	0%	0%	0%	0%	0%	22.3%
Wood – treated/painted – pallets	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Wood – untreated	4.2%	2.2%	0%	0%	0%	0%	0%	0%	0%	0%	2.8%
Wood – untreated – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	2.2%	1.1%	0%	3.2%	0%	0%	0%	0%	0%	0%	1.8%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>

**Table AF154: Composition of single-material C&I loads from offices, garbage bags separate, by regional grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0.3%	11.9%	0%	0.6%	0%	0%	0%	0%	0%	0%	0.9%
Cardboard dry – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – compacted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – computers & peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – TVs	0%	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – unpackaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garbage bags	1.7%	0%	0%	0%	0%	0%	0%	0%	0.1%	0%	1%
Garden organics	0%	0%	0%	0%	0%	0%	0.7%	0%	0.8%	0%	0.2%
Glass – non-packaging	0%	4.7%	0%	0%	0%	0%	0%	0%	0%	0%	0.3%
Glass – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – concrete/bricks	45%	0%	0%	15%	0%	0%	99.3%	0%	91.1%	0%	56.8%
Masonry materials – other	28.5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17.1%
Metal (ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (low density)	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – packaging	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Plastic – EPS foam	0%	0.6%	0%	0.1%	0%	0%	0%	0%	0%	0%	0.1%
Plastic – film packaging	0.6%	0.1%	0%	1.3%	0%	0%	0%	0%	0%	0%	0.4%
Plastic – other	0.9%	0%	0%	0.8%	0%	0%	0%	0%	0%	0%	0.5%
Plastic – rigid packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rubber	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles and leather	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – carpet and underlay	6.8%	50.8%	0%	77.4%	0%	0%	0%	0%	0%	0%	9.8%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%
Wood – treated/painted	14%	18.7%	0%	0%	0%	0%	0%	0%	0.2%	0%	9.5%
Wood – treated/painted – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated	1.2%	12.9%	0%	0%	0%	0%	0%	0%	0%	0%	1.5%
Wood – untreated – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0.4%	0%	0%	4.9%	0%	0%	0%	0%	7.8%	0%	1.5%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>

## Industry sector: Shopping centres

Table AF155: Composition of overall C&amp;I waste from shopping centres, garbage bags separate, showing all regions

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	4079	7.6%	1186	4.9%	558	11.9%	5823	7.1%
Electrical	146	0.3%	23	0.1%	0	0%	169	0.2%
Food	6602	12.3%	777	3.2%	266	5.6%	7645	9.3%
Garbage bags	26,214	48.7%	13,773	57.3%	2158	45.8%	42,144	51.1%
Garden organics	2214	4.1%	558	2.3%	256	5.4%	3028	3.7%
Glass	312	0.6%	163	0.7%	20	0.4%	495	0.6%
Masonry	706	1.3%	325	1.4%	654	13.9%	1685	2%
Metals	944	1.8%	337	1.4%	100	2.1%	1381	1.7%
Paper	2166	4%	855	3.6%	135	2.9%	3155	3.8%
Plastic	4289	8%	1520	6.3%	324	6.9%	6132	7.4%
Rubber	72	0.1%	93	0.4%	0	0%	165	0.2%
Textiles	1602	3%	655	2.7%	119	2.5%	2375	2.9%
Wood	4238	7.9%	3287	13.7%	120	2.5%	7645	9.3%
Other	205	0.4%	490	2%	0	0%	695	0.8%
<b>Total</b>	<b>53,787</b>	<b>100%</b>	<b>24,041</b>	<b>100%</b>	<b>4709</b>	<b>100%</b>	<b>82,536</b>	<b>100%</b>

**Table AF156: Composition of overall C&I waste from shopping centres, garbage bags distributed, showing all regions**

Material category	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard	5688	10.6%	1974	8.2%	647	13.8%	8309	10.1%
Electrical	303	0.6%	52	0.2%	3	0.1%	357	0.4%
Food	12,958	24.1%	6013	25%	970	20.6%	19,941	24.2%
Garden organics	3213	6%	856	3.6%	262	5.6%	4330	5.2%
Glass	959	1.8%	696	2.9%	117	2.5%	1772	2.1%
Masonry	1002	1.9%	361	1.5%	668	14.2%	2031	2.5%
Metals	1817	3.4%	663	2.8%	158	3.4%	2638	3.2%
Paper	9279	17.3%	3558	14.8%	612	13%	13,449	16.3%
Plastic	9813	18.2%	4258	17.7%	786	16.7%	14,857	18%
Rubber	288	0.5%	223	0.9%	12	0.2%	522	0.6%
Textiles	2400	4.5%	992	4.1%	199	4.2%	3592	4.4%
Wood	4425	8.2%	3320	13.8%	120	2.6%	7866	9.5%
Other	1642	3.1%	1075	4.5%	155	3.3%	2872	3.5%
<b>Total</b>	<b>53,787</b>	<b>100%</b>	<b>24041</b>	<b>100%</b>	<b>4709</b>	<b>100%</b>	<b>82,536</b>	<b>100%</b>

**Table AF157: Composition of mixed C&I loads from shopping centres, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	710	1.6%	189	0.8%	0	0%	899	1.2%
Cardboard dry – compacted	1216	2.7%	579	2.5%	371	7.9%	2167	3%
Cardboard – wet strength/waxed – loose	79	0.2%	50	0.2%	0	0%	129	0.2%
Cardboard – wet strength/waxed – compacted	989	2.2%	368	1.6%	187	4%	1543	2.1%
Electrical – computers and peripherals	8	0%	0	0%	0	0%	8	0%
Electrical – other	114	0.3%	22	0.1%	0	0%	136	0.2%
Electrical – TVs	24	0.1%	0	0%	0	0%	24	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	0	0%	54	0.2%	34	0.7%	88	0.1%
Food organics – unpackaged	6507	14.4%	723	3.2%	232	4.9%	7462	10.2%
Garbage bags	19,809	43.8%	13,773	60.3%	2158	45.8%	35,740	49.1%
Garden organics	2214	4.9%	558	2.4%	256	5.4%	3028	4.2%
Glass – non-packaging	101	0.2%	39	0.2%	0	0%	141	0.2%
Glass – packaging	184	0.4%	124	0.5%	20	0.4%	328	0.5%
Masonry materials – concrete/bricks	0	0%	52	0.2%	0	0%	52	0.1%
Masonry materials – other	706	1.6%	272	1.2%	654	13.9%	1632	2.2%
Metal (ferrous) – packaging	374	0.8%	141	0.6%	34	0.7%	549	0.8%
Metal (ferrous) – non-packaging (low density)	345	0.8%	49	0.2%	12	0.3%	406	0.6%
Metal (ferrous) – non-packaging (high density)	6	0%	0	0%	0	0%	6	0%
Metal (non-ferrous) – packaging	133	0.3%	64	0.3%	18	0.4%	215	0.3%
Metal (non-ferrous) – non-packaging (low density)	54	0.1%	51	0.2%	36	0.8%	141	0.2%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	27	0.1%	0	0%	0	0%	27	0%
Paper – office	234	0.5%	112	0.5%	15	0.3%	361	0.5%
Paper – other	944	2.1%	441	1.9%	24	0.5%	1410	1.9%
Paper – packaging	960	2.1%	299	1.3%	95	2%	1354	1.9%
Plastic – EPS foam	307	0.7%	70	0.3%	21	0.4%	398	0.5%
Plastic – film packaging	1728	3.8%	755	3.3%	116	2.5%	2600	3.6%
Plastic – other	1925	4.3%	615	2.7%	161	3.4%	2701	3.7%
Plastic – rigid packaging	242	0.5%	76	0.3%	26	0.6%	345	0.5%
Rubber	61	0.1%	93	0.4%	0	0%	154	0.2%
Textiles and leather	460	1%	150	0.7%	52	1.1%	662	0.9%
Textiles – carpet and underlay	164	0.4%	352	1.5%	67	1.4%	583	0.8%
Textiles – mattresses	17	0%	54	0.2%	0	0%	71	0.1%
Textiles – covered furniture	907	2%	90	0.4%	0	0%	997	1.4%
Wood – treated/painted	2950	6.5%	1406	6.2%	0	0%	4356	6%
Wood – treated/painted – pallets	172	0.4%	154	0.7%	120	2.5%	445	0.6%
Wood – untreated	454	1%	527	2.3%	0	0%	982	1.3%
Wood – untreated – pallets	111	0.2%	58	0.3%	0	0%	168	0.2%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	19	0%	490	2.1%	0	0%	509	0.7%
<b>Total</b>	<b>45,256</b>	<b>100%</b>	<b>22,850</b>	<b>100%</b>	<b>4709</b>	<b>100%</b>	<b>72,815</b>	<b>100%</b>

**Table AF158: Composition of single-material C&I loads from shopping centres, garbage bags separate, showing all regions**

Material	SMA		ERA		RRA		Overall	
	tonnes per year	% by weight						
Cardboard dry – loose	13	0.2%	0	0%	0	0%	13	0.1%
Cardboard dry – compacted	67	0.8%	0	0%	0	0%	67	0.7%
Cardboard – wet strength/waxed – loose	0	0%	0	0%	0	0%	0	0%
Cardboard – wet strength/waxed – compacted	1004	11.8%	0	0%	0	0%	1004	10.3%
Electrical – computers and peripherals	0	0%	0	0%	0	0%	0	0%
Electrical – other	0	0%	1	0.1%	0	0%	1	0%
Electrical – TVs	0	0%	0	0%	0	0%	0	0%
Electrical – whitegoods	0	0%	0	0%	0	0%	0	0%
Food organics – packaged	94	1.1%	0	0%	0	0%	94	1%
Food organics – unpackaged	1	0%	0	0%	0	0%	1	0%
Garbage bags	6404	75.1%	0	0%	0	0%	6404	65.9%
Garden organics	0	0%	0	0%	0	0%	0	0%
Glass – non-packaging	0	0%	0	0%	0	0%	0	0%
Glass – packaging	27	0.3%	0	0%	0	0%	27	0.3%
Masonry materials – concrete/bricks	0	0%	0	0%	0	0%	0	0%
Masonry materials – other	0	0%	0	0%	0	0%	0	0%
Metal (ferrous) – packaging	5	0.1%	0	0%	0	0%	5	0%
Metal (ferrous) – non-packaging (low density)	0	0%	32	2.7%	0	0%	32	0.3%
Metal (ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – packaging	0	0%	0	0%	0	0%	0	0%
Metal (non-ferrous) – non-packaging (low density)	0	0%	0	0%	0	0%	0	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (high density)	0	0%	0	0%	0	0%	0	0%
Paper – office	10	0.1%	0	0%	0	0%	10	0.1%
Paper – other	16	0.2%	3	0.3%	0	0%	19	0.2%
Paper – packaging	2	0%	0	0%	0	0%	2	0%
Plastic – EPS foam	5	0.1%	0	0%	0	0%	5	0.1%
Plastic – film packaging	33	0.4%	1	0.1%	0	0%	34	0.3%
Plastic – other	41	0.5%	2	0.2%	0	0%	43	0.4%
Plastic – rigid packaging	8	0.1%	0	0%	0	0%	8	0.1%
Rubber	11	0.1%	0	0%	0	0%	11	0.1%
Textiles and leather	24	0.3%	0	0%	0	0%	24	0.2%
Textiles – carpet and underlay	27	0.3%	10	0.8%	0	0%	36	0.4%
Textiles – mattresses	0	0%	0	0%	0	0%	0	0%
Textiles – covered furniture	3	0%	0	0%	0	0%	3	0%
Wood – treated/painted	552	6.5%	1142	95.9%	0	0%	1694	17.4%
Wood – treated/painted – pallets	0	0%	0	0%	0	0%	0	0%
Wood – untreated	0	0%	0	0%	0	0%	0	0%
Wood – untreated – pallets	0	0%	0	0%	0	0%	0	0%
Other – batteries	0	0%	0	0%	0	0%	0	0%
Other – gas bottles	0	0%	0	0%	0	0%	0	0%
Other – nappies	0	0%	0	0%	0	0%	0	0%
Other (including fines <10 mm)	186	2.2%	0	0%	0	0%	186	1.9%
<b>Total</b>	<b>8531</b>	<b>100%</b>	<b>1191</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>9722</b>	<b>100%</b>

**Table AF159: Composition of mixed C&I loads from shopping centres, garbage bags separate, by regional grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0%	1.7%	0%	0.3%	0%	0%	1.2%	0%	0.4%	0%	1.1%
Cardboard dry – compacted	0%	2.9%	0%	0%	0%	1.5%	2.8%	9.2%	2.6%	0%	2.9%
Cardboard – wet strength/waxed – loose	0%	0.2%	0%	0%	0%	0%	0.4%	0%	0%	0%	0.2%
Cardboard – wet strength/waxed – compacted	0%	2.3%	0%	0%	0%	1.3%	2%	4.9%	0.8%	0%	2%
Electrical – computers and peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0.3%	0.2%	0%	0.2%	0%	0.1%	0.1%	0%	0%	0%	0.2%
Electrical – TVs	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	0%	0%	0%	0%	0%	0%	0.4%	0.9%	0%	0%	0.2%
Food organics – unpackaged	25.8%	13.5%	0%	0%	0%	0%	5.4%	3.6%	0%	0%	8.6%
Garbage bags	11.8%	48.2%	0%	0%	0%	41.1%	65.8%	37.6%	62%	0%	51.6%
Garden organics	0%	5.3%	0%	0%	0%	4.2%	1.3%	6.7%	3.8%	0%	3.8%
Glass – non-packaging	0%	0.2%	0%	0%	0%	0.9%	0%	0%	0%	0%	0.2%
Glass – packaging	0.2%	0.5%	0%	0%	0%	1.4%	0.5%	0.2%	0%	0%	0.5%
Masonry materials – concrete/bricks	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0.1%
Masonry materials – other	7%	0%	0%	87.1%	0%	3%	0%	17.2%	2.7%	0%	2.2%
Metal (ferrous) – packaging	0.2%	0.9%	0%	0%	0%	0.9%	0.7%	0.7%	0.1%	0%	0.7%
Metal (ferrous) – non-packaging (low density)	3.7%	0.3%	0%	0%	46.6%	0.4%	0.1%	0.3%	0.3%	0%	0.5%
Metal (ferrous) – non-packaging (high density)	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0.2%	0.3%	0%	0%	0%	0.6%	0.2%	0.5%	0.1%	0%	0.3%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0.1%	0.1%	0%	0.5%	0%	0.9%	0%	0.9%	0.3%	0%	0.2%
Metal (non-ferrous) – non-packaging (high density)	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0.6%	0%	0%	0%	0.9%	0.4%	0.4%	0.3%	0%	0.5%
Paper – other	0%	2.3%	0%	0%	0%	1.7%	0.8%	0.5%	5.1%	0%	1.9%
Paper – packaging	0.5%	2.2%	0%	0.1%	0%	3.5%	0.8%	2.5%	0.8%	0%	1.7%
Plastic – EPS foam	0%	0.7%	0%	0%	0%	0.3%	0.4%	0.4%	0.1%	0%	0.5%
Plastic – film packaging	0.5%	4.1%	0%	0%	0%	5.9%	3.6%	2.7%	0.5%	0%	3.5%
Plastic – other	4.8%	4.2%	0%	1%	0%	5%	2.3%	3.9%	1.8%	0%	3.5%
Plastic – rigid packaging	0.3%	0.6%	0%	0%	0%	0.4%	0.4%	0.6%	0.1%	0%	0.4%
Rubber	0%	0.1%	0%	0%	0%	0.3%	0.6%	0%	0.1%	0%	0.3%
Textiles and leather	0%	1.1%	0%	0%	0%	2.1%	0.2%	1.4%	0.5%	0%	0.9%
Textiles – carpet and underlay	0%	0.4%	0%	0%	0%	2.2%	1.3%	1.8%	1.5%	0%	1%
Textiles – mattresses	0%	0%	0%	0%	0%	0.1%	0.4%	0%	0%	0%	0.1%
Textiles – covered furniture	0.1%	2%	0%	0%	30.8%	1.4%	0%	0%	0.5%	0%	1.1%
Wood – treated/painted	42.7%	3.1%	0%	10.8%	22.6%	15.8%	3.7%	0%	4.4%	0%	5.9%
Wood – treated/painted – pallets	0%	0.4%	0%	0%	0%	0%	1.2%	3.1%	0%	0%	0.7%
Wood – untreated	1.5%	0.9%	0%	0%	0%	3.9%	1.2%	0%	3.9%	0%	1.5%
Wood – untreated – pallets	0%	0.3%	0%	0%	0%	0%	0.4%	0%	0%	0%	0.2%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0%	0%	0%	0%	0%	0%	1.2%	0%	6.4%	0%	1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>

**Table AF160: Composition of single-material C&I loads from shopping centres, garbage bags separate, by Regional Grouping**

Material	SSROC	WSROC	MACROC	NSROC	SHOROC	SCG	Hunter	MIDWASTE	Other	Unknown	All
Cardboard dry – loose	0%	0%	0%	1.2%	1.6%	0%	0%	0%	0%	0%	0.1%
Cardboard dry – compacted	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0.6%
Cardboard – wet strength/waxed – loose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cardboard – wet strength/waxed – compacted	22.6%	3%	0%	0%	0%	0%	0%	0%	0%	0%	9.3%
Electrical – computers and peripherals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – other	0%	0%	0%	0%	0%	0%	0.1%	0%	0%	0%	0%
Electrical – TVs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electrical – whitegoods	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food organics – packaged	2.4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.9%
Food organics – unpackaged	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garbage bags	60.6%	90.4%	0%	96.2%	94.8%	0%	0%	0%	0%	0%	59%
Garden organics	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Glass – non-packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Glass – packaging	0%	0.8%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%
Masonry materials – concrete/bricks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Masonry materials – other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – packaging	0%	0%	0%	0.1%	1.4%	0%	0%	0%	0%	0%	0%
Metal (ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	2.5%	0%	0%	0%	0.6%
Metal (ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – packaging	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Disposal-based audit – Main Report

Metal (non-ferrous) – non-packaging (low density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal (non-ferrous) – non-packaging (high density)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Paper – office	0%	0.3%	0%	0.1%	0%	0%	0%	0%	0%	0%	0.1%
Paper – other	0%	0.3%	0%	0.7%	0%	0%	0.2%	0%	0%	0%	0.2%
Paper – packaging	0%	0%	0%	0.3%	0%	0%	0%	0%	0%	0%	0%
Plastic – EPS foam	0%	0.1%	0%	0%	0.3%	0%	0%	0%	0%	0%	0%
Plastic – film packaging	0%	0.8%	0%	0.4%	1.1%	0%	0.1%	0%	0%	0%	0.3%
Plastic – other	0%	1%	0%	0.9%	0%	0%	0.2%	0%	0%	0%	0.4%
Plastic – rigid packaging	0%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Rubber	0%	0.3%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
Textiles and leather	0%	0.7%	0%	0.1%	0%	0%	0%	0%	0%	0%	0.2%
Textiles – carpet and underlay	0.7%	0%	0%	0%	0%	0%	0.7%	0%	0%	0%	0.4%
Textiles – mattresses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Textiles – covered furniture	0%	0%	0%	0%	0.8%	0%	0%	0%	0%	0%	0%
Wood – treated/painted	13.8%	0%	0%	0%	0%	0%	88.8%	0%	0%	0%	25.6%
Wood – treated/painted – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood – untreated – pallets	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – batteries	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – gas bottles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other – nappies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other (including fines <10 mm)	0%	0%	0%	0%	0%	0%	7.4%	0%	0%	0%	1.7%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>

## Count of individual e-waste items recorded during the audit

**Table AF161: Count of e-waste items recorded**

E-waste category	Total	SMA	ERA	RRA
Computers and peripherals	133	121	5	7
TVs	85	61	11	13
White goods	43	29	3	11
Other office-based electronics	41	37	2	2
Small household appliances	721	606	51	64
Other	179	159	5	15
<b>Total</b>	<b>1202</b>	<b>1013</b>	<b>77</b>	<b>112</b>

## Garbage bag composition

**Table AF162: Garbage bag composition by region, consolidated categories**

Category (consolidated visual audit)	Weight sorted aggregated (kg)*			
	SMA	ERA	RRA	Overall
Cardboard	313.09	74.17	34.55	421.81
Electrical	31.04	6.65	1.02	38.70
Food	1158.89	591.35	272.26	2022.49
Garden organics	156.09	77.54	2.27	235.90
Glass	120.18	53.72	37.58	211.48
Masonry	42.66	4.42	5.30	52.38
Metals	178.11	38.61	22.39	239.12
Paper	1321.91	359.15	184.56	1865.62
Plastic	1092.66	289.59	178.63	1560.88
Rubber	33.38	18.10	4.46	55.94
Textiles	285.93	33.67	31.17	350.77
Wood	34.20	7.62	0.23	42.06
Other – nappies	211.71	78.43	40.57	330.70
Other – other	180.51	14.90	19.41	214.82
<b>Total</b>	<b>5160.349</b>	<b>1647.923</b>	<b>834.388</b>	<b>7642.660</b>

Note: The tonnages in this table are based on the weight of all bags sorted in each region, with no scaling by tonnes or sites. Therefore the proportion of each material as a percentage of the total material in the garbage bags may vary slightly from those shown in the main report, which are weighted based on each site's annual waste receipts.

**Table AF163: Garbage bag composition by region, detailed categories**

Category sorted		Weight sorted (kg)			
		SMA	ERA	RRA	Overall
S-1	Food organics – unpackaged	1032.899	533.628	261.333	1827.860
S-2	Food organics – packaged	42.823	22.856	4.029	69.708
S-3	Food organics – liquid	83.163	34.866	6.893	124.922
S-4	Garden organics	156.090	77.538	2.272	235.900
S-5	Wood/untreated – board/pole, untreated	9.743	0.019	0.222	9.984
S-6	Wood/untreated – pallets/furniture	0.000	0.000	0.000	0.000
S-7	Wood/untreated – chipboard / MDF	0.101	0.000	0.000	0.101
S-8	Wood/treated/painted – board/pole, treated	19.772	7.599	0.011	27.382
S-9	Wood/treated/painted – pallets/furniture	0.358	0.000	0.000	0.358
S-10	Wood/treated/painted – chipboard / MDF	4.230	0.000	0.000	4.230
S-11	Cardboard dry – packaging	204.047	43.305	22.307	269.659
S-12	Cardboard dry – production spoils	3.555	2.923	3.115	9.593
S-13	Cardboard dry – waxed	7.925	0.386	0.518	8.829
S-14	Cardboard wet – packaging	22.639	8.634	4.653	35.926
S-15	Cardboard wet – production spoils	5.325	0.000	0.067	5.392
S-16	Cardboard wet – waxed	4.493	4.270	0.179	8.942
S-17	Paper – photocopy paper	184.446	25.320	14.583	224.349
S-18	Paper – magazines / catalogues	54.194	17.623	5.791	77.608
S-19	Paper – brochures and leaflets	29.191	14.561	6.624	50.376
S-20	Paper – books	47.006	16.037	3.072	66.115
S-21	Paper – printing/writing (other office)	185.847	44.635	13.827	244.309

Disposal-based audit – Main Report

S-22	Paper – other packaging	119.087	16.809	7.743	143.639
S-23	Paper – newsprint	69.841	29.526	17.110	116.477
S-24	Paper – brown kraft paper	54.090	12.427	4.718	71.235
S-25	Paper – rolls of low grade	9.316	0.042	3.134	12.492
S-26	Paper – hand towels	254.583	64.029	34.100	352.712
S-27	Paper – contaminated (incl.tissue/ex.hand towels)	314.304	118.145	73.856	506.305
S-28	Plastic – PET bev. cont. (P1)	61.923	14.415	6.638	82.976
S-29	Plastic – PET pack. (excl bev cont.) (P1)	19.919	12.277	5.380	37.576
S-30	Plastic – PET other non-bev/non-pack. (P1)	4.958	0.138	0.416	5.512
S-31	Plastic – HDPE bev. cont. (P2)	59.314	18.567	15.136	93.017
S-32	Plastic – HDPE pack. (excl bev cont.) (P2)	23.149	5.810	3.953	32.912
S-33	Plastic – HDPE other non-bev/non-pack. (P2)	7.055	0.021	0.000	7.076
S-34	Plastic – PVC bev. cont. (P3)	0.000	0.060	0.156	0.216
S-35	Plastic – PVC pack. (excl bev cont.) (P3)	1.333	0.461	0.871	2.665
S-36	Plastic – PVC other non-bev/non-pack. (P3)	2.712	0.297	0.037	3.046
S-37	Plastic – LDPE pack. (P4)	0.672	0.146	0.132	0.950
S-38	Plastic – LDPE non-pack (P4)	5.755	0.000	0.000	5.755
S-39	Plastic – PP pack. (P5)	62.553	20.115	18.924	101.592
S-40	Plastic – PP non-pack. (P5)	46.064	4.137	1.593	51.794
S-41	Plastic – PS pack. (P6)	9.146	3.229	1.171	13.546
S-42	Plastic – EPS pack cont. (P6) not pack foam	6.980	2.062	1.233	10.275
S-43	Plastic – PS & EPS non-pack. (P6)	64.436	9.703	2.907	77.046
S-44	Plastic – Other plastic cont. (P7)	11.770	0.096	1.138	13.004
S-45	Plastic – film packaging (bags and film)	597.622	174.206	97.473	869.301

Disposal-based audit – Main Report

S-46	Plastic – polystyrene foam (EPS)	1.001	0.000	0.414	1.415
S-47	Plastic – other	106.299	23.849	21.053	151.201
S-48	Glass – containers bev	93.864	40.481	22.338	156.683
S-49	Glass – containers non-bev	15.713	9.836	10.788	36.337
S-50	Glass – containers (fines)	6.773	3.108	3.950	13.831
S-51	Glass – plate / non-pack. (other glass)	3.826	0.295	0.508	4.629
S-52	Metal (ferrous) – packaging bev	11.186	0.931	0.198	12.315
S-53	Metal (ferrous) – packaging non-bev	53.681	17.611	15.644	86.936
S-54	Metal (ferrous) – non-packaging	52.042	3.223	1.836	57.101
S-55	Metal (non-ferrous) – packaging bev	32.641	9.657	2.597	44.895
S-56	Metal (non-ferrous) – packaging non-bev	8.898	1.605	0.518	11.021
S-57	Metal (non-ferrous) – non-packaging	19.663	5.586	1.598	26.847
S-58	Textiles – carpet and underlay	15.298	0.000	5.920	21.218
S-59	Textiles – cloth	211.183	16.002	16.965	244.150
S-60	Textiles – covered furniture	0.000	0.000	0.000	0.000
S-61	Textiles – mattresses	0.000	0.000	0.000	0.000
S-62	Textiles – other	59.449	17.665	8.287	85.401
S-63	Rubber – tyres, tubes	0.909	3.939	0.000	4.848
S-64	Rubber – other	32.471	14.163	4.456	51.090
S-65	Electrical and electronic – TVs	2.755	0.000	0.000	2.755
S-66	Electrical – computers and peripherals	0.609	0.000	0.627	1.236
S-67	Electrical – toner cartridges	4.532	0.212	0.000	4.744
S-68	Electrical and electronic – whitegoods	0.000	0.000	0.045	0.045
S-69	Electrical – WEEE (other)	23.140	6.440	0.343	29.923

Disposal-based audit – Main Report

S-70	C&D – concrete	0.000	0.000	0.000	0.000
S-71	C&D – bricks	0.494	0.000	0.000	0.494
S-72	C&D – tiles	4.373	1.624	1.183	7.180
S-73	C&D – rock/dirt/soil	15.821	2.798	3.899	22.518
S-74	C&D – asphalt	0.000	0.000	0.000	0.000
S-75	C&D – plasterboard	21.974	0.000	0.218	22.192
S-76	Contaminated soils and processing residuals	12.019	0.648	0.221	12.888
S-77	Hazardous / special – batteries	1.442	0.238	0.318	1.998
S-78	Hazardous / special – gas bottles	0.186	0.000	0.000	0.186
S-79	Hazardous / special – fluorescent tubes	0.660	0.000	0.000	0.660
S-80	Hazardous / special – chemicals	12.417	2.233	3.756	18.406
S-81	Hazardous / special – clinical	25.634	6.058	7.585	39.277
S-82	Fines (<10mm) not able to be categorised	13.262	0.851	0.000	14.113
S-83	Liquid paperboard	65.108	14.650	3.710	83.468
S-84	Nappies	211.705	78.426	40.572	330.703
S-85	Other	114.892	4.876	7.526	127.294
<b>Total</b>		<b>5160.349</b>	<b>1647.923</b>	<b>834.388</b>	<b>7642.660</b>

**Table AF164: Garbage bag composition by industry sector, consolidated categories**

Category (detailed visual audit)	Weight sorted (kg)								
	Manufacturing (M)	Retail trade (R)	Accommodation, cafes and restaurants (H)	Healthcare and social assistance (charity) (E)	Offices (C)	Shopping centres (X)	Education/training (S)	Mixed small business (O)	Other businesses (Z)
Cardboard	100.992	61.176	43.275	30.240	34.682	32.240	29.812	58.987	30.405
Electrical	12.494	6.868	0.926	8.625	1.207	0.153	2.360	1.946	4.124
Food	241.191	338.905	217.666	189.516	151.201	186.266	197.060	411.661	89.024
Garden organics	0.376	11.538	5.246	8.234	9.610	10.550	3.305	2.350	184.691
Glass	20.147	50.213	22.984	14.310	12.472	24.390	4.121	42.771	20.072
Masonry	5.950	6.457	3.404	1.896	1.285	0.342	5.866	2.893	24.291
Metals	50.146	41.179	18.853	20.940	21.946	13.899	13.920	40.117	18.115
Paper	309.736	295.242	144.140	223.752	213.234	94.139	156.085	337.651	91.638
Plastic	391.777	240.605	114.533	133.015	122.068	98.176	94.677	273.980	92.044
Rubber	6.146	5.455	1.949	16.149	2.697	3.422	2.793	12.102	5.225
Textiles	68.065	42.145	5.279	134.362	11.987	4.728	9.309	29.459	45.435
Wood	9.513	4.659	0.160	6.995	2.913	0.325	3.862	3.321	10.307
Other – nappies	29.181	12.142	13.467	145.488	3.482	14.550	13.363	77.775	21.255
Other – other	71.204	33.353	16.976	30.998	11.786	9.072	11.453	15.478	14.502
<b>Total</b>	<b>1316.918</b>	<b>1149.937</b>	<b>608.858</b>	<b>964.520</b>	<b>600.570</b>	<b>492.252</b>	<b>547.986</b>	<b>1310.491</b>	<b>651.128</b>

**Table AF165: Garbage bag composition by industry sector, detailed categories**

Category (detailed visual audit)		Weight sorted (kg)								
		Manufacturing (M)	Retail trade (R)	Accommodation, cafes and restaurants (H)	Healthcare and social assistance (charity) (E)	Offices (C)	Shopping centres (X)	Education/ training (S)	Mixed small business (O)	Other businesses (Z)
V-1	Cardboard dry – loose	55.864	50.344	18.877	22.376	25.566	21.929	16.115	44.013	24.168
V-2	Cardboard dry – compacted	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
V-3	Cardboard – wet strength/waxed – loose	45.128	10.832	24.398	7.864	9.116	10.311	13.697	14.974	6.237
V-4	Cardboard – wet strength/waxed – compacted	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
V-5	Electrical – computers and peripherals	0.634	0.017	0.000	0.098	0.098	0.000	0.389	0.000	0.000
V-6	Electrical – other	10.589	6.055	0.780	8.527	0.946	0.153	1.971	1.522	4.124
V-7	Electrical – TVs	1.271	0.751	0.146	0.000	0.163	0.000	0.000	0.424	0.000
V-8	Electrical – whitegoods	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000
V-9	Food organics – packaged (inc. liquids)	37.836	26.529	11.180	25.295	11.769	5.663	13.041	48.613	14.704
V-10	Food organics – unpackaged	203.355	312.376	206.486	164.221	139.432	180.603	184.019	363.048	74.320
V-11	Garbage bags	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
V-12	Garden organics	0.376	11.538	5.246	8.234	9.610	10.550	3.305	2.350	184.691
V-13	Glass – non-packaging	0.144	0.707	0.000	1.115	0.061	0.698	0.189	1.030	0.685
V-14	Glass – packaging	20.003	49.506	22.984	13.195	12.411	23.692	3.932	41.741	19.387
V-15	Masonry materials – concrete/bricks	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.494	0.000
V-16	Masonry materials – other	5.950	6.457	3.404	1.896	1.285	0.342	5.866	2.399	24.291

Disposal-based audit – Main Report

V-17	Metal (ferrous) – packaging	9.504	13.152	13.326	8.124	12.526	7.969	7.183	22.061	5.406
V-18	Metal (ferrous) – non-packaging (low density)	18.880	12.458	0.279	6.021	3.325	1.281	1.506	4.633	8.718
V-19	Metal (ferrous) – non-packaging (high density)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
V-20	Metal (non-ferrous) – packaging	10.241	10.970	4.593	5.539	5.166	3.704	2.158	10.628	2.917
V-21	Metal (non-ferrous) – non-packaging (low density)	11.521	4.599	0.655	1.256	0.929	0.945	3.073	2.795	1.074
V-22	Metal (non-ferrous) – non-packaging (high density)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
V-23	Paper – office	92.502	67.072	11.933	32.502	66.019	8.496	53.700	111.600	24.834
V-24	Paper – other	167.565	198.880	99.771	180.926	123.748	65.389	91.814	182.495	59.005
V-25	Paper – packaging	49.669	29.290	32.436	10.324	23.467	20.254	10.571	43.556	7.799
V-26	Plastic – EPS foam	2.166	2.330	0.481	0.652	0.988	1.217	0.915	2.227	0.714
V-27	Plastic – film packaging	210.390	136.225	67.890	69.171	72.618	57.448	49.843	159.616	46.100
V-28	Plastic – other	114.137	41.042	11.659	33.009	20.776	13.060	13.087	33.233	21.427
V-29	Plastic – rigid packaging	65.084	61.008	34.503	30.183	27.686	26.451	30.832	78.904	23.803
V-30	Rubber	6.146	5.455	1.949	16.149	2.697	3.422	2.793	12.102	5.225
V-31	Textiles and leather	66.036	42.145	4.839	120.079	8.668	4.193	9.309	28.847	45.435
V-32	Textiles – carpet and underlay	2.029	0.000	0.440	14.283	3.319	0.535	0.000	0.612	0.000
V-33	Textiles – mattresses	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
V-34	Textiles – covered furniture	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
V-35	Wood – treated/painted	8.915	4.588	0.142	6.945	2.478	0.240	3.712	3.109	1.483

Disposal-based audit – Main Report

V-36	Wood – treated/painted – pallets	0.000	0.000	0.000	0.000	0.334	0.000	0.000	0.024	0.000
V-37	Wood – untreated	0.598	0.071	0.018	0.050	0.101	0.085	0.150	0.188	8.824
V-38	Wood – untreated – pallets	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
V-39	Other – batteries	0.363	0.068	0.318	0.164	0.190	0.052	0.127	0.582	0.134
V-40	Other – gas bottles	0.000	0.000	0.000	0.175	0.000	0.000	0.011	0.000	0.000
V-41	Other – nappies	29.181	12.142	13.467	145.488	3.482	14.550	13.363	77.775	21.255
V-42	Other (including fines <10 mm)	70.841	33.285	16.658	30.659	11.596	9.020	11.315	14.896	14.368
<b>Total</b>		<b>1316.918</b>	<b>1149.937</b>	<b>608.858</b>	<b>964.520</b>	<b>600.570</b>	<b>492.252</b>	<b>547.986</b>	<b>1,310.491</b>	<b>651.128</b>