

Appendices

APPENDIX A: DEFINITION OF NFR CODES

Table A1: Definition of NFR Codes

NFR Code	NFR Source Description
1A1a	1 A 1 a Public Electricity and Heat Production
1A1b	1 A 1 b Petroleum refining
1A1c	1 A 1 c Manufacture of Solid Fuels and Other Energy Industries
1A2	1 A 2 Manufacturing Industries and Construction
1A2a	1 A 2 a Iron and Steel
1A2b	1 A 2 b Non-ferrous Metals
1A2c	1 A 2 c Chemicals
1A2d	1 A 2 d Pulp, Paper and Print
1A2e	1 A 2 e Food Processing, Beverages and Tobacco
1A2f	1 A 2 f Other (to be specified)
1A3ai(i)	1 A 3 a ii Civil Aviation (International, Landing & Take-Off)
1A3aii(i)	1 A 3 a ii Civil Aviation (Domestic, Landing & Take-Off)
1A3b	1 A 3 b Road Transportation
1A3bi	1 A 3 b i Road Transport, Passenger cars
1A3bii	1 A 3 b ii Road Transport, Light duty vehicles
1A3biii	1 A 3 b iii Road Transport, Heavy duty vehicles
1A3biv	1 A 3 b iv Road Transport, Mopeds & Motorcycles
1A3bv	1 A 3 b v Road Transport, Gasoline evaporation
1A3bvi	1 A 3 b vi Road Transport, Automobile tyre and brake wear
1A3bvii	1 A 3 b vii Road Transport, Automobile road abrasion
1A3c	1 A 3 c Railways
1A3dii	1 A 3 d ii National Navigation
1A3e	1 A 3 e Other (to be specified)
1A3ei	1 A 3 e i Pipeline compressors
1A3eii	1 A 3 e ii Other mobile sources and machinery
1A4a	1 A 4 a Commercial / Institutional
1A4b	1 A 4 b Residential
1A4bi	1 A 4 b i Residential plants
1A4bii	1 A 4 b ii Household and gardening (mobile)
1A4c	1 A 4 c Agriculture / Forestry / Fishing
1A4ci	1 A 4 c i Stationary
1A4cii	1 A 4 c ii Off-road Vehicles and Other Machinery
1A4ciii	1A 4 c iii National Fishing
1A5a	1 A 5 a Other, Stationary (including Military)
1A5b	1 A 5 b Other, Mobile (Including military)
1B1	1 B 1 Fugitive Emissions from Solid Fuels

NFR Code	NFR Source Description
1B1a	1 B 1 a Coal Mining and Handling
1B1b	1 B 1 b Solid fuel transformation
1B1c	1 B 1 c Other (to be specified)
1B2	1 B 2 Oil and natural gas
1B2a	1 B 2 a Oil
1B2ai	1 B 2 a i Exploration Production, Transport
1B2aiv	1 B 2 a iv Refining / Storage
1B2av	1 B 2 a v Distribution of oil products
1B2avi	1 B 2 a vi Other
1B2b	1 B 2 b Natural gas
1B2c	1 B 2 c Venting and flaring
2A	2 A MINERAL PRODUCTS (b)
2A1	2 A 1 Cement Production
2A2	2 A 2 Lime Production
2A3	2 A 3 Limestone and Dolomite Use
2A4	2 A 4 Soda Ash Production and use
2A5	2 A 5 Asphalt Roofing
2A6	2 A 6 Road Paving with Asphalt
2A7	2 A 7 Other including Non Fuel Mining & Construction (to be specified)
2B	2 B CHEMICAL INDUSTRY
2B1	2 B 1 Ammonia Production
2B2	2 B 2 Nitric Acid Production
2B3	2 B 3 Adipic Acid Production
2B4	2 B 4 Carbide Production
2B5	2 B 5 Other (to be specified)
2C	2 C METAL PRODUCTION
2D	2 D OTHER PRODUCTION (b)
2D1	2 D 1 Pulp and Paper
2D2	2 D 2 Food and Drink
2E	2E_Production_of_Halocarbons_and_Sulphur_Hexafluoride
2E1	2 E 1 Halocarbons production (by-product)
2E2	2 E 2 Halocarbons production (fugitive)
2F	2 F Halocarbons use
2G	2 G OTHER (to be specified)
3A	3 A PAINT APPLICATION
3B	3 B DEGREASINGsss AND DRY CLEANING
3C	3 C CHEMICAL PRODUCTS, MANUFACTURE AND PROCESSING
3D	3 D OTHER incl. products containing HMs and POPs (to be specified)
4A1	4 A 1 Enteric_Fermentation_Cows
4A10	4 A 10 Enteric_Fermentation_Deer
4A3	4 A 3 Enteric_Fermentation_Sheep
4A4	4 A 4 Enteric_Fermentation_Goats
4A6	4 A 6 Enteric_Fermentation_Horses
4A8	4 A 8 Enteric_Fermentation_Swine

NFR Code	NFR Source Description
4B	4 B MANURE MANAGEMENT (c)
4B1	4 B 1 Cattle
4B11	4 B 11 Liquid_Systems
4B12	4 B 12 Solid_Storage_and_Drylot
4B13	4 B 13 Other
4B1a	4 B 1 a Dairy
4B1b	4 B 1 b Non-Dairy
4B2	4 B 2 Buffalo
4B3	4 B 3 Sheep
4B4	4 B 4 Goats
4B5	4 B 5 Camels and Llamas
4B6	4 B 6 Horses
4B7	4 B 7 Mules and Asses
4B8	4 B 8 Swine
4B9	4 B 9 Poultry
4C	4 C RICE CULTIVATION
4D	4 D AGRICULTURAL SOILS
4D1	4 D 1 Direct Soil Emission
4F	4 F FIELD BURNING OF AGRICULTURAL WASTES
4G	4 G OTHER (d)
5B	5 B FOREST AND GRASSLAND CONVERSION
5D	5D_CO2_Emissions_From_Soils
5E	5 E Other
6A	6 A SOLID WASTE DISPOSAL ON LAND
6B	6 B WASTE-WATER HANDLING
6C	6 C WASTE INCINERATION (e)
6D	6 D OTHER WASTE (f)
7	7 OTHER
X	X (11 08 Volcanoes)

APPENDIX B: METHODS FOR CALCULATING EMISSION DISTRIBUTIONS

For a more detailed description of the integration of point source data analysis and the development of UK emission maps, see Chapter 3 of “*UK Emission Mapping Methodology 2007*” (Bush *et al.*, 2009). This report outlines in detail the analysis conducted to analyse known point source emissions data, and derive the ‘area’ emission sources that make up the remaining component of UK emission totals. These area sources are then disaggregated geographically across the UK using a range of methods according to available data for the source in question. The geographical distribution of emissions across the UK is then built up from distributions of emissions in each source sector.

For large industrial point sources, emissions are compiled from a variety of official UK sources (Environment Agency, Scottish Environment Protection Agency, Northern Ireland Department of Environment, Local Authorities). The area source distribution maps are generated using appropriate surrogate statistics for that sector, commonly using local activity statistics such as raw material use, energy use, industrial production and employment data, housing and population data, road vehicle and fuel sales data, periodic census or socio-economic survey data.

Table B1: Methods used to Map Emissions in each of the 11 UNECE Source Sectors

1 Combustion in energy production and transfer points offshore IDBR employment	6 Solvent use population points IDBR employment Land use
2 Combustion in commercial, institutions, residential and agricultural sectors points domestic fuel use IDBR employment IDBR agriculture IDBR commercial and public fuel use	7 Road transport road transport
3 Combustion in industry points IDBR employment IDBR industry fuel use	8 Other transport and machinery agriculture airports other rail shipping IDBR employment population
4 Production processes points IDBR employment shipping road transport population other	9 Waste Treatment and disposal landfill Land use offshore points IDBR employment
5 Extraction / Distribution of fossil fuels points offshore other domestic fuel use population	10 Agricultural, forests and landuse change agriculture Land use
	11 Other sources and sinks Land use population

Table B1 provides a simple overview of the different data used to map the SNAP sectors, whilst Table B2 below provides a more detailed insight into the disaggregation methodologies used to compile the DA air quality pollutant inventories. Table B2 is presented using the NFR reporting structure, which is the format currently required for the LRTAP submission.

NFR Sector	Source	Disaggregation Method
1A1a	Power stations (all fuels)	All emissions are derived from the AEA point source database, which is based on annual emissions estimates reported to UK environmental regulators by IPC/IPPC-regulated industry and (since 2005) fuel use data available from the EUETS. Environment Agency (2008a,b), SEPA (2008a,b), NI DoE (2008a,b)
1A1b	Refineries (all fuels)	Point source data provided by plant operators to IPC/IPPC pollution inventories (see 1A1a). Further detail on combustion and process emissions provided by UKPIA (2009).
1A1c	Coke & SSF production (all fuels)	Point source data provided by plant operators (see 1A1a). Regional iron & steel production and fuel use data (ISSB, 2009). UK fuel use data from DECC (2008a).
	Nuclear fuel production (all fuels)	All emissions are in England
	Colliery combustion (all fuels)	Deep mined coal production, data from the Coal Authority (2008).
	Gas production & gas separation plant (all fuels)	Arrivals of natural gas, DECC (2008a,d), DECC Oil & Gas EEMS inventory (2008)
	Offshore oil & gas (Natural gas use)	DECC Oil & Gas EEMS inventory (2008). Point source data for NOX, SO2, VOC. (CO and PM10 assumed same as SO2.)
1A2a	Blast furnaces & sinter plant	Point source data provided by plant operators (see 1A1a), supplemented by site-specific breakdown of emissions from Corus (2008).
	Iron & steel combustion plant (all fuels)	Regional iron & steel production and fuel use data (ISSB, 2009).
1A2b	Primary lead & zinc production, secondary copper, aluminium & lead production, copper alloy & semis production, zinc oxide and zinc alloys production, lead battery manufacture.	Point source data provided by plant operators (see 1A1a).

NFR Sector	Source	Disaggregation Method
1A2f	Refractory & ceramic production	Regional GDP data (ONS, 2008).
	Autogenerators (coal)	All emissions in England.
	Lime, cement, brick and ammonia production (all fuels)	Point source data from plant operators (see 1A1a). All lime production and ammonia production in England.
	Other industrial combustion (oils)	Regional energy statistics, DECC (2008b), and analysis of AEA point source data.
	Other industrial combustion (SSF, coke)	Regional energy statistics, DECC (2008b), and analysis of AEA point source data.
	Other industrial combustion (coal)	Regional energy statistics, DECC (2008b), and analysis of AEA point source data.
	Other industrial combustion & auto-generators (gas)	Natural gas consumption data from gas network operators: Transco (2008), Northern Gas Networks (2008), Scotia Gas (2008), Wales & West (2008), Phoenix Gas (2007, 2008), Firmus Energy (2008). Analysis of AEA point source data.
	Industrial off-road machinery (all fuels)	Regional GDP data, ONS (2008).
1A3ai (i)	Aircraft – international take-off and landing (all fuels)	CAA (2008), database of flight information. All emissions for each flight assigned to DA of origin airport.
1A3aii (i)	Aircraft – domestic take-off and landing (all fuels)	CAA (2008), database of flight information. All emissions for each flight assigned to DA of origin airport.
1A3bi to 1a3bvi	Road Transport	Road fuel sales, DTI; vehicle km, DETR / DLTR, Emission factors: COPERT III/IV, (European Environment Agency, 2000/2007), Barlow et al. (2001), Composition of fleet: Vehicle Licensing Statistics Report, DfT (GB), Dept of Regional Development (NI). Traffic data: National Traffic Census, DfT (GB: 1990-2007) Dept of Regional Development (NI: 1990-1999), Traffic Census Report (NI: 2000), Vehicle Kilometres of Travel Survey of Northern Ireland Annual Report (NI: 2001), Traffic and Travel Information 2007 (DRDNI: 2008), Fuel consumption: Digest of UK Energy

NFR Sector	Source	Disaggregation Method
		Statistics, DECC (2008a), Welsh Office fuels data (WO, 1998)
1A3c	Railways: intercity, regional and freight	Gas oil consumption, Railtrack, ATOC, Translink & NIR (2008)
1A3dii	Coastal shipping (gas oil, fuel oil)	Port movement data, DfT (2008b) Maritime Statistics.
1A3eii	Aircraft support vehicles (gas oil)	Regional aircraft movements, DfT (2008d)
1A4a	Railways – stationary combustion	Regional energy statistics, DECC (2008b)
	Industrial & commercial combustion	Regional energy statistics, DECC (2008b), in conjunction with analysis of AEA point source data. Gas use data supplemented by sales data from gas network operators (same references as 1A2f).
	Public sector combustion	Regional energy statistics, DECC (2008b), in conjunction with analysis of AEA point source data. Gas use data supplemented by sales data from gas network operators (same references as 1A2f).
1A4bi	Domestic combustion	For coal, anthracite, petroleum fuels, analysis is from Regional energy statistics, DECC (2008b) and Housing Condition Survey data. Domestic peat combustion data from CEH (2008). Gas use data provided by gas network operators (same references as 1A2f).
1A4bii	House & garden machinery (all fuels)	Regional dwellings data, ONS (2008).
1A4ci	Agriculture – Stationary combustion	Agricultural employment data, Defra (2008) used for allocation of solid and gaseous fuels. Regional energy statistics, DECC (2008b) used for petroleum-based fuels.
1A4cii	Agriculture – mobile machinery	Agricultural off-road mapping grid.
1A4ciii	Fishing vessels	All emissions unallocated.
1A5b	Military aircraft and naval shipping	Regional GDP data (ONS, 2008).
1B1a	Deep-mined coal	Regional deep mine production, Coal Authority (2008).

NFR Sector	Source	Disaggregation Method
1B1b	Coke & SSF production	Point source data provided by plant operators (see 1A1a).
	Iron & steel flaring	Regional iron & steel production and fuel use data (ISSB, 2009).
1B2ai	Offshore oil & gas: offshore oil loading, well testing.	All emissions unallocated.
	Offshore oil & gas: process emissions, onshore oil loading, oil terminal storage	Emissions derived from the DECC Oil & Gas (2008) EEMS point source dataset, with extrapolations back to cover 1990, 1995 where data gaps are evident.
1B2aiv	Refinery process emissions (drainage, tankage, general)	Point source data provided by plant operators (see 1A1a), UKPIA (2008) and analysed using the AEA point source database.
1B2av	Petrol terminal storage and loading, Refinery road and rail haulage emissions	Point source data provided by plant operators (see 1A1a).
	Petrol station emissions from delivery, vehicle refuelling, storage tanks and spillages	Regional road transport distribution based on analysis of vehicle km data for different vehicle types and the resultant fuel use distributions. Hence, references as 1A3b.
1B2b	Onshore gas production (gasification process emissions)	Point source data provided by plant operators (see 1A1a).
	Gas leakage from supply infrastructure	Leakage data provided by gas network operators: National Grid Transco (2008), Northern Gas Networks (2008), Scotia Gas Networks (2008), Wales & West Utilities (2008), Phoenix Gas (2008).
1B2c	Offshore oil & gas: flaring & venting	Emissions derived from the DECC Oil & Gas (2008) EEMS point source dataset, with extrapolations back to cover 1990, 1995 where data gaps are evident.
	Refinery flaring	Point source data provided by plant operators (see 1A1a).
2A1	Cement decarbonising	Point source data provided by plant operators (see 1A1a).
	Concrete batching	Regional GDP data (ONS, 2008).

NFR Sector	Source	Disaggregation Method
	Slag cement production	Slag cement production mapping grid
2A2	Lime production decarbonising	Point source data provided by plant operators (see 1A1a).
2A3	Limestone & dolomite use in: inter plant, glass production, basic oxygen furnaces. FGD emissions from power stations.	Point source data provided by plant operators (see 1A1a).
2A4	Soda ash use in glass and chemical industries	Point source data provided by plant operators (see 1A1a).
2A7	Construction, asphalt manufacture	Regional GDP data (ONS, 2008).
	Quarrying (aggregates)	Quarries mapping grid.
	Glass industry process emissions	Point source data provided by plant operators (see 1A1a).
2B1	Ammonia production	All ammonia production now in England. Point source emissions data and plant capacity data used for earlier years.
2B2	Nitric acid production	Point source data provided by plant operators (see 1A1a). Now all England.
2B3	Adipic acid production	Point source data provided by plant operators (see 1A1a). All England.
2B5	Ship purging	All emissions unallocated.
	Chemical industry process emissions	Point source data provided by plant operators (see 1A1a).
2C	Industrial process emissions from SMEs, hot & cold steel rolling emissions	Regional GDP data (ONS, 2008).

NFR Sector	Source	Disaggregation Method
	Process emissions from: blast furnaces, EAFs, BOFs, primary aluminium production & anode baking, alumina production, non-ferrous metal processes	Point source data provided by plant operators (see 1A1a), plus supplementary data provided by Corus (2008)
	Flaring & stockpile emissions at iron & steelworks	Regional iron & steel production and fuel use data (ISSB, 2009).
	Foundries	Foundries mapping grid
2D1	Paper production process emissions	Regional GDP data (ONS, 2008).
	Wood product process emissions	Wood coating mapping grid.
2D2	Cider & wine manufacture	All emissions are in England.
	Spirit manufacture	Spirits mapping grid
	Brewery emissions	Brewing mapping grid
	Food & drink process industries: meat & fish, margarine, cakes & biscuits, animal feed, coffee roasting	Population used to disaggregate emissions.
	Other food & drink processes: bread baking, sugar beet, malting.	Point source data provided by plant operators (see 1A1a).
3	Solvent use	Population data, ONS (2008).
3A	Trade & retail decorative paints,	Population data, ONS (2008).
	Industrial coatings: commercial vehicles, aircraft, agricultural and construction vehicles.	Regional GDP data (ONS, 2008).

NFR Sector	Source	Disaggregation Method
	Industrial coatings: wood, metal, plastic, marine, vehicle refinishing.	Various coatings mapping distribution grids are used, based on surveys of locations of such processes.
	Industrial coatings: coil, metal packaging, automotive, drum.	Point source data provided by plant operators (see 1A1a).
3B	Domestic surface cleaning.	Population data, ONS (2008).
	Dry cleaning (solvent use)	Dry cleaning mapping grid
	Industrial surface cleaning	Industrial employment mapping distribution grid.
3C	Rubber & plastic products	Population data, ONS (2008).
	Leather coating and degreasing	Regional GDP data (ONS, 2008).
	Tyre manufacture and industrial coatings: textiles, film.	Point source data provided by plant operators (see 1A1a).
	Industrial coating manufacture: adhesives, inks, solvents and pigments	Various industry-specific coatings mapping distribution grids
3D	Industrial adhesives and solvent use, printing, aerosol and non-aerosol products (cosmetics & toiletries, household products, paint thinners),	Population data, ONS (2008).
	Printing – public gravure	Other printing mapping grid
	Road dressings	Road dressing mapping grid.
	Agrochemical use, wood impregnation	Various agricultural mapping distribution grids

NFR Sector	Source	Disaggregation Method
	Seed oil extraction, paper coatings, some adhesive and printing processes.	Point source data provided by plant operators (see 1A1a).
4B1	Cattle waste: manure & excreta	Livestock data, via North Wyke Research (2008)
4B3	Sheep & goat waste: manure & excreta	Livestock data, via North Wyke Research (2008)
4B6	Horse waste: manure & excreta	Livestock data, via North Wyke Research (2008)
4B8	Pig waste: manure & excreta	Livestock data, via North Wyke Research (2008)
4B9	Poultry wastes: manure & excreta	Livestock data, via North Wyke Research (2008)
4B13	Domestic pets: manure & excreta	Population data, ONS (2008).
4D1	Use of domestic fertiliser & composting	Population data, ONS (2008).
	Agricultural soil emissions	North Wyke Research (2008), livestock data and fertiliser application data.
4F	Field burning	Field burning estimates, via North Wyke Research (2008).
5B	Deforestation	CEH (2008) regional distribution data.
6A	Landfills, benzoles & tars	Regional landfill MSW disposal data (wastedataflow.org)
6B	Sewage sludge decomposition	Population data, ONS (2008).
6C	Clinical waste incineration, small-scale waste burning	Population data, ONS (2008).
	Incineration: MSW, crematoria, sewage sludge, chemical waste	Point source data provided by plant operators (see 1A1a).

NFR Sector	Source	Disaggregation Method
	Foot & mouth pyres	Data on livestock disposal, NAO report.
6D	Nappies, accidental fires	Population data, ONS (2008).
7	Cigarettes, fireworks & bonfires	Population data, ONS (2008).

APPENDIX C: DEVOLVED ADMINISTRATION PM₁₀ INVENTORIES, 1990-2007

Table C.1 PM₁₀ Emissions Inventory for England 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	57.6	31.7	20.3	16.0	17.4	11.9	6.0	6.3	6.4	7.4	7.9	6.4	-89%	6%	67%
1A1b	1.9	2.1	2.1	2.0	1.6	1.4	1.3	1.2	1.4	1.3	1.1	0.9	-51%	1%	59%
1A1c	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-83%	0%	20%
1A2a	1.1	1.2	1.2	1.2	0.9	1.2	1.2	1.2	1.0	0.9	0.7	1.3	16%	1%	66%
1A2f	20.2	19.5	18.2	16.6	15.4	14.8	13.7	13.4	13.2	11.8	10.9	10.0	-50%	10%	82%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-8%	0%	94%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-45%	0%	60%
1A3bi	6.9	7.9	7.3	7.2	5.8	5.6	5.5	5.3	5.1	5.0	4.9	4.8	-30%	5%	81%
1A3bii	7.5	8.5	7.7	7.2	5.7	5.5	5.0	4.7	4.4	4.2	3.8	3.7	-51%	4%	83%
1A3biii	13.6	12.7	10.3	9.2	7.7	6.7	6.0	5.4	5.0	4.6	4.2	3.8	-72%	4%	81%
1A3biv	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	-73%	0%	88%
1A3bvi	6.5	6.7	7.1	7.3	7.3	7.4	7.5	7.5	7.7	7.7	7.8	7.9	22%	8%	82%
1A3c	0.5	0.5	0.6	0.6	0.6	0.7	0.6	0.5	0.5	0.5	0.5	0.5	6%	1%	78%
1A3dii	3.1	3.1	2.9	2.5	2.3	1.9	1.7	2.9	3.4	4.1	5.7	5.4	75%	5%	69%
1A3eii	0.3	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	5%	0%	84%
1A4a	2.5	1.6	1.1	1.0	0.8	1.0	0.7	0.6	0.6	0.7	0.7	0.6	-78%	1%	82%
1A4bi	25.0	14.3	15.5	16.9	12.0	10.6	8.4	8.0	8.4	8.1	8.9	10.1	-60%	10%	55%
1A4bii	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-72%	0%	84%
1A4ci	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	-5%	2%	92%
1A4cii	4.9	4.9	4.9	4.8	4.6	4.5	4.3	4.0	3.6	3.1	2.7	2.3	-54%	2%	59%
1A5b	1.4	1.1	0.9	0.9	0.9	0.8	0.8	0.5	0.8	0.7	0.7	0.7	-49%	1%	86%
1B1b	0.4	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.3	0.4	0.3	-8%	0%	89%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.4	0.2	0.3	22073%	0%	22%
2A1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2%	0%	85%
2A4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
2A7	14.0	12.3	11.2	10.8	10.6	10.7	10.6	10.6	10.9	11.1	10.9	11.1	-20%	11%	80%
2B5	2.6	2.0	1.3	1.1	1.0	1.0	1.0	0.9	0.5	0.6	0.6	0.5	-81%	1%	92%
2C	10.5	8.7	6.9	5.7	5.2	5.0	4.5	4.6	4.5	4.1	4.1	5.2	-50%	5%	72%
2D1	2.0	1.8	0.8	0.8	0.8	0.9	1.0	1.0	1.1	1.0	1.0	0.7	-67%	1%	84%
3A	6.8	5.1	5.4	5.1	4.7	4.3	4.2	4.4	4.5	4.5	4.7	4.7	-31%	5%	86%
3C	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	18%	0%	94%
4B1	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-28%	0%	58%
4B8	1.6	1.6	1.7	1.5	1.5	1.5	1.1	1.0	1.1	1.0	1.0	1.0	-37%	1%	82%
4B9	5.3	5.4	6.6	7.0	6.9	7.4	6.9	7.2	7.4	7.1	7.2	6.9	30%	7%	76%
4D1	1.7	1.6	1.6	1.6	1.7	1.3	1.6	1.5	1.5	1.5	1.5	1.3	-19%	1%	66%
6C	5.2	4.4	3.7	3.7	3.7	6.6	3.7	3.7	3.7	3.7	3.7	3.7	-29%	4%	84%
6D	1.5	1.5	1.3	1.5	1.4	1.5	1.5	1.5	1.3	1.2	1.2	1.2	-23%	1%	84%
7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.8	1.5	1.6	1.5	1.5	7%	1%	84%
Grand Total	210	166	146	138	126	120	104	104	103	102	102	100	-52%	100%	74%

Table C.2: PM₁₀ Emissions Inventory for Scotland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	7.4	4.1	2.7	2.3	3.1	3.1	1.9	0.9	1.6	1.5	2.4	2.1	-72%	15%	22%
1A1b	0.9	1.0	1.0	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	-76%	2%	14%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	70%	0%	15%
1A2a	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1A2f	1.9	1.7	1.5	1.4	1.4	1.4	1.2	1.2	1.2	1.1	1.1	1.1	-45%	8%	9%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3%	0%	4%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-23%	0%	27%
1A3bi	0.7	0.8	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-29%	3%	8%
1A3bii	0.8	0.9	0.8	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	-51%	3%	9%
1A3biii	1.6	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.5	0.5	0.5	0.4	-73%	3%	9%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-57%	0%	5%
1A3bvi	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	25%	6%	9%
1A3c	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-6%	1%	10%
1A3dii	1.1	1.2	1.0	0.9	0.8	0.7	0.6	0.9	1.0	1.1	1.4	1.4	21%	10%	18%
1A3eii	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-8%	0%	13%
1A4a	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-79%	0%	7%
1A4bi	6.3	3.6	3.7	3.8	2.9	2.5	2.0	1.9	1.9	1.7	1.9	2.1	-66%	15%	12%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-74%	0%	8%
1A4ci	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-2%	1%	6%
1A4cii	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.2	1.1	1.0	0.8	0.7	-53%	5%	18%
1A5b	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	-53%	0%	8%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2c	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.1	0.1	0.0	0.1	582%	0%	5%
2A1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-11%	0%	7%
2A4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
2A7	1.9	1.7	1.5	1.5	1.4	1.5	1.4	1.4	1.5	1.4	1.4	1.4	-27%	10%	10%
2B5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-92%	0%	0%
2C	0.7	0.6	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	-70%	2%	3%
2D1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	-67%	0%	6%
3A	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-33%	2%	6%
3C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19%	0%	3%
4B1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-10%	1%	15%
4B8	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	2%	1%	9%
4B9	0.8	0.8	0.7	0.6	0.8	0.9	0.8	0.8	0.9	0.8	0.7	0.8	3%	5%	9%
4D1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	3%	2%	13%
4F	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
6C	0.4	0.4	0.4	0.4	0.4	1.1	0.4	0.4	0.4	0.4	0.4	0.4	-13%	3%	9%
6D	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	-27%	1%	8%
7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	1%	1%	8%
Grand Total	29.2	22.2	19.5	18.3	17.4	17.3	14.4	13.1	13.9	13.4	14.5	14.1	-52%	100%	10%

Table C.3: PM₁₀ Emissions Inventory for Wales 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	2.7	1.5	1.0	0.7	1.4	1.1	0.6	0.7	0.7	0.8	0.9	0.7	-73%	7%	8%
1A1b	0.6	0.7	0.7	0.5	0.5	0.5	0.4	0.5	0.3	0.3	0.4	0.4	-31%	4%	27%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-17%	0%	9%
1A2a	0.7	0.9	0.9	0.9	0.9	0.6	0.3	0.5	0.7	0.6	0.6	0.6	-3%	6%	34%
1A2f	1.6	1.4	1.1	1.1	1.1	1.1	1.0	1.0	0.9	0.8	0.7	0.6	-60%	6%	5%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73%	0%	1%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	383%	0%	1%
1A3bi	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-27%	3%	5%
1A3bii	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	-55%	2%	5%
1A3biii	0.8	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	-74%	2%	5%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-58%	0%	4%
1A3bvi	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	29%	4%	5%
1A3c	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	-8%	1%	9%
1A3dii	0.5	0.5	0.4	0.4	0.4	0.3	0.2	0.4	0.5	0.6	0.8	0.8	49%	7%	10%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-25%	0%	1%
1A4a	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-81%	0%	6%
1A4bi	4.9	2.7	3.0	3.3	2.3	2.0	1.6	1.5	1.6	1.6	1.7	2.0	-59%	17%	11%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-73%	0%	5%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-43%	0%	1%
1A4cii	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.7	0.6	0.6	0.5	-54%	4%	12%
1A5b	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-57%	0%	4%
1B1b	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.0	-72%	0%	11%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	763%	0%	1%
2A1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5%	0%	5%
2A4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
2A7	1.5	1.3	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	-30%	9%	7%
2B5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	-41%	0%	8%
2C	2.6	2.5	2.2	1.9	1.8	1.1	0.8	1.2	1.2	1.0	1.2	1.8	-32%	16%	25%
2D1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	-67%	0%	6%
3A	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	-37%	2%	5%
3C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22%	0%	3%
4B1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-19%	1%	11%
4B8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-76%	0%	0%
4B9	0.4	0.4	0.5	0.6	0.6	0.6	0.3	0.6	0.5	0.4	0.3	0.4	10%	4%	5%
4D1	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	-8%	2%	11%
4F	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
6C	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	-3%	2%	5%
6D	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-25%	1%	5%
7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	4%	1%	5%
Grand Total	20.5	16.6	15.3	14.9	14.1	12.4	9.9	10.9	10.9	10.3	10.9	11.4	-45%	100%	8%

Table C.4: PM₁₀ Emissions Inventory for Northern Ireland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	2.7	1.5	1.0	0.6	0.8	1.0	0.4	0.4	0.3	0.3	0.3	0.3	-91%	3%	3%
1A1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2f	0.9	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.4	0.5	0.5	0.5	-45%	5%	4%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	202%	0%	1%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-26%	0%	12%
1A3bi	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	15%	4%	5%
1A3bii	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	-66%	1%	3%
1A3biii	0.6	0.6	0.5	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.2	-60%	3%	5%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-60%	0%	2%
1A3bvi	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	62%	5%	5%
1A3c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31%	0%	2%
1A3dii	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	77%	4%	4%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-24%	0%	2%
1A4a	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-82%	0%	5%
1A4bi	12.6	6.9	6.4	5.9	5.5	5.1	4.7	4.2	3.9	3.7	3.8	4.1	-68%	46%	22%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-71%	0%	3%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-41%	0%	1%
1A4cii	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.5	0.4	-52%	5%	11%
1A5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-44%	0%	2%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2A1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19%	0%	3%
2A4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
2A7	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-25%	4%	3%
2B5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2C	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-32%	1%	1%
2D1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	-67%	0%	5%
3A	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-36%	1%	2%
3C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30%	0%	0%
4B1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5%	1%	16%
4B8	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-40%	1%	8%
4B9	0.6	0.8	0.8	0.8	0.8	0.8	0.9	1.0	1.0	1.0	1.0	0.9	67%	10%	11%
4D1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-18%	2%	9%
4F	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
6C	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3%	1%	3%
6D	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	-20%	0%	3%
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	10%	1%	3%
Grand Total	21.4	14.5	13.0	12.0	11.6	11.1	10.1	9.8	9.2	8.9	9.1	9.0	-58%	100%	7%

Table C.5: Unallocated PM₁₀ Emissions in the UK, 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1c	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	30%	17%	56%
1B2c	1.7	1.4	1.4	1.2	1.0	1.1	0.7	0.8	0.9	0.7	0.8	0.8	-50%	83%	73%
2C	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
Grand Total	1.9	1.7	1.7	1.4	1.3	1.4	1.0	1.1	1.1	0.9	1.0	1.0	-46%	100%	1%

APPENDIX D: DEVOLVED ADMINISTRATION CO INVENTORIES, 1990-2007

Table D.1 Carbon Monoxide Emissions Inventory for England 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	92	86	49	44	53	53	51	59	57	58	62	65	-29%	4%	81%
1A1b	4.8	5.5	5.4	4.9	3.9	2.5	2.8	3.3	3.0	6.9	3.6	2.9	-40%	0%	63%
1A1c	2.4	1.6	1.9	1.7	2.5	2.8	2.3	2.4	2.3	2.4	1.4	1.4	-40%	0%	8%
1A2a	208	207	193	193	141	189	183	168	166	175	150	148	-29%	9%	68%
1A2f	280	323	307	295	271	263	262	265	269	247	248	247	-12%	16%	83%
1A3ai(i)	7.5	6.9	7.6	7.8	7.9	7.1	6.8	6.7	6.9	7.1	7.0	6.7	-11%	0%	95%
1A3aii(i)	12.8	4.1	6.6	6.8	5.7	5.7	5.6	6.9	10.3	10.0	8.6	3.9	-69%	0%	41%
1A3bi	4094	3040	2361	2127	1758	1488	1294	1098	930	742	640	537	-87%	34%	84%
1A3bii	582	422	309	244	187	142	103	76	59	47	41	37	-94%	2%	84%
1A3biii	104	87	74	68	63	57	52	47	45	41	39	37	-64%	2%	82%
1A3biv	121	81	90	98	87	81	76	77	65	61	52	48	-60%	3%	87%
1A3c	8.2	8.1	9.2	9.1	9.8	10.6	9.5	9.2	9.3	9.5	9.6	9.6	18%	1%	78%
1A3dii	5.8	5.2	5.2	4.6	4.5	3.7	3.1	5.6	5.4	6.3	8.6	7.7	32%	0%	69%
1A3eii	0.9	1.0	1.2	1.2	1.3	1.3	1.3	1.3	1.4	1.5	1.5	1.5	75%	0%	84%
1A4a	7.6	5.9	5.4	5.3	5.2	5.6	5.1	5.0	5.2	5.1	5.0	4.7	-39%	0%	85%
1A4bi	570	426	379	381	320	320	252	219	212	172	160	168	-71%	11%	60%
1A4bii	67.8	71.4	65.2	63.2	61.3	60.5	59.8	59.1	58.3	58.1	58.7	59.4	-12%	4%	84%
1A4ci	14.2	14.1	14.2	14.4	14.2	14.3	14.2	14.2	14.1	14.1	14.1	14.0	-2%	1%	92%
1A4cii	13.9	13.9	13.9	13.6	13.2	13.0	12.9	12.8	12.4	11.9	11.5	11.0	-20%	1%	59%
1A5b	11.4	8.3	6.9	6.8	6.3	6.3	6.6	6.2	6.3	6.0	6.0	7.6	-33%	0%	86%
1B1b	22.0	11.9	11.8	9.2	9.3	5.2	3.6	5.9	3.3	3.2	3.6	3.1	-86%	0%	31%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2c	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.6	0.6	0.5	0.4	2%	0%	4%
2A4	5.5	2.8	2.6	2.5	3.5	5.0	5.0	6.4	6.2	3.3	4.0	4.6	-17%	0%	91%
2A7	5.3	3.6	3.4	1.6	2.8	2.5	2.5	2.7	2.6	4.3	4.7	3.4	-35%	0%	100%
2B5	81.8	88.2	68.6	65.5	82.5	81.6	39.0	36.6	28.5	24.8	25.7	28.8	-65%	2%	99%
2C	125	124	123	149	132	137	141	63	64	62	86	82	-34%	5%	56%
4F	245	0	0	0	0	0	0	0	0	0	0	0	-100%	0%	NA
5B	3.7	2.8	3.4	4.9	6.2	7.5	6.5	6.4	5.8	5.7	5.0	4.6	25%	0%	72%
6C	19.0	17.9	18.9	18.9	18.8	34.8	18.9	18.9	18.9	18.9	18.8	18.8	-1%	1%	84%
6D	5.7	5.7	4.4	5.0	4.6	4.9	5.0	5.4	4.4	4.1	4.2	4.2	-28%	0%	84%
7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.8	6.7	6.8	6.8	6.8	1%	0%	84%
Grand Total	6727	5082	4148	3853	3282	3012	2631	2294	2079	1815	1686	1576	-77%	100%	75%

Table D.2: Carbon Monoxide Emissions Inventory for Scotland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	12.4	11.8	6.8	6.4	8.5	8.1	7.9	7.4	7.6	7.5	9.8	8.4	-32%	5%	10%
1A1b	1.1	1.2	1.2	1.1	0.9	0.8	0.7	0.7	1.0	1.0	0.9	1.0	-6%	1%	22%
1A1c	1.1	1.6	1.9	1.6	1.4	1.5	1.5	1.4	1.4	1.4	1.2	1.3	14%	1%	8%
1A2a	53	1	0	0	0	0	0	0	0	0	0	0	-100%	0%	0%
1A2f	25	30	29	28	26	25	27	27	28	26	25	25	-1%	15%	8%
1A3ai(i)	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	17%	0%	4%
1A3aii(i)	6.5	3.4	3.8	4.8	6.6	7.6	6.8	7.4	6.7	6.8	6.0	5.4	-16%	3%	57%
1A3bi	382	284	221	193	164	139	122	104	88	70	61	52	-86%	30%	8%
1A3bii	56	40	31	24	18	14	10	8	6	5	4	4	-93%	2%	8%
1A3biii	12.5	9.6	7.7	6.9	6.5	5.8	5.2	4.9	4.6	4.4	4.2	4.1	-67%	2%	9%
1A3biv	5.8	4.9	5.2	5.7	5.3	4.9	4.9	5.1	4.4	4.0	3.4	3.2	-45%	2%	6%
1A3c	1.2	1.2	1.4	1.4	1.5	1.4	1.1	1.2	1.2	1.2	1.3	1.3	4%	1%	10%
1A3dii	2.2	1.9	1.8	1.7	1.6	1.3	1.0	1.7	1.6	1.8	2.2	2.0	-9%	1%	18%
1A3eii	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	54%	0%	13%
1A4a	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-35%	0%	8%
1A4bi	164	116	101	92	81	75	63	54	49	38	45	44	-73%	25%	16%
1A4bii	7.2	7.5	6.8	6.6	6.3	6.2	6.1	6.0	5.9	5.9	5.9	6.0	-17%	3%	8%
1A4ci	0.9	0.9	0.8	0.7	0.8	0.7	0.7	0.7	0.9	0.8	0.9	1.0	12%	1%	6%
1A4cii	4.2	4.2	4.2	4.1	4.0	3.9	3.9	3.9	3.8	3.7	3.5	3.4	-19%	2%	18%
1A5b	1.2	0.9	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	-38%	0%	8%
1B1b	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2c	1.0	1.1	0.9	1.1	1.0	1.7	1.1	0.8	0.8	0.9	0.7	0.9	-11%	1%	8%
2A4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-17%	0%	2%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2B5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3%	0%	0%
2C	5.8	5.2	5.4	6.5	6.7	6.8	7.0	3.4	3.5	3.4	4.8	4.3	-27%	2%	3%
4F	18.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
5B	1.2	0.9	1.1	1.5	1.9	2.4	2.0	2.0	1.8	1.8	1.6	1.5	25%	1%	23%
6C	2.0	2.0	2.1	2.1	2.1	6.2	2.1	2.1	2.0	2.0	2.0	2.0	1%	1%	9%
6D	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	-32%	0%	8%
7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	-5%	0%	8%
Grand Total	771	532	436	391	347	316	278	245	221	188	187	174	-77%	100%	8%

Table D.3: Carbon Monoxide Emissions Inventory for Wales 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	4.7	4.4	2.5	2.1	3.6	4.5	3.6	3.8	5.2	4.5	5.3	4.5	-5%	2%	6%
1A1b	1.2	1.3	1.3	1.2	0.9	0.8	0.8	1.0	1.3	1.3	1.0	0.7	-41%	0%	15%
1A1c	0.4	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.5	35%	0%	3%
1A2a	123	145	151	149	111	105	50	44	66	64	89	69	-44%	29%	32%
1A2f	19	20	20	19	19	19	19	18	18	16	16	16	-13%	7%	6%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66%	0%	0%
1A3aii(i)	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	-78%	0%	0%
1A3bi	244	181	141	127	105	89	79	67	58	46	40	34	-86%	14%	5%
1A3bii	36	26	19	15	12	9	7	5	4	3	2	2	-94%	1%	5%
1A3biii	6.3	4.9	4.1	3.7	3.3	2.9	2.6	2.4	2.2	2.1	2.1	2.0	-68%	1%	4%
1A3biv	4.7	4.0	4.4	4.8	4.4	4.1	3.9	3.9	3.4	3.2	2.7	2.5	-46%	1%	5%
1A3c	1.1	1.1	1.3	1.3	1.4	1.0	0.9	0.9	1.1	1.1	1.2	1.2	1%	0%	9%
1A3dii	1.0	0.9	0.8	0.7	0.7	0.6	0.4	0.8	0.9	1.0	1.2	1.1	12%	0%	10%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26%	0%	1%
1A4a	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-54%	0%	5%
1A4bi	102	76	67	69	56	57	43	37	36	28	24	26	-74%	11%	9%
1A4bii	4.1	4.3	3.9	3.7	3.6	3.6	3.5	3.5	3.4	3.4	3.4	3.5	-15%	1%	5%
1A4ci	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-1%	0%	1%
1A4cii	2.9	2.9	2.9	2.8	2.7	2.7	2.7	2.6	2.6	2.5	2.4	2.3	-20%	1%	12%
1A5b	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-43%	0%	4%
1B1b	12.3	19.0	19.0	14.7	15.1	8.5	3.5	4.9	3.3	2.9	6.4	6.9	-44%	3%	69%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	1%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32%	0%	0%
2A4	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.2	0.3	0.3	-17%	0%	6%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2B5	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.2	0.3	0.4	0.4	42%	0%	1%
2C	64	62	66	61	59	45	33	43	42	48	56	60	-6%	26%	41%
4F	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
5B	0.3	0.2	0.3	0.4	0.5	0.6	0.5	0.5	0.5	0.5	0.4	0.4	25%	0%	6%
6C	0.9	0.9	1.0	1.0	1.0	2.2	1.0	1.0	1.0	1.0	1.0	1.0	6%	0%	4%
6D	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	-30%	0%	5%
7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-2%	0%	5%
Grand Total	632	556	507	479	402	358	256	241	251	231	257	236	-63%	100%	11%

Table D.4: Carbon Monoxide Emissions Inventory for Northern Ireland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	4.1	3.8	2.2	1.4	1.3	1.5	1.1	1.1	2.1	3.1	2.9	2.7	-33%	3%	3%
1A1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2f	9.8	10.8	10.3	10.1	8.4	7.8	7.8	7.7	7.8	7.9	8.8	9.1	-7%	12%	3%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	113%	0%	1%
1A3aii(i)	1.7	0.2	0.2	0.9	0.7	0.2	0.4	0.2	0.2	1.8	3.4	0.2	-90%	0%	2%
1A3bi	123	92	69	63	53	44	36	31	27	21	18	16	-87%	20%	2%
1A3bii	6.8	5.6	4.6	4.0	3.5	3.0	2.4	2.0	1.7	1.5	1.4	1.1	-83%	1%	3%
1A3biii	3.6	3.3	2.9	2.8	2.6	2.5	2.9	3.0	2.6	2.4	2.4	2.2	-39%	3%	5%
1A3biv	2.4	1.6	2.1	2.2	1.9	1.8	1.8	2.3	1.9	1.8	1.4	1.4	-42%	2%	2%
1A3c	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	45%	0%	2%
1A3dii	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.5	0.5	33%	1%	4%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27%	0%	2%
1A4a	0.4	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	-67%	0%	2%
1A4bi	211	121	103	91	82	71	62	52	42	37	37	40	-81%	51%	14%
1A4bii	2.3	2.4	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	-10%	3%	3%
1A4ci	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	28%	0%	1%
1A4cii	2.6	2.6	2.6	2.5	2.5	2.4	2.4	2.4	2.3	2.3	2.2	2.1	-18%	3%	11%
1A5b	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-26%	0%	2%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2A4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-17%	0%	0%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2B5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3%	0%	0%
2C	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.0	0.0	0.0	0.0	0.0	-97%	0%	0%
4F	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
5B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
6C	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	11%	1%	3%
6D	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	-26%	0%	3%
7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4%	0%	3%
Grand Total	371	245	201	183	160	139	122	106	92	83	82	79	-79%	100%	4%

Table D.5: Unallocated Carbon Monoxide Emissions in the UK, 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1c	9.0	12.7	15.8	16.1	15.6	16.4	16.5	16.2	16.1	15.3	13.8	14.0	56%	58%	81%
1B2ai	5.5	7.1	3.0	1.0	0.7	0.5	0.7	0.5	0.5	0.5	0.2	0.2	-97%	1%	99%
1B2c	14.6	15.5	13.4	11.5	10.9	10.5	10.3	9.1	9.1	10.4	9.1	9.8	-33%	41%	88%
Grand Total	29.1	35.4	32.2	28.6	27.2	27.4	27.5	25.8	25.7	26.2	23.1	23.9	-18%	100%	1%

APPENDIX E: DEVOLVED ADMINISTRATION NO_x INVENTORIES, 1990-2007

Table E.1 Nitrogen Oxides (as Nitrogen Dioxide) Emissions Inventory for England 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	614	384	279	246	263	285	270	306	284	304	300	291	-53%	25%	81%
1A1b	26.7	22.7	23.9	20.2	19.5	18.9	20.4	19.5	21.5	21.2	18.7	17.0	-36%	1%	66%
1A1c	7.1	7.3	8.7	8.6	9.3	9.7	9.1	9.6	10.6	11.1	7.2	6.5	-8%	1%	13%
1A2a	19.7	22.7	19.7	19.9	14.4	14.4	12.9	12.5	12.5	12.5	12.5	12.0	-39%	1%	64%
1A2f	298	272	248	235	232	225	218	224	222	213	203	191	-36%	17%	83%
1A3ai(i)	4.6	5.9	7.4	8.1	9.0	8.7	8.5	8.9	9.6	10.3	10.4	10.2	122%	1%	95%
1A3aii(i)	0.7	0.7	0.8	0.9	1.0	1.0	1.0	1.0	1.1	1.3	1.2	1.1	61%	0%	59%
1A3bi	541	437	369	337	297	261	229	195	170	149	130	113	-79%	10%	82%
1A3bii	72.1	71.8	73.8	71.4	69.6	68.4	64.7	62.0	59.3	55.9	49.2	45.7	-37%	4%	84%
1A3biii	284	275	268	263	254	245	236	229	227	217	210	201	-29%	17%	81%
1A3biv	1.2	0.9	1.1	1.2	1.2	1.3	1.3	1.4	1.3	1.3	1.1	1.1	-5%	0%	86%
1A3c	15.3	18.6	24.8	26.8	30.5	33.8	29.5	27.1	28.0	29.1	29.7	30.3	98%	3%	78%
1A3dii	57.0	50.6	50.8	45.0	43.6	36.3	30.4	54.7	53.1	61.8	83.9	75.0	32%	7%	69%
1A3eii	3.8	4.4	5.1	5.2	5.3	5.0	4.9	4.8	4.8	4.7	4.4	4.1	8%	0%	84%
1A4a	29.7	30.3	28.5	29.0	25.7	26.4	22.3	22.4	23.4	22.4	21.2	19.2	-35%	2%	86%
1A4bi	80.4	83.3	89.7	88.9	90.7	92.9	90.0	91.2	93.4	89.4	85.3	81.4	1%	7%	82%
1A4bii	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	7%	0%	84%
1A4ci	0.9	1.1	0.8	0.8	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	-41%	0%	79%
1A4cii	44.3	44.3	44.4	43.4	42.0	40.6	39.2	37.0	33.9	30.5	26.6	22.8	-48%	2%	59%
1A5b	35.8	28.0	22.0	23.5	22.6	21.3	20.4	15.4	20.6	19.0	18.8	20.2	-44%	2%	86%
1B1b	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	-49%	0%	73%
1B2ai	0.6	9.9	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2c	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	-69%	0%	3%
2B2	6.6	1.6	1.7	2.0	1.8	0.9	0.6	0.7	0.7	0.6	0.6	0.6	-91%	0%	100%
2B5	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.3	0.5	30%	0%	91%
2C	3.1	3.0	2.4	2.3	2.2	1.9	0.9	1.1	1.2	1.1	0.9	1.0	-69%	0%	69%
4F	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
5B	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	25%	0%	72%
6C	5.7	3.7	1.6	1.5	1.5	2.0	1.5	1.5	1.5	1.5	1.3	1.3	-77%	0%	85%
6D	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	-29%	0%	84%
Grand Total	2163	1782	1574	1482	1438	1402	1313	1329	1281	1258	1219	1147	-47%	100%	77%

Table E.2 Nitrogen Oxides (as Nitrogen Dioxide) Emissions Inventory for Scotland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	86.1	55.1	39.7	37.6	44.6	39.7	37.2	36.8	35.7	35.2	48.2	41.8	-51%	28%	12%
1A1b	6.0	5.0	5.3	4.6	4.3	4.7	5.5	3.6	3.5	3.7	3.7	3.3	-45%	2%	13%
1A1c	3.0	3.9	4.7	4.8	4.6	4.2	3.9	3.9	3.6	3.6	3.1	3.3	11%	2%	6%
1A2a	4.1	0.8	0.4	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-95%	0%	1%
1A2f	27.0	24.8	23.7	22.5	22.9	23.2	20.4	20.4	20.9	20.8	20.0	18.7	-31%	12%	8%
1A3ai(i)	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	210%	0%	4%
1A3aii(i)	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	74%	0%	29%
1A3bi	54.0	43.4	36.3	32.2	28.9	25.2	22.5	19.2	16.7	14.5	12.8	11.2	-79%	7%	8%
1A3bii	7.5	7.3	7.8	7.4	7.2	6.9	6.6	6.3	6.0	5.6	5.0	4.7	-37%	3%	9%
1A3biii	32.8	29.4	27.8	26.8	26.4	25.4	24.6	24.4	24.0	23.4	23.2	22.6	-31%	15%	9%
1A3biv	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	17%	0%	6%
1A3c	2.3	2.8	3.7	4.1	4.6	4.5	3.5	3.4	3.7	3.8	3.9	4.0	75%	3%	10%
1A3dii	21.0	18.7	17.2	16.4	15.7	12.3	10.2	16.3	15.5	17.2	21.3	19.2	-9%	13%	18%
1A3eii	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.6	-5%	0%	13%
1A4a	3.1	2.7	2.7	2.8	2.4	2.6	2.1	2.2	2.3	2.2	2.1	1.9	-39%	1%	8%
1A4bi	9.1	9.6	9.8	9.5	9.6	10.1	9.5	9.5	9.6	9.3	9.1	8.8	-3%	6%	9%
1A4bii	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1%	0%	8%
1A4ci	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-58%	0%	11%
1A4cii	13.4	13.4	13.4	13.1	12.7	12.3	11.8	11.2	10.2	9.4	8.2	7.0	-47%	5%	18%
1A5b	3.7	2.9	2.2	2.3	2.2	2.0	1.9	1.5	2.0	1.8	1.8	1.9	-48%	1%	8%
1B1b	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2ai	0.0	0.0	0.0	0.4	0.5	0.6	0.6	0.6	0.4	0.6	0.5	0.0	NA	0%	11%
1B2c	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.1	0.2	15%	0%	8%
2B2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2B5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30%	0%	2%
2C	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-96%	0%	1%
4F	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
5B	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	25%	0%	23%
6C	0.3	0.2	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	-56%	0%	8%
6D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-33%	0%	8%
Grand Total	277	222	197	187	189	177	163	162	157	154	165	151	-45%	100%	10%

Table E.3: Nitrogen Oxides (as Nitrogen Dioxide) Emissions Inventory for Wales 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	42.0	26.1	18.8	13.9	23.9	31.4	25.7	27.0	28.7	26.0	33.1	20.5	-51%	21%	6%
1A1b	5.9	5.0	5.3	5.0	4.3	4.2	4.4	3.5	4.8	5.7	5.5	5.7	-4%	6%	22%
1A1c	2.0	4.1	4.6	4.4	4.3	3.6	2.2	1.8	1.5	1.7	2.0	2.1	8%	2%	4%
1A2a	10.8	17.2	16.9	18.5	12.6	9.9	5.9	7.3	6.7	6.4	7.3	6.6	-39%	7%	35%
1A2f	22.5	17.8	17.3	17.9	21.4	19.8	16.6	16.0	16.7	15.3	13.7	13.0	-43%	13%	6%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	228%	0%	0%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	865%	0%	1%
1A3bi	34.4	27.6	23.0	21.0	18.4	16.1	14.4	12.3	10.9	9.4	8.3	7.3	-79%	8%	5%
1A3bii	4.9	4.8	4.9	4.7	4.6	4.5	4.3	4.1	3.9	3.7	3.1	2.8	-43%	3%	5%
1A3biii	17.2	15.4	14.9	14.2	13.4	12.7	12.2	11.7	11.6	11.2	12.2	11.9	-31%	12%	5%
1A3biv	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	15%	0%	5%
1A3c	2.1	2.6	3.5	3.8	4.3	3.3	2.9	2.8	3.4	3.4	3.6	3.6	71%	4%	9%
1A3dii	9.5	8.4	7.8	7.1	6.9	5.4	4.4	7.8	8.4	9.3	11.9	10.6	12%	11%	10%
1A3eii	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	-22%	0%	1%
1A4a	1.9	1.8	1.3	1.4	1.2	1.3	1.0	1.1	1.1	1.1	1.0	0.9	-51%	1%	4%
1A4bi	5.4	5.6	6.0	5.9	5.9	6.0	5.8	5.9	6.0	5.7	5.5	5.1	-5%	5%	5%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4%	0%	5%
1A4ci	0.1	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-60%	0%	7%
1A4cii	9.2	9.2	9.2	9.0	8.7	8.4	8.1	7.6	7.0	6.4	5.5	4.8	-48%	5%	12%
1A5b	1.8	1.4	1.0	1.1	1.0	1.0	0.9	0.7	0.9	0.9	0.8	0.9	-52%	1%	4%
1B1b	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-58%	0%	27%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	8%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60%	0%	0%
2B2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2B5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30%	0%	6%
2C	1.5	1.4	1.2	1.2	1.2	1.0	0.4	0.3	0.5	0.4	0.4	0.4	-71%	0%	30%
4F	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
5B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25%	0%	6%
6C	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-11%	0%	6%
6D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-31%	0%	5%
Grand Total	172	149	136	130	133	129	110	110	113	107	114	97	-44%	100%	7%

Table E.4: Nitrogen Oxides (as Nitrogen Dioxide) Emissions Inventory for Northern Ireland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	30.9	19.2	13.8	14.1	14.8	16.2	12.0	11.2	9.4	8.6	9.3	6.6	-79%	14%	2%
1A1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2f	11.7	9.9	8.6	7.9	7.2	6.9	6.4	6.2	6.1	7.1	6.8	6.7	-42%	14%	3%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	370%	0%	1%
1A3aii(i)	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	128%	0%	12%
1A3bi	19.0	15.7	13.5	12.8	12.0	10.8	9.6	8.5	7.9	7.2	6.2	5.8	-70%	12%	4%
1A3bii	1.9	2.1	2.3	2.4	2.5	2.6	2.4	2.4	2.3	2.1	1.9	1.4	-27%	3%	3%
1A3biii	11.0	11.2	10.9	11.1	11.2	11.1	13.5	14.6	13.0	12.7	13.0	12.2	11%	26%	5%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36%	0%	2%
1A3c	0.3	0.4	0.5	0.5	0.6	0.6	0.5	0.4	0.6	0.6	0.6	0.7	144%	2%	2%
1A3dii	3.4	3.0	2.8	2.7	2.6	2.1	1.8	3.2	3.3	3.8	5.1	4.5	33%	9%	4%
1A3eii	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-22%	0%	2%
1A4a	1.1	0.7	0.5	0.5	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	-65%	1%	2%
1A4bi	4.3	3.2	3.5	3.4	3.5	3.5	3.5	3.6	3.6	3.5	3.6	3.3	-23%	7%	3%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10%	0%	3%
1A4ci	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-80%	0%	3%
1A4cii	8.3	8.3	8.3	8.1	7.9	7.6	7.3	6.9	6.3	5.9	5.1	4.4	-47%	9%	11%
1A5b	0.9	0.8	0.6	0.6	0.6	0.6	0.5	0.4	0.6	0.5	0.5	0.5	-38%	1%	2%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2B2	0.7	0.3	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2B5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30%	0%	0%
2C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42%	0%	0%
4F	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
5B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
6C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-23%	0%	2%
6D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-27%	0%	3%
Grand Total	94	75	66	65	64	63	58	58	54	53	53	47	-50%	100%	3%

Table E.5: Unallocated Nitrogen Oxides (as Nitrogen Dioxide) Emissions in the UK, 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1c	21.9	31.2	38.8	38.4	36.4	36.9	51.5	46.2	47.7	44.9	39.9	39.5	80%	95%	77%
1B2ai	10.1	0.8	0.6	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-99%	0.2%	81%
1B2c	2.2	2.7	2.5	2.6	1.9	1.9	2.4	1.6	1.7	1.9	1.6	1.8	-18%	4%	88%
Grand Total	34	35	42	41	38	39	54	48	49	47	42	41	21%	100%	3%

APPENDIX F: DEVOLVED ADMINISTRATION SO₂ INVENTORIES, 1990-2007

Table F.1 Sulphur Dioxide Emissions Inventory for England 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	2378	1388	935	657	678	584	543	545	396	294	256	207	-91%	47%	73%
1A1b	95	82	72	62	50	55	47	49	56	57	55	59	-38%	13%	74%
1A1c	4.4	2.1	4.1	3.4	4.1	3.6	3.2	3.1	3.6	3.3	3.3	4.0	-10%	1%	85%
1A2a	15.4	17.1	15.5	14.7	10.5	14.6	12.4	8.5	10.4	9.9	10.6	11.3	-26%	3%	72%
1A2f	302	216	129	99	92	92	80	74	75	74	67	63	-79%	14%	83%
1A3ai(i)	0.3	0.4	0.6	0.5	0.5	0.6	0.5	0.5	0.6	0.7	0.8	0.7	158%	0%	94%
1A3aii(i)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	78%	0%	60%
1A3bi	21.0	19.4	11.5	10.2	4.7	2.7	2.3	2.3	2.2	1.8	1.8	1.5	-93%	0%	84%
1A3bii	5.4	5.7	2.4	0.8	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	-98%	0%	84%
1A3biii	26.2	17.7	5.5	1.0	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.2	-99%	0%	81%
1A3biv	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-94%	0%	88%
1A3c	1.7	1.1	1.2	1.2	1.2	1.2	1.4	1.5	1.5	1.5	1.6	1.5	-14%	0%	78%
1A3dii	17.3	18.4	16.3	14.0	12.9	10.8	9.4	16.2	20.6	24.9	34.5	33.6	94%	8%	69%
1A3eii	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	11%	0%	84%
1A4a	61.2	38.0	19.9	15.9	10.2	11.7	6.0	4.2	4.0	4.1	3.7	3.5	-94%	1%	80%
1A4bi	76.4	55.5	48.5	32.9	32.1	26.7	19.3	17.0	15.7	11.7	12.0	12.3	-84%	3%	56%
1A4bii	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-95%	0%	84%
1A4ci	2.9	3.6	1.9	1.6	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.1	-95%	0%	61%
1A4cii	3.6	2.4	2.4	2.3	2.1	1.9	2.2	2.4	2.3	2.1	2.1	1.8	-49%	0%	59%
1A5b	7.9	6.5	5.1	5.4	5.3	4.9	4.5	3.2	4.7	4.3	4.4	4.4	-45%	1%	86%
1B1b	16.0	8.8	7.2	6.1	5.9	6.6	5.2	6.6	7.9	6.8	6.9	9.0	-44%	2%	92%
1B2ai	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	49334%	0%	22%
2A7	4.3	9.7	13.1	8.9	10.5	9.1	12.0	16.4	16.6	17.2	18.4	15.9	272%	4%	100%
2B5	39.7	38.2	35.3	30.3	22.2	16.3	12.7	9.7	8.6	7.0	5.6	5.7	-86%	1%	99%
2C	5.4	5.0	6.2	5.6	4.7	4.6	3.5	4.8	4.6	5.4	5.2	5.3	-2%	1%	65%
6C	6.9	3.9	1.1	1.3	1.0	1.8	0.8	0.8	0.8	0.8	0.8	0.8	-89%	0%	84%
Grand Total	3092	1940	1334	975	950	850	767	766	632	529	491	441	-86%	100%	75%

Table F.2 Sulphur Dioxide Emissions Inventory for Scotland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	196	120	81	68	96	93	88	77	63	50	60	47	-76%	62%	17%
1A1b	20.1	17.4	15.3	13.1	10.8	8.1	8.1	5.6	3.9	3.8	6.2	5.8	-71%	8%	7%
1A1c	0.4	0.0	0.0	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-90%	0%	1%
1A2a	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1A2f	33.4	21.1	10.4	7.5	6.9	7.1	9.7	9.2	9.8	10.4	8.6	7.8	-77%	10%	10%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	176%	0%	4%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	131%	0%	28%
1A3bi	2.0	1.9	1.1	0.9	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	-93%	0%	8%
1A3bii	0.5	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-98%	0%	9%
1A3biii	2.9	1.8	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	-99%	0%	9%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-92%	0%	5%
1A3c	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-24%	0%	10%
1A3dii	6.4	6.8	5.5	5.1	4.6	3.7	3.2	4.9	6.0	6.9	8.8	8.6	34%	11%	18%
1A3eii	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-2%	0%	13%
1A4a	7.1	5.0	2.5	1.9	1.2	1.4	0.7	0.5	0.4	0.3	0.3	0.3	-96%	0%	6%
1A4bi	29.4	22.8	20.9	10.1	12.0	8.8	7.0	6.0	5.2	3.9	4.6	4.1	-86%	5%	19%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-95%	0%	8%
1A4ci	0.8	1.1	0.6	0.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-95%	0%	16%
1A4cii	1.1	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	-48%	1%	18%
1A5b	0.8	0.7	0.5	0.5	0.5	0.5	0.4	0.3	0.5	0.4	0.4	0.4	-49%	1%	8%
1B1b	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2ai	0.1	0.1	0.2	0.4	0.4	1.2	0.9	0.5	0.4	0.4	0.2	0.2	119%	0%	89%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1420%	0%	5%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2B5	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-96%	0%	0%
2C	0.8	0.7	0.8	0.7	0.7	0.7	0.6	0.8	0.8	0.8	0.8	0.7	-15%	1%	8%
6C	0.3	0.2	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.1	-68%	0%	9%
Grand Total	307	201	141	110	135	127	120	106	91	78	91	76	-75%	100%	13%

Table F.3: Sulphur Dioxide Emissions Inventory for Wales 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	85.2	49.7	33.5	24.5	47.6	41.4	31.5	37.1	33.9	26.9	31.5	22.1	-74%	40%	8%
1A1b	22.4	19.4	17.0	14.6	11.9	9.8	10.3	8.8	9.9	11.8	13.8	14.6	-35%	27%	18%
1A1c	1.1	0.6	1.2	1.0	0.7	0.8	0.3	0.3	0.4	0.4	0.4	0.4	-61%	1%	9%
1A2a	9.4	14.4	11.0	11.4	9.7	6.7	2.9	3.0	2.9	3.0	4.6	4.4	-54%	8%	28%
1A2f	35.1	21.0	13.3	9.4	9.5	11.3	8.8	7.8	5.5	3.1	2.4	2.4	-93%	4%	3%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	294%	0%	1%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	719%	0%	1%
1A3bi	1.3	1.2	0.7	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	-92%	0%	5%
1A3bii	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-98%	0%	5%
1A3biii	1.6	1.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-99%	0%	4%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-92%	0%	4%
1A3c	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	-26%	0%	9%
1A3dii	2.9	3.1	2.5	2.2	2.1	1.6	1.4	2.3	3.3	3.8	4.9	4.8	66%	9%	10%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-20%	0%	1%
1A4a	5.3	3.2	1.7	1.4	0.9	1.0	0.5	0.4	0.3	0.3	0.3	0.3	-95%	1%	6%
1A4bi	12.2	8.6	7.3	5.9	5.3	4.6	3.2	2.8	2.7	2.0	1.8	2.1	-83%	4%	9%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-95%	0%	5%
1A4ci	0.6	0.7	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-95%	0%	12%
1A4cii	0.7	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	-49%	1%	12%
1A5b	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	-53%	0%	4%
1B1b	4.1	2.0	2.3	1.9	1.4	1.5	0.6	0.7	0.7	0.8	0.9	0.8	-80%	1%	8%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	11%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1823%	0%	1%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2B5	1.4	1.1	0.9	0.7	0.5	0.4	0.2	0.1	0.1	0.1	0.1	0.1	-96%	0%	1%
2C	2.7	2.4	2.4	2.0	2.1	2.5	2.1	1.8	2.0	2.2	2.0	2.2	-20%	4%	27%
6C	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-49%	0%	4%
Grand Total	187	130	96	77	93	83	63	66	63	55	64	55	-71%	100%	9%

Table F.4: Sulphur Dioxide Emissions Inventory for Northern Ireland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	68.1	39.8	26.8	26.8	29.2	30.1	18.3	17.4	16.4	13.7	13.4	8.3	-88%	49%	3%
1A1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2f	17.5	11.8	6.3	4.4	3.3	3.2	2.1	1.9	2.0	3.1	2.8	2.4	-86%	14%	3%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	187%	0%	1%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	162%	0%	11%
1A3bi	0.7	0.8	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-93%	0%	3%
1A3bii	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-99%	0%	2%
1A3biii	1.1	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-98%	0%	6%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-92%	0%	2%
1A3c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6%	0%	2%
1A3dii	1.0	1.1	0.9	0.8	0.8	0.6	0.6	1.0	1.3	1.5	2.1	2.0	96%	12%	4%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-19%	0%	2%
1A4a	5.3	3.2	1.7	1.4	0.9	1.0	0.5	0.4	0.3	0.4	0.4	0.3	-93%	2%	8%
1A4bi	24.6	14.4	10.8	7.3	7.8	5.9	4.8	4.3	3.3	2.6	3.0	3.3	-87%	19%	15%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-94%	0%	3%
1A4ci	0.5	0.7	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-95%	0%	10%
1A4cii	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	-47%	2%	11%
1A5b	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-39%	1%	2%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2B5	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-96%	0%	0%
2C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-26%	0%	0%
6C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-46%	0%	3%
Grand Total	120	74	48	42	43	42	27	26	24	22	22	17	-86%	100%	3%

Table F.5: Unallocated Sulphur Dioxide Emissions in the UK, 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1c	0.4	0.6	0.7	4.2	3.2	3.1	0.4	0.5	0.4	0.3	0.5	0.3	-35%	67%	6%
1B2ai	7.6	6.2	0.8	0.8	0.7	0.0	0.1	0.5	0.6	0.6	0.6	0.0	-100%	0%	0%
1B2c	0.1	0.3	0.3	0.5	0.3	0.4	0.2	0.2	0.2	0.2	0.1	0.1	11%	33%	73%
Grand Total	8.1	7.1	1.9	5.5	4.2	3.5	0.7	1.2	1.2	1.1	1.2	0.4	-95%	100%	0%

APPENDIX G: DEVOLVED ADMINISTRATION NMVOC INVENTORIES, 1990-2007

Table G.1 Non Methane Volatile Organic Compounds (NMVOC) Emissions Inventory for England 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	5	6	2	3	4	3	4	3	3	3	4	4	-30%	1%	80%
1A1b	0	0	0	0	0	0	0	0	0	0	0	0	-12%	0%	71%
1A1c	0	0	0	0	0	0	0	0	0	0	0	0	-21%	0%	22%
1A2a	1	1	1	0	0	0	0	0	1	1	0	0	-9%	0%	65%
1A2f	22	23	23	23	22	23	22	21	21	21	21	20	-11%	3%	83%
1A3ai(i)	3	2	2	2	1	1	1	1	1	1	1	1	-72%	0%	89%
1A3ai(ii)	1	0	0	0	0	0	0	0	0	0	0	0	-76%	0%	52%
1A3bi	447	318	222	191	152	122	100	79	63	49	41	35	-92%	5%	84%
1A3bii	37	28	22	18	15	12	10	9	8	7	7	6	-83%	1%	84%
1A3biii	65	44	33	30	27	24	21	19	18	17	16	15	-77%	2%	82%
1A3biv	25	13	12	12	11	11	10	11	9	8	7	7	-72%	1%	89%
1A3bv	190	146	87	72	55	43	36	29	22	17	14	11	-94%	2%	84%
1A3c	2	2	3	3	3	3	3	3	3	3	3	3	26%	0%	78%
1A3dii	3	2	2	2	2	2	1	3	3	3	4	4	32%	1%	69%
1A3eii	0	0	1	1	1	1	1	1	1	1	1	1	54%	0%	84%
1A4a	1	1	1	1	1	1	1	1	1	1	1	1	-6%	0%	86%
1A4bi	39	26	27	29	23	21	18	18	20	20	22	24	-37%	4%	58%
1A4bii	14	15	14	13	13	13	12	12	12	10	9	8	-40%	1%	84%
1A4ci	2	2	2	2	2	2	2	2	2	2	2	2	-1%	0%	92%
1A4cii	6	6	6	6	6	6	6	5	5	5	4	4	-34%	1%	59%
1A5b	2	2	2	2	1	1	1	1	1	1	1	1	-39%	0%	86%
1B1b	0	0	0	0	0	0	0	0	0	0	0	0	-54%	0%	71%
1B2ai	67	48	40	47	55	53	36	30	26	26	21	21	-68%	3%	28%
1B2aiv	66	57	39	31	29	25	23	23	21	21	20	19	-71%	3%	62%
1B2av	93	83	74	52	48	46	45	43	39	35	34	30	-67%	5%	84%
1B2b	36	34	55	55	52	55	54	39	40	39	36	34	-5%	5%	86%
1B2c	2	2	2	2	3	3	3	1	2	2	2	2	-26%	0%	7%
2A7	3	2	2	1	2	2	2	1	1	2	3	4	18%	1%	98%
2B5	144	128	89	59	51	45	42	39	33	31	23	22	-85%	3%	66%
2C	1	1	1	1	1	1	1	1	1	1	1	1	-7%	0%	66%
2D1	4	3	0	0	0	0	0	0	0	0	0	0	-96%	0%	84%
2D2	28	28	28	28	27	28	27	28	28	27	26	26	-6%	4%	33%
3A	172	126	117	111	106	104	102	103	102	99	101	99	-42%	15%	84%
3B	72	47	42	39	38	35	32	28	27	26	26	26	-64%	4%	84%
3C	37	32	27	22	17	14	13	13	13	13	13	13	-66%	2%	86%
3D	276	246	231	219	208	202	198	199	202	204	202	202	-27%	31%	84%
4F	24	0	0	0	0	0	0	0	0	0	0	0	-100%	0%	NA
6A	19	17	14	13	12	11	10	8	8	8	8	8	-60%	1%	78%
6C	5	5	5	5	5	5	5	5	5	5	6	5	1%	1%	84%
6D	2	2	2	2	2	2	2	2	1	1	1	1	-28%	0%	84%
Grand Total	1916	1499	1229	1097	995	918	845	783	745	713	680	660	-66%	100%	70%

Table G.2 Non Methane Volatile Organic Compounds (NMVOC) Emissions Inventory for Scotland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	0.6	0.7	0.3	0.2	0.4	0.3	0.4	0.3	0.4	0.4	0.5	0.4	-37%	0%	9%
1A1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-13%	0%	11%
1A1c	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	-55%	0%	9%
1A2a	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-98%	0%	0%
1A2f	2.1	2.2	2.2	2.2	2.1	2.2	2.1	2.0	2.0	1.9	1.9	1.9	-9%	1%	8%
1A3ai(i)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-34%	0%	10%
1A3aii(i)	0.4	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	-59%	0%	40%
1A3bi	42	30	21	17	14	11	9	7	6	5	4	3	-92%	2%	8%
1A3bii	3.4	2.6	2.1	1.7	1.4	1.2	1.0	0.9	0.8	0.7	0.6	0.6	-82%	0%	8%
1A3biii	7.4	4.6	3.4	2.9	2.7	2.4	2.1	2.0	1.9	1.8	1.7	1.6	-78%	1%	9%
1A3biv	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	-56%	0%	5%
1A3bv	18.2	13.9	8.3	6.7	5.2	4.1	3.5	2.8	2.2	1.7	1.3	1.0	-94%	1%	8%
1A3c	0.3	0.3	0.4	0.4	0.5	0.5	0.4	0.3	0.4	0.4	0.4	0.4	11%	0%	10%
1A3dii	1.0	0.9	0.8	0.8	0.8	0.6	0.5	0.8	0.7	0.8	1.0	0.9	-9%	1%	18%
1A3eii	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35%	0%	13%
1A4a	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-11%	0%	8%
1A4bi	9.8	6.3	6.3	6.3	5.2	4.6	4.0	4.0	4.0	4.0	4.4	4.9	-50%	3%	12%
1A4bii	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.0	0.9	0.8	-44%	1%	8%
1A4ci	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	13%	0%	6%
1A4cii	1.9	1.9	1.9	1.8	1.8	1.7	1.7	1.6	1.5	1.5	1.4	1.3	-33%	1%	18%
1A5b	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-44%	0%	8%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2ai	140	85	71	60	58	49	48	37	24	26	24	24	-83%	16%	32%
1B2aiv	22	18	12	10	9	6	6	6	6	5	5	5	-78%	3%	15%
1B2av	8.9	7.9	7.1	4.8	4.5	4.4	4.2	4.1	3.8	3.4	3.2	2.9	-67%	2%	8%
1B2b	2.9	2.7	4.5	4.5	4.7	4.7	4.8	3.0	3.2	3.4	3.1	2.6	-11%	2%	6%
1B2c	2.5	2.2	2.2	1.9	2.0	3.8	9.0	2.4	2.1	2.3	1.9	2.7	10%	2%	11%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9%	0%	1%
2B5	17.1	15.2	11.2	11.5	10.7	9.7	8.9	8.2	7.6	7.0	7.6	8.8	-49%	6%	27%
2C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-60%	0%	0%
2D1	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-96%	0%	6%
2D2	42	44	48	49	49	49	49	49	49	49	48	49	17%	33%	63%
3A	16	12	11	9	9	9	9	9	9	9	9	9	-47%	6%	7%
3B	7.5	4.8	4.2	3.9	3.8	3.4	3.1	2.8	2.7	2.5	2.5	2.5	-67%	2%	8%
3C	4.8	4.2	4.1	1.7	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	-76%	1%	8%
3D	30	27	25	23	22	21	20	20	21	21	20	21	-32%	14%	9%
4F	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
6A	2.6	2.4	2.0	1.8	1.7	1.4	1.3	1.1	1.1	1.1	1.2	1.2	-56%	1%	12%
6C	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	-2%	0%	10%
6D	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	-32%	0%	8%
Grand Total	390	293	254	226	213	195	192	169	153	151	147	149	-62%	100%	16%

Table G.3: Non Methane Volatile Organic Compounds (NMVOC) Emissions Inventory for Wales 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	0.9	0.9	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.4	-52%	1%	9%
1A1b	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-13%	0%	18%
1A1c	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-33%	0%	5%
1A2a	0.3	0.4	0.5	0.4	0.4	0.3	0.1	0.2	0.2	0.2	0.3	0.3	-20%	0%	34%
1A2f	1.6	1.6	1.6	1.7	1.8	1.8	1.7	1.7	1.6	1.4	1.4	1.4	-11%	3%	6%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-53%	0%	0%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-72%	0%	0%
1A3bi	27	19	13	11	9	7	6	5	4	3	3	2	-92%	4%	5%
1A3bii	2.2	1.7	1.3	1.1	0.9	0.7	0.6	0.5	0.5	0.5	0.4	0.4	-83%	1%	5%
1A3biii	3.9	2.4	1.8	1.6	1.4	1.2	1.1	1.0	0.9	0.9	0.8	0.8	-79%	2%	4%
1A3biv	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	-55%	1%	4%
1A3bv	11.6	8.9	5.3	4.4	3.3	2.6	2.2	1.8	1.4	1.1	0.9	0.7	-94%	1%	5%
1A3c	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	9%	1%	9%
1A3dii	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.4	0.4	0.5	0.6	0.5	12%	1%	10%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11%	0%	1%
1A4a	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-22%	0%	4%
1A4bi	7.3	4.7	5.1	5.5	4.2	3.9	3.3	3.2	3.6	3.7	4.1	4.7	-36%	9%	11%
1A4bii	0.8	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.5	0.5	-42%	1%	5%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9%	0%	1%
1A4cii	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.1	1.0	1.0	0.9	0.8	-34%	2%	12%
1A5b	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-48%	0%	4%
1B1b	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-64%	0%	29%
1B2ai	0.9	1.6	1.3	1.3	1.1	0.5	0.4	0.4	0.4	0.4	0.3	0.4	-56%	1%	1%
1B2aiv	12.6	11.4	7.5	6.2	7.2	6.1	6.4	5.8	6.4	6.0	6.6	7.1	-44%	14%	23%
1B2av	6.5	5.7	4.9	3.4	3.6	3.0	3.0	2.9	2.6	2.3	2.4	2.2	-67%	4%	6%
1B2b	1.7	1.6	2.7	2.7	2.7	2.3	2.5	2.0	2.4	2.6	2.4	2.9	71%	6%	7%
1B2c	0.4	0.2	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.6	0.6	46%	1%	3%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14%	0%	1%
2B5	2.7	2.4	2.5	2.2	1.6	1.2	0.4	2.7	2.2	0.3	0.4	0.3	-90%	1%	1%
2C	0.8	0.8	0.8	0.8	0.7	0.5	0.3	0.4	0.5	0.5	0.5	0.6	-31%	1%	33%
2D1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-96%	0%	6%
2D2	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	-8%	3%	2%
3A	15	11	9	8	7	7	7	7	7	6	7	7	-56%	14%	6%
3B	4.1	2.7	2.4	2.2	2.1	2.0	1.8	1.6	1.5	1.5	1.4	1.4	-65%	3%	5%
3C	5.2	4.3	3.1	2.8	1.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7	-87%	1%	4%
3D	19	16	14	14	12	12	11	11	12	12	11	11	-41%	23%	5%
4F	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
6A	1.3	1.2	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	-57%	1%	6%
6C	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	-4%	1%	4%
6D	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-30%	0%	5%
Grand Total	132	105	85	77	68	59	55	54	53	49	50	50	-62%	100%	5%

Table G.4: Non Methane Volatile Organic Compounds (NMVOC) Emissions Inventory for Northern Ireland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total	% of UK Sector (2007)
1A1a	0.3	0.4	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.3	0.4	0.1	-69%	0%	2%
1A1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2f	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	-8%	3%	3%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1%	0%	1%
1A3aii(i)	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	-77%	0%	8%
1A3bi	13.6	9.7	6.6	5.7	4.7	3.7	2.9	2.4	1.9	1.5	1.3	1.2	-91%	4%	3%
1A3bii	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	-60%	1%	3%
1A3biii	3.1	2.3	1.7	1.5	1.4	1.2	1.3	1.3	1.1	1.0	1.0	0.9	-70%	3%	5%
1A3biv	0.5	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	-59%	1%	2%
1A3bv	5.6	4.3	2.5	2.1	1.6	1.3	1.0	0.8	0.6	0.5	0.4	0.3	-95%	1%	2%
1A3c	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	55%	0%	2%
1A3dii	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	33%	1%	4%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11%	0%	2%
1A4a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-16%	0%	2%
1A4bi	19	11	11	10	10	9	8	8	8	7	8	8	-56%	29%	19%
1A4bii	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	-39%	1%	3%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42%	0%	1%
1A4cii	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	0.9	0.9	0.8	0.8	-32%	3%	11%
1A5b	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-33%	0%	2%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2ai	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-52%	0%	0%
1B2aiv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2av	2.7	2.4	2.1	1.5	1.4	1.3	1.2	1.2	1.1	1.0	0.9	0.9	-68%	3%	2%
1B2b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5%	0%	0%
2B5	0.4	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	-76%	0%	0%
2C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-28%	0%	0%
2D1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-96%	0%	5%
2D2	1.8	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	7%	7%	2%
3A	5.1	3.6	3.6	3.4	3.3	3.3	3.3	3.3	3.3	3.2	3.3	3.2	-37%	12%	3%
3B	2.3	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.9	0.9	0.8	0.8	-64%	3%	3%
3C	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-52%	1%	2%
3D	9.3	8.0	7.3	7.0	6.9	6.7	6.5	6.5	6.6	6.7	6.6	6.7	-28%	24%	3%
4F	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	NA
6A	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.4	-52%	1%	4%
6C	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4%	1%	2%
6D	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	-26%	0%	3%
Grand Total	69	51	43	40	37	34	32	30	29	28	28	28	-59%	100%	3%

Table G.5: Unallocated Non Methane Volatile Organic Compounds (NMVOC) Emissions in the UK, 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1c	0.3	0.4	0.4	0.6	0.5	0.6	0.7	0.6	0.7	0.5	0.4	0.4	41%	1%	64%
1B2ai	52.3	53.9	51.1	50.4	53.4	67.4	70.1	52.4	38.7	30.3	32.8	30.0	-43%	57%	40%
1B2c	38.4	37.2	28.1	23.2	19.7	18.4	22.2	18.8	26.4	17.5	17.6	20.5	-47%	39%	80%
2B5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0%	4%	6%
Grand Total	92.9	93.4	81.5	76.1	75.4	88.3	94.9	73.6	67.7	50.2	52.7	52.8	-43%	100%	6%

APPENDIX H: DEVOLVED ADMINISTRATION NH₃ INVENTORIES, 1990-2007

Table H.1 Ammonia Emissions Inventory for England 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-	% of DA Total (2007)	% of UK Sector
1A1a	0.0	0.3	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2457%	0%	81%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-95%	0%	97%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-94%	0%	52%
1A2f	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.4	27%	0%	77%
1A3bi	0.6	7.0	9.2	9.4	9.5	9.3	9.0	8.4	7.7	6.9	6.1	5.2	815%	3%	84%
1A3bii	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	156%	0%	84%
1A3biii	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	19%	0%	80%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4%	0%	87%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75%	0%	84%
1A4a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33%	0%	96%
1A4bi	2.8	2.0	1.8	2.0	1.6	1.6	1.3	1.1	1.1	1.0	1.0	1.1	-61%	1%	64%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9%	0%	84%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7%	0%	92%
1A4cii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-20%	0%	59%
1B1b	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-12%	0%	91%
1B2aiv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	7%	0%	83%
2A7	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.4	0.4	0.4	0.4	9%	0%	79%
2B5	5.9	5.9	7.4	3.4	2.3	2.4	2.2	2.0	1.9	4.0	3.9	3.7	-37%	2%	99%
2C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-33%	0%	100%
2D1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1%	0%	86%
2D2	0.8	0.8	1.0	1.1	0.9	0.8	1.0	0.9	0.9	0.9	0.7	0.8	-5%	0%	100%
3D	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1%	1%	84%
4B13	15.1	14.4	14.4	14.5	14.3	13.9	13.7	14.1	14.2	14.2	16.1	13.7	-9%	7%	79%
4B1a	57.3	59.1	56.1	57.3	54.3	52.9	52.2	51.6	50.4	48.3	47.1	45.0	-21%	23%	63%
4B1b	40.1	35.6	34.5	34.4	33.6	31.3	30.3	30.9	32.0	31.7	32.3	33.0	-18%	17%	53%
4B3	6.4	6.3	6.4	6.4	6.1	5.2	5.0	5.1	5.2	5.0	5.0	4.9	-24%	3%	44%
4B6	2.0	2.5	3.1	2.7	2.8	2.8	3.0	2.9	3.3	3.4	3.8	3.8	92%	2%	77%
4B8	35.1	33.1	32.9	29.8	26.3	23.3	21.8	19.0	19.5	17.8	18.1	17.0	-51%	9%	82%
4B9	29.9	26.5	30.7	32.0	29.0	30.8	28.5	27.6	28.1	26.4	26.7	24.2	-19%	13%	76%
4D1	42.2	30.9	28.1	32.2	22.6	24.6	26.0	21.8	25.8	25.7	24.7	27.8	-34%	14%	65%
4F	3.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	-51%	1%	84%
6A	2.2	2.9	3.2	3.3	3.4	3.3	3.4	3.3	3.1	2.9	2.6	2.4	8%	1%	78%
6B	4.5	4.9	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	1%	2%	84%
6C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-32%	0%	83%
6D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1%	0%	84%
7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-13%	0%	84%
Grand Total	251	236	238	237	216	211	206	198	202	197	198	192	-23%	100%	66%

Table H.2 Ammonia Emissions Inventory for Scotland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2678%	0%	11%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1A2f	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30%	0%	6%
1A3bi	0.1	0.7	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.6	0.5	824%	1%	8%
1A3bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	164%	0%	9%
1A3biii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18%	0%	9%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38%	0%	6%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54%	0%	13%
1A4a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30%	0%	3%
1A4bi	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	-60%	1%	14%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3%	0%	8%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	6%
1A4cii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-19%	0%	18%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2aiv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7%	0%	4%
2A7	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	9%	0%	12%
2B5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-28%	0%	0%
2C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2D1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7%	0%	8%
2D2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
3D	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-5%	0%	8%
4B13	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.5	1.7	1.5	0%	4%	8%
4B1a	7.0	7.4	7.3	7.4	7.1	7.0	7.1	7.2	7.2	7.2	7.3	7.2	3%	19%	10%
4B1b	13.5	12.3	12.6	12.4	12.3	11.5	11.8	12.0	12.0	12.4	12.6	12.3	-9%	33%	20%
4B3	3.2	3.1	3.2	3.2	3.0	2.7	2.7	2.7	2.7	2.7	2.5	2.5	-23%	7%	22%
4B6	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	130%	1%	8%
4B8	2.5	2.9	3.3	2.7	2.7	2.9	2.5	2.3	2.2	2.2	2.1	2.0	-21%	5%	9%
4B9	4.3	3.9	3.4	2.8	3.3	3.6	3.4	3.0	3.4	3.0	2.8	2.7	-36%	7%	9%
4D1	10.8	8.1	7.0	8.0	5.5	6.5	6.7	5.7	6.5	6.2	6.2	6.6	-39%	18%	16%
4F	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-51%	1%	13%
6A	0.3	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	19%	1%	12%
6B	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-4%	1%	8%
6C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-29%	0%	5%
6D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5%	0%	8%
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-17%	0%	8%
Grand Total	45	42	41	41	39	39	39	37	38	38	38	37	-17%	100%	13%

Table H.3: Ammonia Emissions Inventory for Wales 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	2734%	0%	6%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-98%	0%	3%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	48%
1A2f	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.1	0.0	67%	0%	9%
1A3bi	0.0	0.4	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.3	850%	1%	5%
1A3bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	144%	0%	5%
1A3biii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17%	0%	5%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38%	0%	5%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26%	0%	1%
1A4a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-87%	0%	0%
1A4bi	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	-61%	1%	13%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6%	0%	5%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-44%	0%	1%
1A4cii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-19%	0%	12%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-79%	0%	9%
1B2aiv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7%	0%	12%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9%	0%	8%
2B5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	144%	0%	1%
2C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2D1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-14%	0%	4%
2D2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
3D	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-2%	0%	5%
4B13	2.0	1.9	1.6	1.8	1.8	1.8	1.8	1.9	1.6	1.7	2.1	1.6	-22%	6%	9%
4B1a	9.4	9.6	9.3	9.6	9.3	9.6	9.6	9.7	9.9	9.7	9.4	8.5	-9%	31%	12%
4B1b	7.9	7.4	7.5	7.5	7.2	7.3	6.8	7.3	7.4	7.3	7.5	6.9	-13%	25%	11%
4B3	3.5	3.7	3.8	3.9	3.7	3.4	3.4	3.4	3.3	3.2	3.1	3.0	-14%	11%	28%
4B6	0.3	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	72%	2%	12%
4B8	0.6	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	-82%	0%	0%
4B9	2.1	1.8	2.3	2.7	2.4	2.3	1.3	2.2	1.8	1.4	1.3	1.4	-32%	5%	5%
4D1	6.7	5.3	5.2	5.7	3.8	4.3	4.3	3.7	4.3	4.5	4.1	4.4	-35%	16%	10%
4F	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-51%	0%	2%
6A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	16%	1%	6%
6B	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-1%	1%	5%
6C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	260%	0%	11%
6D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2%	0%	5%
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15%	0%	5%
Grand Total	34	32	32	34	31	31	30	31	31	30	30	28	-18%	100%	10%

Table H.4: Ammonia Emissions Inventory for Northern Ireland 1990-2007 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-	% of DA Total (2007)	% of UK Sector (2007)
1A1a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2734%	0%	2%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1A2f	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	121%	0%	8%
1A3bi	0.0	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	738%	1%	3%
1A3bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107%	0%	2%
1A3biii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99%	0%	6%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50%	0%	2%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27%	0%	2%
1A4a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-87%	0%	0%
1A4bi	1.1	0.6	0.5	0.4	0.4	0.3	0.3	0.2	0.1	0.1	0.1	0.2	-86%	0%	9%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12%	0%	3%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-43%	0%	1%
1A4cii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-17%	0%	11%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
1B2aiv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7%	0%	1%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9%	0%	0%
2B5	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2D1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11%	0%	2%
2D2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
3D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3%	0%	3%
4B13	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.5	-27%	2%	3%
4B1a	8.0	8.9	9.7	9.9	9.8	10.5	10.6	10.4	10.6	10.7	10.8	10.4	31%	33%	15%
4B1b	10.4	10.1	10.4	10.1	9.8	9.7	9.9	10.1	10.0	10.1	10.3	10.5	0%	33%	17%
4B3	0.9	0.9	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.7	-28%	2%	6%
4B6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40%	0%	3%
4B8	3.8	3.3	3.2	2.4	2.0	1.9	1.8	2.0	2.0	1.9	1.7	1.8	-54%	6%	8%
4B9	3.2	4.1	3.7	3.8	3.5	3.3	3.8	3.9	3.8	3.6	3.8	3.3	4%	10%	11%
4D1	5.4	4.3	4.2	4.7	3.2	3.8	4.0	3.3	3.8	3.6	3.6	3.9	-28%	12%	9%
4F	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-51%	0%	2%
6A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31%	0%	4%
6B	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4%	0%	3%
6C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16%	0%	2%
6D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3%	0%	3%
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-10%	0%	3%
Grand	34	34	34	34	31	32	32	32	32	32	32	32	-7%	100%	11%

Table H.5: Unallocated Ammonia Emissions in the UK, 1990-2007 (ktonnes)

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APPENDIX I: DEVOLVED ADMINISTRATION LEAD INVENTORIES, 1990-2007

Table I.1 Lead Emissions Inventory for England 1990-2007 (tonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	116	106	17	13	14	10	8	9	10	9	8	1.9	-98%	4%	72%
1A1b	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.7	0.9	0.7	0.7	108%	1%	59%
1A1c	0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-95%	0%	97%
1A2a	16	18	18	17	14	17	17	18	14	18	14	18	10%	36%	65%
1A2f	32	27	21	19	16	16	19	17	22	16	5	5	-85%	10%	81%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83%	0%	94%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22%	0%	59%
1A3bi	1642	817	451	239	1.3	1.2	1.1	1.1	1.1	1.2	1.2	0.8	-100%	2%	83%
1A3bii	154	60	27	12	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	-100%	0%	84%
1A3biii	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	8%	1%	81%
1A3biv	16	6	4	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	88%
1A3c	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	35%	0%	78%
1A3dii	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.3	0.3	0.3	0.4	0.4	55%	1%	69%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75%	0%	84%
1A4a	28	13	1.8	1.8	1.3	1.3	0.8	0.7	0.6	0.7	0.7	0.6	-98%	1%	79%
1A4bi	9.4	6.4	5.7	5.9	4.7	4.6	3.6	3.0	2.8	2.2	2.1	2.2	-76%	4%	59%
1A4bii	7.0	4.0	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	84%
1A4ci	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-84%	0%	65%
1A4cii	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	-28%	0%	59%
1A5b	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-42%	0%	86%
1B1b	2.8	1.9	1.9	1.8	1.7	1.7	2.1	1.7	2.0	2.0	2.1	2.3	-18%	4%	89%
2A7	2.4	2.7	2.7	2.2	1.5	1.1	1.1	1.0	0.9	0.9	0.8	0.7	-69%	1%	80%
2B5	93	80	85	26	11	13	10	13	14	13	3.7	2.7	-97%	5%	98%
2C	126	100	65	55	49	47	46	29	22	17	16	14	-89%	28%	77%
6C	230	67	0.6	1.0	1.0	0.2	0.2	0.2	0.2	0.1	0.0	0.0	-100%	0%	95%
Grand Total	2478	1312	705	400	116	115	110	95	91	82	55	51	-98%	100%	72%

Table I.2 Lead Emissions Inventory for Scotland 1990-2007 (tonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	10.1	6.5	2.3	1.9	2.4	2.6	2.6	1.2	2.4	1.8	2.2	0.5	-95%	17%	19%
1A1b	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	3%	6%	14%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1A2a	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1A2f	3.0	2.0	1.5	1.2	1.0	0.7	1.0	0.9	1.5	0.7	0.4	0.6	-81%	20%	10%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106%	0%	4%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67%	0%	28%
1A3bi	156	78	43	22	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-100%	3%	8%
1A3bii	15.1	5.8	2.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	1%	8%
1A3biii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6%	1%	9%
1A3biv	0.7	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	5%
1A3c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19%	1%	10%
1A3dii	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	8%	4%	18%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54%	0%	13%
1A4a	1.2	0.6	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-96%	2%	7%
1A4bi	2.9	1.9	1.6	1.6	1.4	1.2	1.1	0.9	0.8	0.6	0.7	0.7	-77%	23%	18%
1A4bii	0.7	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	8%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-82%	0%	14%
1A4cii	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-27%	2%	18%
1A5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-47%	0%	8%
1B1b	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2A7	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	20%	5%	15%
2B5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0%	0%
2C	6.8	4.9	2.7	2.0	1.6	1.7	1.8	1.0	0.8	0.7	0.6	0.5	-93%	16%	3%
6C	7.3	2.4	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	1%
Grand Total	210	103	55	31	7.2	7.0	7.2	4.7	6.1	4.4	4.7	3.0	-99%	100%	4%

Table I.3 Lead Emissions Inventory for Wales 1990-2007 (tonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-	% of DA Total (2007)	% of UK Sector
1A1a	3.2	1.5	0.8	0.6	1.1	0.9	0.8	1.0	1.0	0.9	0.8	0.2	-95%	1%	7%
1A1b	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.3	194%	2%	27%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-98%	0%	3%
1A2a	9.7	12.4	13.7	12.9	12.9	7.8	4.1	7.6	11.5	13.8	14.9	9.9	2%	65%	35%
1A2f	2.4	2.0	1.3	1.3	1.1	1.1	1.7	1.4	1.8	0.9	0.3	0.2	-90%	2%	4%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	245%	0%	1%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	712%	0%	1%
1A3bi	99.8	49.6	27.4	14.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-100%	0%	5%
1A3bii	9.7	3.8	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	5%
1A3biii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	4%
1A3biv	0.6	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	4%
1A3c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16%	0%	9%
1A3dii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	32%	0%	10%
1A3eii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26%	0%	1%
1A4a	0.5	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-90%	0%	7%
1A4bi	1.7	1.2	1.0	1.1	0.9	0.9	0.6	0.5	0.5	0.4	0.4	0.4	-77%	3%	10%
1A4bii	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	5%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-83%	0%	11%
1A4cii	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	-28%	0%	12%
1A5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-51%	0%	4%
1B1b	1.4	1.8	1.8	1.8	2.0	1.4	0.5	0.8	0.4	0.4	0.4	0.3	-81%	2%	11%
2A7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	414%	0%	2%
2B5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	0.0	0.0	-53%	0%	2%
2C	11.7	10.7	6.0	3.7	4.8	5.1	3.3	2.9	3.7	3.6	3.3	3.7	-69%	24%	20%
6C	0.4	0.3	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	4%
Grand Total	142	84.4	54.6	37.3	23.3	17.8	11.5	14.9	19.5	21.3	20.8	15.3	-89%	100%	22%

Table I.4 Lead Emissions Inventory for Northern Ireland 1990-2007 (tonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	% Change (1990-2007)	% of DA Total (2007)	% of UK Sector (2007)
1A1a	3.20	1.51	0.81	0.46	0.59	0.86	0.55	0.60	0.47	0.34	0.26	0.06	-98%	5%	2%
1A1b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	0%	0%
1A1c	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	0%	0%
1A2a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	0%	0%
1A2f	1.16	0.80	0.57	0.52	0.44	0.22	0.24	0.20	0.32	0.48	0.23	0.31	-73%	27%	5%
1A3ai(i)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	502%	0%	1%
1A3aii(i)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61%	0%	11%
1A3bi	52.6	25.9	13.7	7.4	0.05	0.05	0.04	0.04	0.04	0.05	0.05	0.04	-100%	3%	4%
1A3bii	0.34	0.21	0.13	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-98%	0%	2%
1A3biii	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.03	87%	2%	6%
1A3biv	0.32	0.11	0.08	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	2%
1A3c	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66%	0%	2%
1A3dii	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.02	57%	2%	4%
1A3eii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27%	0%	2%
1A4a	0.53	0.22	0.16	0.16	0.11	0.12	0.07	0.06	0.06	0.07	0.06	0.06	-89%	5%	7%
1A4bi	3.36	1.75	1.47	1.30	1.15	0.97	0.84	0.67	0.50	0.41	0.42	0.47	-86%	41%	12%
1A4bii	0.23	0.14	0.08	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	3%
1A4ci	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-84%	0%	10%
1A4cii	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	-26%	4%	11%
1A5b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-36%	0%	2%
1B1b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	0%	0%
2A7	0.03	0.03	0.03	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	2%	3%	3%
2B5	0.07	0.08	0.02	0.02	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
2C	0.51	0.41	0.25	0.21	0.23	0.24	0.22	0.08	0.09	0.06	0.07	0.06	-88%	5%	0%
6C	0.23	0.15	0.02	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
Grand Total	62.7	31.4	17.4	10.3	2.76	2.60	2.12	1.80	1.62	1.53	1.24	1.13	-98%	100%	2%

Table I.5: Unallocated Lead Emissions in the UK, 1990-2007 (tonnes)

This page intentionally left blank; there are no reported “Unallocated” (i.e. offshore) lead emission sources in the UK inventory.