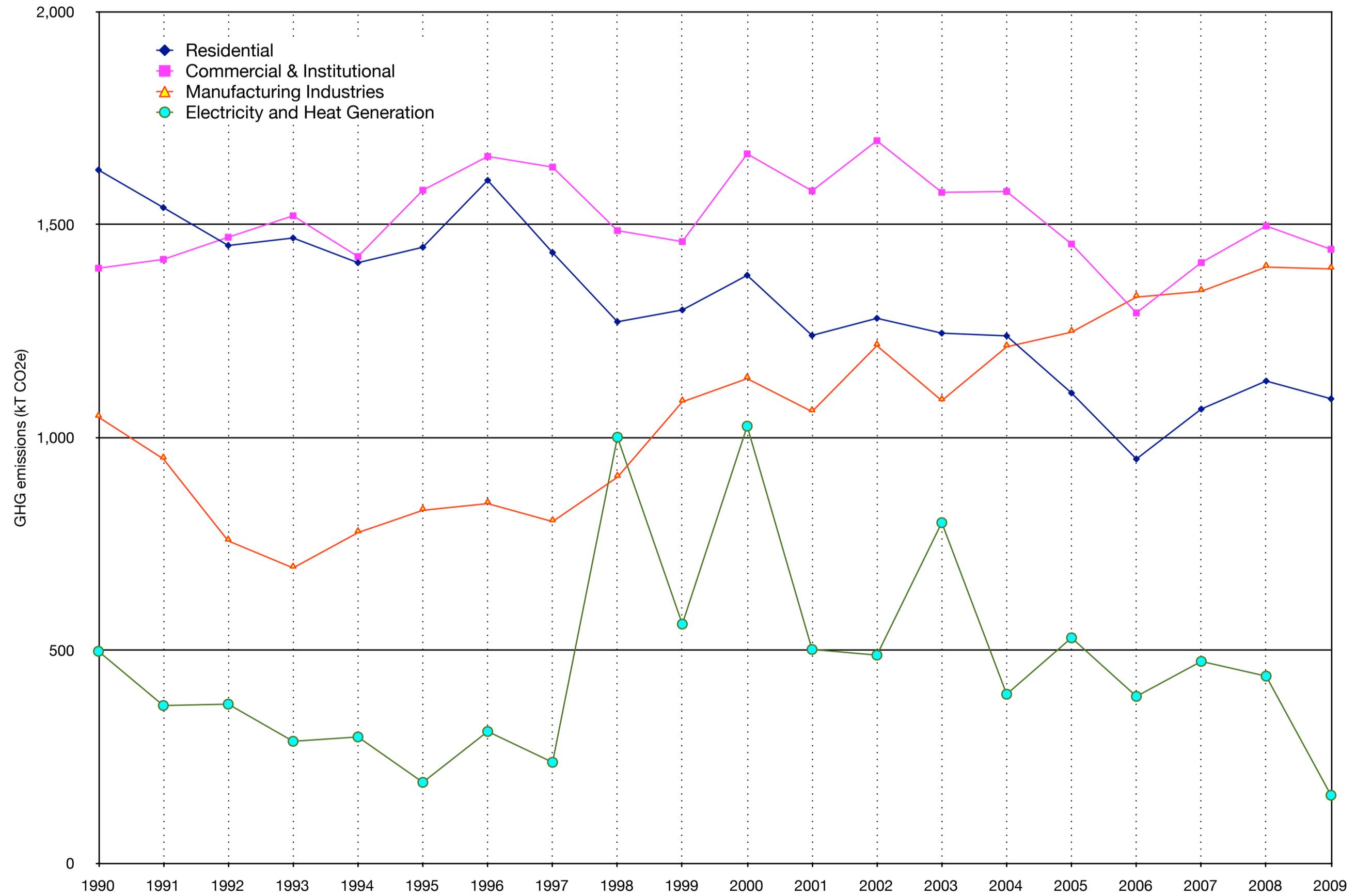
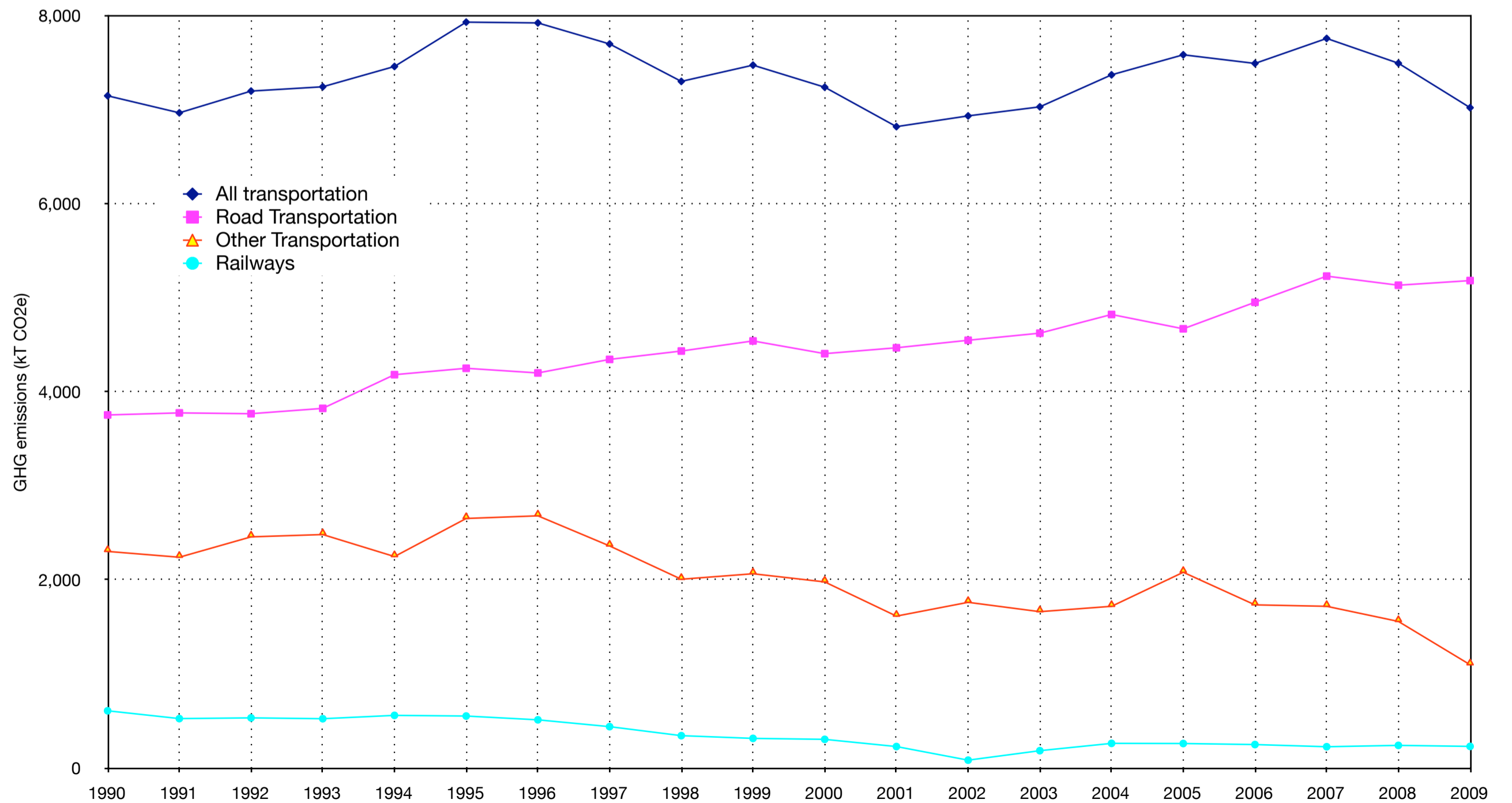


Greenhouse Gas Categories		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
% above target		6.0%	4.3%	5.2%	5.2%	8.1%	12.1%	16.5%	14.3%	16.9%	16.3%	20.8%	12.4%	16.8%	20.2%	20.6%	18.8%	19.5%	22.5%	23.1%	15.6%	
Total annual emissions		18,491	18,169	18,346	18,346	18,874	19,615	20,427	20,035	20,506	20,405	21,235	19,681	20,487	21,125	21,193	20,854	20,980	21,535	21,644	20,274	
Kyoto target		17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381	17,381
ENERGY		12,281	11,805	11,816	11,797	11,916	12,537	12,959	12,442	12,645	12,551	13,113	11,896	12,358	12,518	12,573	12,717	12,314	12,966	12,893	12,007	
a.	Stationary Combustion Sources	4,750	4,446	4,212	4,136	4,035	4,169	4,570	4,263	4,859	4,593	5,365	4,562	4,897	4,953	4,668	4,579	4,215	4,586	4,779	4,347	
	Electricity and Heat Generation	497	370	373	286	296	190	309	237	1,000	561	1,026	502	489	800	397	529	392	474	439	159	
	Fossil Fuel Production and Refining	1	1	1	1	1	1	1	1	1	1	1	1	17	0	1	0	2	0	0	0	
	Mining & Oil and Gas Extraction	74	76	58	28	8	13	11	12	39	27	29	46	24	88	105	114	112	135	152	132	
	Manufacturing Industries	1,048	949	757	693	776	829	844	802	906	1,083	1,138	1,060	1,215	1,086	1,213	1,247	1,329	1,343	1,400	1,395	
	Construction	63	45	51	38	41	34	32	45	84	75	62	61	68	78	82	85	91	102	98	75	
	Commercial & Institutional	1,397	1,418	1,470	1,520	1,425	1,580	1,660	1,635	1,485	1,460	1,666	1,579	1,697	1,575	1,577	1,454	1,292	1,410	1,496	1,442	
	Residential	1,628	1,540	1,451	1,468	1,410	1,447	1,604	1,434	1,271	1,299	1,381	1,239	1,280	1,245	1,238	1,104	949	1,066	1,132	1,091	
	Agriculture & Forestry	42	46	51	101	77	76	110	98	71	86	63	74	108	81	55	45	47	55	60	52	
b.	Transport ¹	7,145	6,964	7,195	7,241	7,456	7,928	7,919	7,696	7,298	7,471	7,236	6,817	6,931	7,027	7,368	7,581	7,489	7,754	7,491	7,019	
	Civil Aviation (Domestic Aviation)	482	424	439	413	469	474	528	552	516	552	549	508	540	559	566	571	555	581	561	510	
	Road Transportation	3,753	3,774	3,766	3,823	4,181	4,249	4,199	4,343	4,432	4,539	4,404	4,467	4,546	4,622	4,821	4,668	4,950	5,228	5,131	5,181	
	Light-Duty Gasoline Vehicles	1,614	1,606	1,563	1,532	1,501	1,534	1,383	1,385	1,344	1,360	1,310	1,285	1,289	1,274	1,262	1,139	1,229	1,256	1,185	1,273	
	Light-Duty Gasoline Trucks	847	910	946	1,003	1,078	1,117	1,149	1,280	1,377	1,471	1,482	1,488	1,549	1,614	1,691	1,624	1,753	1,793	1,692	1,674	
	Heavy-Duty Gasoline Vehicles	341	299	272	255	271	214	266	230	223	200	211	244	234	236	248	228	249	258	247	264	
	Motorcycles	7.1	7.0	6.9	6.7	6.4	6.1	5.4	5.1	4.9	4.0	4.4	5.0	7.6	8.2	8.7	8.2	9.0	9.3	8.9	8.2	
	Light-Duty Diesel Vehicles	14.5	14.5	14.1	13.9	13.4	12.2	11.7	11.5	11.1	11.1	10.6	10.5	10.9	11.1	12.0	10.9	12.1	12.8	12.7	13.0	
	Light-Duty Diesel Trucks	40	43	46	54	63	71	70	76	82	84	90	91	93	96	101	100	109	112	108	102	
	Heavy-Duty Diesel Vehicles	828	830	857	930	1,177	1,197	1,231	1,236	1,283	1,297	1,259	1,314	1,342	1,361	1,476	1,545	1,573	1,770	1,859	1,830	
	Propane & Natural Gas Vehicles	61.4	64.0	61.0	27.4	71.6	97.4	83.2	120.1	107.2	113.3	36.4	30.7	20.0	21.9	21.3	13.6	14.8	17.6	19.6	17.3	
	Railways	608	525	533	524	560	553	512	440	344	315	305	228	84	184	262	260	249	226	241	230	
	Navigation (Domestic Marine)	0	0	0	-	-	-	-	0	-	-	-	-	-	0	0	-	-	0	-	-	
	Other Transportation	2,302	2,240	2,457	2,482	2,248	2,652	2,681	2,360	2,006	2,065	1,978	1,615	1,761	1,662	1,719	2,080	1,734	1,719	1,558	1,098	
	Off-Road Gasoline	457	489	531	511	501	572	570	423	426	430	436	393	376	386	403	372	330	390	343	287	
	Off-Road Diesel	1,004	782	713	723	557	787	821	749	629	583	720	683	732	829	887	1,112	869	902	971	709	
	Pipelines	841	970	1,214	1,247	1,189	1,293	1,290	1,188	952	1,052	822	539	654	447	429	596	535	426	244	102	
c.	Fugitive Sources	386	395	409	421	425	440	469	484	489	488	512	517	531	537	537	557	610	626	623	642	
	Coal Mining	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Oil and Natural Gas	386	395	409	421	425	440	469	484	489	488	512	517	531	537	537	557	610	626	623	642	
INDUSTRIAL PROCESSES ²		518	441	341	346	337	359	379	409	436	613	683	709	671	682	714	786	758	774	673	733	
a.	Mineral Products	212	164	69	75	72	76	74	76	76	72	76	66	66	61	66	62	57	55	54	48	
	Cement Production	145	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Lime Production	58	59	60	65	67	69	67	70	70	65	69	61	63	58	62	59	54	53	51	46	
	Mineral Products Use	9	6	9	10	5	7	7	6	6	7	7	5	3	4	4	3	3	3	4	3	
b.	Chemical Industry	20	19	19	18	22	29	28	30	31	33	44	48	43	42	50	54	50	47	-	52	
	Nitric Acid Production	20	19	19	18	22	29	28	30	31	33	44	48	43	42	50	54	50	47	-	52	
	Adipic Acid Production	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Petrochemical Production ³	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
c.	Metal Production	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Iron and Steel Production	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Aluminum Production	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SF ₆ Used in Magnesium Smelters and Casters	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
d.	Production and Consumption of Halocarbons	4	4	4	4	4	23	42	63	83	99	127	166	187	214	229	237	222	228	223	244	
e.	Other & Undifferentiated Production ⁵	281	253	248	248	239	232	235	239	246	409	436	428	374	364	370	433	428	443	395	389	
SOLVENT & OTHER PRODUCT USE		7	7	6	6	7	8	8	9	8	8	9	8	6	8	8	7	12	12	12	9	
AGRICULTURE		5,089.9	5,276.5	5,530.7	5,530.9	5,935.4	6,019.3	6,377.1	6,457.1	6,685.5	6,486.2	6,670.3	6,294.6	6,667.4	7,121.2	7,089.4	6,523.1	7,060.2	6,935.7	7,207.1	6,653.9	
a.	Enteric Fermentation	1,320.6	1,351.6	1,463.5	1,496.5	1,564.3	1,662.1	1,731.0	1,815.3	1,816.7	1,783.8	1,813.4	1,869.8	1,920.9	2,023.6	2,153.7	2,207.0	2,212.9	2,046.2	2,021.8	1,903.7	
b.	Manure Management	371.0	383.6	415.0	422.0	442.7	478.6	503.1	519.4	536.9	536.1	562.0	603.9	641.3	659.3	674.8	688.4	695.4	651.0	622.1	602.1	
c.	Agriculture Soils	3,265.1	3,427.2	3,542.9	3,522.2	3,836.5	3,786.9	4,042.8	4,029.7	4,236.4	4,095.7	4,219.9	3,763.3	4,038.1	4,363.0	4,243.7	3,615.8	4,132.7	4,222.6	4,542.5	4,128.7	
	Direct Sources	1,776.5	1,866.2	1,907.9	1,874.3	2,060.9	1,997.0	2,151.2	2,114.2	2,239.2	2,146.6	2,209.8	1,890.2	2,049.9	2,229.1	2,127.1	1,709.3	2,036.4	2,122.5	2,329.7	2,099.8	
	Pasture, Range and Paddock Manure	308.8	318.2	352.1	362.9	381.5	406.5	418.8	440.6	446.2	444.5	456.9	471.7	485.5	513.2	537.4	551.2	553.9	510.0	507.2	474.3	
	Indirect Sources	1,179.9	1,242.9	1,283.0	1,285.0	1,394.1	1,383.4	1,472.8	1,474.9	1,551.0	1,504.6	1,553.2	1,401.5	1,502.6	1,620.7	1,579.2	1,355.3	1,542.3	1,590.1	1,705.6	1,554.6	
d.	Field Burning of Agricultural Residues	133.1	114.1	109.3	90.2	91.9	91.7	100.2	92.7	95.5	70.6	75.1	57.5	67.1	75.3	17.3	11.9	19.2	16.0	20.7	19.5	
WASTE		595.4	640.2	652.9	665.7	678.6	691.6	704.4	717.5	731.3	745.4	759.9	773.0	784.2	795.7	808.4	821.7	836.2	848.2	859.1		

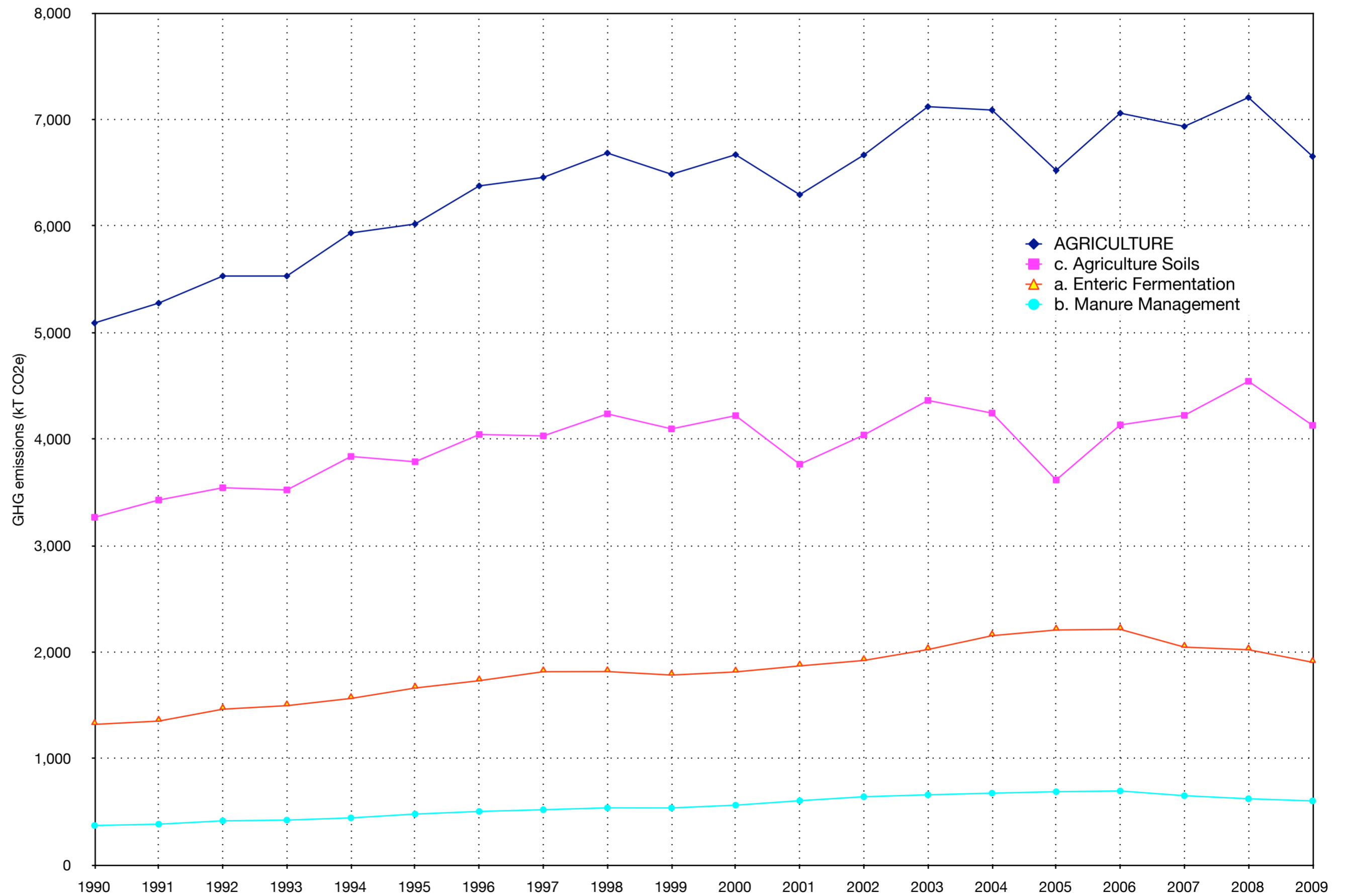
Greenhouse Gas Categories	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Manitoba total annual emissions	18,491	18,169	18,346	18,346	18,874	19,615	20,427	20,035	20,506	20,405	21,235	19,681	20,487	21,125	21,193	20,854	20,980	21,535	21,644	20,274
Stationary Combustion Sources	4,750	4,446	4,212	4,136	4,035	4,169	4,570	4,263	4,859	4,593	5,365	4,562	4,897	4,953	4,668	4,579	4,215	4,586	4,779	4,347
Electricity and Heat Generation	497	370	373	286	296	190	309	237	1,000	561	1,026	502	489	800	397	529	392	474	439	159
Fossil Fuel Production and Refining	1	1	1	1	1	1	1	1	1	1	1	1	17	0	1	0	2	0	0	0
Mining & Oil and Gas Extraction	74	76	58	28	8	13	11	12	39	27	29	46	24	88	105	114	112	135	152	132
Manufacturing Industries	1,048	949	757	693	776	829	844	802	906	1,083	1,138	1,060	1,215	1,086	1,213	1,247	1,329	1,343	1,400	1,395
Construction	63	45	51	38	41	34	32	45	84	75	62	61	68	78	82	85	91	102	98	75
Commercial & Institutional	1,397	1,418	1,470	1,520	1,425	1,580	1,660	1,635	1,485	1,460	1,666	1,579	1,697	1,575	1,577	1,454	1,292	1,410	1,496	1,442
Residential	1,628	1,540	1,451	1,468	1,410	1,447	1,604	1,434	1,271	1,299	1,381	1,239	1,280	1,245	1,238	1,104	949	1,066	1,132	1,091
Agriculture & Forestry	42	46	51	101	77	76	110	98	71	86	63	74	108	81	55	45	47	55	60	52



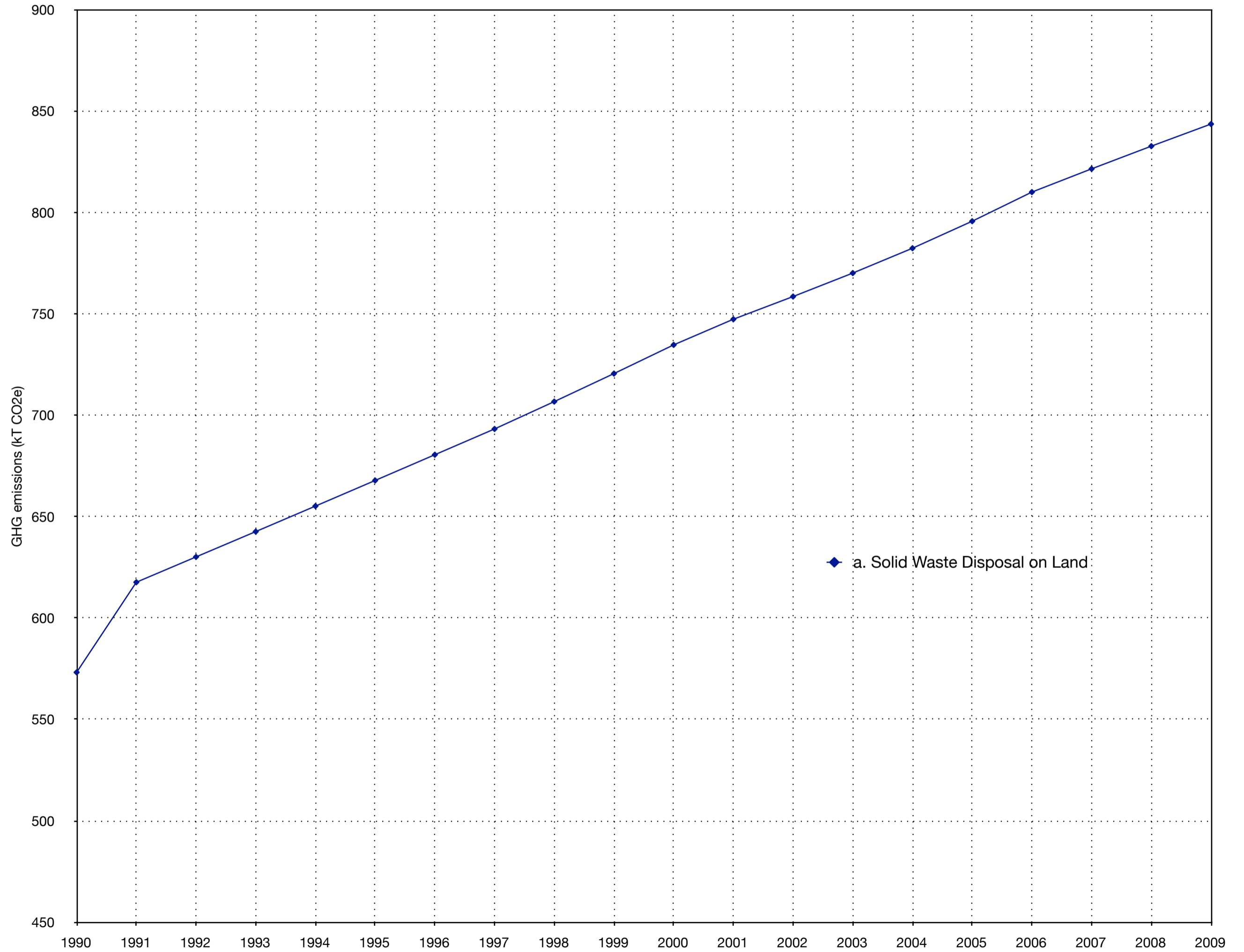
Greenhouse Gas Categories	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Manitoba total annual emissions	18,491	18,169	18,346	18,346	18,874	19,615	20,427	20,035	20,506	20,405	21,235	19,681	20,487	21,125	21,193	20,854	20,980	21,535	21,644	20,274
All transportation	7,145	6,964	7,195	7,241	7,456	7,928	7,919	7,696	7,298	7,471	7,236	6,817	6,931	7,027	7,368	7,581	7,489	7,754	7,491	7,019
Civil Aviation (Domestic Aviation)	482	424	439	413	469	474	528	552	516	552	549	508	540	559	566	571	555	581	561	510
Road Transportation	3,753	3,774	3,766	3,823	4,181	4,249	4,199	4,343	4,432	4,539	4,404	4,467	4,546	4,622	4,821	4,668	4,950	5,228	5,131	5,181
Light-Duty Gasoline Vehicles	1,614	1,606	1,563	1,532	1,501	1,534	1,383	1,385	1,344	1,360	1,310	1,285	1,289	1,274	1,262	1,139	1,229	1,256	1,185	1,273
Light-Duty Gasoline Trucks	847	910	946	1,003	1,078	1,117	1,149	1,280	1,377	1,471	1,482	1,488	1,549	1,614	1,691	1,624	1,753	1,793	1,692	1,674
Heavy-Duty Gasoline Vehicles	341	299	272	255	271	214	266	230	223	200	211	244	234	236	248	228	249	258	247	264
Motorcycles	7.1	7.0	6.9	6.7	6.4	6.1	5.4	5.1	4.9	4.0	4.4	5.0	7.6	8.2	8.7	8.2	9.0	9.3	8.9	8.2
Light-Duty Diesel Vehicles	14.5	14.5	14.1	13.9	13.4	12.2	11.7	11.5	11.1	11.1	10.6	10.5	10.9	11.1	12.0	10.9	12.1	12.8	12.7	13.0
Light-Duty Diesel Trucks	40	43	46	54	63	71	70	76	82	84	90	91	93	96	101	100	109	112	108	102
Heavy-Duty Diesel Vehicles	828	830	857	930	1,177	1,197	1,231	1,236	1,283	1,297	1,259	1,314	1,342	1,361	1,476	1,545	1,573	1,770	1,859	1,830
Propane & Natural Gas Vehicles	61.4	64.0	61.0	27.4	71.6	97.4	83.2	120.1	107.2	113.3	36.4	30.7	20.0	21.9	21.3	13.6	14.8	17.6	19.6	17.3
Railways	608	525	533	524	560	553	512	440	344	315	305	228	84	184	262	260	249	226	241	230
Navigation (Domestic Marine)	0	0	0	-	-	-	-	0	-	-	-	-	-	0	0	-	-	0	-	-
Other Transportation	2,302	2,240	2,457	2,482	2,248	2,652	2,681	2,360	2,006	2,065	1,978	1,615	1,761	1,662	1,719	2,080	1,734	1,719	1,558	1,098
Off-Road Gasoline	457	489	531	511	501	572	570	423	426	430	436	393	376	386	403	372	330	390	343	287
Off-Road Diesel	1,004	782	713	723	557	787	821	749	629	583	720	683	732	829	887	1,112	869	902	971	709
Pipelines	841	970	1,214	1,247	1,189	1,293	1,290	1,188	952	1,052	822	539	654	447	429	596	535	426	244	102

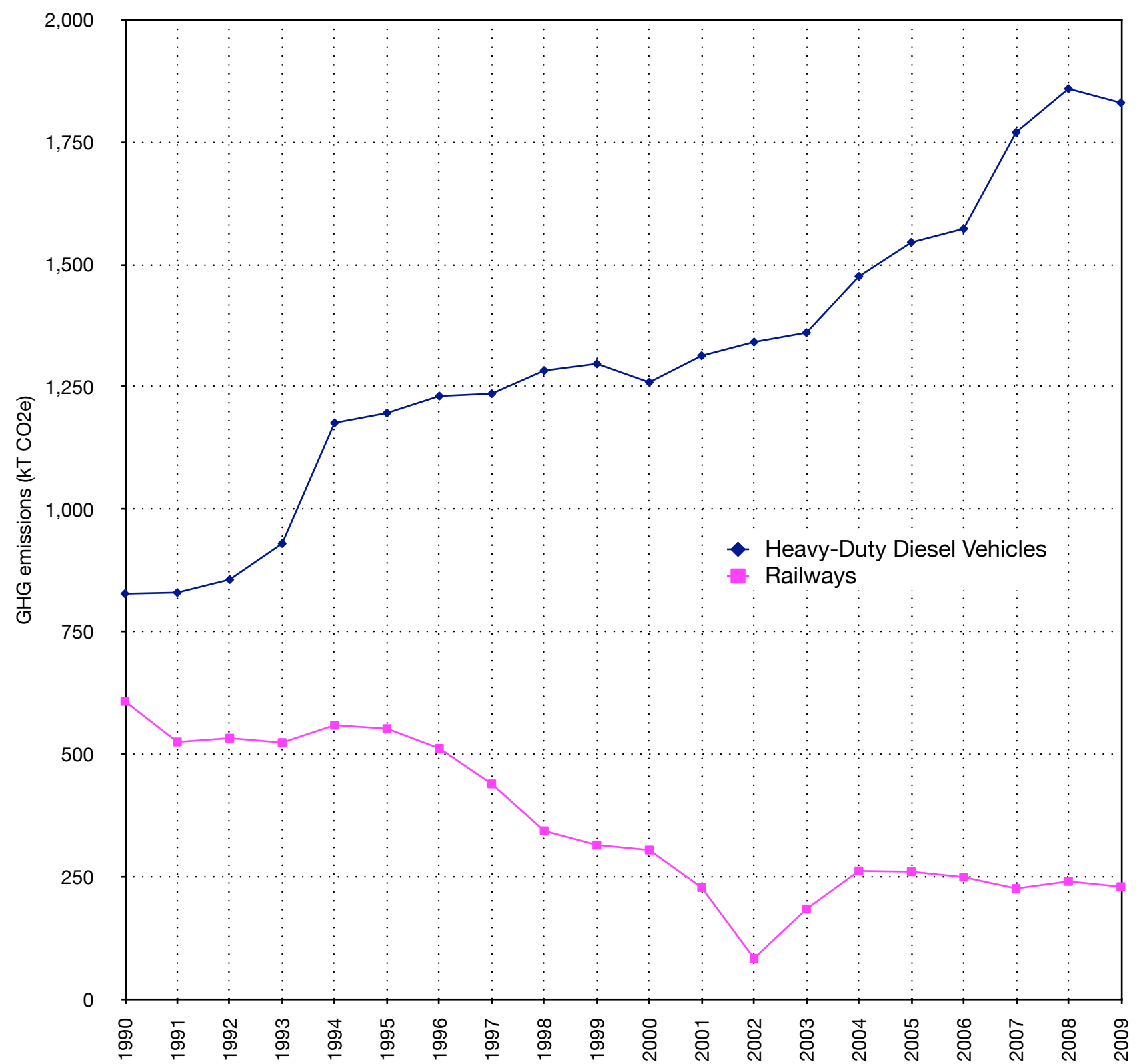
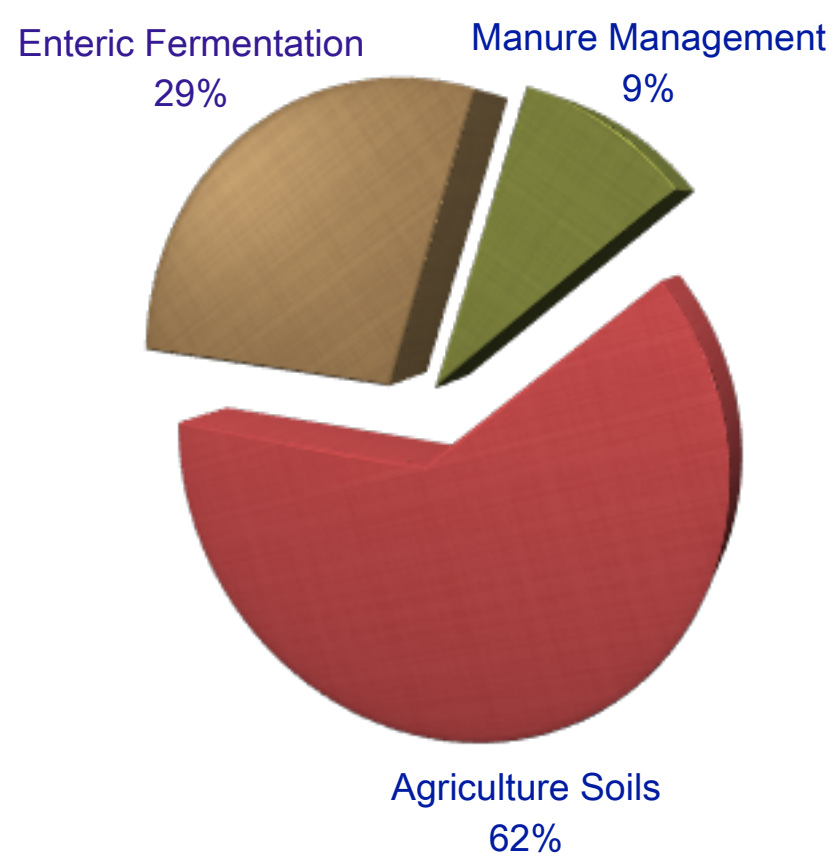
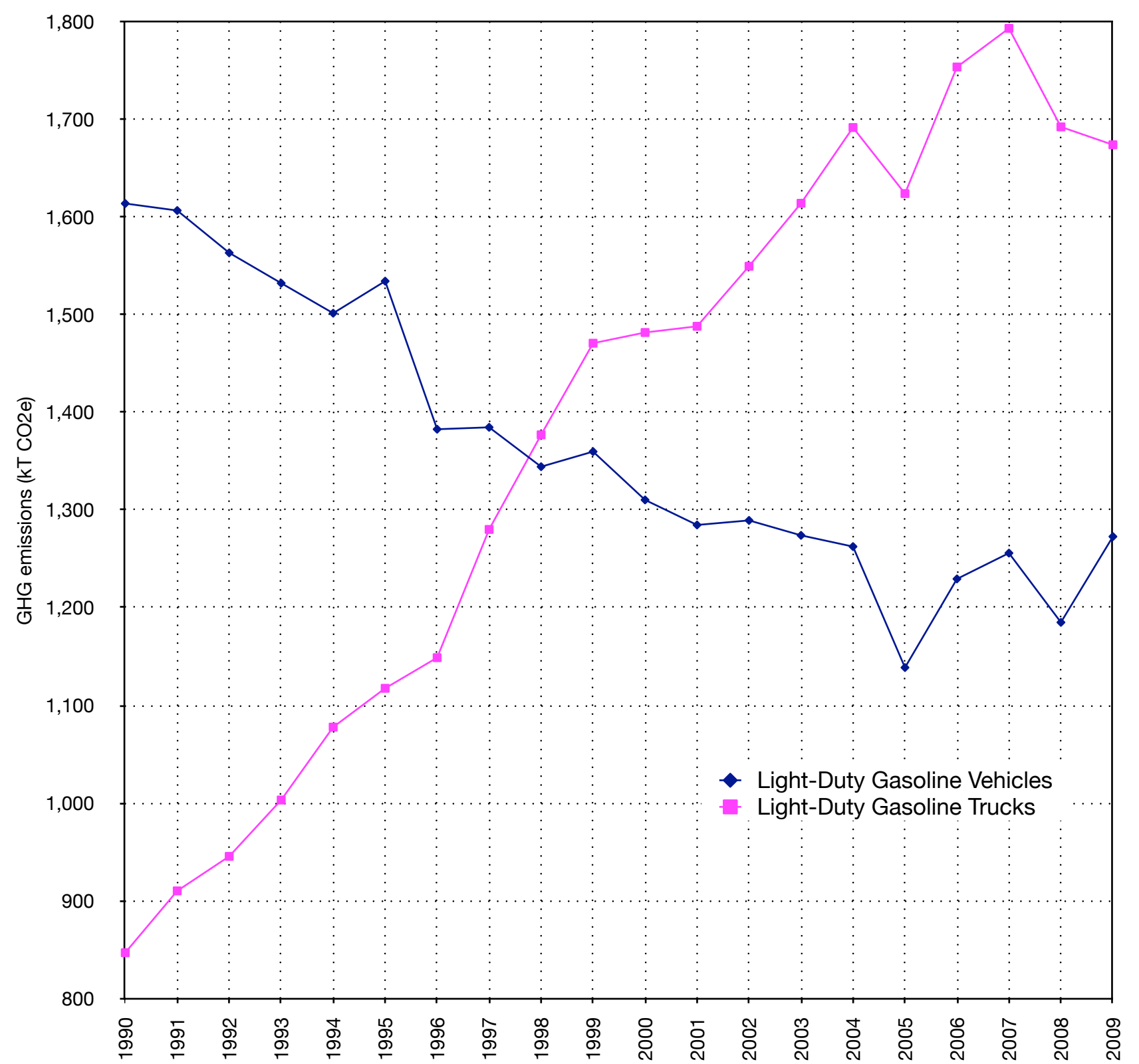
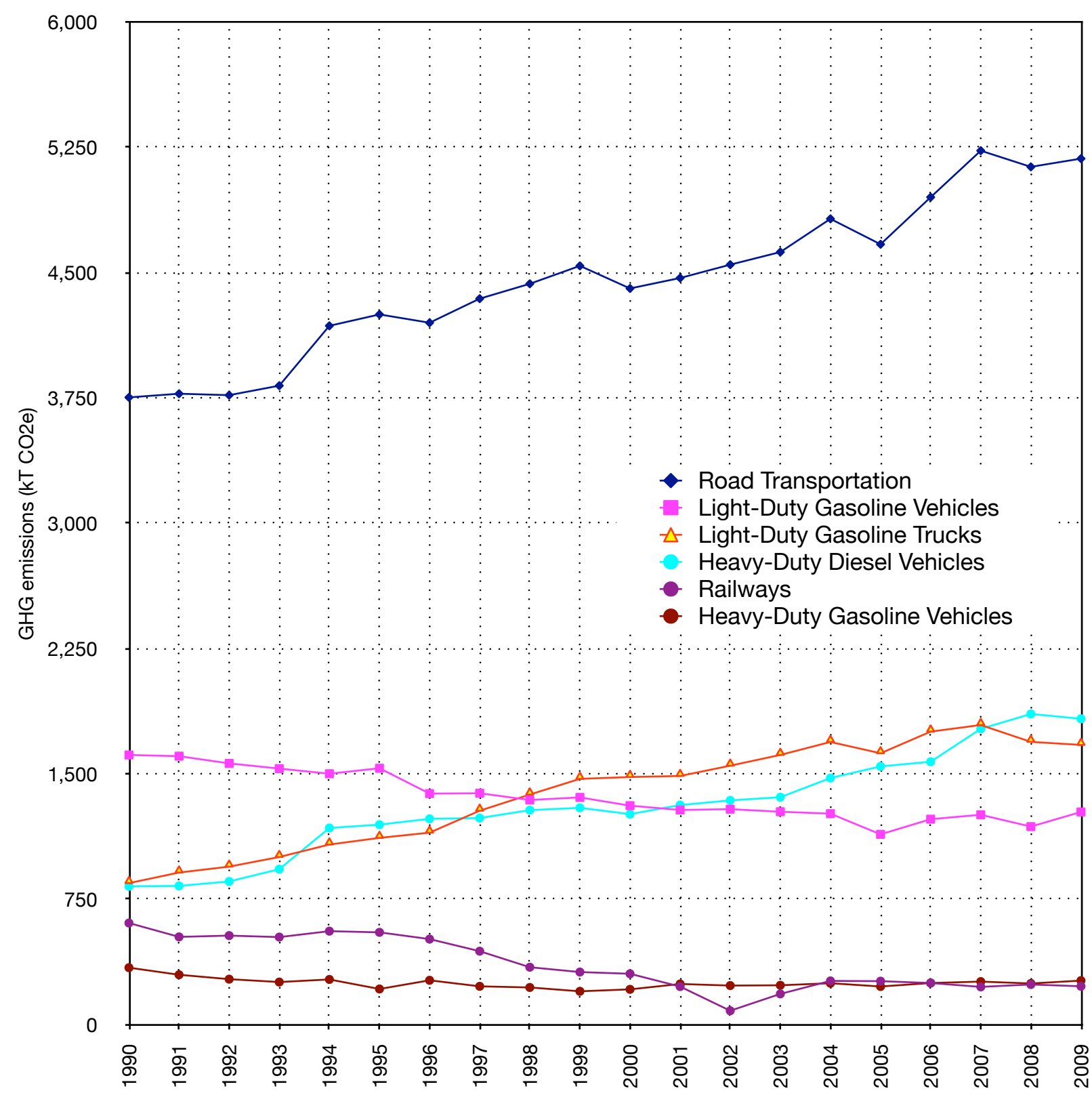
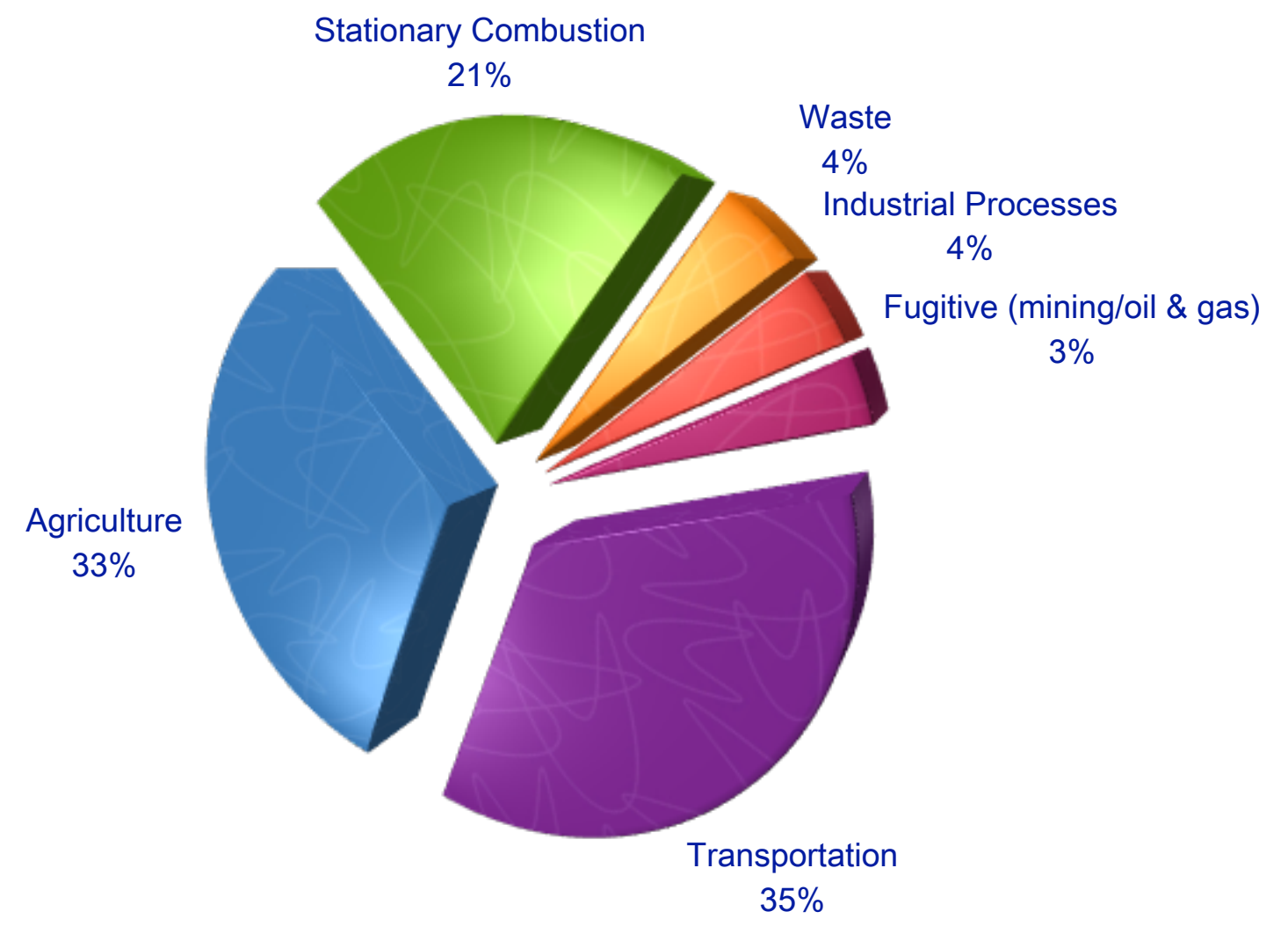
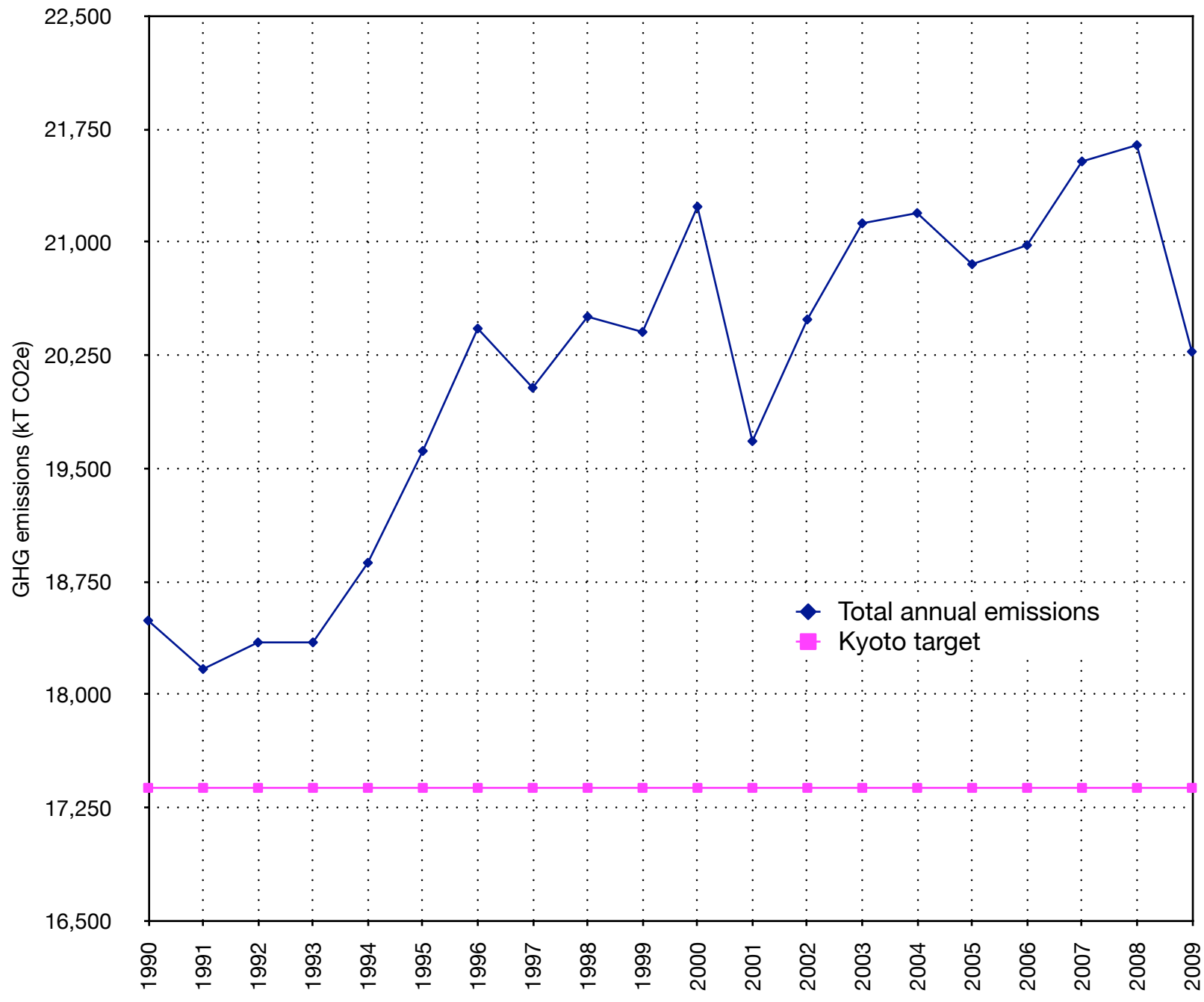


Greenhouse Gas Categories		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Manitoba total annual emissions		18,491	18,169	18,346	18,346	18,874	19,615	20,427	20,035	20,506	20,405	21,235	19,681	20,487	21,125	21,193	20,854	20,980	21,535	21,644	20,274
AGRICULTURE		5,090	5,277	5,531	5,531	5,935	6,019	6,377	6,457	6,685	6,486	6,670	6,295	6,667	7,121	7,089	6,523	7,060	6,936	7,207	6,654
a.	Enteric Fermentation	1,321	1,352	1,463	1,496	1,564	1,662	1,731	1,815	1,817	1,784	1,813	1,870	1,921	2,024	2,154	2,207	2,213	2,046	2,022	1,904
b.	Manure Management	371	384	415	422	443	479	503	519	537	536	562	604	641	659	675	688	695	651	622	602
c.	Agriculture Soils	3,265	3,427	3,543	3,522	3,836	3,787	4,043	4,030	4,236	4,096	4,220	3,763	4,038	4,363	4,244	3,616	4,133	4,223	4,542	4,129
	Direct Sources	1,776	1,866	1,908	1,874	2,061	1,997	2,151	2,114	2,239	2,147	2,210	1,890	2,050	2,229	2,127	1,709	2,036	2,123	2,330	2,100
	Pasture, Range and Paddock Manure	309	318	352	363	381	406	419	441	446	444	457	472	485	513	537	551	554	510	507	474
	Indirect Sources	1,180	1,243	1,283	1,285	1,394	1,383	1,473	1,475	1,551	1,505	1,553	1,401	1,503	1,621	1,579	1,355	1,542	1,590	1,706	1,555
d.	Field Burning of Agricultural Residues	133	114	109	90	92	92	100	93	95	71	75	58	67	75	17	12	19	16	21	19



Greenhouse Gas Categories		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Manitoba total annual emissions		18,491	18,169	18,346	18,346	18,874	19,615	20,427	20,035	20,506	20,405	21,235	19,681	20,487	21,125	21,193	20,854	20,980	21,535	21,644	20,274
WASTE		595.4	640.2	652.9	665.7	678.6	691.6	704.4	717.5	731.3	745.4	759.9	773.0	784.2	795.7	808.4	821.7	836.2	848.2	859.1	870.3
a.	Solid Waste Disposal on Land	573.2	617.6	630.1	642.6	655.2	667.8	680.5	693.2	706.7	720.5	734.7	747.3	758.5	770.1	782.3	795.7	810.0	821.5	832.7	843.6
b.	Wastewater Handling	22.2	22.6	22.8	23.1	23.4	23.7	23.9	24.3	24.6	24.9	25.2	25.7	25.7	25.6	26.1	26.1	26.2	26.7	26.4	26.7
c.	Waste Incineration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





TOTAL		20,274
ENERGY		12,007
a. Stationary Combustion Sources		4,347
Electricity and Heat Generation		159
Fossil Fuel Production and Refining		0
Mining & Oil and Gas Extraction		132
Manufacturing Industries		1,395
Construction		75
Commercial & Institutional		1,442
Residential		1,091
Agriculture & Forestry		52
b. Transport¹		7,019
Civil Aviation (Domestic Aviation)		510
Road Transportation		5,181
Light-Duty Gasoline Vehicles		1,273
Light-Duty Gasoline Trucks		1,674
Heavy-Duty Gasoline Vehicles		264
Motorcycles		8.2
Light-Duty Diesel Vehicles		13.0
Light-Duty Diesel Trucks		102
Heavy-Duty Diesel Vehicles		1,830
Propane & Natural Gas Vehicles		17.3
Railways		230
Navigation (Domestic Marine)		-
Other Transportation		1,098
Off-Road Gasoline		287
Off-Road Diesel		709
Pipelines		102
c. Fugitive Sources		642
Coal Mining		-
Oil and Natural Gas		642
INDUSTRIAL PROCESSES²		733
a. Mineral Products		48
Cement Production		-
Lime Production		46
Mineral Products Use		3
b. Chemical Industry		52
Nitric Acid Production		52
Adipic Acid Production		-
Petrochemical Production ³		-
c. Metal Production		-
Iron and Steel Production		-
Aluminum Production		-
SF ₆ Used in Magnesium Smelters and		-
d. Production and Consumption of Halocarbon		244
e. Other & Undifferentiated Production⁵		389
SOLVENT & OTHER PRODUCT USE		9
AGRICULTURE		6,653.9
a. Enteric Fermentation		1,903.7
b. Manure Management		602.1
c. Agriculture Soils		4,128.7
Direct Sources		2,099.8
Pasture, Range and Paddock Manure		474.3
Indirect Sources		1,554.6
d. Field Burning of Agricultural Residues		19.5
WASTE		870.3
a. Solid Waste Disposal on Land		843.6
b. Wastewater Handling		26.7
c. Waste Incineration		-

Category	%	MT
Transportation	34.6%	7
Agriculture	33.1%	6.7
Stationary Combustion	21.2%	4.3
Waste	4.3%	0.87
Industrial Processes	3.6%	0.733
Fugitive (mining/oil & gas)	3.2%	0.642
TOTAL		20.245

Category	%	MT
Enteric Fermentation	28.7%	1,903.7
Manure Management	9.1%	602.1
Agriculture Soils	62.2%	4,128.7
TOTAL		6634.5